

ONLINE GAMING ADDICTION AND ACADEMIC ATTITUDES: THE CASE OF COLLEGE STUDENTS IN THE PHILIPPINES

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Abstract

This study aimed to determine the influence of online computer game addiction on the academic attitudes of students in the tertiary schools of Salug Valley, Zamboanga del Sur, Philippines. It determined the level of addiction in playing computer games, the academic attitudes as influenced by online computer games and the significant relationship between students' online computer game addiction and their academic attitudes. A total of 365 students were utilized as respondents of the study. It employed descriptive-survey and analysis and adopted online computer games addiction questionnaire of Conrad and influence of online computer games to the academic attitudes questionnaire, which was prepared by the researcher. The responses were drawn using frequency counts, percentage, rank, Weighted Average Mean, and Pearson correlation coefficient. The study revealed that the respondents have moderate level online game addiction risk and their academic attitudes were fairly affected by online computer games. Further, there was no significant relationship between online game addiction and students' academic attitudes toward study habits, achieving goals, academic responsibility, but has significant relationship in their participation in extra-academic activities. The study recommends that the school administrators may facilitate engaging and interactive activities that will divert students' attention and will foster mass participation. Moreover, guidance counselors may provide services to guide and help the students solve common problems with regard to their academic attitudes. Parents may always monitor and motivate their children to limit their exposure to computers and lead to the right and good things that they may spend their time on.

Keywords: online game, addiction, academic attitudes, college students

Introduction

Today, technology becomes part of every life and every day, man tries to invent something for convenience and for the good of humanity. However, man doesn't see the negative sides of those inventions because we focus on how to earn. One of the most popular and common technologies nowadays that everyone is using is the computer. Computers have become a social and economic necessity that permeates every part of our life. Therefore, necessary precaution must be taken in exploring all the uses of computers and the negative consequences of using them on a daily basis.

Computer games are a one way to ease our boredom, but sometimes it leads to addiction because of lack of self-discipline. Computer game addiction is a worrying aspect of the modern-day technologically able youth. Many students spend hours a day on computers, so much so that computers have become a primary source of entertainment for them and because of that, they forget the role of being a student.

On the other hand, attitude controls every life; it's a secret power working twenty-four hours a day, for good or bad. It is of paramount importance that people know how to harness and control this great force (Simmons, 2005). Once an attitude develops, habit emerges and addiction exist. The number of addicted players continues to grow as gaming gains more influence.

According to Kuss (2013), in the 2000s, online games became popular, while studies of Internet gaming addiction emerged, outlining the negative consequences of excessive gaming, its prevalence, and associated risk factors. Internet gaming is a booming market. In 2012, more than one billion individuals played computer games, which fuelled the 8% growth of the computer gaming industry in the same year. It is argued that only by understanding the appeal of Internet gaming, its context, and neurobiologic correlates can the phenomenon of Internet gaming addiction be understood comprehensively.

In recent years, research about Internet gaming addiction has increased both in quantity as well as in quality. In South-East Asian countries, the negative impacts of Internet gaming addiction have led governments and health care providers to take the problem seriously and to develop a series of initiatives to curb and alleviate the problem. It has been stated that the higher the Internet penetration and social acceptance of gaming, the higher the prevalence of gaming problems, (King et al. 2012) partially explaining the higher prevalence rates reported in South-East Asian countries. In addition to this, there is good reason to think that the lower acceptance of excessive gaming in a culture, the more distress (not less) gamers experience in engaging in the activity, potentially fuelling problem perception. Therefore, a lack of acceptance of excessive gaming and thus stigmatization of the behavior might contribute to higher rates of addiction and problematic play in some way.

Kuss (2013) mentioned that the concerns appear to be grounded as a growing number of studies indicate that Internet gaming addiction is associated with various negative consequences. The psychological consequences include the following: sacrificing real-life relationships, other pastime activities, sleep, work, education, socializing, and relationships, obsession with gaming

and a lack of real-life relationships, lack of attention, aggression and hostility, stress, dysfunctional coping, worse academic achievement, problems with verbal memory, and low well-being and high loneliness. Moreover, psychosomatic consequences have been found in a number of studies. These included problems with sleeping (Allison et. al, 2006) seizures, (Chuang, 20016) and psychosomatic challenges. (Batthyány, 2009). This long list indicates that Internet gaming problems must be taken seriously as they can affect the individual negatively in a variety of ways.

Taken together, the individual, game, and attitudes appear to have a significant impact upon the extent to which problems occur as a consequence of excessive gaming in terms of how Internet gaming addiction is conceptualized. In this way, the attitudes can be seen as a lens through which individuals and others around them perceive and give meanings to behaviors and their consequences. It is critical to understand gaming problems not only by means of the observable symptoms, but to situate them within the broader context of the game, the individual, and the attitudes.

While there have been a number of studies of the effects of computer game addiction to academic performance, none has looked at the influence of online computer game addiction on students' academic attitudes in Zamboang del Sur. To bridge the gap, this study aims to determine the influence of online computer game addiction on the academic attitudes of college students in Salug Valley.

Theoretical Consideration

This study is anchored in the concept of Donmus (as cited in Khatir, 2015) who indicates that games can develop individuals' physical and mental capacities, and also can hold the attention of participants all the time and puts them in a race with themselves and also with others in order to obtain certain objectives. He believed that "The value of educational games has been increasing in language education since they help to make language education entertaining "Alternatively, Gassand Selinker(as cited in Demirbiek et al., 2010, p.763) indicated that repetition that occurs through games allows a learner to be exposed to the learning target language and creates more opportunities for acquisition to occur.

An online game has swiftly become a popular source of entertainment for all ages, particularly among young people. It is becoming a regular source of entertainment globally, spreading in conjunction with the constant improvement of internet access.

According to Linda Jackson (2011), both boys and girls who play video games tend to be more creative, regardless of whether the games are violent or nonviolent. A professor of brain and cognitive sciences, Daphne Bavelier (2010) video gamers show improved skills in vision, attention and certain aspects of cognition. And these skills are not just gaming skills, but real-world skills. They perform better than non-gamers on certain tests of attention, speed, accuracy, vision and multitasking.

Besides being a source of entertainment, the online games also have potential problems such as aggression, physical injury, and addiction. But among all problems related to online game use, addiction is arguably the most worrying. Online game addiction has been recognized internationally and steps have been taken.

Lepper, M. R. & Gurtner, J (2000), stated that prolonged and excessive use of these games can cause, mainly upon children, a number of physical and psychological problems which may include obsessive, addictive behavior, dehumanization of the player, desensitizing of feelings, personality changes, hyperactivity, learning disorders, premature maturing of children, psychomotor disorders, health problems (due to lack of exercise & tendonitis), Development of anti-social behavior and loss of free thinking and will.

On the other hand, Koo, et al. (2007) discussed the different factors to engagement with an online game: (i) concentration; (ii) enjoyment; (iii) escape; (iv) epistemic curiosity; and (v) social affiliation. Young (1996) posited that high-volume users of online chat rooms tend to suffer from increasing weak real-world interactions with their friends, families, and social activities (e.g., clubs and social organizations). Griffiths, et al. (2004) found online game is essentially played for leisure and pleasure. Babin, et al. (1994) indicated that hedonic values reflect the potential entertainment value and enjoyment that shoppers perceive in the experience of shopping. Hsu and Lu (2004) have implied that the extrinsic dimensions might not reflect the salient motives of players. In addition, the psychology of players is more inclined to be addicted to online games, such as low agreeableness, high loneliness and shyness and low self-esteem (Bianchi & Phillips, 2005). Hsu and Lu (2004; 2007) also concerned the cognitive and perceptual factors affecting attitude and behavior with online game users. Kraut, et al. (1998) used statistical methods to show a negative correlation between Internet usage and communication with relatives and friends. Morahan-Martin and Schumacher (2000) found that in the USA, pathological Internet undergraduate users were more likely to play online games.

According to Asdaque (2010) the use of the Internet is one of the major factors affecting the academic performance and social life of university students. The number of hours spent on the Internet will affect the CGPA, of students unless the Internet is used for study purpose. The students achieve good CGPA, who used the Internet for academic purposes. The graphical representations about the use of the Internet and its impact on the social life of university students indicate that the maximum use of the Internet, minimize the social activities of university students. The study showed that use of Internet for study purpose and academic achievements are directly proportional to each other while inversely proportional to the social life of university students.

Moreover, Thomas and Martin (2010) added that the basis of any addiction is the negative consequences that come with using a substance or doing an activity. With pathological gaming, the criteria for it includes resorting to crimes to fund one's own activity or pay off debts one has accumulated. However, articles in the media indicate a trend that many crimes may occur either due to frustration surrounding the game, or to copycat violent acts from the game.

Arntz (2006) and Griffiths (2010) said that emotional stability is dependent on a secure attachment to a person or thing. Computer players may use computer games as a way to solve emotional problems, and to get away from reality. This may create a self-repeating cycle, as the problem is not solved and only delayed, which creates more conflict for the individual and cause them to play more.

Methods and Materials

This study utilized the descriptive survey type of research. A purposive sampling technique was employed, having a total of 365 students were utilized as respondents of the study in all tertiary schools of Salug Valley in the province of Zamboanga del Sur. The identified tertiary schools comprised J.H. Cerilles State College (JHCSC) - Molave Offsite, Western Mindanao State University (WMSU) - Molave External Studies Unit, Zamboanga del Sur Maritime Institute of Technology (ZSMIT) - Molave Branch, Blancia Carreon Foundation Incorporated (BCFI)-Molave, J.H. Cerilles State College (JHCSC) - Tambulig Offsite, J.H. Cerilles State College (JHCSC) - Mahayag Off-site and J.H. Cerilles State College (JHCSC) - Dumingag Campus. This study adopted online computer games addiction questionnaire of Conrad and influence of online computer games to the academic attitudes questionnaire, which was made by the researcher. It was subjected to a reliability test by twenty (20) graduate students of Jose Rizal Memorial State University of Dapitan City who were not the respondents of the study. The responses were drawn using frequency counts, percentage, rank, Weighted Average Mean, and Pearson correlation coefficient.

The questionnaire consisted of the following parts, namely: Part I, considered the respondents' profile in terms of age, course and academic status; Part II, dealt on the online computer games played by the respondents; Part III, assessed the level of online computer games addiction by the respondents which was adopted from the study of Conrad (2010); Part IV included the influence of online computer games to the academic attitudes of the respondents in terms of study habits, achieving goals, academic responsibility and participation in extra-academic activities which was constructed by the researcher, and underwent reliability test.

To determine the student-respondents' level of online computer game addiction, the following method of scaling was used: 1 – 13 (Low Online Game Addiction Risk), 14 – 26 (Moderate Online Game Addiction Risk, 27 – 40 (High Online Game Addiction Risk). Further, to determine the academic attitudes of the respondents and the influence of online computer games addiction, the following manner of scaling was utilized: (5 4.51 - 5.0) Strongly Agree (SA) Very Affected (VA); (4 3.51 – 4.50) Agree (A)/ More Affected (MA), (3 2.51 – 3.50) Fairly Agree (FA) /Fairly Affected(FA), (2 1.51 – 2.50) Disagree (D)/Less Affected (LA), and (1 1.00 – 1.50). Strongly Disagree(SD)/ Least Affected(LtA).

The researcher administered personally the questionnaire-checklists to the respondents. Pertinent communications were sent by the researcher prior to the conduct of the study. The cooperation of the respondents was also asked by the researcher so they would answer the questionnaire-checklists honestly and willingly. Proper explanation to the respondents was made on how to

accomplish the given questionnaire-checklist and its relevance. After the retrieval process, the researcher went through the process of tallying, computing, analyzing and interpreting data.

In analyzing the gathered data, descriptive and inferential statistics were used. Frequency counts, percentage, rank and the Weighted Average Mean were employed to determine the respondents' profile, online computer games commonly played, the level of online computer game addiction, their academic attitudes toward study habits, achieving goals, academic responsibility and participation in extra-academic activities. To test the significance of the relationship between the respondents' academic attitudes as influenced by online computer game addiction, Pearson correlation coefficient was used.

Results

Table 1 presents the student-respondents' level of online computer game addiction. As shown in the table, 147 or 40.27% of the student-respondents are having low level online game addiction risk; 175 or 47.95% having moderate level online game addiction risk; and 43 or 11.78%, with high level online game addiction risk. The result implies that many of the respondents are at the moderate level of online game addiction risk, as shown in the study of Conrad (2010), this indicates that they are not yet full risk for an online computer game addiction but they should be very careful about their behavior.

Table 1. Students' Level of Online Computer Games Addiction

Level of Addiction	Frequency	Percent (%)
Low Online Game Addiction Risk	147	40.27
Moderate Online Game Addiction Risk	175	47.95
High Online Game Addiction Risk	43	11.78

The data on the academic attitudes of student-respondents as influenced by online computer game addiction are presented in Table 2. As reflected in the table, all statements are rated as "Fairly Affected". The overall mean of 3.19 indicates that the respondents' study habits were fairly affected. As shown in the study of Watkins (2008) that the students spent more of their time in playing computer games and sometimes tend to forget to study their lessons.

Table 2. Academic Attitudes of the Student-respondents as Influenced by Online Computer Game Addiction

Academic Attitudes	Mean	Description	Interpretation
Study Habits	3.19	Fairly Agree	Fairly Affected

Achieving Goals	2.77	Fairly Agree	Fairly Affected
Academic Responsibilities	2.96	Fairly Agree	Fairly Affected
Participation in Extra-curricular Activities	2.54	Fairly Agree	Fairly Affected
GRAND MEAN	2.87	Fairly Agree	Fairly Affected

In terms of achieving goals, the overall mean of 2.77 implies that the respondents' attitudes toward achieving goals were fairly affected since the students are less determined with their goals as supported by the study of Rooiji (2011) which tells that the students' attention is diverted in exploring the games they played.

In terms of academic responsibility, the overall mean of 2.96 reveals that the respondents' study habits toward academic responsibility were fairly affected. As cited by Ayas (2010) in his study, students tend to forget doing their assignments and projects because of the excitement they felt in playing computer games.

Lastly, in terms of participation in extra-academic activities, the overall mean of 2.54 shows that the respondents' attitudes toward participation in extra-academic activities were fairly affected. As stated by Wu (2007), playing online computer games is perceived as enjoyable by the students compared with other activities like attending schools' activities.

Generally, the grand mean of 2.87 signifies that the respondents' academic attitudes were "Fairly Affected" by playing online computer games. As revealed in the study of Ip (2008), those students who frequently play online games perform less in examination and are not as motivated or not as interested in their studies compared to students who infrequently play online games who perform better.

Table 3. Test of Relationship Between Online Game Addiction and Students' Academic Attitudes

Variables	Mean	<i>p</i> -value	Computed Value	Decision
Online Game Addiction Study Habits	1.72 3.19	0.06	-0.10	Accept Ho
Online Game Addiction Achieving Goals	1.72 2.77	0.11	0.08	Accept Ho
Online Game Addiction	1.72	0.61	-0.03	Accept Ho

Academic Responsibility	2.96			
Online Game Addiction	1.72	0.02	0.13	Reject Ho
Participation in Extra-Academic	2.54			

Table 3 presents the relationship between online game addiction and the students' academic attitudes as to study habits, achieving goals, academic responsibility, and participation in extra-academic activities.

As reflected in the table, the result proves that there is no significant relationship between online game addiction and the students' attitudes toward study habits. This means that online game addiction does not influence their study habits. According to Khursid (2012), if the students want to pass with good grades, they must improve their study skills or they must show proactive behaviors toward their studies.

The findings supported the study of Wang and Zhu (2011) in which online gaming affects students in three main ways physically: (1) Gaming addiction could drastically increase body weight abnormally due to poor eating habits, which can be dangerous; (2) Socially it hindered the development of their social skills and can also ruin the relationship with family, friends and peers academically; (3) All gaming addicts admitted that their academic careers had been suffered significantly since they started playing.

There is also no significant relationship between online game addiction and the students' attitudes toward achieving goals having the p-value of 0.11 and the computed value of 0.08. This means that online game addiction does not affect the respondents' attitude in achieving goals. According to Wentzel (2000), students should learn which goals are more important to achieve and how the attainment of one's set goal can lead to have better grades.

Further, the results showed no significant relationship between online game addiction and the students' attitudes toward academic responsibility. This means, respondents' academic responsibility is not affected by the level of the online game addiction. In the study conducted by Ip (2008), the findings revealed that those students who were diligent in their academics have better grades than those who are just doing their projects just for completion.

However, this study revealed significant relationship between the online game addiction and the students' attitudes toward participation in extra-academic activities. This means that the extent of the participation of the respondents in extra-curricular activities are affected by their online game addiction. This implies that the school administrator and other concerned officials may provide engaging and interactive sports activities that will divert students' attention from getting addicted in online game. Fujita (2005) asserted that involving in the school's activities will help the students improve their grades. The students who participated in school-based activities had higher grades, higher academic aspiration and better academic attitudes than those who were not involved in extracurricular activities at all.

Discussion

This study proves that online game addiction does not influence students' academic attitudes towards study habits, achieving goals, academic responsibility but has great influenced in their participation in extra-academic activities. The study recommends that the school administrators may facilitate engaging and interactive activities that will divert students' attention and will foster mass participation. Moreover, guidance counselors may provide services to guide and help the students solve common problems with regard to their academic attitudes. Parents may always monitor and motivate their children to limit their exposure to computers and lead to the right and good things that they may spend their time on.

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