

Online Gaming Addiction Among Bangladeshi Youth: A Case Study From Gamers' Perspectives

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Abstract—The main purpose of the paper is to determine how online game affects different aspects of Bangladeshi university going students life. The main research questions are how much time they spent playing online game, how much money they spent and what influences them to play online games. Data collection was done through a online questionnaire form. Total 80 participants provided data. The primary findings of the study was most of the participants play 2-4 hour daily but they don't want to spend money buying paid games. Another interesting find was although participants were casual gamers but they were willing to take measure against online gaming addiction.

I. INTRODUCTION

Nowadays internet is used by 99.247 million people in Bangladesh [1]. Among these internet users 26.46 million people plays various games. After the rise of popular online games like player unknown's battle ground(PUBG), which was later ported into handheld devices like mobile phones and tablets, clash of clans(COC), Ludo Star etc. children, adolescents even grown ups got hooked into an addiction which is online gaming. Consumer habit, an important key to repetitive consumption, is an interesting yet puzzling phenomenon. Sometimes this consumption becomes obsessive—consumers will continue to act a certain way even when they feel it is not in their best interests. [2]. Among these popular online game, people most of the time fight other people over the internet. They can create groups which is often called clans, can talk to each other, sell in game merchandise which may broaden the social domain of the gamers but often raises other socioeconomic problems. To speak very frankly online games costs time, energy, money, hampers study, work, business. In this research, we focused on how young people dive into online games and the effects of online games in their daily lives and activities.

The primary aim of this research was to analyze the reasons behind why young people, specifically students starts to play online game in Bangladesh, why they became addicted and the impact of online games in their daily life.

As internet is cheap now-a-days in Bangladesh and smart devices are more available, it is easy for students to access internet and play different kinds of online games. The purpose of this research is to know is there any psychological relation to playing online games such as PUBG, Fortnite, League of legends(LoL), Apex legends, DOTA etc. One of many

research question we would like to arise are, The reason behind spending a huge amount of time playing games and also interested to discover the after effects of daily activities, how much money and time they spent playing online games etc.

A. Research Questions

In this work, we put an exhaustive effort to find precise answers to the following questions related to online gaming.

- What genre of online game is more preferred by Bangladeshi students?
- How much time they spend on online games daily?
- Do they buy paid games like PUBG, GTA 5 online, and pay for in game coins and merchandise?
- What motivates them to play online games? Do they have some personal agenda like self improvement or they play games to avoid boredom and socialize?
- Are they open to adopt any means that will restrict their online game presence?

II. RELATED WORKS

E.J. Kim et al.(2008) [4] ran a survey on 1471 online game users(males 82.7%, females 17.3%) using an online response method. They were asked to complete self-reports. Questionnaires included demographic information and game use-related characteristics of the samples, the online game addiction scale, the BussePerry aggression questionnaire, a self-control scale, and the narcissistic personality disorder scale. Their result indicated positive co-relation between narcissistic personality trait and online game addiction. Whereas they found negative co-relation between self-control and online games. They came to a conclusion that personality characteristics such as aggression, self-control, and narcissistic personality traits may lead a person to become addicted to online games.

Zhengchuan XU et al.(2012) [7] collected survey data from 623 adolescents using partial square least technique. Before that, they used 163 adolescents to refine survey tools. The researchers of the paper took a different approach. To understand formation of game addiction among adolescents, they targeted the functional need that humans have. The researchers pointed out some of these functional need that leads adolescents towards game addiction. The need for advancement, desire

to gain power, progress rapidly, accumulate in-game symbols of wealth or status, need to form long-term relationships with others, need to avoid thinking about real life problems through immersion in the game.

Antonius J. van Rooij et al.(2010) [6] ran survey on two large group of participants whose age was 13-16 years. In this study, researchers have found the presence of a little subgroup of video gamers that is apparently 'dependent on' games. In spite of the fact that computer game habit is definitely not another wonder, the presentation of an online part in the present age of games has likely expanded the size and extent of the issue. This online part in gaming prompted the commencement of (private and public) treatment programs focusing on gaming dependence. Therefore, there is expanding center upon internet games when examining computer game enslavement. Research among a test of World of Warcraft players distinguished a gathering of 10% who played a normal of 63 hours out of every week and demonstrated impressive negative indications. Grüsser et al. examined per users of a web-based gaming magazine in an online review and found that 12% of those gamers satisfied analytic criteria of enslavement concerning their gaming conduct. These discoveries show the presence of a little subgroup of web-based gamers who can possibly be arranged as 'online computer game addicts. Effects might differ based upon the psychological profile of the gamer, i.e. there may be a group of addicted heavy gamers who suffer as a result of their unbalanced life-style, and another group of heavy gamers who benefit from having multiple social environments.

III. DATA COLLECTION METHODS

As the timeline of the research is during COVID-19 Pandemic, there was no alternative to online survey. We created 12 questions that explore why Bangladeshi people are into online games and how it might affect them. The question were served to them in online question form manner.

We used JotForm, a free online form builder to create online questionnaire.

A total of 80 data were collected within a week window. We decided not to take more submission because of the current circumstances.

Data distribution was done one to one using Facebook messenger for the most part. One Facebook group was used to collect data. The Facebook group had 90% male members. So ratio of male participants were greater than female participants.

IV. DATA FINDINGS AND RESULT

A. Action shooter are more played by Bangladeshi students than Strategical games

40% of the total population plays popular action shooters like Player Unknowns battle ground(PUBG), fortnite, Call of duty. 27% plays strategical games like DOTA, online ludo, Clash of clans.

Although strategical games like DOTA, STARCRAFT has huge fan base outside of Bangladesh, figure 1 shows that Bangladeshi university going students are more of a action

shooter fan. The primary reason for that is game like PUBG and PUBG mobile which popularised a sub genre of game called battle royal. Another battle royal named Fortnite was free on EPIC game store [3] which took the gaming world by storm.

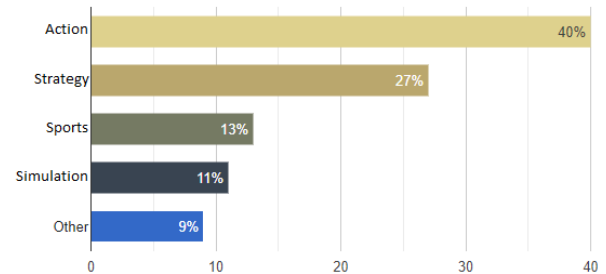


Fig. 1. A bar chart showing which genre is preferred by participants

Action games include a broad variety of games including action shooter, battle royals, strategical action shooter. Some of the popular action shooter online games are PUBG, Fortnite, Call of duty Warzone, Apex legends.

Online Shooter are primarily fixed length matches where player are given certain missions or they have to survive among 100 other players.

Online strategy games are DOTA, LOL, StarcraftII. These games are more popular than actions shooters. But in our survey, participants were more of a action shooter fan rather than strategical. Online strategy games also has time limited matches. But the learning curve of these games are too steep. Player has to play games like DOTA for years after years before they can become good at the game.

Online sports games include FIFA online, PES online, nba online etc.

Simulation games include Euro truck simulator, Cities skyline, The sims 4. Simulation games lets you build your online profile in real time. Games like sims 4 has close to reality game mechanism that lets you befriend other players, marry them, participate in social gathering all inside the game.

Other category have various kind of games which has a fan base of their own. For example, Grand Theft auto online version is an Role playing game(RPG) game which has combined elements of Action shooter, Simulation and Strategy. Other popular RPG games are World of warcraft, Elder scrolls online etc.

B. Negative co-relation between playing online game for long time and spending money

63% of the population plays 2-3 hours daily on average which gives us a hint that majority of the gamers are intermediate gamers.

Figure 2 and finding 3 says 63% of the population plays 2-3 hour daily. Which indicates that the majority of the participants takes online gaming seriously. But figure 3 says otherwise. It indicated that 80% of the population spend below 1000 Bangladeshi taka for online games. The negative co-relation between these two suggests that most of them plays free online games like PUBG mobile, clash of clans, ludo online, Fornite. They are happy with the default in game weapon skins and other merchandises.

It gives us the notion that Bangladeshi students are happy with the free content they get from the games. They won't spent money buying paid online games, gaming accessories or in game purchases.

The timing of this research and data collection also plays a vital role. During this COVID-19 pandemic, there has been a surge in online gamers who can just download PUBG mobile and play casually for 2-4 hours daily. After the pandemic situation resolves they might not play for 2-4 hours daily which makes them less significant participant for our research.

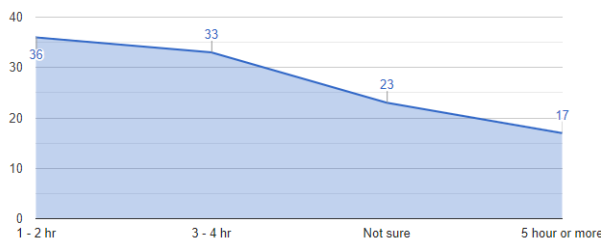


Fig. 2. A line chart showing how much time participants spent daily playing games

But 57% of the population said that they spent no money whatsoever on online games and 23% said they spent less than 1000 Bangladeshi Taka on online games. This is a negative correlation between majority of the population being intermediate gamers and spending money.

C. Friends and personal interests are the main motivation behind online gaming addiction

On the question of what motivates them to play online games, 40.5% of participants says that they are driven by personal interest. Another, 39.4% says that, they are influenced by friends as figure 5 states. The preconceived notion was hardcore gamers play online games to get relief from stress, anxiety and other problems. But the data shows otherwise. On the other hand 40.5% playing games out of personal interest might spark a thought that they are playing games to improve their game playing ability.

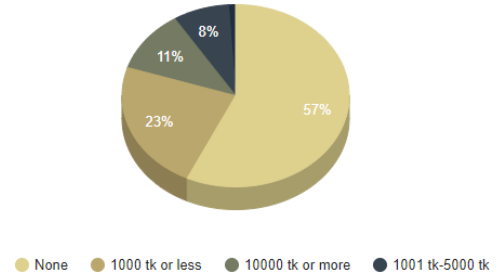


Fig. 3. A pie chart showing how much money they spent on online games

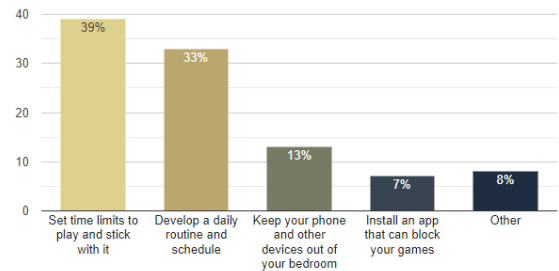


Fig. 4. A bar chart showing what are they willing to do to get rid of game addiction

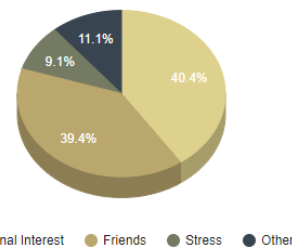


Fig. 5. A pie chart showing what motivates students to play online games

D. Causal gamers are interested in adopting anti game addiction measures

Although, the data says that the participants of this research are not that much of a hardcore gamer but on the question of whether they are willing to take some cautionary measures to stop gaming addiction, 39% agreed to set time limits and other 33% were willing to develop a daily routine as indicated by figure 4.

A useful insight we got here is, although they won't spend money on games, but they are willing to take measure to stop long streak of daily gaming. They understand that, more they play the game, more they will get hooked into the game. So they are open to simple remedy like, setting particular time limit for playing games or keeping their phone away or develop a healthy routine.

V. FUTURE WORK AND CONCLUSION

The circumstances we did the survey was not in favour of research. In future we can contact any online gaming organization or group to participate in this survey. We can also take interview from people who play online games professionally. Recently, online game streaming became very popular where people play 6-7 hours daily in front of more than thousand of online audience. We can take exclusive online interview from them or observe their behaviour while they are in critical moment in the game to see how it affects their performance, attitude, and language.

The economic side of online gaming and online game industry can also be taken into account as many online streamers take streaming as their main job. Many online gaming shop business are now booming and there has been a recent surge in online gaming in Bangladesh as gaming accessories like high end, powerful GPU, RAM, CPU prices has been coming down.

Online gaming is the new hot trend which was started in 2016, now is more bigger than ever. Games like Fortnite offering \$100 prize pool for their grand finals [5]. As successful trend which will go a long way, research like these will help us understand how it affect students.

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APPENDIX

A. Questionnaire

We are asking for your voluntary participation in our mini project-based research regarding addiction to online gaming Bangladeshi students. If you participate, you will be asked to provide answers to questions regarding your exposure to online gaming. Filling the questionnaire should take less than 5 minutes. By clicking "Next" below you are indicating that you have read and understood this consent form and agree to

participate in this research study. If you have any questions then feel free to contact rayhan.taher@gmail.com

- 1) On average, how much time the students spend playing online games daily?
 - 1 - 2 hr
 - 3 - 4 hr
 - 5 hour or more
 - Not sure
- 2) What things influenced them to play online games in the first place?
 - Friends
 - Stress
 - Personal Interest
 - Curiosity
 - Hype of a trend
- 3) Are they increasing the time of playing gradually?
 - Yes
 - No
- 4) What reason behind playing video games most applies to them?
 - To avoid boredom
 - To increase your gaming skill
 - To help with depression
 - Social purpose (e.g. Playing with friends or strangers online)
 - For the story and narrative of game
- 5) Does the student ever ignore other important activities for it?
 - Yes
 - No
- 6) How much money have they spent behind online games in the past year?
 - None
 - 1000 tk or less
 - 1001 tk-5000 tk
 - 5001tk -10000tk
 - 10000 tk or more
- 7) Is the game they are addicted to integrated with social media?
 - Yes
 - No
- 8) Do they like spending time playing with your online teammate rather than spending time with their family and friends?
 - Yes
 - No
- 9) What genre of games do they play most?
 - Action Shooting - Based on thrills, fightings, shooting (PUBG, Apex Legends)
 - Sports - Features and focuses on sports.(FIFA18, PES20)
 - Strategy - Focuses on tactical and logistical challenge (DOTA, Counter Strike,LOL,Ludo, CoC)

- Simulation - Focuses on simulation of real events like flying a plane or driving (Bus Simulator)

10) Do they think they should've taken some of these steps to keep them out of the addiction to online gaming?

- Set time limits to play and stick with it
- Keep your phone and other devices out of your bedroom
- Consult with a psychiatrist
- Develop a daily routine and schedule Install an app that can block your games