

## Study of PUBG's addictive gaming habit among Indian Youth

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**Abstract:** *Playing PUBG is turning into problematic addiction. It has been putting detrimental effects on the people who play excessively. Even the American Psychiatric Association has recognized the online gaming addiction/disorder in its fifth edition. The addiction leads to functional impairment and severe distress among the players. The gamers are often reported to lose control of how and where they spent their time. The disorder is often associated with disturbingly alarming psychopathological symptoms like aggressive behavior, breaking the rules and normal human routine to continue to play games, and lack of participation in social activities. With the advent of PUBG, a lot of concerns have been raised about the addictive behavior of Indian youngsters' gaming addiction. Schools and colleges all across the nation have issued cautionary messages to parents to keep an eye on their offspring. The present research paper documents the online gaming addictive behavior of the Indian youngsters through qualitative and quantitative methods.*

**Keywords:** *PUBG, Internet gaming disorder, Mobile gaming, Online gaming, India, Addiction*

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### I. INTRODUCTION AND LITERATURE REVIEW

Playing games online has been ranked as the favorite leisure activity around the globe (Ballabio et al. 2017; Männikkö et al. 2015). Online gaming, like some other leisure activities, can have both positive and negative effects on the players. Studies done by Griffiths (2002, 2019) and Nuyens et al. (2019) have shown that online gamer can reap benefits therapeutically and medically and find themselves improved in their cognitive skills and health. In making social connections and improving collaborative skills too, online gaming has been proven as an effective method (Gee, 2007; Reinders, 2012). Online gaming has produce several educational benefits too. The interactive online games are also associated with the courses to improve communication and language skills (Reinders&Wattana, 2012). On the contrary, the online gaming can become an addiction and health hazard too (Kuss and Griffiths 2012; Pontes and Griffiths 2014).

This paper studies the impact of one of the most used games PUBG (Player Battle Undergrounds) on youth in India. PUBG is a multi-player game played online whose concept is taken from *Battle Royale (2000)* a film made in Japan. The modus-operandi of the game is that 100 players connect online with or without using their real name in teams of 4 players. These teams are dropped by parachutes on a VR (virtual reality) battleground. These teams look for and try to kill one another and each team tries to be the last surviving team. The team mates can give life to each to each other and have 'VR chicken-dinner' if they win the game. It has become a matter of prestige and players boast about their wins and number of kills on social media platforms (What's App Status, Facebook, Instagram, Snapchat Stories etc.). Gamers in teams of fours pool money also and winning team takes all the money. In tech and annual festivals of colleges and universities, PUBG competition are also conducted as part of their events and activities. Since its launch in December 2017 by Quartz India (2018), it has been downloaded 26,774,647 times (Google Play Store, April, 2020). Bhattacharya (2019) reported that more than 30 million gamers play this online game every day. Quartz India (2018) published a survey result with 1047 participants who expressed that PUBG was first in its popularity with 62% participants preferring it.

Since this game is so popular in India, its negative effects are also more clearly evident in Indian context. There have been few studies which included Indian gamers as participants among the participants of other nations, but there has been no dedicated study on Indian gamers only. Pontes et al. (2017) studied the properties and constituents of a gaming disorder assessment instrument with the psychometric evaluations of gamer across the globe. Subramaniam et al. (2016) also included gamers from several countries including India but did not present a country-wise data or attributes. Srijanpana et al. (2014) studied overall addiction Indian

users of use of internet for social media, gaming, watching video contents etc. and do not focus entirely upon the PUBG addiction or gaming addiction of Indian users.

Apart from these survey researches some case studies are also written on the gaming addiction from medical and psychological perspectives (Griffiths 2010; Keepers 1990; Kuczmierczyk et al. 1987; Ross et al. 1982; Torres-Rodriguez et al. 2019). Mamun and Griffiths (2019) took a case study approach to study the problematic cases reported in various print media and newspapers from India. They report that several news stories have presented a negative image of PUBG and associated the gaming addiction of PUBG with deterioration in the physical, psychological and mental health of the gamers. Mamun and Griffiths (2019) presented 8 incidents from Indian print media which reported very negative effects of PUBG game's addiction on Indian gamers. They reported incidents where "exam failure, running away from home, hospitalization, drinking acid by mistake instead of water, suicide and suicide attempt, and accidental deaths" (Mamun & Griffiths, 2019, pp 2 – 3) happened due to excessive playing of PUBG.

Indian print media have reported several incidents very PUBG addiction has become very fatal and life threatening, especially among youngsters, and has broken the very thread of sane, social life. As recently as May 2019, a 19 years old married woman in Gujarat, India rang up the state women helpline number asking their help to get divorce from her husband so that she can live with her constant PUBG partner (India Today, May 21, 2019). A new version of PUBG asks for money to provide updated features and teenagers, not having money to buy these features, resort to extreme measures to get the money to play PUBG. A 16 years old boy in Hyderabad, India, faked his own kidnapping and asked for 3 lakh INR from his parents (Times of India, Oct 14, 2019). Even a 12 years old boy from Rajkot, India stole around 3 Lakh INR from her parents in small installments over a period to pay for these features of PUBG (Times of India, March, 1, 2020). Even the Prime Minister of India, Mr. Modi, Chief Ministers of various Indian states, celebrities have warned against the excessive use of PUBG and have asked the parents to contact child helplines if they see signs of addiction in their children (News18, August 5, 2019; Times of India, January, 29, 2019). Considering the grave situation in India, this study tries to capture Indian youngsters' experiences about PUBG. The following sections discuss the research methodology, information about the participants, results of the survey, discussions on the results, implications for caring adults of youngsters and future research scope.

## **II. RESEARCH METHODOLOGY, INSTRUMENT & PARTICIPANTS**

The research paper uses the survey research method to study the gaming disorder of the survey participants. Study's design is cross-sectional study which is a type of observational study that analyzes data from a population, or a representative subset, at a specific point in time. The instrument used in the survey, "*Internet Gaming Disorder Scale-Short-Form (IGDS9-SF)*" is developed by Pontes & Griffiths (2015) for generic gaming disorder and has been converted to study PUBG's gaming disorder by replacing the word 'Game' in the questions by 'PUBG'. The scale has 9 questions about the gaming disorder. For the study, 05 more questions were added in the instrument to check the perception of the students about seeking help regarding their addiction. The participants have to record their experiences of a gaming related situation or feeling on a Likert scale of 1 to 5, where 1 denotes 'never', 2 denotes 'rarely', 3 denotes 'sometimes', 4 'often' and 5 'very often'. The survey was served to 480 students of a PGDM institute in Northern part of India. 306 students completed the survey and all responses were valid and completely filled, making the response rate of 63.75%. These 306 students represented 19 states and union territories of India with almost equal representation of male and female participants.

## **III. RESULTS**

The gaming disorder and addiction keeps the addicted person mentally occupied with the game even when the person is not playing the game. The first question asks the participants whether they feel mentally occupied with PUBG even when they are not playing it. The question no. 5 also talks about the same mental occupation of gaming activity as it talks about stopping/discontinuing other hobbies and entertainment activities once the participants started playing the game. Figure 1 and 2 report the results below. If we add 'often' and 'very often' numbers, it leads to more than 40 % of the participants reporting that even during the non-playing, period they think about the game (playing it, thinking about the results of the previous game etc.) and they have stopped doing other leisure activities once they started playing the game.

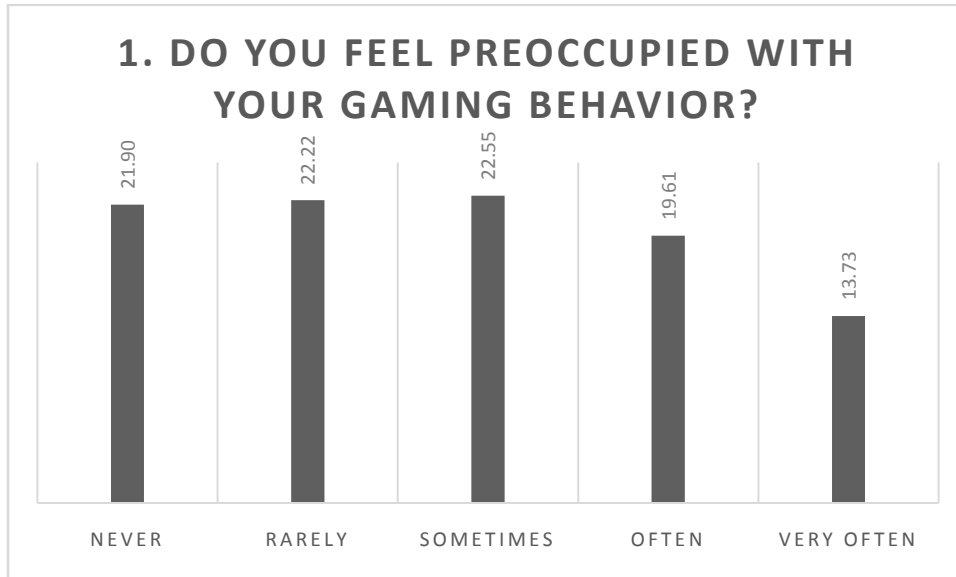


Figure 1



Figure 2

The participants themselves may have tried to stop playing the game and uninstall it, however, they might have failed in doing so. Question no. 2 (Figure 3) records do they feel anxious/irritated/sad when they try to stop playing. More than 25 % of participants feel anxious/irritated/sad when they try to stop playing PUBG. Question no. 4 (Figure 4) tries to find out if the participants loose the sense of control over their playing or uninstalling the game. Around 20% participants feel that their PUBG playing behavior has become automated and subconscious. Question no 10 (Figure 5) directly asks if the participants feel helpless in controlling their PUBG playing addiction. This question was not in the original instrument 'IGDS9-SF', but we added this direct question in order to check the biasness and defensiveness of the participants. However, when a direct question asked that whether or not they can control their PUBG playing addiction only around 15 % agreed to it. All three questions (Question no 2, 4, and 10) are asking the same thing in different language and participants' self-consciousness is probing them to answer differently in direct and indirect questions.

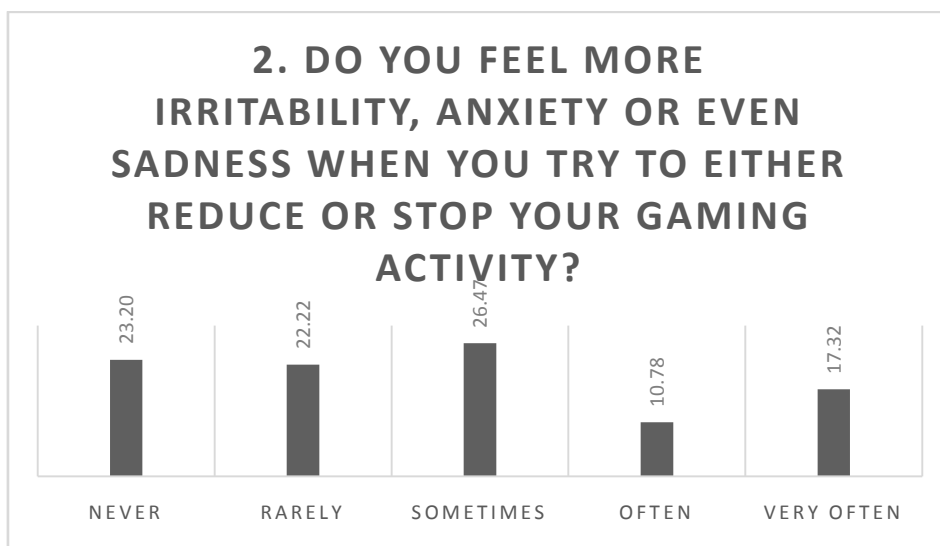


Figure 3

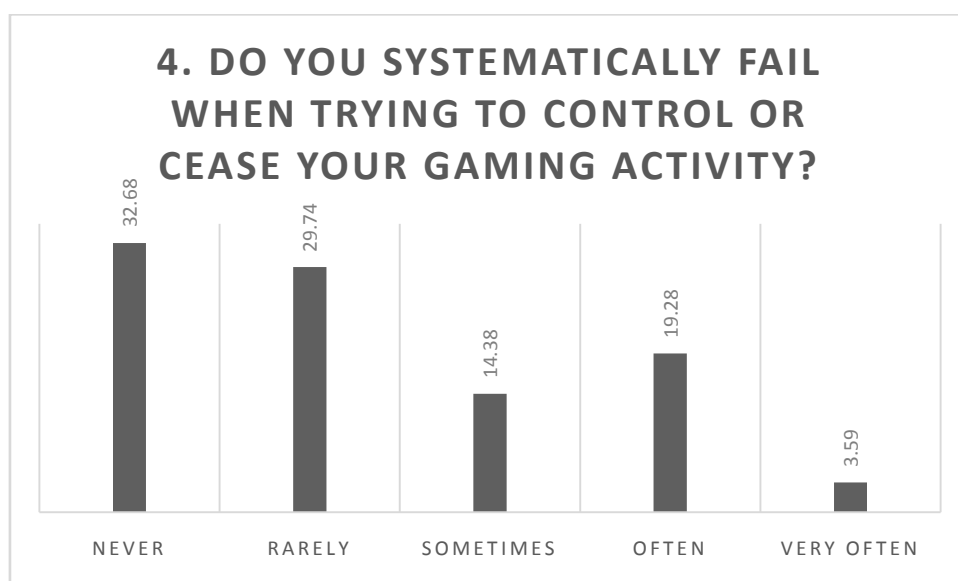


Figure 4

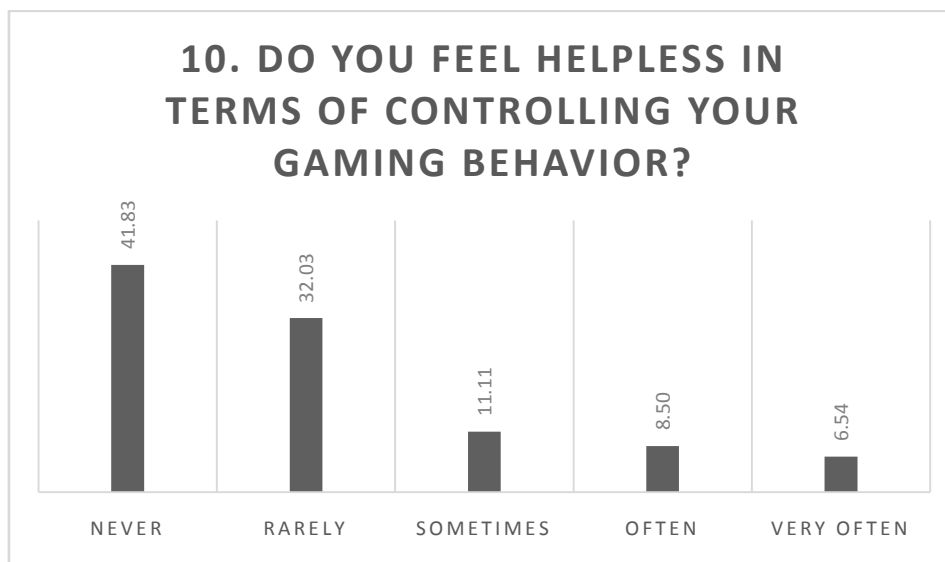


Figure 5

Next, question no 3 and 8 were related to the motives behind playing PUBG. Question no 3 (Figure 6) was connoted positively asking if spending time in playing PUBG leads to satisfaction or pleasure. Question no 8 (Figure 7) was connoted negatively asking if the participants play PUBG to escape from negative emotions like helpless, guilt, anxiety etc. Both the questions had elicited similar kind of responses as in positively structured question about motive majority (26.47%) of the participants said that they 'rarely' feel the need to spend more time in playing PUBG and in negatively structured question majority (28.76%) of the participants said that they 'never' play PUBG in order to escape from any negative emotion.

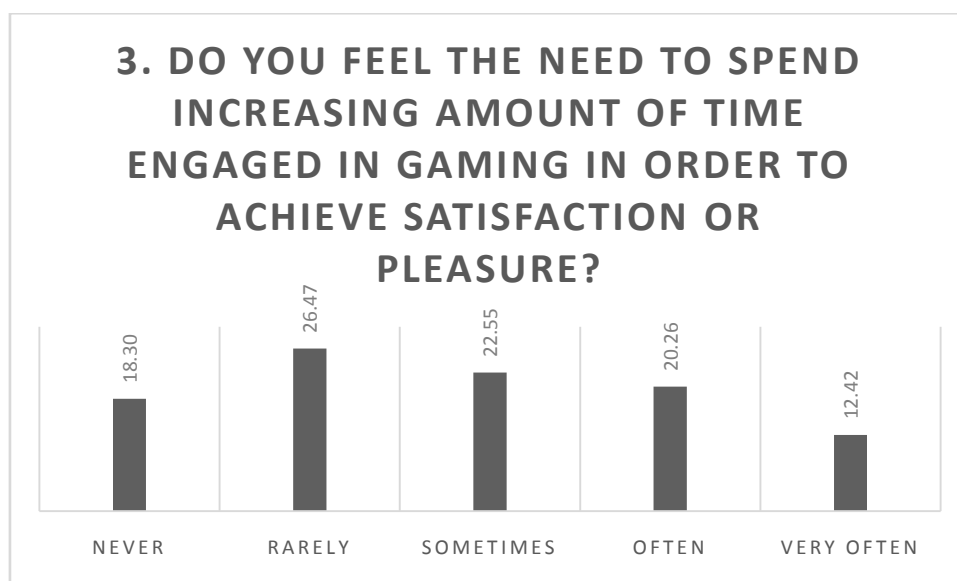


Figure 6



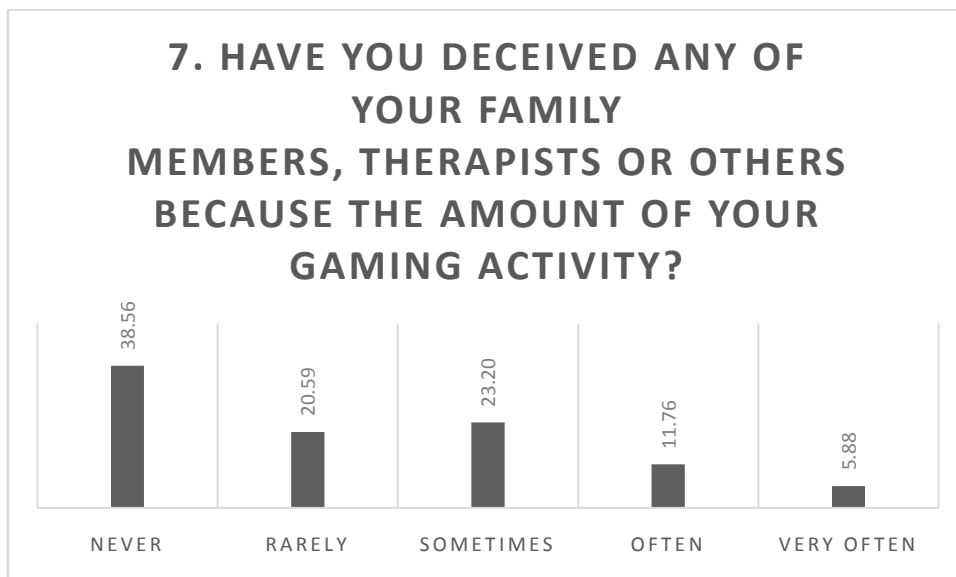
Figure 7

The breaking of social, professional and personal relationship is another side-effect of the addiction of PUBG. Question no. 6 and 7 talk about interpersonal relationships. Question no 6 (Figure 8) asks the candidate whether or not they continued to play PUBG despite knowing that it is causing tensions in their interpersonal relationships in general. It is a direct and somewhat neutral question and participants may have answered it honestly with 31 % participants saying that they continued to play PUBG despite knowing that it is creating tension in the relationships 'often' or 'very often'. In the similar kind of negatively structured question (question no. 7, Figure 9) the participants may have become defensive and only 16 % participants, 'often' or 'very often' have deceived the people around them (family members, therapists, etc.) in order to play more PUBG. Next, question no 9 (Figure 10) asked about losing a professional or career opportunity due to excessive playing of PUBG. This, indirectly, is a result of strained relationships (personal and professional) due to addictive playing

of PUBG. Around 20 % people said that they have 'often' or 'very often' lost a professional or career opportunity due to excessive playing of PUBG. Looking at these three questions together (question no. 6, 7, and 9) indicates that addictive playing of PUBG in, on an average, 3 out of 10 participants, 'often' or 'very often' have led to strained personal or professional relationships.



**Figure 8**



**Figure 9**

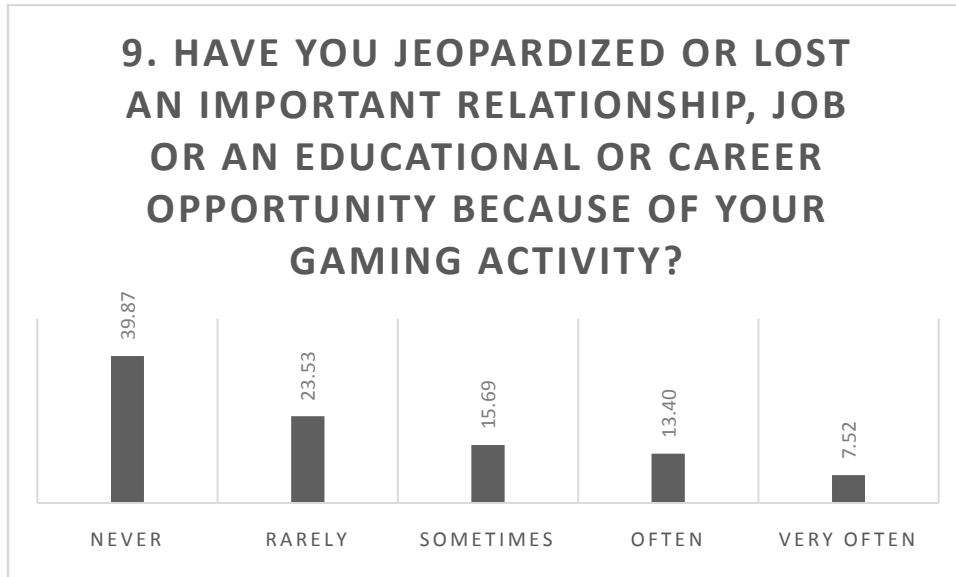


Figure 10

Now, four more questions (question no. 11, 12, 13, 14) were added after observing certain behaviors regarding PUBG playing habits of youngsters in general. Since it is a team game, where four, generally, socially know people, often classmates, make a team to play the game, the game (PUBG) might often include a lot of peer pressure of playing. Even when someone does delete PUBG after realizing the toll its taking on their health, personal and professional life, sometimes, the peers (friends, colleagues, classmates) might put peer pressure on the person to re-download it. Further, the habit of bragging about the ‘number of kills’ by a person on social media can also indirectly put a peer-pressure on someone to (re)download and play the game. Question no. 13, Figure 11 asks participants that whether or not they have deleted and then re-installed the game because of peer-pressure. Around 20% participants said that they have ‘often’ or ‘very often’ deleted the game considering its bad effects on them and have re-installed it due to peer pressure.

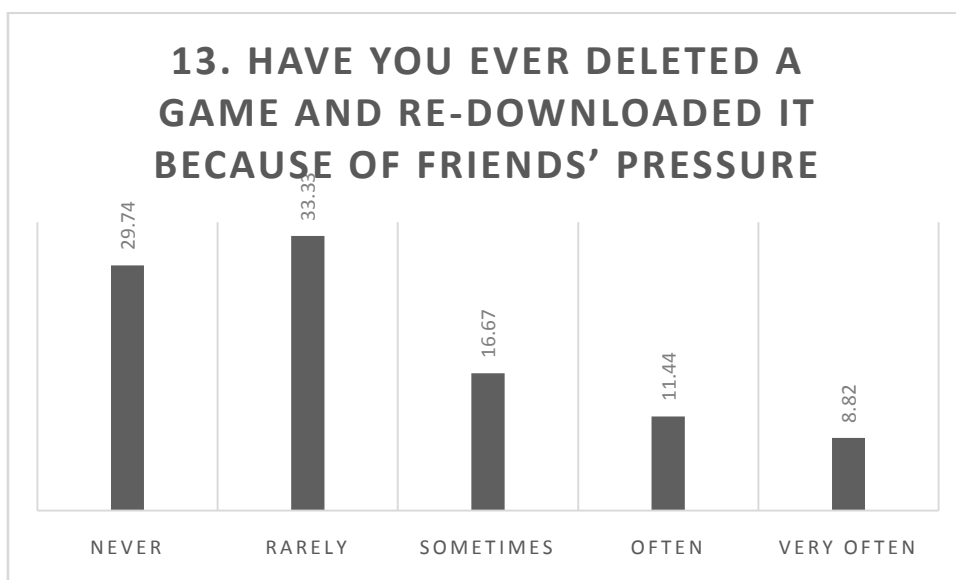


Figure 11

The two more added questions (question no. 11 and 12) try to gauge participants’ willingness to discuss and seek help about their addictive PUBG playing behavior. Figure 12 (question no. 12) reports that only around 20% participants try to talk to someone about their excessive PUBG playing habit and most (80%) participants said that they never tried to talk about it. Next, question no. 11 (Figure 13) reports that around 16 % participants have already tried counselling or external help to come out of the excessive PUBG playing habit. Finally, the participants were asked (question no. 14, Figure 14) about how much time do they spend, on an average, every day on playing PUBG. About 77% participants spend more than 6 hours per day on average on playing PUBG

which is an indication of addictive behavior. These results and their implications are discussed in the next section.

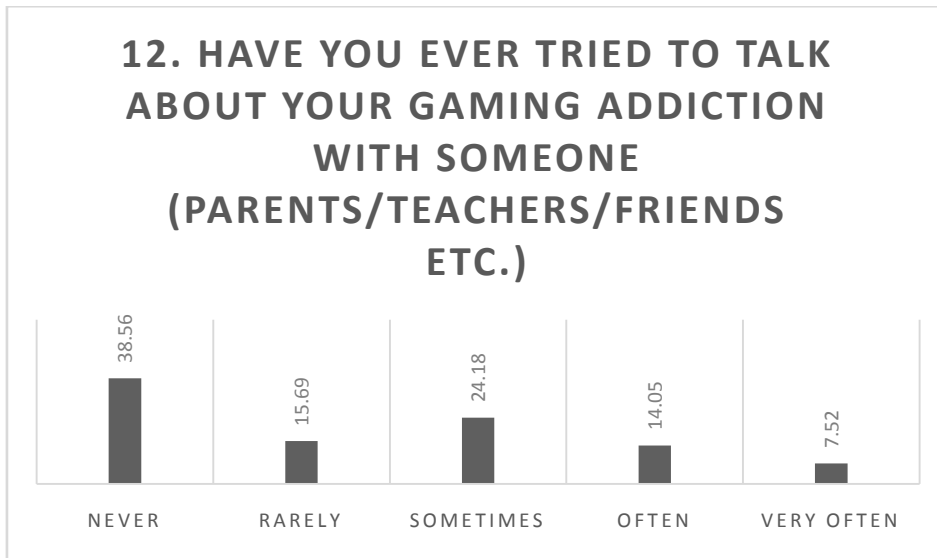


Figure 12

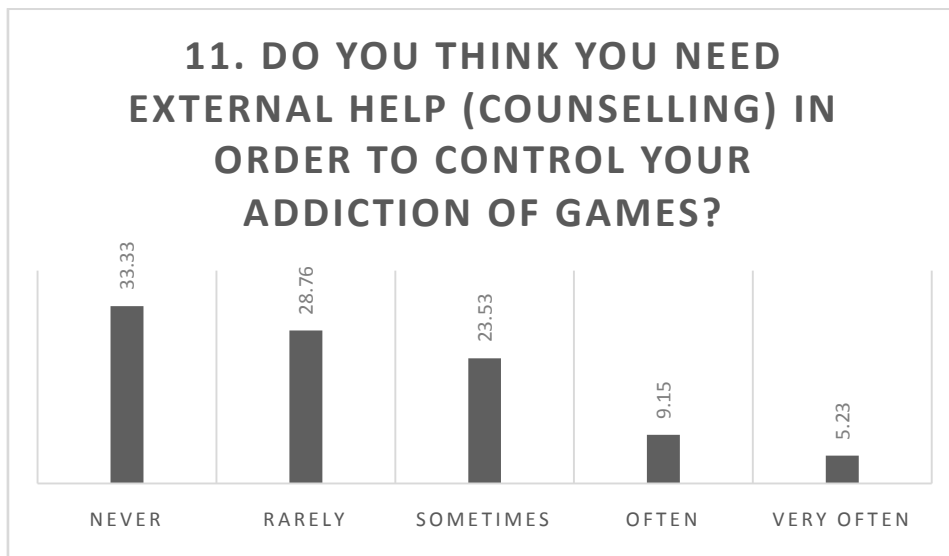


Figure 13

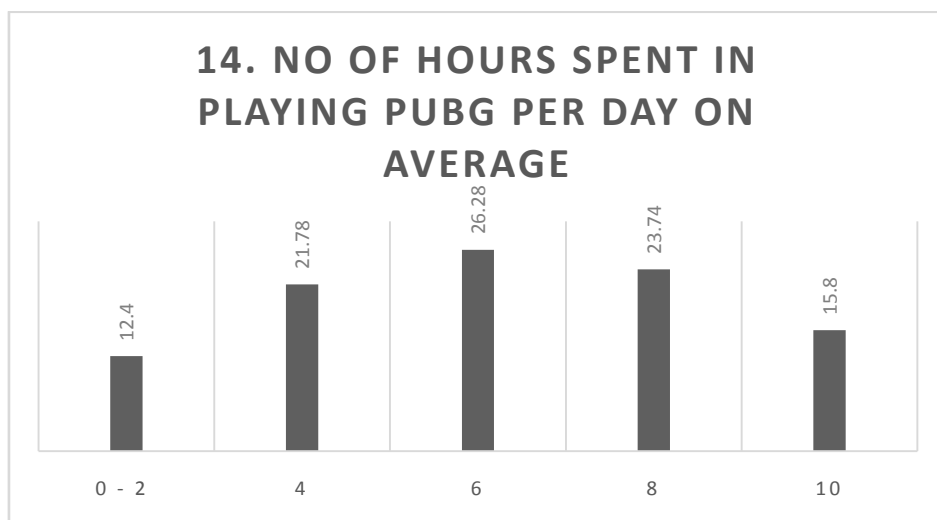


Figure 14



#### **IV. DISCUSSIONS AND IMPLICATIONS**

The questionnaire can be categorized into four aspects of PUBG gaming habit. The final question (question no 14) gives an alarming picture of the situation as about 64% of the participants play PUBG for 6 or more than 6 hours a day, which is a sign of addictive behavior. However, as is the case with most addictions, the addicted person (some participants here) are not aware about their addictive gaming behavior. The situation worsens when the results reveal that about 40% participants continue to think about PUBG even when they are not playing it. The real motive behind playing PUBG could not be clearly ascertained from the questionnaire as question no 3 and 8, both elicited mixed results. However, for about 20% participants, peer pressure is one reason for playing PUBG, despite being aware of its detrimental effects. For about 3 out of 10 participants, (question no. 6, 7, and 9), PUBG playing has led to strained personal or professional relationships. Finally, question no 11 and 12 indicate that only about 20% participants have ever tried to seek help from friends, family or counsellors.

Looking at these detrimental effects and addictive nature of the game various countries, states have tried to ban the game. China banned PUBG including 7 other games in 2018 considering its detrimental effect on psychological and social life of youngsters (New Indian Express, 2019). In Indian context, the Prime Minister discussed about PUBG (Times of India, Jan 29, 2019), chief ministers of Indian states like Gujarat, Goa, Jammu and Kashmir, Tamil Nadu etc. have asked for ban on PUBG (Sekhose, 2019). Even a PIL (public interest litigation) has been filed against PUBG in Bombay High Court citing that PUBG induces violent and aggressive behavior and creates an atmosphere of cyberbullying (Sekhose, 2019). Banning the game entirely is the easiest and most popular way governments are dealing with PUBG addiction. PUBG mobile itself tried to mitigate the negative impact of the game on young gamers. It tried to restrict playing PUBG for 6 hours a day but its functioning and effectiveness is still questionable. The company also started dialogues with governments all across the world to understand the impact it is creating and find out measures to mitigate this negative impact.

These results of the present study have serious academic and societal implications, which goes beyond this single-point mitigation process, banning. The participants have shown that they are, to some extent, open to discussion and seeking external help about their PUBG addiction. In the curriculum of schools and colleges there should be some chapter related to this addiction. School, colleges and other academic institutes must keep an eye on the performance and behavior of their students. General gaming disorder seminars can be conducted for parents as well as students for creating awareness about PUBG addiction. Further, academic institutes can also hire some psychological counsellors who can assist addicted students to get out the trap of PUBG and resume their normal life. In general, the society can be made aware of this addiction by publishing articles, blogs etc., creating social media campaigns in associating with youth influencers (sports persons, celebrities etc.). Academic institutes and society

#### **V. LIMITATIONS & FUTURE RESEARCH SCOPE**

One limitation of this study is that the number of active PUBG players in India are in millions and some researchers can do the research with at least thousands of PUBG players across various parts of India. Further, another interesting area of research could be doing in-depth qualitative (interview and focus-group) research with some highly addictive PUBG players to understand the patterns of addiction. Collaborative with researchers from social sciences and psychologists can bring more in-depth and multi-faceted observations of PUBG addiction. The topic also demands an action research model where pretest and posttest with an intervention are conducted with the help of psychologists, social scientists, educationists etc.

#### **VI. CONCLUSION**

Several researches and print media stories have highlighted that PUBG game is very addictive in nature and can lead to serious detrimental outcomes like loss of life and sanity. The gamers often lose the sense of control over their actions and thoughts and behave in a very anti-social way. As the study shows, to some extent, peer pressure also works in favor of the game and youngsters generally get trapped into this addictive gaming behavior. Being aggressive and violent are most common outcomes of PUBG addiction which leads to loss of relationships (personal and professional), career opportunities, social life and grip over one's thoughts and actions. The paper has presented data of participants' experience and perception of their PUBG gaming behavior. The paper also discusses some implications for academic institutes and societies in general to mitigate the negative effects of PUBG playing. Governments, at present, take a singular step of trying to ban PUBG, however, various social institutes (including educational institutes) can do a lot in safeguarding India's youth from this addictive game, PUBG.

#### **REFERENCES**