Problematic Online Gaming in Pakistan

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Abstract: *The objective of the present research is to explore the prevalence of problematic online gaming in adolescents and young adults. A sample of (N=357), 298 males and 59 females participants who play online multiplayer games was collected. Online Gaming Questionnaire Short Form (POGQ-SF) by Papay, et al. (2013) was used to differentiate between problematic and non-problematic gamers. The chronbach alpha of (POGQ-SF) was .75. The results indicated 190 participants as problematic gamers and 165 participants as non-problematic gamers. It was also indicated that males are more problematic gamers than females. The result has important implications for future researchers.*

Keywords: problematic online gaming, time of playing, adolescents, DSM-V, addiction.

1. Introduction

Common man assumes that the purpose of the game is "entertainment" and that games are played in leisure time when one is tired from the daily activities of life. But the number of time that people spend playing games and their negative consequences revealed by the research contradict the common man notion (Liu & Peng, 2009; Van Rooij, 2011).

American Psychological Association Diagnostic and Statistical Manual (DSM V) has introduced "Internet Gaming Disorder" in section III as a condition warranting more research. The data mostly come from Asian countries (King, Haagsma, Delfabbro, Gradisar, & Griffiths, 2013).

Studies have revealed that online games are replacing other life activities like study, job, social life, family events, and normal daily functioning like watching television and sports (Van Rooij, 2011). Excessive game playing disrupt the school, work, and real-life social contacts (Grusser, Thalemann, & Griffiths, 2007).Research to date (Chappell, Eatough, Davies, & Griffiths, 2006; Egli& Myers, 1984; Griffiths & Davies, 2005; Grusser, Thalemann, & Griffiths, 2007;Keepers, 1990;) has identified a minority of players who sacrifice sleep, school and job productivity, household chores, time spent with significant others, and other major responsibilities in order to play video games offline and online (as cited in King et al., 2010).

1.1 Problematic Online Gaming

Van Rooij (2011) defined game addiction as: "A loss of control over gaming, leading to significant harm". Demetrovics et al. (2012) propose the term Problematic gaming. Problematic gaming has been defined as "When the excessive gaming starts interfering with the daily life functioning it became problematic gaming or addiction".

Problematic use of online gaming can be viewed as a special case of the broader concept of Pathological Internet Use (PIU). Problematic internet use is considered as a multidimensional syndrome that is comprised of cognitive, emotional and behavioral symptoms. Most of the studies conducted on problematic gaming have used the Brown (1997) component model of addiction as theoretical framework for explaining video game addiction. This model states that six core features must be present for a significant period of time in order to indicate addiction i.e., salience, mood modification, tolerance, withdrawal, conflict and relapse.

1. Salience. This occur when playing video game become the most important activity in a person's life, dominating the thoughts (preoccupation and cognitive distortions), emotions (cravings), and behavior (deterioration of normal behaviors).
2. Mood modification. This refers to changes in person's mood state that occur as a result of playing video games, such as increase in physiological arousal or a tranquilizing feeling of calm.
3. Tolerance. This refers to the process whereby increasing amounts of video game play are required to achieve the former mood-modifying effects. This means that players gradually increase the amount of time they spend engaged in video game playing.
4. Withdrawal. These are the aversive mood states and /or physical effect that occur when video game play is suddenly discontinued or reduced. Psychological withdrawal symptoms include frustration, irritability and flattened affect.
5. Relapse. This refers to the tendency for the player to make repeated reversions to earlier patterns of video game play.
6. Harm. This refers to the negative consequences of excessive video game play. Harm includes conflicts between the addicted video game player and other people (family members and friends), other activities (job, school, social life, hobbies and interests), and from within the addict themselves (psychological distress).

Playing time is also considered as one of the most important criteria for identifying gaming addiction. A study identified the time of 41 hours per week as criteria for addiction (Griffiths, Davies, & Chappell, 2003). Online gaming is very popular in Pakistan as in all other countries of the world. Gaming zones are working in every city, opens 24 hours a day and full of gamers. The popularity is increasing day by day. According to Gametracker website almost 2000 people from Pakistan play games at each online gaming database. There are more than 200 hundred Pakistani online gaming servers for different online games.

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In the west, research has demonstrated negative effects of multiplayer online gaming; thus known by "problematic online gaming". It is a need of time to explore this phenomenon in Asian countries, establish the theoretical foundations of the construct and to understand its prevalence and causation. As Information Technology sector of Pakistan is progressing rapidly so are the online video games. Present research is an effort to take up the start in this new area of research. In the present study, problematic online gaming will be explored in the gaming population; whether this phenomenon exists in Pakistan or not.

2. Literature Review

Various researchers have highlighted the popularity of massively multiplayer online games (MMO) and massively multiplayer online role playing games (MMORPG). According to Caplan, Williams, and Yee (2009) MMO are the rapidly growing segment of internet activity and the subscription for these games are above 47 million. According to Billieux, et al., (2013) there are 20 million people worldwide playing MMORPG games in which 10 million are only playing World of War craft (WOW). According to another research, 12 million people play (WOW) in another virtual gaming world, Blizzard (Ferguson, Coulson, & Barnett, 2011).

In the western countries many researches have been carried out on problematic online gaming. Yee (2006) reported that 50% of massively multiplayer online (MMO) players self-reported that they are "addicted". MMO group also reported greater enjoyment in the game, plans to continue playing, and more online friends than the gamers of other computer games. According to Chak and Leung (2004) only 14.7% can be classified as Internet addicts. The study also suggests that majority of online gamers are non-problematic. A meta-analysis of pathological gaming prevalence indicated that prevalence varies across studies because of approach used to study addiction. Studies that used gambling criterion of addiction indicated high prevalence as while most precise measure estimated 3.1% all over the world.

Yee (2012) highlighted that 18% online game players reported that playing on-line caused them financial, health, relational or work problems. Several studies have also highlighted that increase online game playing fosters violence tendencies, lower psychological and physical well-being, lower achievement and superficial personal and family relationships (as cited in Ryan, Rigby, &Przybylski2006).

3. Method

Cross sectional research design was used to identify problematic and non-problematic gamers from online game players. The sample of the present study consisted of adolescents and young adults who play online multiplayer games. Total sample was consisted of 357 participants, male (83.5%) and female (16.5%). Age range was from 11 to 23 years (M=16.8 and SD=3.13).

3.1 Hypotheses

H1: There is a positive relationship between time of playing online games and problematic gaming behavior
H2: Males are more problematic gamers than females.
H3: Problematic gamers play online games for more time as compared to non-problematic gamers.

3.2 Instrument

Problematic Online Gaming Questionnaire (POGQ-SF)is used in the present study.This scale is developed by Papay et al., (2013) to measure problematic and non-problematic online gaming. The Cronbach alpha of the scale was .91. It is a five point likert scale ranging from 1 "strongly disagree" to 5 "strongly agree". It has 12 items. The score range is from 12 to 60. The cut-off score is 32 for problematic gamers. Time of playing online game was asked on an ordinal scale ranging from 1 hour to 10 hours.

3.3 Procedure

Participants were selected from different schools, colleges and universities of Rawalpindi and Islamabad through purposive sampling technique. The inclusion criteria for participation in the study was people from 11 to 23 years age who play online game on daily basis. After taking informed consent data was collected from participants. They were acknowledged for their participation.

3.4 Statistical Analysis

For analysing data, SPSS and EXCEL was used. T test was used to sort out problematic gamers and non-problematic gamers and for gender differences. Pearson product moment correlation was used for time of playing games and gaming behavior correlation.

4. Result

Table 1: Time of Playing of Problematic/ non-problematic gamers

	Problematic Gamers (n=190)		Non Problematic Gamers (n=165)				95% CI		Cohen's d
Variable	M	SD	M	SD	$t (353)$	P	LL	UL	
Time of Play	2.27	1.05	1.65	.67	6.59	.00	.431	.797	0.70

Table 1 indicates that 190 participants were identified as problematic gamers and 165 participants were identified as non-problematic gamers from the total sample. It also shows that there is significant difference ($p \leq .01$) between problematic and non-problematic gamers on their time of playing game. Problematic gamers play for more time as compared to non-problematic gamers.

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Table 2: Gender Differences in time of Playing Games and Problematic Gaming

Variable	Male (*n*=296)		Female (*n*=59)				95% CI		Cohen's
	M	*SD*	*M*	*SD*	*t (353)*	*p*	*LL*	*UL*	*d*
POGQ-SF									
Problematic Gaming	33.68	9.04	26.84	8.30	5.37	.00	.17	.43	0.78
Time of Play	2.08	.97	1.46	.59	4.76	.00	.36	.88	0.77

Note. POGQ-SF= Problematic Online Gaming Questionnaire Short Form

Table 2 indicated that there is a significant difference between males and females in time of playing online games and problematic gaming. Males are more problematic gamers and play for more time as compared to females. The correlation between time of playing games and problematic gaming behavior is .40 at *p*<.05. This indicated that there is a positive relationship between these two constructs.

5. Discussion/Conclusion

Table 1 indicated that problematic gamers play online games for more time as compared to non-problematic gamers. Researchers have discovered that problematic gamers fulfill their unmet psychological needs in real world through virtual gaming world. Study by (Sheng Wan & Bin Chiou, 2006) indicated that problematic gamers considered games as central to their lives to achieve entertainment, emotional coping, escaping from reality and for interpersonal relationship. It is obvious when problematic gamers are dependent on online games to fulfill their psychological needs then they will play for more time as compared to non-problematic gamers who have other activities in life. Problematic gamers playing hours are more than non-problematic gamers among all the studies conducted on online games. A study reported that 34% MMORPG players reported playing games for 21-40 hours per week, 11% reported playing games for more than 40 hours per week. While 82% players reported playing games between 6 to 11 p.m. (Ng &Wiemer-Hastings, 2005). Another study reported that players played for 22.4 hours per week (Griffiths et al., 2004).Non- problematic gamers reported to play games just for the sake of playing games and games are not the focus of their lives.

Table 2 indicated that males play for more time as compared to females and are more problematic gamers. Researchers on online gaming and problematic online gaming have found out that males play for more time as compared to females. They are at greater risk of developing gaming addiction than females (Billieux et al., 2013). All studies on online gaming reported that males played more games as compared to females (Griffiths et al., 2004). A study carried out on online game addiction reported that 70% of participants were male (Ng &Wiemer-Hastings, 2005). Another study on demographic factors and playing variables in online computer gaming, reported that 81% of online game players were male (Griffiths et al., 2004). Males play games more and thus are at greater exposure of developing problematic gaming behavior. Results regarding gender differences may not be generalized as number of female participants are less than male participants.

190 participants were identified as problematic gamers while 165 were identified as non-problematic gamers. It means that online gamers in Pakistan are addicted to online games as in other part of the world.

6. Implication

The present study was an exploratory study in this domain. This study will provide base for the next researchers in this area by providing theoretical foundations. This study also open a new perspective on criteria of gaming addiction and gender differences in problematic gaming in Pakistan.

7. Recommendation

The study suggests that problematic gaming needs to be studied in Pakistani population in order to take necessary steps to guard against its negative consequences. The study also highlights that there is diversity between the characteristics of males and females and problematic and non-problematic gamers. So in future more advanced and focused studies are necessary for each sub-group.

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