



Effects of excessive playing of online games on anxiety and violent behavior among adolescents–pilot study

¹Aravind Shirshail Indi, ²Dr. Geeta Vikas Shiroor

¹Research Scholar, Shri Jagdish Prasad Jhabarmal Tibrewala University, Vidyanagari, Jhunjhunu. Rajasthan, India

²Shri Jagdish Prasad Jhabarmal Tibrewala University, Vidyanagari, Jhunjhunu, Rajasthan, India

Abstract

Background: Computer games are the most popular entertainments in modern societies and they target a variety of people in different ages. The addiction to the rivalry and excitements of the games make them the most common recreational programs for today's teenagers, so that they do anything to reach a higher level of the game, they immerse in the game so much that they completely separate from their surroundings.

Objectives: To assess the effects of excessive playing online games on anxiety and violent behaviours, to find out correlation between anxiety and violent behaviour related to excessive playing of online games and to find association between level of anxiety, violence behaviour among adolescents with their selected demographic variables.

Methodology: A quantitative approach with e descriptive co-relational survey design was adopted for the study. The samples from the selected areas of Baramati district were selected using purposive sampling technique. The sample consisted of 50 adolescents. The tools used for data collection was Beck Anxiety Inventory (BAI) and violence behaviour assessment scale.

Results: Majority 49(98%) of participants were had mild level of anxiety and remaining 1(2%) of participants were not had anxiety. Majority 40(80%) of participants were had mild level of violence and remaining 10(20%) of participants were had moderate level of violence behaviour. The correlation between anxiety and violence behaviour scores is found positive and not significant at $p < 0.05$ levels. No significant association found between anxiety, violence behaviour and selected socio demographic variables.

Conclusion: There is a need for the education for the adolescents and their parents for the prevention of excessive playing of online games and making them to engage in other physical activities.

Keywords: Anxiety, violent behaviour, online games, adolescents

Introduction

Computer games are the most popular entertainments in modern societies and they target a variety of people in different ages. The addiction to the rivalry and excitements of the games make them the most common recreational programs for today's teenagers, so that they do anything to reach a higher level of the game, they immerse in the game so much that they completely separate from their surroundings. Challenging with the obstacles and reaching a higher level in the game, make the players excited and losing the game make them anxious ^[1]. Computer games started in 1972 with Pang, a computer tennis game, and then developed in hardware and software systems. Improvement of quality and variety of games increasingly spread it in the society especially adolescents ^[2]. It is believed that computer games like watching TV provides opportunities for visual learning. Especially because these games are more active compared to watching TV, they are considered more effective ^[3]. Since these games are known as the second entertainment after TV, opponents of these games emphasize on their negative effects such as stimulating anger and violence, costing a lot of money and having negative effects of physical and mental health, which are much higher than the positive effects of the games such as

increasing the coordination of eyes and hands ^[4]. As Klein and Keepers mentioned in their research reports in 1990, students who prefer computer games to other entertainments have more behavioral problems those other students ^[5]. Development of electronic and computer games are a great threat for youth and adolescents and can lead to psychological disorders and depression in these groups. In previous times, kids were involved playing with other children, but children of today spend most of their time on computer games as soon as they understand and acquainted with them, while these games cannot create any emotional and human relationship ^[6]. Children's and adolescents attractions to the computer games cause many mental, physical and social problems for them. These effects are stimulating anger and violence, obesity, epilepsy due to games, social isolation, and other physical and mental damages. Many psychologists and mental health professionals have paid attention to the effects of this games ^[7]. Researcher need this study, today's generation spend their most of time on technology. Online video games have become a very popular activity among children and adolescents. Impact of this activity affects their behaviour. Personality, and mood, so they suffer from aggression, violence and many more problems. Investigator wants to

assess the impact on behaviour.

Objectives

1. To assess the effects of excessive playing online games on anxiety and violent behaviours among adolescents of selected areas.
2. To find out correlation between anxiety and violent behaviour related to excessive playing of online games among adolescents of selected areas.
3. To find association between level of anxiety among adolescents with their selected demographic variables
4. To find association between level of violent behaviour among adolescents with their selected demographic variables.

Hypothesis

H₁: There will be significant association between levels of anxiety among adolescents and their selected demographic variables at 0.05 levels of significance.

H₂: There will be significant association between levels of violence behaviour of adolescents and their selected demographic variables at 0.05 levels of significance.

H₃: There will be a statistical significant correlation between anxiety and violence behaviors scores of adolescent students at 0.05 level of significance.

Methodology

Research Approach: Quantitative Research Approach

Research Design: Descriptive-correlational research design

Sampling technique: Non-Probability, Purposive Sampling Technique

Sample size: 50

Setting of study: Selected areas of Baramati district

Method of data collection: Interview technique

Tools Used

Part 01: Demographic data

Part 02: Beck Anxiety Inventory (BAI)

A Beck anxiety inventory consists of 21 symptoms related anxiety. It assesses the how much participants have been bothered by that them during the past month, including today. There are four alternative response columns; No, mildly, moderately and severely. Each item is scores as:

Not at all = 0

Mildly = 1

Moderately = 2

Severely = 3

Total Scores: 0-63

Level of anxiety is divided as follows

- Score of 0 = No anxiety
- Score of 1-21 = low anxiety
- Score of 22-35 = moderate anxiety
- Score of 36 and above = potentially concerning levels of anxiety

Part 03: Violence Behavior assessment scale

For assessment of violence behaviour among students a violence behaviour assessment scale is used. It consists of 17 symptoms related violence behaviour among students. It assesses the how much participants have been bothered by that them during the past month, including today. There are five alternative response columns; Never, rarely, occasionally, often and always. Each item is scores as:

Level of violence behaviour

The score obtained by the each participant is calculated and participants are categories in to any one level according to following-

Total Score: 0-68

- Score of 1-23 = Mild problem
- Score of 24-46 = moderate Problem
- Score of 47 and above = Severe problem

Procedure of Data Collection

Data was collected after obtaining administrative permission from health authority of selected areas of Baramati district. The investigator personally explained the participants the need and assured them of the confidentiality of their responses. Data was collected by face to face interview by researcher. The data analysis was done by using both descriptive and inferential statistics.

Results

Section 1: Description of Selected Personal Variables of participants

Table 1: Frequency and percentage distribution of participants according to socio demographic variables
N=50

Sl No	Demographic variables	Frequency (f)	Percentage (%)
1	Age (in yrs)		
	12-13	15	30
	13-14	13	26
2.	Gender		
	Male	30	60
	Female	20	40
3.	Course of study		
	8 th std	12	24
	9 th std	20	40
4.	Religion		
	Hindu	27	54
	Muslim	14	28

	Christian	05	10
	Other	04	08
	Education of father		
5.	Illiterate	09	18
	Primary school	20	40
	10 th grade	07	14
	12 th grade	08	16
	Diploma or degree	04	08
	Post-graduation	02	04
	Education of mother		
6	Illiterate	09	18
	Primary school	19	38
	10 th grade	11	22
	12 th grade	07	14
	Diploma or degree	03	06
	Post-graduation	01	02
	Place of residence		
7	Rural	23	46
	Semi urban	22	44
	Urban	05	10
	Parents income / month		
8	Below 10,000	13	26
	10,000-20,000	15	30
	20,001-30,000	09	18
	Above 30,000	13	26
	Do you have own mobile with internet facility		
9	Yes	34	66.7
	No	16	31.4
	Mode of playing online games		
10	Computer	13	26
	Mobile	29	58
	Tablet	08	16
	Duration of playing online games		
11	Less than 1 year	27	54
	2-3 year	08	16
	>3 years	05	10
	Not using	10	20
	Time spent for online games		
12	Less than 1 hour	27	54
	1-2 hours	16	32
	3-4 hours	04	08
	More than 4 hours	03	06

Section 2: Description of Beck’s anxiety inventory scale scores of participants

a. Description of mean, median, mode, standard deviation and range scores of anxiety scale

Table 2: Anxiety scores of participants N = 50

Mean	Median	Mode	Sd	Range
10.08	10	10	3.58	0-16

Table 4: reveals the mean anxiety scores of participants, it shows that, anxiety scale mean was 10.08, median was 10; mode was 10 with standard deviation 3.58 and range score of 0-16.

b. Description of findings related to level of anxiety among participants

Table 3: Frequency and Percentage distribution of participants according to level of anxiety N=50

Level of anxiety	
No anxiety	Mild anxiety
f (%)	f (%)
01(02%)	49(98%)

The data presented in the Table 3 shows level of anxiety of participants, it reveals that,

Majority 49(98%) of participants were had mild level of anxiety and remaining 1(2%) of participants were not had anxiety.



Fig 1: Percentage distribution of participants according to their level of anxiety

c. Association between levels of anxiety of participants with demographic characteristics

Computed Chi-square value for association between level of anxiety of participants and their selected demographic variables is not found statistically significant for not found statistically significant for selected socio demographic variables. Hence hypothesis H₁ is rejected inferring that there is no statistical significant association between level of anxiety and their selected socio demographic variables.

Section 3: Description of Violence Behaviour Assessment scale scores of participants

a. Description of mean, median, mode, standard deviation and range scores of violence behaviour assessment scale

Table 4: Violence behaviour scores of participants N = 50

Mean	Median	Mode	Sd	Range
18.38	18	8	8.69	0-39

Table 4 reveals the mean violence behaviour scores of participants, it shows that, mean was 18.38, median was 18; mode was 8 with standard deviation 8.69 and range score of 0-39.

b. Description of findings related to level of violence behaviour among participants

Table 5: Frequency and Percentage distribution of participants according to level of violence behaviour N=50

Level of violence behaviour		
Mild level	Moderate level	Severe level
f (%)	f (%)	f (%)
40 (80%)	10 (20%)	00

The data presented in the Table 5 shows level of violence behaviour of participants, it reveals that, Majority 40(80%) of participants were had mild level of violence and remaining 10(20%) of participants were had moderate level of violence behaviour.

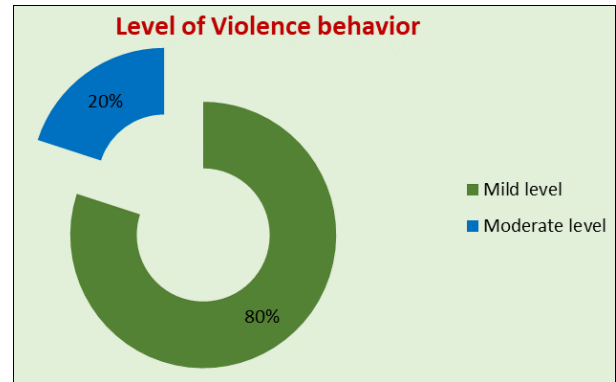


Fig 2: Percentage distribution of participants according to their level of violence behaviour

c. Association between levels of violence behaviour of participants with demographic characteristics

Computed Chi-square value for association between level of violence behaviour of participants and their selected demographic variables is not found statistically significant for not found statistically significant for selected socio demographic variables. Hence hypothesis H₂ is rejected inferring that there is no statistical significant association between level of violence behaviour and their selected socio demographic variables.

Section 4: Description of scores related to correlation between anxiety and violence behaviour scores of participants

In order to, find out the correlation between anxiety and violence behaviour scores participants a correlation coefficient was computed by using Karl Pearson's Co efficient of correlated the findings are presented as follows-

Table 6: Correlation between anxiety and violence behaviour by Karl Pearson's correlation coefficient method N =50

SCORE	Mean score	Correlation coefficient
Anxiety scores	10.25	0.08
Violence behavior score	20.41	(P = 0.583)

*p<0.05

The data presented in Table 6 shows that the correlation between anxiety and violence behaviour scores is found positive and not significant at p<0.05 levels. Hence Hypothesis H₃ is rejected indicating no correlation between anxiety and violence behaviour.

Conclusion

The findings revealed that adolescents of selected areas were had mild level of anxiety and violence behaviors related to excessive playing of online games. Prevention is better than cure, so, there is a need for the education for the adolescents as well as their parents regarding ill effects of excessive use of computers, playing online games ect. Children's need counseling and supportive environment for the reduction of use of electronic gadgets and engage themselves in other physical activities.

References

1. Morrison M, Krugman DM. A look at mass and computer mediated technologies: Understanding the roles of television and computers in the home. *Journal of Broadcasting and Electronic Media*. 2001;45:135-61.
2. Anderson CA, Dill KE. Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *J Pers Soc Psycho*. 2000;78(4):772-90.
3. Anderson CA, Bushman BJ. Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocially behavior: A meta-analytic review of the scientific literature. *Psycho Sic*. 2001;12(5):353-9.
4. Manteqi MA. Study of video and computer games outcomes. 1st ed. Tehran: Farhang and Danesh; 2001.
5. Patton GC, Sawyer SM. The Medical Journal of Australia-MJA Media and young minds. 2000;173:570-1.
6. Klin JD, Freitag E. Enhancing motivation using an instructional game. *Journal of Instructional Psychology*. 1991;18(2):11-7.
7. Ahmadi S. Social effects of computer games on male students in third year of guidance school in Isfahan city. *Quarterly of public culture [Persian]*. 1998;(1)17:87.