



IMPACT OF COMPUTER GAMES ON STUDENTS

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Abstract:

Computer and video game has gain enough popularity among teenagers also in children which is alarming and raised concern about the impact it may have on the youngsters. The games have violent themes, coupled with their interactive nature, have led to accusations that they may be worse than televised violence in affecting children's antisocial behaviour. Addiction is one of the reason it might hamper the effect on health. Other allegations are that they have an addictive quality and that excessive playing results in a diminished social contact and poorer school performance. But how bad are video games? There are strong methodological reasons for not accepting the evidence for video games effects at face value

This research focuses on what are the views of people towards the computer gaming and to identify the actual effects of computer games on high school students. This paper covers earlier studies on the same topic and their findings in literature survey To reach to the objective, responses from significant no of people taken with systematic design of questionnaire. At the end it covers and conclude the relation of different variables & the effect of games on students.

Keywords: Video Game; Sociological; Psychological; Effect on Health; Positive Impact; Learning.

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1. 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.

As we know that education is an important part of today's life and it will affect human economic growth. There are many new type of mass media produced like film, media, television, computer games and internet. Out of all of this we can call computer games as fast growing product. Playing video games is popular in children's lives today. Computer games are played by 95% of 12 to 17 year old teens. It is also played 17 to 25 year old boys but in less manner. 43% of children do the games less than 1 hour and 27% as 2 to 6 hour a day. This habit is affecting the students education and learning. It will also affect the mental health of student.

Computer games also have some good impact on student. There are many games that will help student in learning. Computer games provide the opportunity to communicate with student ,the most important part of this computer game is, its help to problems solving activities And team work in team game like dota2 (war craft), Counter strike (C S) this games are team game as well as strategic games etc.

2. Review of Literature

Computer games provide an opportunity to communicate with students in a language they choose to use with their own peers. This literature review explores how playing games can impact student learning. To begin, the research will define different types of games: physical games, board games, and video games.

3. Games Defined

A game is a competitive activity which often includes a set of rules or guidelines. There are a variety of types of games that can be played by an individual or between two or more people. Most games are governed by a set of rules, and gamers progress to a final goal. The rules are set to provide structure so the playing field is level for all participants. Although rules might provide structure to the game, a gamer's individual creativity and imaginations dictate his or her level of success and proficiency. There are physical games, like tag and hopscotch; board games, such as Monopoly; and many types of video games. Regardless of the type of game, most are chosen for the level of enjoyment or the opportunity to learn new skills.

4. Games Have a Positive Impact on Learning

“When people participate in playful activities, such as digital games, they are more likely to enjoy the learning process resulting in more time, effort, and concentration put into an activity”. This section explores how video games have a positive impact on learning. Games are fun for the participants, helping to create a motivating and positive learning environment. However, the fun and entertainment value is not the primary reason for using games as a learning tool. Video games help students establish a sense of self. In addition, video games are compelling, incorporate problem solving, encourage participation in learning communities, and develop cognitive skills.

5. Help Establish a Sense of Self

Computer games can help players establish a sense of self. Players might enter worlds where they experience different reactions, feelings, emotions, thoughts, and even identities.

Objective

- To analyze the effect of computer games on students education in positive and negative way.
- To analyze whether computer games is good or bad for the students.

6. Research Methodology

The study has followed descriptive research based on survey method. Like other researchers in this study the following steps have been done:

Data Collection

To reach out to more number of students in this research paper we have used descriptive research design and for that we have designed the questionnaire. We have used the convenient platform that is web surveys to reach out to the people.

Data collection tool

Google form is used to take the responses

Sample

A convenience sampling is used for sample under 25 years of age

Questionnaire Design Process

In this study to different factors were identified by studies of literatures and experts' opinion, judgement and confirmation. Considering all other parameters a questionnaire which links to the objective of study was prepared for further use.

Chi-square Test

A **chi-square test for independence** compares two variables in a contingency table to see, if they are related. In a more general sense, it tests to see whether distributions of categorical variables differ from each another. We have used chi- square test in this research paper to test the independency of the two variables.

So we have used two variables and framed hypothesis and applied chi-square test of independence.

Data Analysis

Hypothesis and calculation

1)

Null hypothesis

Ho: Age group and playing computer games are independent variable.

Alternative Hypothesis

H1: Age group and playing computer games are dependent variable.

Level of significance

$$\alpha = 5\% = 0.05$$

Actual Frequency Table

Age grp	yes	no	total
below -15	23	14	37
16 to 20	5	4	9
21 to 25	54	28	82
Total	82	46	128

Expected Frequency Table

Age grp	Yes	No
below -15	23.7	13.3
16 to 20	5.77	3.23
21 to 25	52.53	29.47

Chi-square Test Frequency Table

fo	fe	fo - fe	(fo - fe) ²	(fo - fe) ² /fe
23	23.7	-0.7	0.49	0.0207
14	13.3	0.7	0.49	0.0368
5	5.77	-0.77	0.5929	0.1028
4	3.23	0.77	0.5929	0.1836
54	52.53	1.47	2.1609	0.0411
28	29.47	-1.47	2.1609	0.0733
			Total	0.4583

Degree of freedom 2

Table value @ 5% level of significance 5.99

Chi-square calculated value < Table value.

So here we accept the Null hypothesis (Ho).

Ho: Age group and playing computer games are independent variable.
2)

Null hypothesis

Ho: There is no relation between health problems in student & number of hours of playing game.

Alternative Hypothesis

H1: There is significant relation between health problems in student & number of hours of playing game.

Level of significance

$\alpha = 5\% = 0.05$

Actual Frequency Table

No of hours	Health problems	No health problems	Total Row
who plays 1 -2 hr	40	20	60
who plays 4 or more	50	18	68
Total column	90	38	128

Expected Frequency Table

No of hours	Health problems	No health problems
who plays 1 -2 hr	42.1875	17.8125
who plays 4 or more	47.8125	20.1875

Chi-square Test Frequency Table

fo	fe	fo - fe	(fo - fe) ²	(fo - fe) ² /fe
40	42.18	-2.1875	4.7851	0.1134
20	17.81	2.1875	4.7851	0.2686
50	47.81	-2.1875	4.7851	0.1001
18	20.18	2.1875	4.7851	0.2370
			Total	0.71918

Degree of freedom 1

Table value @ 5% level of significance is 3.84

Chi-square calculated value < Table value.

So here **we accept the Null hypothesis (Ho).**

Ho: There is norelation between health problem in student and number of hours of playing computer game.

7. Conclusion

Out of total sample 93% student play computer games, out of which 73% believe that it has no bad effect, where as 62% says that it will hamper studies. Out of 62%, 52% says that the changes are good.

According to our research we conclude that there is no significant relation between age group and playing computer games. As first hypothesis says age group and playing computer games are independent variables. From second hypothesis we conclude there is no significant relation between health problems in student and number of hours of playing computer games, we fail to reject the null hypothesis.

This may be due to the small sample size and the age group of the students. The segment of games such as brain games memory games and analytical games are to be studied individually and the result will then be interpreted.

Scope for Further Research

The research can further be carried out in finding the behavioural change which seem to be good but in a complete sense.

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