



Online gaming and youth: A study of ICT-mediated engagements and psychological effects

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Abstract

Online games are often played for entertainment, leisure, brainstorming and some other purposes, which in turn also kills time and leads to psychological disturbances and aggression. Much scholarship could be found explaining the negative impacts of the online games but scholarship is scarce about the positive effect induced by the online gaming. During this lockdown due to the pandemic fear of COVID-19, youths from all over the world has adapted the lifestyle in the social media platforms influencing or being influenced by it. This paper aims to reflect on the factors influencing youth by online gaming. The theoretical framework used for the study is Uses and Gratification theory while the data collection is done using questionnaire tool and the sample size is 393 respondents. Cronbach Alpha Testing is done to test the reliability and validity of the tool and analysis of the data is done through Cross-tabulation and Chi-squared test.

Keywords- ICT, online game, psychological disturbances, social media platforms

Introduction

Social media is a new media technology to facilitate social interaction between a large group of people from all corners of the world through a network. Generally, the network used extensively is the Internet. Social media is growing rapidly and becoming a vital part of our everyday life. As we have seen the latest technological revolution is rising, the usage of the smartphones is also increasing. These smartphones make it easy to access any social media platform from anywhere virtually. The well-known social media platforms are Facebook, twitter, Instagram, Snapchat, WhatsApp, LinkedIn, etc. which allows to share photos, videos, information, chat, organize events and play games online. It also helps to get connected with the people whom we would not normally get to interact all the time.

With the advancement of digital technologies, the new media has also evolved accordingly. Social media platform which is the future of informing and educating people can change the mindset of individuals. As trendy as it sounds, social media platform is as powerful as anyone has ever imagined. In short, these platforms bring together like minded people to all sorts of discussions, photos sharing, employability making it a comfort like home. It has provision of streaming and playing games while interacting is another add on feature social media platforms and internet has given. Unlike video games online games can be played with friends, family, relatives sitting in any corner of the world. The early internet was able to connect world and made possibility for social interactions.

Methodology

The purpose of this study is to find out the influencing factors of online games played by youth ranging from age categories 15 years to 29 years. It will also evaluate emerging games with the help of a mixed method approach. The researcher adopted a mixed approach through survey questionnaire and in-depth interviews to find out social media adaptability and playing of online games as a source of connectivity by the youth.

According to Fred N. Kerlinger, “research design is the plan and structure of investigation which is conceived to obtain answer to research questions.” The main focus of the study was to understand the extent of influence of online games by youth. The researcher has used survey design for this study. Questionnaire and in-depth interviews were used as research methods to collect data from youth. A questionnaire was administered by them.

Research objectives

The broad objective of the study is to examine youth influenced by online gaming. Specifically, the study intends:

1. To find out the use of online gaming by youth.
2. To analyze the positive and negative effect on youth by online games
3. To evaluate emerging trends of online games influencing the youth.

Research Hypothesis

1. H_0 : There is no significant difference between the usage of online games and youth.

H_a :: There is a significant difference between the usage of online games and youth.

2. H_0 : There is no significant difference between positive and negative effect on youth by online games.

H_a :: There is a significant difference between positive and negative effect on youth by online games.

3. H_0 : There is no significant relationship between emerging trends of online games and youth.

H_a :: There is a significant relationship between emerging trends of online games and youth.

Theoretical framework

Blumler and Katz’s uses and gratification theory suggests that media users play an active role in choosing and using the media. Users take an active part in the communication process and are goal oriented in their media use. The theorist say that a media user seeks out a media source that best fulfils the needs of the user. Uses and gratifications assume that the user has alternate choices to satisfy their need. The approach used for the study is to specify youth using or playing online games according to their own will of engagement and connecting with people through it. Some has used it as a source of entertainment. This theory also gives insight that motivates youth for consuming a particular media and online gaming platforms.

Analysis design

The study is planned to obtain both quantitative as well as qualitative results. For quantitative results Descriptive stats and Chi square testing was done. In order to check the reliability of the questionnaire Cronbach’s alpha test was applied on 56 items from the questionnaire and the result showed Bartlett’s Test of Sphericity (BTS) result yielded Approx. Chi-Square 8325.876.

Reliability Statistics	
Cronbach's Alpha	N of Items
.735	56

Analysis and Interpretation

Table 1. Distribution of respondents based on games played online.

Options	Responses	Percentage
Yes to a large extent	33	8.40%
Yes to some extent	127	32.30%
Neutral	107	27.20%
No to some extent	44	11.20%
No at all	82	20.90%

Interpretation: The data was analyzed considering 393 respondents on the question asked if they play online games. The options were distributed as yes to a large extent, yes to some extent, neutral, no to some extent, no at all. In the distribution of response, 5 scale was about 8.40 percent said they play online games to a large extent followed by majority of 32.3 percent responding that they do play online games to some extent. However, some 27.2 percent are neutral, followed by some 11.2 said no to some extent and some 20.9 percent prefer not to play the games at all.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.213 ^a	12	.768
Likelihood Ratio	9.195	12	.686
Linear-by-Linear Association	.291	1	.590
N of Valid Cases	385		

a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is 1.63.

The table critical value for 12df is 21.026 @0.05 level of significance

H_0 : There is no significant relationship between the likelihood of playing video games and the age of the respondents

H_a : There is significant relationship between the likelihood of playing video games and the age of the respondents

The analyzed data has revealed that the calculated value is less than the table critical value, the null hypothesis of there is no significant relationship between the likelihood of playing video games and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert influence on playing video games.

Table 2. Distribution of respondents based on the reason for playing online games

Options	Responses	Percentage
I like the graphics/realism relaxation/recreation/escapism	85	21.60%
It improves my hand-eye coordination	28	7.10%
It challenges my mind	120	30.50%
It's such a great feeling to master or finish a game	38	9.70%
I'll play anything when I'm bored	122	31%

Interpretation: Out of 393 responses, 85 (21.60 percent) have responded the graphics or realism or relaxation or recreation or escapism are the reason for playing online games. In this distribution, a small percent of 7.1 (28 responses) have selected the reason as online games improves their hand-eye coordination, some 120 (30.5 percent) have said it challenges their mind. Some 38 reponses (9.7 percent) feels good mastering a game or finishing the game and a majority of 122 responses (31 percent) play online games when they are bored.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.986 ^a	12	.370
Likelihood Ratio	14.205	12	.288
Linear-by-Linear Association	.000	1	.983
N of Valid Cases	385		

a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is 1.38.

The table critical value for 12df is 21.026 @0.05 level of significance

H₀: There is no significant relationship between the reasons of playing video games and the age of the respondents

H_a: There is significant relationship between the reasons of playing video games and the age of the respondents

The analyzed data has revealed that the calculated value is less the table critical value, the null hypothesis of there is no significant relationship between the reasons of playing various types of video games and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert logical reasons on playing different types of video games.

Table 3. Distribution of respondents based on the most appealing feature of online games

Options	Responses	Percentage
Social features (Being able to play with friends or strangers).	181	38.40%
Mastering complex and challenging control schemes.	70	17.80%
Narrative and Identity (Character customization and progression)	46	11.70%
Graphics and aesthetics	100	25.40%
Reward and Punishment features.	26	6.60%

Interpretation: In the distribution of response, 38.40 percent which is a majority of 181 respondents thinks the most appealing feature of online games is social features where they are able to connect and play with friends or strangers. Responses of 70 (17.8 percent) thinks the feature of mastering complex and challenging control schemes is appealing while 46 of them (11.7 percent) thinks narrative and identity like character customization and progression is appealing. However, some 100 (25.4 percent) likes the graphics and aesthetics of the games and a small number of respondents 26 (6.6 percent) likes the reward and punishment feature available in the online games.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.176 ^a	12	.688
Likelihood Ratio	8.588	12	.738
Linear-by-Linear Association	1.766	1	.184
N of Valid Cases	385		

a. 8 cells (40.0%) have expected count less than 5. The minimum expected count is 1.18.

The table critical value for 12df is 21.026 @0.05 level of significance

H₀: There is no significant relationship between the features available while playing video games and the age of the respondents

H_a: There is significant relationship between the features available while playing video games and the age of the respondents

The analyzed data has revealed that the calculated value is less the table critical value, the null hypothesis of there is no significant relationship between the availability of features while playing various types of video games and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert appealing feature on online games.

Table 4. Distribution of respondents based on the social media platform motivated on playing online games

Options	Responses	Percentage
Instagram	133	33.80%
Facebook	39	9.90%
WhatsApp	13	3.30%
Twitter	6	1.50%
LinkedIn	10	2.50%
Snapchat	7	1.80%
YouTube	185	47.10%

Interpretation: The analyzed data of social media platforms motivating the users to play online games is distributed as follows. Out of 393 responses, 133 have said Instagram motivated to play online games, some 39 responses have said Facebook, some 13 said WhatsApp, 6 of them selected Twitter, 10 of them LinedIn, 7 as Snapchat and a majority of 185 responses said YouTube as one of the social media platforms that motivates users to play online games.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.382 ^a	18	.261
Likelihood Ratio	23.813	18	.161
Linear-by-Linear Association	2.008	1	.156
N of Valid Cases	385		

a. 15 cells (53.6%) have expected count less than 5. The minimum expected count is .30.

The table critical value for 18df is 28.869 @0.05 level of significance

H₀: There is no significant relationship between the platforms that motivated on playing online games and the age of the respondents

H_a: There is significant relationship between the platforms that motivated on playing online games and the age of the respondents

The analyzed data has revealed that the calculated value is less the table critical value, the null hypothesis of there is no significant relationship between the social media platforms that motivated on playing online games and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert appealing feature on online games.

Table 5. Distribution of respondents based on social media advertisements on gaming manipulating the users

Options	Responses	Percentage
Yes	310	78.90%
No	83	21.10%

Interpretation: Out of 393 responses, a large number of 310 participants have agreed that social media advertisements on online gaming manipulates the users to play online games while some 83 responses said social media advertisements are not responsible for an individual playing online games.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.749 ^a	3	.626
Likelihood Ratio	1.947	3	.583
Linear-by-Linear Association	.077	1	.781
N of Valid Cases	385		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.95.

The table critical value for 3df is 7.815 @0.05 level of significance

H₀: There is no significant relationship between the advertisement of online games on social media and the age of the respondents

H_a: There is significant relationship between the advertisement of online games on social media and the age of the respondents

The analyzed data has revealed that the calculated value is less the table critical value, the null hypothesis of there is no significant relationship between the manipulation by social media promotional advertisement of online games on gamers and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert appealing feature on online games.

Table 6. Distribution of respondents based on the change of daily routine after playing online games

Options	Responses	Percentage
Yes	76	19.30%
Sometimes	169	43%
No	143	37.70%

Interpretation: From the data collected, the distribution of options are 76 (19.3 percent) have seen the change in their daily routine after playing online games, a majority of 169 (43 percent) sometimes change their daily routine for playing online games and some 143 (37.7 percent) have disagreed that online games are affecting their daily life and activities.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.414 ^a	6	.209
Likelihood Ratio	8.622	6	.196
Linear-by-Linear Association	.133	1	.715
N of Valid Cases	385		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.75.

The table critical value for 6df is 12.592 @0.05 level of significance

H₀: There is no significant relationship between the daily routine and the age of the respondents

H_a: There is significant relationship between the daily routine and the age of the respondents

The analyzed data has revealed that the calculated value is less the table critical value, the null hypothesis of there is no significant relationship between the daily routine and the age of the respondents cannot be rejected. Hence it is assumed that age a variable does exert appealing feature on online games.

Conclusion

Online gaming has emerged as a popular and successful source of entertainment and played by people of all ages, especially by youth. Its main aim is to entertaining people and also indirectly to make them addictive to improve gaming industry. From this study, it is found that youth actively play online games to kill time. It has both the negative and positive effect on users. It affects their daily life sometimes and hampers the routine while focusing on playing the online games. Considering the features available in the gaming apps it helps the users to connect with people. As the advances in technology the graphics and aesthetics are one of the features that influences the users to play online games. One of the emerging trends that are seen in this era is the use social media platforms. Social media platforms namely Instagram, YouTube, Facebook, etc. are used by the developers or promoters to reach the masses and influence them to play online games like Candy Crush, GardenScapes, Clash of Clans, Chapters, Word Puzzle, etc. Youth feels good after mastering the game or finishing the game. This might sometimes lead to addiction. During promotional game advertisements it is seen that disclaimer is used by the promoter to play at their own risk as it might cause addiction. Hence a time limitation has to be set by the users if they are playing daily.

The first objective of the study which is to find out the use of online gaming by youth, it is observed that the youth of age 15-19 consumes maximum time on playing online games. Secondly, the study reveals that the social feature in a games is appealing followed by the graphics and aesthetics while playing online games. It challenges the mind when online games are played. Hence, online games help in self-improvement and personal development which is the Pygmalion Effect that are performance driven with greater expectations which in fact is one of the psychological effects. The data also revealed that 31 percent of the population

consumes this ICT mediated technology only when they are bored and to kill time. In addition, 78.9 percent of population are influenced by advertisements promoted on social media platforms. Digital platforms like YouTube and Instagram are the major contribution on manipulating the users on playing online games. 43 percent of the population agrees that playing online games hampers daily routine.

CONFLICT OF INTEREST STATEMENT

Article title: Online gaming and youth: A study of ICT-mediated engagements and psychological effects

I/we certify that there is no actual or potential conflict of interest in relation to this article.

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