

THE CLASSIFICATION TREE MODEL ANALYZED THE IMPACT OF INDISCRIMINATELY ADDICTIVE ONLINE GAMING ON ONGOING SCHOOL AND COLLEGE STUDENTS

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Abstract

The popularity of gaming is universal. It receives periodic updates in accordance with the development of digital and telecommunication using new technology. This article discusses the practice of watching gameplay videos. The study looks into what motivates students to watch gameplay videos and what pleasures they look for when engaging in such activity rather than playing. In this study questioners were collected from school and college students. While the findings indicate that player's attractiveness is the important factor to watch gameplay. This quantitative approach made it possible to identify the key components and interests of gameplay watching. It is recognized that there are five different categories in gameplay watching – Game caster, Performer, Game buyer, Fandom, Proxy - where each of them appears to carry out such actions for a specific reason. In this study it is also found that long time exposure leads to Addiction by using classification of tree model.

Keywords: Game play, Video game, Game Addiction, Online gaming, Students

Introduction

New gadget games are being developed from time to time as per the advancement of digital and Tele-communications. Games are widely used as both educational tool and entertainment. Games are differ in one form of entertainment[1-2]. For working adults, exposure to other forms of leisure that include aesthetic elements such as watching movies or art can be a way to reduce stress[3]. However, an interesting feature of the games is that they are sometimes considered work, representing the country's games professionally[4-5].

Stimulating the mind and the body and sometimes both, sports cannot be relegated to mere entertainment. Because they play an important role in stimulating the brain and body, they train oneself and keep the body and mind active[6]. Playing an important psychological role, games that help strengthen or increase one's confidence are also seen as enhancing. One's self-confidence is a universal human experience in all cultures and sports are believed to create a sound mind and a healthy body[7]. However, with the advent of the internet, games have taken

a new form. They are recently played as video games. And the younger generation tends to spend more time on it[8-9]. Online video game addiction has increased the average number of hours a person spends in virtual space. Addiction and obsessions associated with video games have been analyzed by researchers for years[10-12].

It's like any other addiction, game addiction has negative effects on a person's performance both physically and mentally. Eye problems, visual impairment, irritability, poor performance in school, insomnia and stress are also the most common negative effects among school children[13]. While all video games are designed to entertain people, some video games are made for a specific purpose. He found that many types of digital games can be divided into categories such as action, adventure, role-playing and entertainment. Training the user while playing these games also has negative consequences[14-15].

The gaming industry has found that providing its users with a rich and compensating experience to quench their thirst for power, transport them to a rich and sophisticated environment in the everyday computer games they play[16-17]. In subsequent years, sound was added to computer games to ensure the authenticity of the players involved, a systematic and computational framework that could create the consciousness of the players to explore the events taking place in the virtual game world[18].

The researchers in this work explored the potential of an advanced feedback framework to support the relationship between game players. It combines virtual and mobile augmented reality, a new approach to digital game-based learning[19-20]. They tried to access the advancements of mixed reality in personal computer gadgets, which created a highly addictive and high impact factor among game players. Mixed reality that can bring innovation in education, combining augmented reality in game scenes and facilitating blended learning according to their research information is obtained in learning, and continuous learning in learning is a dynamic activity of humanity[21-22]. It is considered as a process computer technology and according to this study supported by augmented reality, then, computerized game-based learning is believed to result in learning transfer between athletes[23].

This paper examines the impact of sport studies as it interacts with other media. At the same time, this essay has developed closely with the field of new media studies, in comparison with the new field of science in communication and cultural sciences through cyber and algorithmics. New media studies thus developed seem to have a parallel relationship with e-culture or digital culture in those days[24].

Thus, it seems to have an important application in the life of children and youth. While playing games on computers, he discovered that he was familiar with the use of computers. They master it by playing games and they gain knowledge in using computer even if it is not taught in school. While no other research has shed light on this angle, this study describes a way of using

computer or multimedia technology[25]. This review of advances in computer gaming technology is a polite approach to game-based learning situations, through which, video games research in cognitive and educational science found that video games can be an effective educational tool, this review reviewed three different fields of interest in cognitive development, namely skills, attitudes and inspiration, information and material learning occur[25].

Objective

- To understand why young adults watch game play.
- To find out if there is any impact by watching game play among young adults.
- To understand whether young adults get addicted to games by watching game play.

Methodology:

This research has analyzed the impact on viewing game play by college and school going students. Quantitative method has followed in this research. This research method has used to gather the needed data and information from various school and college students from various educational Institutions. 59 school students and 140 college students participated in this study. The questioners were given to the college students using google form and for the school students it was collected using the questioner.

Data Analysis

When analyzing the most frequent for viewing gameplay were five distinctive type of persons are Game caster, Performer, Game buyer, Fandom, Proxy. Game caster is a person who comments the game in his language and stream it live for others to watch, performer is a person who watch for the purpose of reaching next level in the game, game buyer is a person who watch gameplay for the buying higher version of the game, Fandom are the persons who watch for the entertainment purpose, proxy are the person who has few limitations to play so he satisfies his ego by watching.

Around 156 male participated and only very few female around 10 participated in this survey. Highest viewers are at the age group is above 20 the second highest is 14-16 years age group. 59 school students and 107 college students participated. The maximum numbers of viewers view on mobile phone and medium Youtube. Viewers watch more than 2 hours daily according to the survey.

Around 30.7% viewers watch for game caster, 28.3% watch for their speech and reaction only, Around 22.3% are happy to chat on live shows, but very rear they join in membership 31.3% watch gameplay for the game purpose, 33.3% watch for getting tips to complete the game. Around 32.5% have scored better after getting the tips and advice from viewing gameplay.

Only very few around 18.1% watch for new game launches. Maximum viewers watch for relaxation only. It is also found that 36.7% think about gameplay mostly after watching the

game.

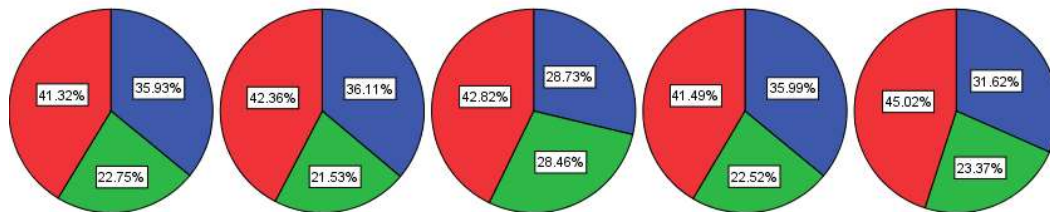
24.1% always eagerly wait for next session and also keep on watching the old gameplays till the new arrival. 33.7% get dreams about the gameplay when they sleep. Around 44% of viewers started use the words after viewing the gameplay what the gamers use in the game while playing. It is also found that very rare only they spend money on those gamers channel.

Result:

Table 1 Case Summaries						
% of Total Sum						
Student	Age Group in years	watch Game play	mode of watch	medium of watch	Watching time	Duration
School student	14-16	35.9%	36.1%	28.7%	36.0%	31.6%
College student	17-19	22.8%	21.5%	28.5%	22.5%	23.4%
	Above 20	41.3%	42.4%	42.8%	41.5%	45.0%
	Total	64.1%	63.9%	71.3%	64.0%	68.4%

Case Summaries
% of Total Sum

Age Group in years
 ■ Total 14-16
 ■ Total 17-19
 ■ Total Above 20



watch Game play mode of watch medium of watch Watching time Duration
Variables

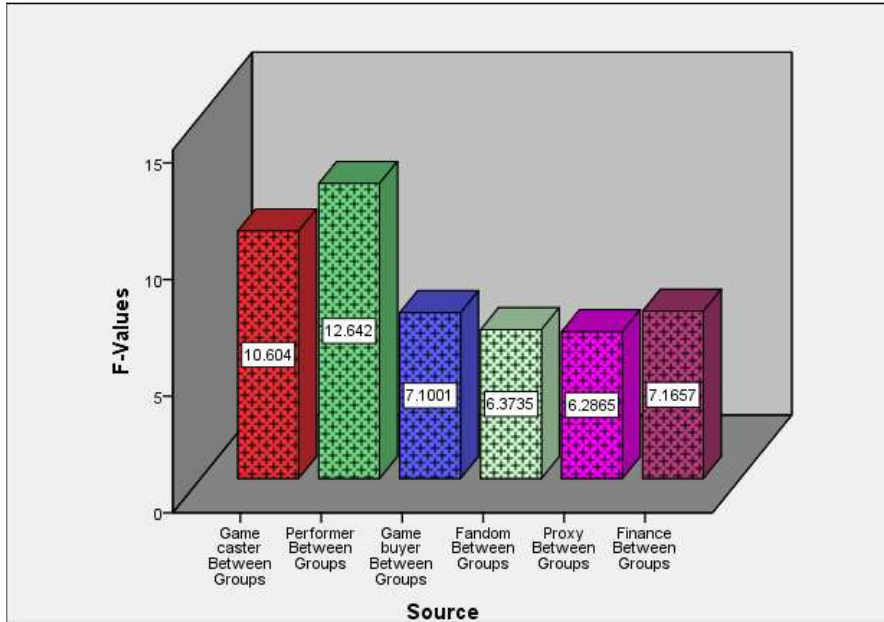
Case Summaries % of Age Group between in years 14-16 have watched Game play 35.9%, mode of watch 36.1%, medium of watch 28.7%, Watching time 36.0% and Duration of hour highly 31.6% There are watching More than 1 hour in a day. College student Age Group

between in years 17-19 are watch Game play 22.8% mode of watch 21.5%, medium of watch 28.5%, Watching time 22.5% and Duration 23.4%. Above 20 are watch Game play 41.3% mode of watch 42.4% medium of watch 42.8% Watching time 41.5% and Duration 45.0%. Total watch are Game play 64.1% mode of watch 63.9% medium of watch 71.3% Watching time 64.0% and Duration 68.4%.

Table 2 ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Game caster	Between Groups	3941.535	23	171.371	10.604	0.001**
	Within Groups	2294.923	142	16.161		
	Total	6236.458	165			
Performer	Between Groups	1990.722	23	86.553	12.642	0.001**
	Within Groups	972.175	142	6.846		
	Total	2962.898	165			
Game buyer	Between Groups	560.666	23	24.377	7.100	0.001**
	Within Groups	487.527	142	3.433		
	Total	1048.193	165			
Fandom	Between Groups	562.352	23	24.450	6.374	0.001**
	Within Groups	544.739	142	3.836		
	Total	1107.090	165			
Proxy	Between Groups	2636.263	23	114.620	6.286	0.001**
	Within Groups	2589.068	142	18.233		
	Total	5225.331	165			
Finance	Between Groups	1500.440	23	65.237	7.166	0.001**
	Within Groups	1292.771	142	9.104		
	Total	2793.211	165			

ANOVA
F



ONEWAY Gamecaster Performer Gamebuyer Fandom Proxy Finance BY Addiction , ANOVA Sum of Squares are Game caster Between Groups Sum of Squares are 3941.535 Mean Square is 171.371 F value is 10.604 and Sig.value is 0.001** Within Groups Sum of Squares are 2294.923 Mean Square is 16.161 Total Sum of Squares are 6236.458. Watching for Gamecaster Players reaction and experience. Chat on live. Joining as a member by paying money Happy if player reads my name Watching whenever on live.

Performer Between Groups Sum of Squares are 1990.722 Mean Square is 86.553 F value is 12.642 and Sig.value is 0.001** Within Groups Sum of Squares are 972.175 Mean Square is 6.846 Total Sum of Squares are 2962.898. Performer Watching only for the game Watching for getting tips and advice Using the tips and scored better

Game buyer Between Groups Sum of Squares are 560.666 Mean Square is 24.377 F value is 7.100 and Sig.value is 0.001** Within Groups Sum of Squares are 487.527 Mean Square is 3.433 Total Sum of Squares are 1048.193. Game buyer launches new game. buying best new games

Fandom Between Groups Sum of Squares are 562.352 Mean Square is 24.450 F value is 6.374 and Sig.value is 0.001** Within Groups Sum of Squares are 544.739 Mean Square is 3.836 Total Sum of Squares are 1107.090. Fandom relaxation and entertainment only. Enjoying the game play rather than paying.

Proxy Between Groups Sum of Squares are 2636.263 Mean Square is 114.620 F value is 6.286 and Sig.value is 0.001** Within Groups Sum of Squares are 2589.068 Mean Square is 18.233 Total Sum of Squares are 5225.331. Proxy financial limitations No time to play No console to

play No friends to play Less knowledge about the game Easy to watch than play Spend no money for watching

Finance Between Groups Sum of Squares are 1500.440 Mean Square is 65.237 F value is 7.166 and Sig.value is 0.001** Within Groups Sum of Squares are 1292.771 Mean Square is 9.104 Total Sum of Squares are 2793.211068 Mean Square is 18.233 Total Sum of Squares are 5225.331. Paid for Super Chat Paid for gaming channel subscription Paid and bought the badges from gaming channel Paid any donation or relief fund via gaming channel

Classification Tree

Model summary specifications growing method CHAID dependent variable is performer and independent variables are game caster, game buyer, fandom, proxy, addiction and finance. validation is none and maximum tree depth 5 minimum cases in parent node. 100 minimum cases are in child node. 50 results are independent variables included addiction number of nodes 5 number of terminal nodes 4 depth 1.

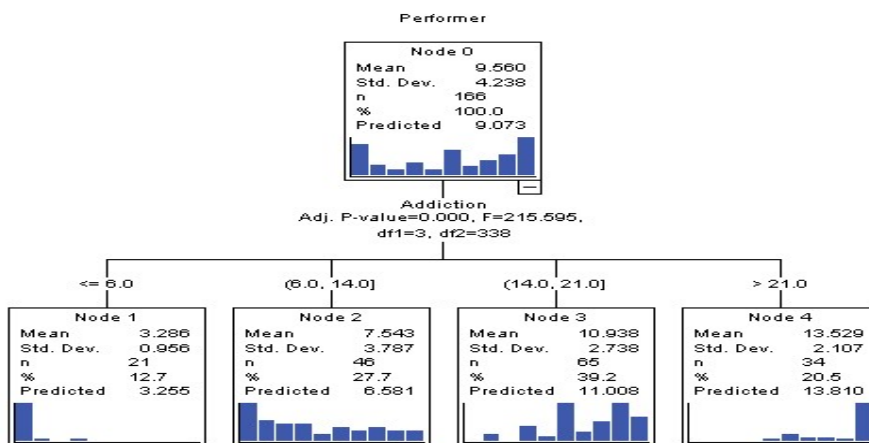


Table 3 Tree Table

Node	Mean	Std. Deviation	N	Percent	Predicted Mean	Parent Node	Primary Independent Variable							
							Variable	Sig. ^a	F	df 1	df 2	Split Values		
0	9.56	4.238	166	100.0%	9.07									
1	3.29	.956	21	12.7%	3.25	0	Addiction	0.001*	215.595	3	338	<=	6.0	
2	7.54	3.787	46	27.7%	6.58	0	Addiction	0.001*	215.595	3	338	(6.0,	14.0]	
3	10.94	2.738	65	39.2%	11.01	0	Addiction	0.001*	215.595	3	338	(14.0,	21.0]	
4	13.53	2.107	34	20.5%	13.81	0	Addiction	0.001*	215.595	3	338	>	21.0	

Growing Method: CHAID

Dependent Variable: Performer

a. Bonferroni adjusted

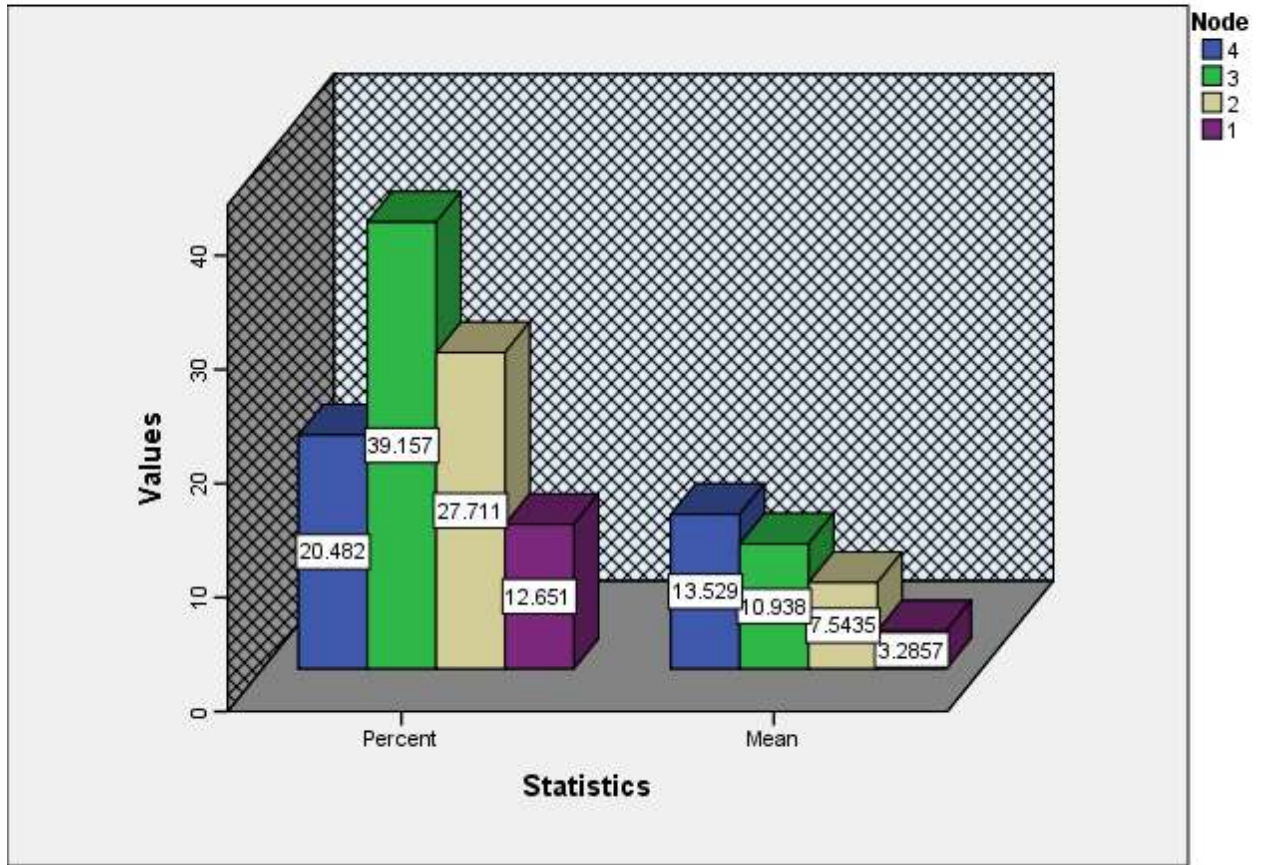
Gain Summary for Nodes

Node	N	Percent	Mean
4	34	20.5%	13.53
3	65	39.2%	10.94
2	46	27.7%	7.54
1	21	12.7%	3.29

Growing Method: CHAID

Dependent Variable: Performer

Gain Summary for Nodes



```
/* Node 1 */.
DO IF (VALUE(Addiction) LE 6).
COMPUTE nod_001 = 1.
COMPUTE pre_001 = 3.25454545454545.
END IF.
EXECUTE.
```

```
/* Node 2 */.
DO IF (VALUE(Addiction) GT 6 AND VALUE(Addiction) LE 14).
COMPUTE nod_001 = 2.
COMPUTE pre_001 = 6.58064516129032.
END IF.
EXECUTE.
```

```
/* Node 3 */.
DO IF (SYSMIS(Addiction) OR (VALUE(Addiction) GT 14 AND VALUE(Addiction) LE 21)).
```

```
COMPUTE nod_001 = 3.  
COMPUTE pre_001 = 11.0076335877863.  
END IF.  
EXECUTE.
```

```
/* Node 4 */.  
DO IF (VALUE(Addiction) GT 21).  
COMPUTE nod_001 = 4.  
COMPUTE pre_001 = 13.8095238095238.  
END IF.  
EXECUTE.
```

Node 1 Mean value is 3.29 and its Std. Deviation 0.956. Percentage of node 1 is 12.7%. .Addiction of node 1 Primary Independent Variable Sig value is 0.001**. Node 2 Mean value is 7.54 and its Std. Deviation 3.787. Percentage of node 2 is 27.7%. Addiction of node 2 Primary Independent Variable Sig value is 0.001**. Node 3 Mean value is 10.94 and its Std. Deviation 2.738. Percentage of node 3 is 39.2%. Addiction of node 3 Primary Independent Variable Sig value is 0.001**. Node 4 Mean value is 13.53 and its Std. Deviation 2.107. Percentage of node 4 is 20.5%. Addiction of node 4 Primary Independent Variable Sig value is 0.001**.

DISCUSSION:

Game caster: Viewers watch for game caster and they enjoy the experience of the game by merely watching. 0.001** Significance proves that students watch for game caster. The viewers also engage in live chat with the game caster. Very few viewers spend money to get the membership so that they can chat with them and other gamers in the group. It is also found that the few viewers tend to become happy when the game caster reads their name during live shows and they are ready to spend money for those happiness and they eagerly wait for live shows of those game caster.

Performer: These are the other type of viewers who watch the gameplay only for the game and they get the tips how to complete the levels. It is also found that they have scored better and crossed the level without any difficulties. They also watch for buying new video games which has launched in the market and learn about those games before spending huge amount on those games. The F value is 12.642 and the significance value is 0.001** hence it is statistically proved that students watch to perform better in their video game.

Reason of Addiction: In this study it is found that viewers spend more than 2 hours in a day merely viewing the gameplay. Most of the viewers get dreams about those gameplays regularly and they always think about the game which leads to game addiction. According to Tree model the significance level is 0.001** which says the addiction rate is high in watching gameplay.

CONCLUSION:

In this study it is found that viewers watch gameplay for performing better and reaching next

level in the video games. And it is also found that viewers spend maximum time in watching gameplay which leads to addiction. The other important aspect is game caster where people watch gameplay the most. The viewers watch for the entertainment purpose only and not much money is involved according to this study. But there are many attractive traps in online live streaming which may tempt the viewers to spend money by getting benefits like super chats or badges given by the game channels.

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