Effects of Violent Digital Games on Adolescent: A Case Study of Quetta, Balochistan, Pakistan

By

[1]Tabinda Aqdas, [2]Muhmmad Fahim Baloch, [3]Babrak Niaz

Abstract:

Video games have become one of the favorite activities of adolescents. A growing body of research is linking violent video games to aggressive cognitions, attitudes, and behaviors. The core objective of this study is to analyze the video games habits of adolescents and the level of parental monitoring. This study examines associations among violent video game exposure, school grades of adolescents, and their involvement in physical fights. The cultivation theory gives the way to this research which states that adolescents have strong media influence if they continuously watch the same content again and gain they will adopt that as the media cultivate the minds. The primary source of data collection includes questionnaire, hundred students of 9th and 10th grades from three different schools of Quetta i-e OPF (Overseas Public Foundation), Wilderness school and college and Government boys' high school Quetta as well as hundred parents. This study finds that adolescents who expose themselves to greater amount of video games were reported to getting into arguments with teachers more frequently, more likely to be involved in physical fights, and academically performed more poorly in school. The study also suggests parents that how to control or stop the adolescents from playing violent video games.

Keywords: Adolescents, Video Games, Violence, Etc.

[1]M.Phil. Scholar, Department of Media Studies, University of Balochistan, Quetta Pakistan. Email: tabindaaqdas@gmail.com

[2]Dr. Muhammad Fahim Baloch, Assistant Professor, Department of Media Studies, University of Balochistan, Quetta. Pakistan. Email: balochfahim@gmail.com

[3]Dr. Babrak Niaz, Assistant Professor, Department of Media Studies, University of Balochistan, Quetta. Pakistan. Email: babrakniaz@yahoo.com

Introduction:
In a broad sense, digital gaming includes, but is much more than, playing using software running on PCs, consoles, or portable devices. (Aranda, Navarro 2011). The idea of video games was brought forward by William Higginbotham in October 1958; it was a simple tennis game (American psychopathological society news), on computer system and also with the help of oscilloscope at Brookhaven national laboratory. It was the first computer video game. Later on with the passage of time many video games became popular among children especially adolescent. Children' are quick learners, they take very short time and keen interest in learning and playing video games. They want to play continuously for hours sitting in front of computers (Douglas gentile 2014). Videos games were not only popular in the Europe but Asian countries were also showing huge interest in the video games in early 1980s (Geneva Mith 2012). With the passage of time the interest for video games develops in to addiction.

The video game industry produced $115.06 billion in revenue in 2015. While actual consoles - mainly the Playstation and Xbox - account for almost half of it, mobile gaming is the most improved sector. Candy Crush's release in 2012 became the catalyst for digital gaming, with a sharp increase in overall revenue following soon after. It went from an industry making $9.28 billion in 2012, to now, where an increased portfolio of games has seen that figure rise to $22.01 billion (Ayenigbara 2018).

The subject of that addiction were mostly kids or teenagers who slowly and gradually get addicted to video games. Some of the children like to spend their free time on playing video games. Historically, addiction has been understood in various ways—a sin, a disease, a bad habit—each a reflection of a variety of social, cultural, and scientific conceptions (Kushner 2006; Levine 1978).

But most of the children take that innocent creation as a dangerous creation and slowly and gradually, fun became addiction and due to this addiction they slowly ignore their parents company then friends and even personal time for exercises gym and any physical activities and just focus on playing violent video games (Anderson 2002). The purpose of making games difficult and challenging was to develop interest so that the children keeps playing for hours. New challenges are being added one after other to make the video games more interesting. prizes and incentives associated with the games makes them play games more frequently.

"We are no more worried if children missed their school due to video games, but we are worried if our children are murdering their classmates because of violent video games." (Tom Bissell 2008). Many researches were conducted to find out how the time spent on video games increases day by day among the adolescent. Perhaps it is not to

say that it is a disorder and not diagnosed by American Medical Association, but yes it is a real problem which has to be taken seriously. In a recent research conducted by the University of New Mexico, Morgan Adams. suggests that there are two reasons for playing video games to extreme–level. The first reason is single player games which have certain goals and achievements where certain tasks are assigned to the players such as to release the captured princess etc. the purpose of these games is to complete the game in a given time period to get high score at the end.

The second type of video games are played online having multiplayer provision. These types of games are played online with friends or anonymous players sitting remotely, generally such games have no end so children keep playing to enter new levels. The players enjoy the game and gets involved to such level that consider themselves as games main character. They usually make game team partners online while playing games players can be from another part of the world. A teenager in Thailand obsessed with video games was found dead after a marathon session lasting several nights, (Miller, 2019).

According to the WHO definition, a person with gaming disorder will demonstrate the following characteristics for at least 12 months; problems controlling control their gaming habits, seeing gaming as more important over other necessities and daily activities or work, continuing to engage in gaming even after its negative health and social problems has been identified or are evident. Further research shows that gaming disorders can also be linked with anxiety, depression, obesity, sleeping disorders, and stress. People who remain physically inactive for long periods because of gaming may also be at higher risk of obesity, sleep disorders, and other health-related issues, according to WHO (Ayenigbara 2018).

Theoretical Framework:

The current research revolves around the cultivation theory, which was presented by Gerbner in 1976. The theory believes that media cultivates the mind of the people like what they see on television or computer or any media they adopted the same behavior. Gerbner explain that in our society two categories of people exists one, those who watch television from 5 to 7 hours daily are called heavy television viewers, second those who watch from 1 to 3 hours' television daily are called low television viewers. The heavy viewership affected mostly by media, because its human nature people adopted the same behavior what they see frequently. (Gerbner, G & Gross.1976). Further the theory says that it's not only television viewership but also computer, internet and video games because these are also forms of media. (Miller K 2005). Theory say that people who are high viewer of media change themselves into what they watch on media. If they watch violent things, movies and play violent video games they adopt the violent behaviors and languages.

This theory further explain that media is doing spoon feeding task to the individuals whatever media present-people try to perform the same. Some people are highly influenced by media some are low it depends on how much time is spent by the individual on media either social or electronic. Violent video games are also a kind of media which may produce aggression or may not. This research will find out either violent video games increase aggression or not, and is there is any relationship between aggressive behavior and violent video games or not.

Literature Review:

In the last 25 years, numerous studies have been conducted to measure the implications of violent video games on children. majority of these studies are on the relationship in between violent video games and aggressive behavior, (Dewitt P.E 1993). There are two noticeable things which researchers choose for research one is the content of video games played by children, and the other on their grades in the final exams. On the other hand, researchers are interested on the comparison between violent and non-violent video games. Although not all the research done on the violent and non-violent contents of studies but likely the contents of time period of playing these games, for example, mostly researches prove that due to violent video games people are becoming aggressive. It also effects the school results of children (American Medical Association 2000).

As the same numinous studies also shows the negative association between violent video games, aggressive behavior and school performance. Different people having different concepts about violent video games. In general, combined all the results of the studies most of the researchers agree that violent video games cause aggression in the children and some effect on their school performances (Harris & Williams, 1985). While findings of some research done on the college students were different as compare to the behavior of the school going children having no effect on their behavior and grades. Mostly the target of these games are children because they do-not have enough knowledge to adopt the behavior they do not differentiate between positive and negative (Anderson & Dill, 2000; Paschke, Green, & Gentile, 2001). Some other findings about aggressive games depends on the content of the games being played will affect the relationship between duration of games played and studies. For example, if students play educational games, they easily learn their subjects and love their studies, but if they play violent games, then they get low grades in school (Lieberman. D, A 1988). If the children frequently play games on computers or play stations then, they get poor grades in exams and loose the interest in the studies.

However, besides the content, somehow not only this factor but also the other factors like social activities and passing the time by

playing other games with the friends. This hypothesis suggests that media have influence on people now it-'depends on people what they learn from the media it depends on them to choose positive or negative. Media has influence on our social and educational learning. It is bitter reality that due to media the habits of book reading and family interaction has been affected and in future this trait will be almost finished (Huston et al., 1992). Let's imagine that if children reading books for 7 hours a week and just 4 hours play video games then the grades of children and behavior will be totally opposite to the current one. Now the question is whether the violent games affect the grades

Games are designed for fun and enjoyment and sometimes educational for children, most include aggressive content. Recently an organization of content analyses of video games proved that 89% of the games have violent content. (Children now 2001) a large portion of these games have serious violent content and violent characters. (Dietz, 1998; Children Now, 2001; Dill, Gentile, Richter, & Dill, 2001). However, the games which played and download by the youngsters, majority having aggressive and based on violent content. Because of popularity of these games and changing behaviors of children, researchers observed on this issue to find out the solutions and also find the evidence of the violence create in children at very initial stage of life. Different studies focus on the parental control on the video games either they allow their children to play these games or not? And if they allow, for how many hours' children play games, in front of computers. 55% parents say they always put limits on playing time of their children and 40% of the parents says they Often or always check the contents of games before their children buy of download the video games on computer (Gentile & Walsh, 2002). But these numbers are not really high, they are the estimate view of parental monitoring of children's video game play. In one study, mostly children said that their parents "never" check the contents of their games before buy or download the game (Walsh, 2000). Funk, Hagan, and Schimming (1999) show in the researches, that parents could not even correctly answered about their child's favorite game. About 70% of the cases parents were incorrect to answer, the one of their children's favorite game (strasburger, V, C & Donnerstein E 1999).

Children most favorite games are violent games. Since last 20 years' aggressive games are apparently play more than other games and at a same time children violent acts are increases frequently and they also involved in crimes and murders. The percentages of child crime rate are increases day by day. Parents should notice the behaviors of their children especially boys, the rate of arguments and fighting with the parents and teachers is also increase after invention of these violent video games. In a recent interaction study, youth and school teachers combine to design the bill against media consumption (Robinson, Wilde, Navracruz, Haydel, & Varady, 2001). The purpose of the bill was

to limiting the time period of TV, video games and movies watch at home, but not focus on the alternating tasks of these things. After six months of interaction, students who follow the bill had reduced the media influence and low aggression level and also perform well in the school. The results of current research are also on the work of Robinson and colleagues. Minimize the amount of playing violent video games and arguments with the parents and teachers, also involvement in physical fights in school and streets. Children who said that their parents monitor the contents of playing video games before buy or download into the computers are comparatively less argue with the teachers and parents or get into physical fights.

However, another study had been conducted in America on the effect of violent video games on adolescent. The results show that children playing time duration was very high, they sit in front of the screen for 13 hours a week. One estimate shows that more than 75% of teenagers play mature games, which contains violence, blood and gore. (Bushman, BJ, & Huesmann, LR 2006).

Results:

Statistic Presentation of Number of Children Involve in Case Study:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	75	75.0	75.0	75.0
	Female	25	25.0	25.0	100.0
	Total	100	100.0	100.0	

Researcher took 100 participants by random sampling method comprising 25 females and 75 males number of boys are three times greater than girls that shows that boys are highly involved in playing violent video games. These participants are randomly selected from Quetta city - enrolled in the different schools of Quetta.
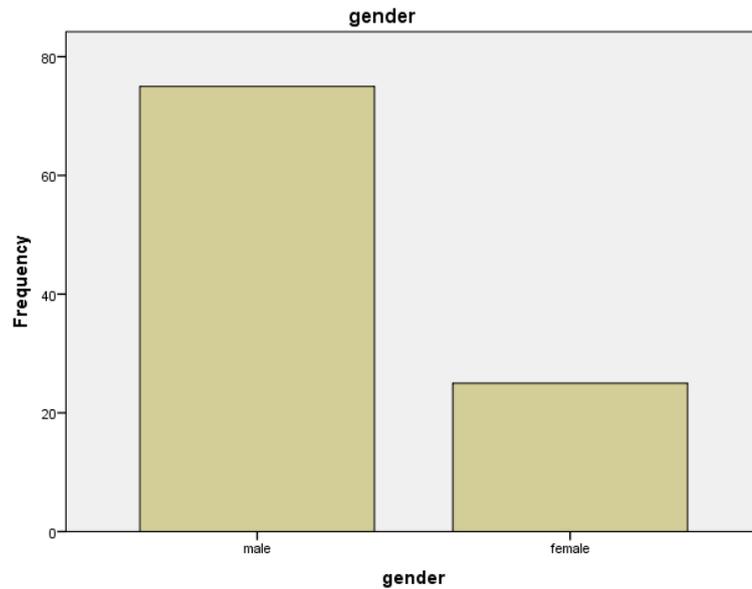
gender

Fig shows that male are three times more than females in playing violent video games:

It is obvious from the data that boys are more interested in playing violent video games which has violent content, weapons like guns, bombs, and mild language these kinds of games would change their personalities, which may harm the society and the family members of those who play such games as well.

Statistic Presentation of Schools:

In this case study three different schools of Quetta city were studied to find out the effects of violent video games on children.– Children are play-these violent games, some private and government school students are collectively play these kind of games which somehow effect their study as well.

		Frequency	Percent	Valid Percent	Cumulative Percent
	OPF	44	44.0	44.0	44.0
	Wilderness	46	46.0	46.0	90.0
Valid	Government school	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

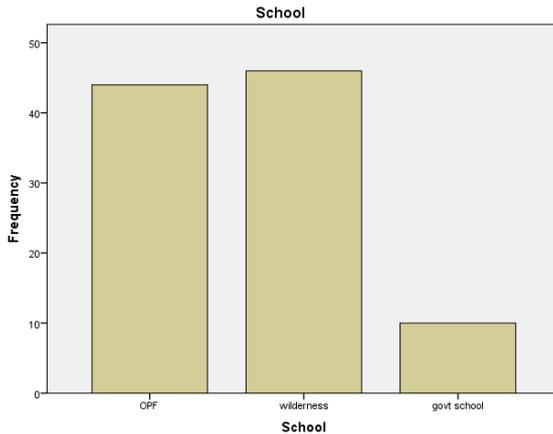**Figure shows that all government and private school student play violent games:**

Researcher choose three different schools of Quetta private school "Wilderness school", Government school is Overseas Public Foundation school (OPF) and Government boys school Quetta". In these school students of secondary section mostly play violence based games and all the students of class is highly addicted to these kinds of games which

Table of Ages of Children:

Children between 15 to 16 years of age are addicted to violent video games they play violence-based games daily from 3 to 4 hours

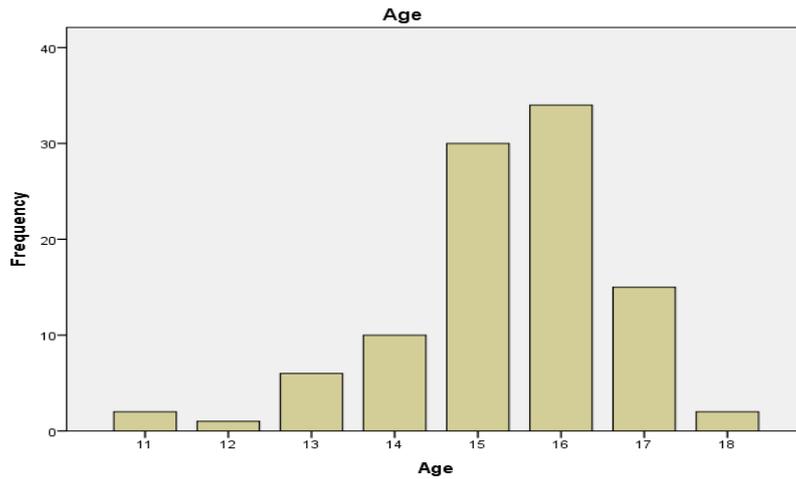|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	2	2.0	2.0	2.0
	12	1	1.0	1.0	3.0
	13	6	6.0	6.0	9.0
	14	10	10.0	10.0	19.0
	15	30	30.0	30.0	49.0
	16	34	34.0	34.0	83.0
	17	15	15.0	15.0	98.0
	18	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

Figure shows children mostly from 15 to 17 years old play violent video games:

Children from 14 to 17 are like to play violent video games more as compare to 11 to 13 years old boys, the above figure shows that most of the participants are under 15 to 17 years and this age is the time when boys are very much adventurous than girls and for thrill and fun most of the boys play violent video games and also try to perform the same act for fun and show off.
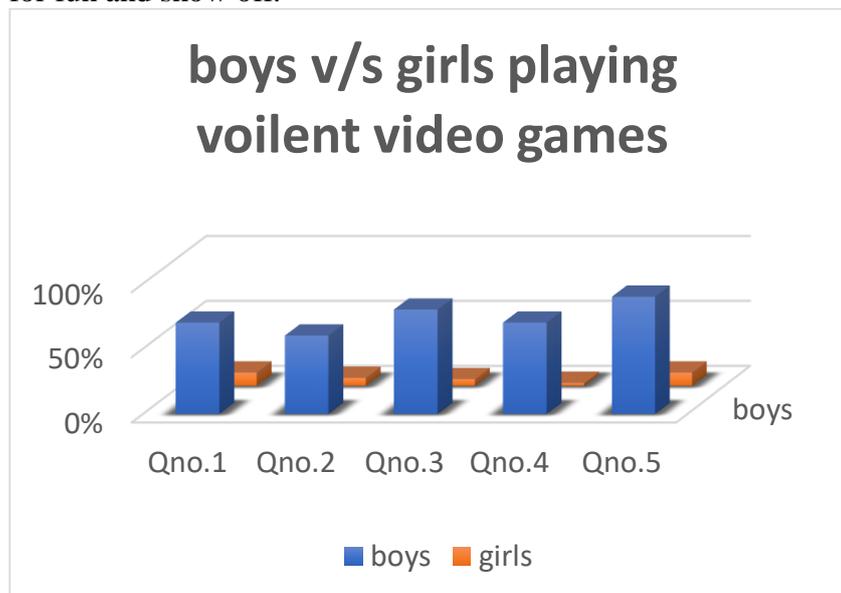

Figure shows that boys ~~are playing~~ more violent video games than girls.

Researcher ask some questions to both boys and girls about violent video games and in question no.1 states that "which violent video games do your parents allow you to play?" and almost 60% boys answered that

their parents allow them to play violent video games in homes as well in gaming zone. They play all the games like counter strike, GTA and fighting games. As compare to boys, girls mostly answered that they don't play these kinds of violent games because they personally don't like and as well their parents do not allow them Only 10% girls like to play these games. Like this other four questions are also related to the playing violent video games and the results are also same all the boys like to play violent video games and soon after playing these games the researcher ask about the aggressive behavior then 70% boys say that "yes it gets easier for me to perform a violent act after playing these violent games".
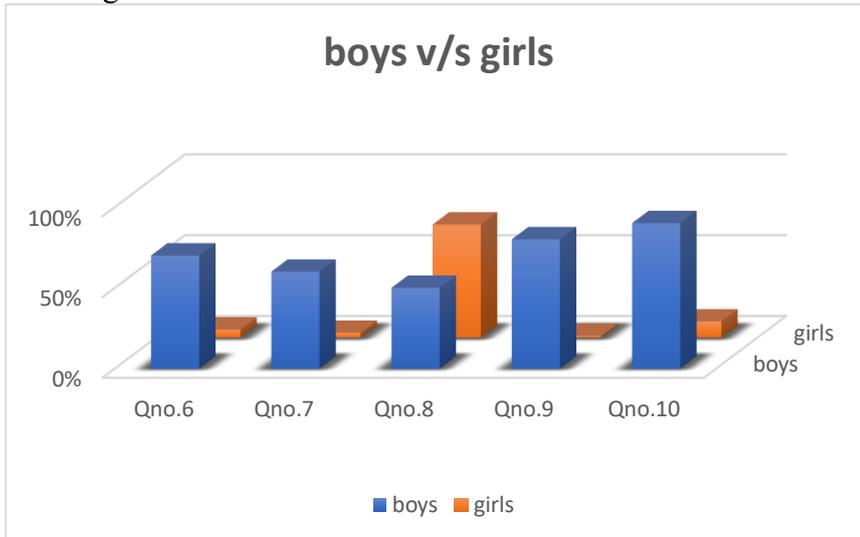

Figure shows the percentages of girls and boys.

Question no.6 is about when you angry or stressed what kinds of games do you like to play? The answer of all the boys' participants is counter strike and GTA. On the other hand, all the girl's response that they don't bother to play these games in angry and stressed time as well in normal routine. Then in Question no.8 the percentage of boys are low than girls are due to researcher ask about do their parents monitor the content of their games they play? Then 70% of the boy's response that their parents think that they are mature enough to play these games. And they don't watch them, but the girls say that yes their parents are very much protective and they monitor the contents of games they play.

The last question was asked from participants that why do you find violent video games interesting? The answer is quite interesting too and more focused to the parents that almost all the boys answered the same statement i-e it is fun to pretend to do illegal things without in trouble. And as compare to girls they don't play violent video games.

Parents Involve in the Study:

|		Frequency	Percent	Valid Percent	Cumulative Percent
	Father	55	55.0	55.0	55.0
Valid	Mother	45	45.0	45.0	100.0
	Total	100	100.0	100.0	

Researcher also collect data from the respective parents who live in the Quetta city. The purpose of involving parents in this research is to know the changing behavior of the children in schools and home as well. Researcher took 100 parents both male and female in which 45 are females and 55 are the males.

Statistic Data Collected from Parents:

Researcher ask some questions to the parents of teenager children that how you define your children's behavior.

Following are some questions

- Do you allow your children to play violent video games?
- Do you monitor the contents of the video games-your children play?
- Removing violent video games from our society, would make children less aggressive and peaceful do you agree?
- Do you feel that playing violent video games have also affect your children's grades in annual exams because children spend more time in playing games rather than studying?
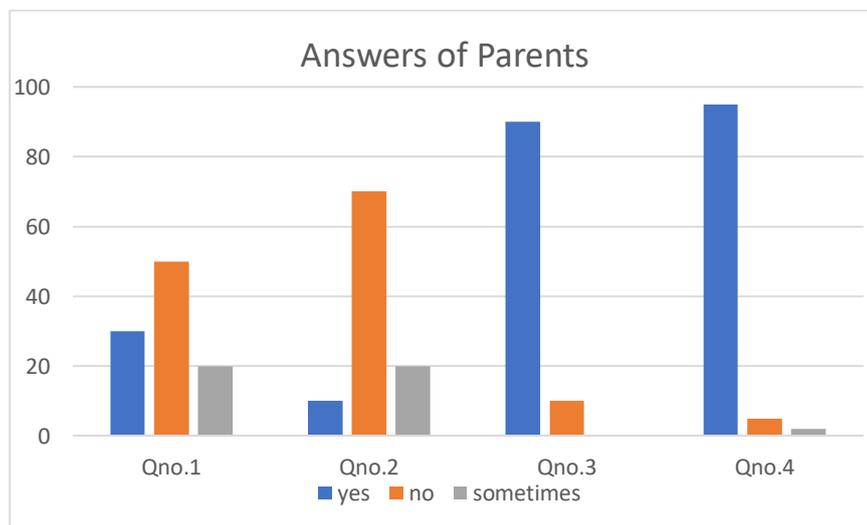
Graphical Presentation of Parents Answers.

These answers are not said to be final because it is collected from 100 people so according to the researcher data, parents do not allow their

children to play these games but children are playing because they like violent games. In the second question maximum parents think that no need to monitor their children because they are mature enough to play these kinds of games. And on the other hand, parents think that if violent video games are banned then somehow violence that exists in our society may be reduced. They think that with some other factors violent video games are also playing role in spreading violence in the society. The results also mentioned that due to playing so much violent video games the annual results of children would be affected because they spend more time in playing video games rather studying.

Relationship between Violent Video Games and Aggression:

		CS	PS
CS	Pearson Correlation		-.177
	Sig. (2-tailed) 1		.078
	N	100	100
PS	Pearson Correlation	-.177	1
	Sig. (2-tailed)	.078	
	N	100	100

This data shows that there is relationship in between the violent video games and aggressive behavior of children, they play continuously 3 to 5 hours' violent games that sometimes charge their aggressive cells of body and force them to commit violent acts. Both the parents and children admit that these games have negative impact on the adolescence and we as adolescence should try to avoid these games. If these games are played continuously in the future than the outcomes may be more destructive. The more these games introduced in the world the more people become aggressive.

Discussion and Recommendations:

Playing violent video games is not a big issue but when our children adopt the same behavior which they see in the games and try to perform violent acts that may be harmful for the society. Researcher ask many questions to the students of secondary classes about violent and aggressive behavior of children after playing these violent video games. and the answers of many boys were same according to them they like to play these games because they do not perform it in The results shows that boys are more addicted to violent video games as compare to the girls and in their gatherings boys try to do same acts what they see in the games and for fun they try to perform violent acts in real life. Such acts are not sign of positive effects of violence based video games. Another noticeable thing is that all the parents (respondents) of this research agree on the point that due to playing violent video games their children

became more violent although the other factors of society are also responsible for making our peaceful society a violent society Now the point is why children play these games so much?

One thing also wants to be mentioned in this chapter that children who don't want to spend time with the parents they usually of these games, children who are get bored quickly from any activity are not engage in these games. But if child not having healthy relations with the family members and siblings are adopted these habits as to fresh their mind. In addition to the psychological elements to keep playing may be addictive of these games because they start these games for relax but soon the time came they want to stop playing these games but due to addiction of the game they won't leave this game and keep playing.

Hammersmith Hospital London conduct a study in 2005 which found that Dopamine levels in player's brains doubled while playing games. Dopamine is a mood regulating hormone associated with feelings of pleasure. The results demonstrate that gaming makes person chemically addictive

It was hypothesized that exposure to video games violence would be positive related with the aggressive behaviors, and the time duration of the playing games will lead children to poor performance in the school. Students who play violent games are more involved in physical fights, argue with the teachers and family members, the relationship between aggressive games and aggressive behavior are stronger than poor performance in the school.

Children spend lot of time sitting in front of screens playing video games. One of the researchers found that the average time of children playing video games is 13 hours a week. On average 75% teenagers are involved in playing these games which are based on violence showing blood, mild language and weapons like guns and bombs.

Results shows that immediately after playing such games, children can have aggressive and rude behavior, shows anger, inure in heart beat and blood pressure.

And still yet, researchers not surely say that due to violent video games children show aggressive behavior. But somehow aggressive games play role in the aggressive behavior so children should try to give less time to these games.

It is difficult to ban all the aggressive games because they are easily available on internet and–most of them are can downloaded for free so firstly there should be no free violent games available on web, a high price should be set for such games so that children could not able to buy these games and move towards the non-violent video games.

The question asked by a researcher Douglas Gentile that is every child violent? The answer is No, not all the children are born violent during their life they learn different behaviors from the society. They

learn what they watch and observe mostly, and its human nature that if peaceful environment is provide to them, they will have a peaceful nature and if war, violence and gore is present in any environment they will also have aggressive mind sets. Mostly boys are involved in these games as compare to girls. Many studies are carried out on both girls and boys the results mentioned that boys are more violent than girls because girls do not play such games while boys are highly engaged in action games. One thing noticed was playing such kind of games makes children violent. A problem faced is that these games cannot be banned at once, there are millions of games available on the internet having violent contents games and it is impossible to ban all these games or remove them from the internet. One thing to be kept in mind is that these games are mostly available for free for downloading. Free access to these games provoke children to play more and more by developing interest, and they push the buttons aggressively while playing that also shows that these games charge the aggressive cells of children which are present in their body and if they lose the game they hurt themselves by punching themselves.

Other researchers argue on these results; they say that violence of the games do not affect the behavior of the children in real life these are just entertainment packages for children. The violence found in the children may be due to other factors prevails in the society. They linked their behavior with the history of poverty, abuses harassment cases child ignorance by parents and many more. (Huesmann, LR & Eron, LD. Ferguson), they further explain that not violence exist in the children is due to these games but also there is some old happenings any accidents or mishaps occur in their life so they behave like this, but the critics on these results say that such things do not happen to every child not all the children faced mishaps in past. So such statements cannot be assumed to be true for all the children.

As the popularity of these games is increasing day by day and the sales of these games going high every year the youth violence is also increasing, so the connection in both of them was found, Ferguson who is not only scientist of violent video games but also a professor in university measure the difference between violent and non-violent popularity among adolescent he chooses high population of adolescent in his experiment for analyzing the results. He concludes his studies with the no effect on adolescent and sometimes its negative effect on children they adopted the negative things from that games only when they are in angry mood or stressed. Further he explained that psychological affect is long lasting with the short term memory they adopted the behavior but if the repeat the behavior then this shot term recalling process will convert into long term memory.

Recommendations:

Violent video games are one of the main causes of change in behavior of adolescents. They often copy the main characters of the video games and tries to adopt their behavior and often act like them. Parents should not encourage their children to play violent video games. If a child does not follow parent's guidance he or she should not be punished but should be treated sensibly. Counselling of children is must in this regard to discourage them from purchasing or downloading violent video games. Try to encourage them to be involved in outdoor activities, educational or non-violent games.

The summary of all these discussions is that parents should take responsibility to monitor the content of video games their children play; off course there is no shortcut to control them. We need to do better than before to understand the complexities of the games that exists now, provide them toys to play with them and from learn them. Children should be helped in becoming better citizens not criminals they must be educated for a peaceful society.

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