

Impact of Playing PUBG and Fortnite on the Behavior of Youngsters in Pakistan

Dr. KIRAN KARAMAT

Lecturer/Head Media Studies Department
Kinnaird College for Women.

NAYAB JAVED

Lecturer, Lahore College for Women University.
Email: nayabjaved528@gmail.com

MEHER SHAH

Student of BA (Hons) Media Studies Kinnaird College.

HAFIZA AYESHA BIBI

Student of BA (Hons) Media Studies Kinnaird College.

Abstract

PUBG and Fortnite are very popular among youngsters in Pakistan. The research claimed that PUBG and Fortnite have an ability to indulge the players and the excessive addiction to play video games led to aggression and violence among youngsters. In this study, the researchers found out how playing PUBG and Fortnite have a very strong relationship with player's behavior. The researchers examined the sort of responses and aptitudes that player gains after playing PUBG and Fortnite. The researchers explored the main factors like aggression, violence, anxiety, headache, back pain and weak eyesight caused by the excessive playing of PUBG and Fortnite among youngsters. The research also explored that in lockdown due to coronavirus, players played PUBG and Fortnite more frequently because of more spare time they had. The results of the study showed that playing PUBG and Fortnite creates aggression, abusiveness and violent ideas among youngsters because of the violence within the video game. It is also claimed that excessive playing PUBG and Fortnite causes physical and mental health problems among youngsters.

Keywords: *PUBG, Fortnite, Aggression, Violence, Behavior, Youngsters.*

Introduction

The topic of this research is based on the impact of video games (PUBG and Fortnite) on the behavior of youngsters in Lahore, Pakistan. Video games are very popular among our youngsters in Pakistan. The researchers have taken the two major prevailing video games PUBG and Fortnite. Video games have an ability to indulge the players and the excessive addiction to play video games led to transforming the entertainment side of video games to be involved in most of the other areas in life. The aim of the study is to find out how these video games have a very strong relationship with player's behavior. The researchers examine what sort of responses and aptitudes that players gain after playing these video games. These reactions can be negative or positive, direct or indirect for example, improving social relationships, upgrade the critical thinking, personality development or aggression, fatigue, violence and depression. Moreover, the study examines the reasons behind too much addiction towards these video games.

The development of video games in Pakistan began sometime around the 2000's, when teenagers who had played and experienced games from what is formally known internationally as the 3rd and 4th generation of video game development began to become young adults. Video gaming is the main practice of online entertainment, which can be considered addictive. Massive online gaming is the most prevalent and addictive web-based category. The reason that the video games are addictive is because they require different tasks to achieve and a variety of activities.

Excessive online gaming is connected to shifts in the level of indulgence of non-complicated video games. Whereas addictive gaming has negative psycho-social implications and includes control loss over excessive gaming activity (Lemmens, 2009). This is commonly believed that video games are a source of amusement and pass time activity. On the contrary, it has an impact on the behavior of human life in general and in particular.

Player Unknown BattleGrounds (PUBG) is an online multiplayer royal fighting game produced and released by the South Korean video game developer company Bluehole. Up to one hundred players in the game land on an island and search for the weapons, arms and other equipment to destroy other players while getting themselves safe from killing. The safe area of the game map decreases by the time, forcing surviving players to tighter areas to trigger encounters. The last player or team to stand will win the game. In 2018, a free-to-play mobile version was launched for Android and iOS in addition with PlayStation 4 (PS4). PUBG is one of the video games with bestselling and most played video games of all the time. Through 2020, PUBG had sold more than 70 million copies, with PUBG mobile phones downloaded over 600 million times (Nandini, 2020).

Fortnite Battle Royale is an online video game free-to-play multiplayer battle royale which is a side game. It has an access to Android, iOS in 2017 and initially released for PS4, Xbox and Microsoft Windows. The game rapidly gained popularity all over the world and in Pakistan. By May 2020, the active player count had reached 350 million. The 60 percent payers are found to be in between the age group of 18-24 (Iqbal, 2021).

The research examines how these video games players are affected by the violence in these video games especially players in Pakistan. The research also explores the mental or physical health problems faced by the youngsters and how they feel the behavioral changes in themselves gradually. Excessive playing by the users make them antisocial and far from the reality of this world because of the fact that they are deeply indulging in the virtual world provided by these video games.

Objectives

- To find out the main reasons that attract the youngsters to play PUBG and Fortnite.
- To analyze the behavioral changes in youngsters after playing PUBG and Fortnite.
- To examine the effects on socialization of youngsters due to playing video games.
- To analyze the effects on mental and physical health of youngsters playing video games.

Statement of the Problem

The research attempts to find the behavioral changes among youngsters in Pakistan who play PUBG and Fortnite. This is commonly believed that video games are a source of amusement and pass time activity. According to Lemmens (2009) addictive gaming has negative psycho-social implications and includes control loss over excessive gaming activity. The social learning theory of Bandura (1986) says that exposure to these types of violent video games can make behavioral changes and strengthen existing aggressive and violent habits.

Research Questions

1. What are the effects of video games (PUBG and Fortnite) on the behavior of youngsters?
2. What are the main reasons to play PUBG and Fortnite among youngsters?
3. How PUBG and Fortnite can affect the socialization of youngsters?

Rationale of the Study

It has been observed by the researchers that the people who play these games have no socialization at all. They are more indulging in this gaming world which lead them to live a virtual life away from the reality. So, the rationale for the study is to discover how video games (PUBG and Fortnite) have contributed to behavioral changes among youth since the selected video games are very popular and most played games in the world. The study explores how these video games can affect the socialization of youngsters in modern society. It also examines the relationship of video games with the behavior of youngsters in all aspects be it in a negative or a positive way. The study also investigates the reasons behind the addiction level among the youngsters playing selected video games and consequently the impact of these video games on the mental and physical health of youngsters.

Literature Review

Literature review provides comprehensive information that could be of assistance to researchers in their future research areas. In this way, it can be used by the researchers to collect data about the further studies. The number of video games users has grown rapidly with recent years in Pakistan. Video games have different categories but most of the users are attracted towards action games. Video games have both adverse and positive effects on users. Video games may be the reason for serious mental problems or commit serious antisocial behavior among youngsters in Pakistan. With that, video games can have the benefits which makes the players smart and in fact teach the players high-level cognitive skills they may need in the future.

Ali and Al-Qahtani (2020) state that youngster's obsession and addiction towards PUBG is the most prevailing action in Pakistan nowadays. PUBG is an online multiplayer game in which about 100 players skydive into a landmass and search for weapons and arms to kill other players while trying to avoid execution simultaneously. Over a period of time, the living players move into more compact areas to force eventual conflict. The final team or player overcome all the game-wide obstacles will win the battlefield war. The duration of PUBG has no limits because of that it is appealing, as it is available twenty-four seven. However the addiction of online gaming in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) is also known as (IGD) Internet Gaming Disorder (Carbonell and Griffiths, 2018). Online gaming takes the form of mental health problems and psychological conditions with adverse health effects. Inhuman behaviors such as lack of empathy and war related feelings are suggested to emerge among our youngsters who have the addiction towards violent video games like PUBG and Fortnite. The World Health Organization (WHO) recognized online gaming addiction as an absolute mental health problem (WHO, 2018). The well-known effects of excessive playing PUBG are fatigue, headache, poor sleep quality, eye strain, insomnia, unconscious condition and aggression. Our young population in Pakistan is investing their precious time and energy with no valuable payback in return.

Nawaz et al. (2020) summarizes that the video game addiction relates to the individual's psychological characteristics such as competitive personality traits and social isolation behaviors in youngsters and teenagers whether they are school going, university students or professional career oriented people (Singh, 2019). PUBG has completely shaken the nation by indulging all ages of gamers into their domain. There is a major negative association between addiction of online gaming and psychological characteristics of narcissistic personality traits and social isolation which suggest players playing video games should have strong interpersonal and social skills with others (Kiming and Andringa, 2018). Since Pakistan is a

developing country, where because of limited resources, individuals may be granted more time and opportunities to fulfill their household obligations in order to follow social norms and pressures. The individuals tend to be more focused on fulfilling their basic needs while avoiding crisis. This aspect is very necessary to consider the living standards of Pakistan where online gaming may be a secondary requirement for many of the people (Memon, 2015).

An article by Hisam et al. (2018) examines that cognitive abilities include strong mental capabilities like enhancement of knowledge, decision making power, and attention towards respective work, problem solving and evaluation among the young population. One of the positive viewpoints among users is that video games help in building cognitive abilities in themselves. Also the cognitive methods help in generating new ideas while making use of existing knowledge. Video games can enhance the cognitive capabilities of the individual and it's becoming a technique where individuals can motivate themselves in the learning process. The interactive feature has also embellished in strengthening the communicating factor between the individuals. Video games are observed for technically most demanding in addition with psychologically most absorbing experience for mental working (Kuruvilla, 2009, April 1).

In another study, Ashfaq and Fatima (2014) focuses on video games' effects nearly doubled compared to other violent media such as television programmes etc. as this medium has more interaction capacity from watching television or movies which makes video games a different medium. Video games require players to take an active part in the script of the game as players become an active participant in the game as the player's chosen game character (Barlett & Swing, 2008). Video games have both positive and negative effects on players' behavior because of the interactive feature. Violent and non-violent video games can be dependent on the after effects of respective nature. In respect to violent games the players communicate with other characters of the game and also use different types of weapons such as guns, knife, axes and bombs etc. Video games offer the players a sense of virtual world. The players imagine and feel that they are in those circumstances or they visit the different virtual worlds. Violent actions are repeatedly seen in the video game and that may play a role in raising the player's violent behavior (Barlett and Swing, 2008). Such a way of repetition has become a way of learning and players learn and adopt the wrong behavior patterns which enlarge the aggression level in their lives.

The violent players of video games also face the problem of poor empathy towards others, interpretations through self-serving and an exaggerated sense of liberty. The continuous exposure to violent games makes the player's personality as violence, and aggression becomes a natural action to them. The player's schema of perception and expectation becomes aggressive that leads them to aggressive personality formation. The person's logical variables (e.g. attitude towards violence, personality aggression) and situation variables (e.g. media violence, real world exposure) combine to affect the present internal state of an individual (as cited in Krish, 2002). The research aims to raise awareness among parents of video games players and brings some awareness to players from its harmful effects on their behavior, mental and physical health in Pakistan.

A study by Qureshi and Masroor (2013) claims that there is a major distinction between excessive gaming and pathological (caused by a mental or physical disorder) gaming. Excessive gaming is associated with different participation degrees, which is not too problematic, but pathologically it includes socially and mentally unhealthy and inability to manage excessive gaming behaviors. Video games or any kind of games are not addictive itself (Gentile, 2009). But the way young people are using those games in Pakistan is not sustainable and causes harm. Pathological use of gaming is just not a disorder in psychological terms. The people who used to play video games for an extended period of time, there are symptoms which began to appear are unconscious mind, aggressive behavior and more interpersonal conflicts. Aggression is a sudden and momentous act of rage. It is an observable behavior that can damage, depreciate and demolish any person or as well as an object. Among youngsters, the lack of discipline leads them to lack of insight and responsiveness to their actions which contribute to violent behavior (Atkins, 2003).

Berkowitz's (1984) says that these violent video games will also promote aggressive beliefs, thoughts, memories and feelings. Aggressive children always act aggressively but when they are exposed to such video games their level of aggression increases. It may also be seen that only certain youngsters are at risk to be affected by the adverse effect of these violent video games. According to Bandura (1986) sometimes it is also related with social learning theory where exposure to these types of violent video games can make behavioral changes and strengthen existing aggressive and violent habits. Buchman (1996) says that young boys play more video games as compared to girls but they both play these video games on a daily basis. Play time of these video games decreases with the increase of age. There are multiple video games that don't include violence, but young boys and girls give preference to violent games more as compared to other games. The emotional and social challenges faced by youngsters during their puberty were related with the increase in aggressiveness and conflict amongst them and when they play such violent games, they make themselves more involved in violent activities.

The excessive availability of violent video games has caused a negative impact on students resulting in fights and school shootings. Walsh (1999) examined that the shooting that took place in school Bethel, AL was by the boys who had a history of playing violent games. Anderson & Dill (2000) states that women somehow have small amounts of behavioral change when they play these violent games. But if we look at this point females are less likely to indulge themselves in fights and crimes.

Video games are one of the most entertaining media for young people from the start. There are 50% video games for youngsters to play but some certain types of video games also involve violence. Koop & Zimbardo (1982) says that the most important concern that has been raised is that all video and computer games have violent features in them due to which children are having aggressive behaviors. Video games are claimed to be constantly raising aggressive behaviors among youngsters. A lot of video games feature destruction and aggression which results in violent behaviors. Greenfield (1984) says that if we make a comparison between the adverse effect of playing violent video games or television, video games are more likely to have a long term adverse effect on youngsters because they have more active involvement in it. Because they have greater control on video games, youngsters are more likely to be affected by the aggressive and violent behavior in the game. Video games tend to have more ability to promote aggressive traits from which youngsters adopt these by observing what they are playing. Similarly playing these violent video games can have a negative effect on a youngster's emotional state and also have a higher chance of increasing anxiety level. Griffiths & Hunt (1993, 1995) says that youngsters agreed to it that playing these kinds of violent video games has increased aggression and anger amongst them. It is also observed that youngsters with more aggressive traits are drawn to these kinds of video games that eventually increase their aggression level.

"The General Aggression Model" also shows how violent video games and aggressive behavior are linked to each other. The "input" is the violence given by the video games and the "output" comes out in the form of anger, aggression and anxiety amongst the youngsters. (Bushman et al., 2004). But all the people are not passive because not everyone will interpret and be affected in the same manner. Aggressive behaviors can be clearly understood when we understand the situation of a person. Bushman (1995) says youngsters who remain angry more often will be more likely to have ideas related to anger, fury, rage and hate as compared to those who are not angry. So when these angry people are exposed to these violent games then their aggressive, fighting, destroying and killing traits trigger and they will eventually behave in a violent way as compared to a person who is not angry. Bushman & Anderson (2002) says that youngsters exposed more to violent video games are more likely to respond to vague stories with aggression. Playing these video games can have short term as well as long term adverse effects on youngster's behavior. Parental participation in video games habits have become a beneficial factor for their children (Gadberry et al., 1999). Parents who have kept a play limit for their children see less aggression amongst them as compared to the children who weren't given play limit. But according to researchers very few youngsters claimed that their parents often put limits on the play time of the video games and check rating of that game before allowing them to play. Some claim that their parents have kept them away from the video games

because they know about the rating of video games (Gentile & Walsh, 2002) .Short term exposure to the violent games will have moderate amount of aggression in youngsters as compared to long term which have a lasting effect on youngster's behavior. Indulging in violent videos also leads towards physical fights and getting into an argument with teachers. The video games not only have an effect on the behavior of the youngsters but also have adverse effects on school grades.

Violent video games like PUBG and Fortnite have adverse and positive effects in itself but the excessive use of anything can cause harm whether in the personality of an individual or can affect the socialization of the individual with family and friends. The violent video games at its extent can cause violence in the society as well. The main focus of this research is to explore the main reason behind the behavioral changes found in young boys and girls and how these violent video games become mentally and emotionally stressful for them. This study examines how children don't socialize with their parents, friends and teachers after indulging themselves in violent video games. This research deeply studies how players react to certain situations after having behavioral changes. The players react to the behavioral changes after excessive playing or they ignore the changes in themselves. The players are having mental or physical health problems after excessive watching and playing. Watching violence for a long time will somehow affect the psychological behavior, thoughts or health of viewers.

Hypotheses

H1: Playing PUBG and Fortnite creates aggression among youngsters.

H0: Playing PUBG and Fortnite does not create aggression among youngsters.

H2: Playing PUBG and Fortnite causes mental and physical health problems among youngsters.

H0: Playing PUBG and Fortnite does not cause mental and physical health problems among youngsters.

Theoretical Framework

A theory can be explained as a set of assumptions, accepted facts and propositions which try to provide an explanation of an effect by observing a phenomenon. In other words theory can be a system of ideas determining how to explain something, mostly something based on general principles. In this particular research, the theory suggested is observational learning theory.

Observational Learning Theory

Observational learning theory was proposed in 1977 by Albert Bandura explains how individuals observe their surroundings, get influenced and act in a similar way. Individuals basically observe models around them which causes them to act in that particular way. Models are influential channels such as friends, family, television, video games, teachers and peer groups. These models provide examples of behavior to observe and imitate. Through these models individuals adopt certain behaviors and try to mimic. Individuals pay attention to these models, encode those certain behaviors and later try to imitate what has been observed. Individuals try to imitate those models specially which they think that are similar to them. Children and youngsters are more likely to be influenced by the attitudes and behavior surrounding them at home, school, playgrounds or peer groups or the media they are indulging themselves in such video games, television etc. He carried out a famous Bobo doll experiment to analyze how children react to violence. Bandura presented that children would mimic the fierce and forceful activities of an adult model. In the test, children watched a film in which an adult hits an enormous balloon doll.

After viewing the film, children were allowed to play with a genuine Bobo doll simply like the one they found in the film. What Bandura discovered was that children were imitating the adult's violent activities and were dealing with dolls in the same manner they saw in the film. The result showed that children who were exposed to violence for a long period of time have maintained a violent behavior later on and aggressive behavior was recognized in them. Also exposure to violent movies and video games can have

an impact on behavior of children. Similarly observational learning can also be effective for children in socializing, learning and shaping their ideas.

Application of the Theory

This theory is applicable to the research because as it says that individuals learn from their models which results change in their behavior. Similarly youngsters who indulge themselves in playing violent video games like Fortnite and PUBG later on adopt aggressive behavior from these video games. They encode aggressive behavior from these violent games and later on behave in a similar manner. These violent video games also promote aggressive beliefs, thoughts, memories and feelings. Youngsters indulge themselves in fights and aggressive traits. These violent video games tend to have more ability to promote aggressive traits from which youngsters adopt these by observing what they are playing. What youngsters are observing through video games will ultimately have influence on their behaviors and mental health.

Research Method

The quantitative research is applied to this study. Survey method has been used to collect data from the respondents. The method was used to seek answers to the questions, to attain numerical stats about the behaviors of players after being involved in video games like PUBG and Fortnite.

Population

The population of this study were the PUBG and Fortnite players in Pakistan between the age group of 13-30. The data has been collected from the main cities such as Lahore, Islamabad and Karachi. An online survey was conducted to approach the respondents.

Sampling Technique

The sample technique which is used in this study is non-probability sampling type "Purposive Sampling". This sampling method requires researchers to have prior knowledge about the purpose of their study so that they can properly choose and approach eligible participants. Researchers used purposive sampling because they wanted to access a particular subset of people, as players of PUBG and Fortnite were selected purposely.

Sample Size

A sample is the subdivision of the population that represents the entire population. The sample size of the study was 200 youngsters both male and female between the age bracket of 13-30 who play PUBG and Fortnite.

Tool of data collection

Analytical survey is carried out to investigate how a response variable is related to a particular explanatory variable. For this research, analytical self-developed questionnaire is a tool of data collection. The questionnaire consists of more than 20 questions which are multiple choice questions and are close ended. The questionnaire is specially designed for collecting data regarding the behavioral changes, traits and attributes of youngsters. The questionnaire was distributed among 200 players of PUBG and Fortnite in Pakistan.

Pre-testing

The questionnaire was pretested to check its effectiveness with the respondents of the questionnaire. The questionnaire was distributed to 20 respective correspondents for pretesting purpose which was the 10% of the total sample size to verify the reliability of the questionnaire. The value of the Chronbach's Alpha test was .689 which shows the good reliability of the tool.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.689	23

Findings and Results

The researchers used linear regression method to test the hypotheses for the study which was the impact of PUBG and Fortnite on the behavior of youngsters in Pakistan. The researchers applied a linear regression test because there was a strong relationship between dependent and independent variables and there was an element of prediction in hypotheses statements.

Following were the hypotheses:

- H1:** Playing PUBG and Fortnite creates aggression among youngsters.
- H0:** Playing PUBG and Fortnite does not create aggression among youngsters.
- H2:** Playing PUBG and Fortnite causes mental and physical health problems.
- H0:** Playing PUBG and Fortnite does not cause mental and physical health problems.

Table 2: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Regression	1.954	3	.651	2.694	.048 ^b	Significant

The p-value 0.048 which is less than 0.05 shows that the alternative hypotheses are approved and null hypotheses are disapproved. This means that the result is significant and there is a positive relationship between dependent and independent variables that excessive playing of video games PUBG and Fortnite create aggression among youngsters and can cause mental and physical health problems.

Discussion and Analysis

The purpose for the study was to discover how video games (PUBG and Fortnite) have contributed to behavioral changes among youngsters. In the findings, it is shown that 30% of players have aggressive behavior, 14% of players faced "anxiety", 9% of the players faced "stress", 4% of the players faced "loneliness", 28% of them have felt "less stressed", 14% of them have felt "calmness" after playing PUBG or Fortnite. The study also found out the impact of video games on the mental and physical health of youngsters. In the findings, it is shown that the majority of players have mental and physical health problems like 41% of players have felt headache, 22% of players have felt back pain, 18% of players have weak eyesight, 8% of players have felt aggression and 9% of players have anxiety issues after excessive playing of PUBG or Fortnite. So it is revealed that players have felt physical health problems more than mental health problems. The findings are also backed by a previous study that the well-known effects of excessive playing PUBG are fatigue, headache, poor sleep quality, eye strain, insomnia, unconscious condition and aggression (Ali & Al-Qahtani (2020).

The survey has been conducted from PUBG and Fortnite players from three main cities of Pakistan and 76% of respondents were in the age bracket of 19-24. From which, 46% of the respondents were male players and 54% of the respondents were female players. The study answers all the research questions of the study:

What are the effects of video games (PUBG and Fortnite) on the behavior of youngsters?

According to the findings, after playing PUBG or Fortnite 62% of the respondents claim that it creates aggression among them. Thus it concludes that the majority of the players have aggression among themselves after excessive playing. Moreover, after playing PUBG or Fortnite 27% of the players answered that it generates violent ideas in their mind, 38% of them think that it does not generate violent ideas and 34% of them think that sometimes it can generate violent ideas.

The research is backed by the previous study which the researchers have given in literature review where the study by Berkowitz's (1984) says that the violent video games will also promote aggressive beliefs, thoughts, memories and feelings. Aggressive people always act aggressively but when they are exposed to such video games their level of aggression increases. It may also be seen that only certain youngsters are at risk to be affected by the adverse effect of these violent video games. Violent video games can make behavioral changes and strengthen existing aggressive and violent habits. There are multiple video games that don't include violence, but young boys and girls give preference to violent games more as compared to other games. When they play such violent games, they make themselves more involved in violent activities.

What are the main reasons to play PUBG and Fortnite among youngsters?

In the findings, it is shown that 27% of the players are attracted to play PUBG or Fortnite because of shooting, 3% of the players' claim that PUBG or Fortnite are like ego booster to them, 52% of the players play PUBG or Fortnite to relax themselves and 17% of players play PUBG or Fortnite to communicate with different people. So the majority of people are attracted towards PUBG because that is a way to relax themselves.

How PUBG and Fortnite can affect socialization of youngsters?

As per the findings, 30% of the players like spending time playing PUBG or Fortnite, 36% of them like to socialize with friends, 19% of them like to socialize with family and 14% like to stay alone rather than socializing. Most of the players like to socialize with their friends and some of them enjoy playing more. It is also observed that, out of a sample size of 200, 51% of the players claim that playing PUBG or Fortnite enhances their social relationships while 48% of the players claim that playing PUBG or Fortnite does not enhance their social relationships. So, playing PUBG or Fortnite enhances social relation of players that they are more socially active and build social relationships after playing PUBG or Fortnite.

The findings are backed by the theoretical framework of the study that playing video games creates aggression among youngsters because of violence and fighting in PUBG and Fortnite. Excessive playing causes aggression because they have observed the content in PUBG and Fortnite. Observational learning theory is applicable to the research because as it says that individuals learn from their models which results in change in their behavior. Similarly youngsters who indulge themselves in playing violent video games like Fortnite and PUBG later on adopt aggressive behavior from these video games. They encode aggressive behavior from these violent games and later on behave in a similar manner. So, the findings and results of the study have explained that playing PUBG and Fortnite can increase aggressiveness in the behavior of youngsters. It has also observed the physical and mental health problems among youngsters in Pakistan after playing PUBG and Fortnite.

Conclusion

The purpose of this study was to discover how video games (PUBG and Fortnite) have contributed to behavioral changes among youngsters. It examined the relationship of PUBG and Fortnite with the behavior of youngsters in a negative or a positive way. The study also evaluated the factors that are caused by the addiction among the youngsters who play PUBG and Fortnite. Hence, the study found out the impact of PUBG and Fortnite on the mental and physical health of youngsters.

The study was quantitative in nature and survey method was used to collect data from 200 young players of PUBG and Fortnite. The data was gathered online from the three main cities including Lahore, Islamabad and Karachi.

Observational learning theory was applied to the research as it says that individuals learn from their models which results in change in their behavior. Similarly youngsters who indulge themselves in playing violent video games like Fortnite and PUBG, later on adopt aggressive behavior from these video games. The major findings of the study shows that the selected video games does bring behavioral changes in the young players of Pakistan.

The study overall concludes that playing PUBG and Fortnite create aggression, abusiveness and violent ideas among youngsters due to excessive and continuously watching or seeing violence during playing PUBG or Fortnite. Thus it gradually causes behavioral changes among players according to the level of playing. The study also concludes that excessive playing PUBG or Fortnite causes physical and mental health problems faced by players gradually ever since they have been playing PUBG or Fortnite. Thus the study concludes that violence in any form will end up creating behavioral changes like aggression, anxiety and abusiveness among youngsters.

Recommendations

- Parents should not have to give their children more access to phones at teenage.
- Video games should not have violent and abusive content in it.
- Video games should be highly restricted to a specific age group.
- Parents should have to observe their children playing and periodically play with them also.
- Access to using a phone or playing video games is harmful to the mental and physical health of people.
- From childhood, parents should let their children know about the difference between the violence in video games or in any other medium, and real life violence.
- Parents should indulge their children more into physical activities like running, jogging and playing sports to strengthen their physical as well as mental ability.

Limitation of the Study

- The research was limited to only youngsters.
- The research was limited to only three big cities of Pakistan.
- Due to lack of resources, the research was limited to small sample size.

References

- A.Anderson, C., & R. Murphy, C. (2003). Violent Video Games and Aggressive Behavior In Young Women. *Journal of Aggressive Behavior*, 29, 423-429.
DOI: 10.1002/ab.10042

- Al-Qahtani, A. A., & Alenzi, A. A. S., & Ali, A. S. (2020). Players Unknown's BattleGrounds: Yet Another Internet Gaming Addiction. *Journal of Ayub Med Coll Abbottabad*, 32(1). DOI: <http://www.ayubmed.edu.pk/jamc/index.php/jamc/article/view/7158/2864>
- Fatima, H., & Ashfaq, A. (2014). Induction of Violent Characters Through Video Games: A Case Study of Primary School going Children in Pakistan. *The International Asian Research Journal*, 2(03), 17-24 DOI: <https://d1wqtxts1xzle7.cloudfront.net/34161381>
- Gentile, D. A., & Lynch, P. J., & Linder, J. R., & Walsh, D. A. (2004). The Effects of Violent Games Habits on Adolescent Hostility, Aggressive Behaviors, and School Performances. *Journal of Adolescence*, 41(1), 5-22 DOI: 10.1016/j.adolescence.2003.10.002
- Griffiths, M. (1999). Violent Video Games and Aggression: A Review of Literature. *Journal of Aggression and Violent Behavior*, 4(2), 203-212 DOI: S1359-1789(97)00055-4
- Hisam, A., & Masaddi, S. F., & Faheem, M., & Ikhlaq, B., & Iqbal, I. (2018). Does Playing Video Games Affect Cognitive Abilities In Pakistani Children. *Pakistan Journal of Medical Sciences*, 34(6), 1507-1511 DOI: 10.12669/pjms.346.15532
- Iqbal, M. (2021). Fortnite Usage and Revenue Statistics. Retrieved from <https://www.businessofapps.com/data/fortnite-statistics/>
- J.Krish, S. (2003). The Effects of Violent Video Games on Adolescents, The Overlooked Influence of Development. *Journal of Aggression and Violent Behavior*, 8, 377-389 DOI: 10.1016/S1359-1789(02)00056-3
- Nandini, M., & Subramanian A. (2020). PUBG ban in India – is a happy or a sad news? *The International Journal of Indian Psychology*, 8 (4). DOI: 10.25215/0804.014
- Nawaz, M. W., & Nadeem, T., & Rao, S. L., & Fatima, T., & Shoaib, S. (2020). Impact of PUBG Game Addiction on Social Isolation and Narcissistic Tendencies Among Gamers. *Asian Journal of Social Sciences and Management Studies*, 7(3), 166-172 DOI: 10.20448/journal.500.2020.73.166.172
- Qureshi, H. S., & Khan, M. J., & Masroor, U. (2013). Increased Aggression and Loneliness as Potential Effects of Pathological Video-Gaming among Adolescents. *Pakistan Journal of Social and Clinical Psychology*, 11(1), 66-71 DOI: <https://www.researchgate.net/publication/327672875>
- W. Giumetti, G., & M. Markey, P. (2007). Violent video games and as predictors of aggression. *Journal of Research in Personality*, 41(6), 1234-1243 DOI: 10.1016/j.jrp.2007.02.005