The Impact of Playing Violent Online Games on The Aggression Levels Among Individuals Aged 18-37 Years

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Abstract

Online gaming is a very common way to spend leisure time these days especially after the pandemic. The tools used for assessment were the Internet Gaming Disorder Scale–Short-Form (IGDS9-SF) and Buss-Perry Aggression Questionnaire [BPAQ].

The study has used the online mode of data collection. The questionnaires were converted into e-forms and were circulated through various social media handles like email, WhatsApp, Instagram, Facebook, etc. The data was collected and separated into the different dimensions of aggression. Mean, standard deviation, Pearson product moment correlation were used to statistically analyse the relationship of PA, VA, A and H with online violent gaming. The study concluded that verbal aggression and hostility are positively correlated with online violent gaming. Thus, implying that there is a significant relationship between dimensions of aggression and online violent gaming.

ACKNOWLEDGEMENT

Online violent games can refer to a multiplayer game that includes gamers linked via network. Online Violent games are those which constitute violence as the best. The network is wired or wireless LAN, and gamers can be linked with the aid of using a LAN or via the Internet.
Gamers are linked via a community permitting them a disbursed digital recreation international. These virtual worlds are like perpetual, social and fabric worlds which might be loosely structured with the aid of using fable or imaginary narratives in which gamers are allowed to they please. Individual gamers may also alternate their avatars as they want their avatars to appear and to have interaction not only with objects but also with other players. Such games are GTA, COD, COC, PUBG and so on.

Online violent games are so not an unusual place in today's world that nearly all of us like to play them. Online violent games are getting a critical mission to youngsters who like to spend their loose time gambling online violent games and it has become so realistic and can emulate the outer,real life in such a realistic manner as to fancy gamers to spend their loose time in virtual space. Online violent gaming releases an elevated degree of dopamine and glutamate inthe brain which brings pleasure and consequently gives an impetus for further playing of online violent games and addiction. The relationship between violent online video games and aggression has become a famous issue in

psychological research. When it comes to playing online violent video games like GTA, COD, COC and so on proof from meta-analyses confirm that exposure to online violent video games increases aggressive cognitions, aggressive affect and aggressive behavior, and reduce empathy and prosocial behavior and among those games it has been identified that COD, GTA is the maximum famous recreation to be performed with the aid of using consumers. Aggression is conduct that is meant to damage every other person who no longer wants to be harmed and it has diverse types. Physical aggression is aggression that includes harming others bodily as an example hitting, kicking, stabbing, or taking pictures of them. Hostile is an impulsive action or a behavior that is motivated internationally to hurt someor cause harm to an individual, community. It can be verbal aggression, physical aggression, unfriendly nature. Verbal aggression is the communication-based version where we intent to hurt someone verbally like mental torture, abusive language, screaming, speaking ill- will to an individual and it does not include physical aggression A person experiencing anger will often experience physical effects, such as increased heart rate, elevated blood pressure, and increasedlevels of adrenaline and noradrenaline. Anger is of awful childhood, horrific parenting, and horrific surroundings.

This research focus on the impact of online violent gaming in the form of aggression which might leads severe anger issues and mental health problems. It usually means that we all learnby observation consciously and unconsciously.

"Fortunately, most human behavior is learned observationally through modelling from others." -Albert Bandura

PURPOSE OF THE STUDY

By reading this research work parents and adults will also know about the unacceptable and harmful effects of playing video games and guide their children in a better way to avoid them becoming addicted. This study effectively creates knowledge about such problems, and exhibits hidden truths that may harm online game players, both purposefully or unintentionally.

The second motive is that one of our friends, in addition to some youngsters in our family, had equal trouble with immoderate online games that extended their aggression level. They spend numerous times playing online games and are not aware of reality. Our studies aim to elevate public focus and facts about this net gaming sickness and aggression, frustration problems that can affect their mental health, as many human beings are ignorant of its existence.

By studying this research work, parents and adults may even recognize approximately the terrible consequences and dangerous consequences of playing online violent games and manualtheir youngsters in a higher manner to keep away from them turning into addicted. Teachers can also gain knowledge and educate students about online violent game addiction, its impact on their lives, studies, on society and culture.

REVIEW OF LITERATURE:

Greitemeyer, T. (2018). The spreading impact of playing violent video games on aggression. *Computers in Human Behavior*, *80*, 216–219.

This study was aimed to examine the impact of playing violent video games on aggression. The sample consisted of 998 participants. There were 998 people in the sample. Violent Video Games were linked to aggression in both the participants and their friends, according to descriptive statistics and intercorrelations. The study found that not just violent video game users, but also their social networks, have higher levels of

increased aggression. (Greitemeyer, T., 2018, #)

Mehroof, M., & Griffiths, M. D. (2009). Online Gaming Addiction: The Role of Sensation Seeking, Self-Control, Neuroticism, Aggression, State Anxiety, and Trait Anxiety.
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This study looked at the link between online gaming addiction and a range of personality qualities like sensation seeking, self-control, aggression, neuroticism, state anxiety, and trait anxiety. 123 students took part in the study and data were collected during a period of one month. Multiple linear regression elucidated that the five traits of personality - neuroticism, sensation seeking, trait anxiety, state anxiety and aggression have significant relationship with online gaming addiction. It further implies that certain personality traits are essential in the accession, and development of online gaming addiction. (Mehroof et al., 2010, #)

Teng, Z., Li, Y., & Liu, Y. (2014). Online Gaming, Internet Addiction, and Aggression in Chinese Male Students: The Mediating Role of Low Self-Control. *International Journal of Psychological Studies*, *6*(2).

The research is aimed to investigate the mediating role of self-control in the relationship between violent online gaming, internet addiction, and aggression. The study used a cross-sectional method and studied 211 Chinese male students. It found that the majority of the most popular games reported by the respondents were violent. The study concluded that there is a significant relationship between aggression and online gaming addiction which can be inferred from the positive correlation between exposure to violent online game, internet addiction, low self-control and aggression. (Zhaojun Teng et al., 2014, #)

Madran, H., & Cakilci, E. (2014b). The relationship between aggression and online video game addiction: a study on massively multiplayer online video game players. *Anatolian Journal of Psychiatry*, *15*(2), 99.

The purpose of this research was to look into the relationship between aggression and online video game addiction. 205 participants were included in the study who played massively multiplayer online video games for more than a period of 12 months. This study used the Turkish version of the Buss-Perry Aggression Scale and the Internet Addiction Scale. To examine the data, correlation, t-test, and stepwise regression analysis were used. It was found that there was a strong relationship between aggression and online game addiction. However the age and aggression scores were found to be negatively correlated. (Madran et al., 2014, #)

Wright, M. F., & Wachs, S. (2022). Problematic online gaming, subjective health complaints, and depression among adolescent gamers from the United States: the role of console-gaming aggression. *Journal of Children and Media*, 1–10.

The purpose of this study was to look at the long-term association between problematic online gaming and subjective health complaints and depressive symptoms, as well as the role of console-gaming aggression (such as verbal aggression, camping, and trolling) in this relationship. The study included 202 participants, the majority of whom were in 7th or 8th grade who played shooter games. The researchers used questionnaires to assess problematic online gaming, console-gaming violence, subjective health concerns, and depressive symptoms. The study found that high levels of console-game violence boosted the favorable association between problematic online gaming and depressive symptoms. (Wright et al., 2022, #)

METHODOLOGY:

Aim: To know the impact of playing violent video games on the aggression levels among adultsaged 18-35 years.

Objectives:

1.   To find the level of aggression among adults.

2.   To assess the level of violent online gaming among adults.

3.   To find the difference in aggression with respect to gender.

4.   To assess the difference in violent online gaming with respect to game type.

5.   To examine the correlation between violent online gaming and aggression in youth.

6.   To study the relationship between violent online gaming and the dimensions of aggression among adults.

Hypotheses

1.   There would be significant mean difference in aggression with respect to gender.

2.   There would be significant mean difference in violent online gaming with respect to gametype.

3.   There will be significant relationship between violent online gaming and aggression

amongadults.

4.   There will be significant relationship between violent online gaming and physical aggression among adults.

5.   There will be significant relationship between violent online gaming and verbal aggressionamong adults.

6.   There will be significant relationship between violent online gaming and aggression amongadults.

7.   There will be significant relationship between violent online gaming and anger amongadults.

8.   There will be significant relationship between violent online gaming and hostility amongindividuals.

RESEARCH DESIGN:

Research study: It is Cross-sectional research which focuses on studying different groups of people at the same time. These individuals may differ in the variable of interest. However, there may be certain commonalities between them, such as educational qualifications and nationality.

Sample: The total sample size was participants aged between 18-37 years. The consent of each participant was taken and then demographic details will be collected.

Inclusion Criteria:
Those who play online games that involves violenceAge range: 18 - 37 years
Individuals who are ready to participate

Exclusion Criteria:
Individuals above the age of 38 yearsIndividuals below the age of 18 years

TOOLS USED:
1.   Internet Gaming Disorder Scale–Short-Form [IGDS9-SF]
2.   Buss-Perry Aggression Questionnaire

[BPAQ]

DESCRIPTION OF THE TOOLS:

The Internet Gaming Disorder Scale–Short-Form [IGDS9-SF] was developed by Dr. Halley Pontes, was the first brief systematic psychometric tool to assess Internet Gaming Disorder (IGD) using the nine criteria proposed by the American Psychiatric Association in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

The IGDS9-SF is a one-dimensional tool with nine items that reflect all nine criteria for IGD as defined by the DSM-5. (Pontes, 2022).

The Buss-Perry Aggression Questionnaire [BPAQ] was designed by Arnold H. Buss and Mark Perry.

BPAQ is a 29-item, four dimensions that measures:

1.   Physical aggression,
2.   Verbal aggression,
3.   Anger
4.   Hostility

Cronbach's alpha reliability for the physical aggression subscale is 0.81, verbal aggression subscale is 0.74, anger subscale is 0.83; hostility subscale is 0.80.

S.no.	Dimensions	Score range
	Table 1	
1	Physical aggression (PA)	9-45
2	Verbal aggression (VA)	5-25
3	Anger	7-35
4	Hostility	8-40
	Total scores	29-145

PA has 9 items, VA consists of 5 items whereas anger has 7 items, and in hostility there are 8 items. Each item is rated on a 5-point Likert Scale.

STATISTICAL ANALYSIS:

For statistical analysis descriptive statistics (Mean, Frequency distribution), Correlation analysis(Pearson's product moment method) was used for data analysis, through IBM SPSS 20.0 version.

PROCEDURE:

The data was collected online. **IGD S9-SF and BPAQ** were administered on a total of 50 participants who had also given their consent online.

METHOD:

Prior to the participation, all the individuals were informed that the study would be conducted on online mode and that their information would be kept confidential. We then obtained the consent of the participants to fill out questionnaires. Everyone who took part in the study undertook voluntarily, and they were free to withdraw from the study at any time.

We collected data on the basis of snowball sampling. The questionnaires were converted into a Google form and shared using various social media handles like Email, WhatsApp, Instagram, etc. and asked the participants to share it in their respective gaming groups.

DATA ANALYSIS:

This study is focus on particular group for people who play violent online games from the ages of 18 to 37 years whereas other group of people also get knowledge from this study about the effects of playing violent video games which are prone to mental health issues related to frustration, antisocial, aggressive, hostile and having gaming disorder.

We used IBM SPSS Statistics 22 for statistical methods to analyze data. PPMCC was used to analyze the correlations among study variables. To check the relationship between the exposure of online video games and aggression.

RESULTS AND DISCUSSION:

With the consideration of impact of online violent gaming in the form of aggression, the questionnaires measure the level aggressions and internet gaming addiction and aims to determine statistical significance between online video gaming and aggression.

The study was conducted with the following research question keeping in mind.

a)   To find the level of aggression among adults.

b)   To assess the level of violent online gaming among adults.

c)   To find the difference in aggression with respect to gender.

d)   To assess the difference in violent online gaming with respect to game type.

e)   To examine the correlation between violent online gaming and aggression in youth.

f)   To study the relationship between violent online gaming and the dimensions of aggression among adults.

Findings

Table 2 - Distribution of respondents with respect to age

Gender	Frequency	Percent
Female	20	40.0
Male	30	60.0
Total	50	100.0

The table shows the percentage of the respondents with respect of gender, it is found that 30 respondents (60%) out of 50 are male and 20 (40%) are females.

78% of population of research responded as they are non-disordered from gaming addiction whereas 22% have addiction of internet gaming with reference to internet gaming disorder scale. The maximum of respondents is having high physical aggression (72%) in contrast to playing online games. Many respondents are into verbal aggression by violent online gaming (66%).

Table 3 - Distribution of respondents with respect to game type

Game typ	Frequency	Percent
BGMI	11	22.0
GTA	5	10.0
Others	13	26.0
PUBG	21	42.0
Total	50	100.0

Table 3 findings shows the percentage of the respondents with respect of game type, this is shows that 11 respondents (22%) out of 50 are playing BGMI, 5 respondents (10%) are playing GTA, other games which are not mentioned are played by 13 respondents (26%), whereas majority of respondents (42%) plays PUBG.

Mean differences

Table 4- Mean difference in aggression and online gaming with respect togender

Variable	Gender	N	Mean	Std. Deviation	df	t	Sig
BPAQ SCORE	Female	20	84.900	18.8174	48	.195	.84
	Male	30	83.633	24.6261			
IGD-9 SCORE	Female	20	19.100	8.5526	48	-2.8	.00
	Male	30	27.167	10.4224			

Above table 4, reveals that the average aggression by online gaming with respect to gender, BPAQ average is 84.900 in females and 83.633 in males as we can see that intable 2 also females are only 40% whereas males are 60% but still the BPAQ average is more in females. It shows that female respondents are more aggressive as compared to male respondents.

In the same table 4, it also reveals the internet gaming disorder mean difference withcontrast of the impacts of playing violent games that are IGD-9 average is 19.100 in females and 27.167 in males. It means that males have more chances of having

internet gaming addiction as compare to females.

Correlation

Table 5 – Correlation between all variables

	PA	VA	Anger	Hostility	BPAQ Score	IGD-9 Score
PA	1	.795	.760**	.695**	.892**	-.053
VA	.795	1	.707**	.771**	.893**	.171
Anger	.760	.707	1	.796**	.903**	-.029
Hostility	.695	.771	.796**	1	.921**	.158
BPAQ Sco	.892	.893	.903**	.921**	1	.071
IGD-9 Sco	-.053	.171	-.029	.158	.071	1

**. Correlation is significant at the 0.01 level (2-tailed).

Findings from the above given table shows that physical aggression is negatively correlated with IGD-9 (-0.053). Verbal aggression is positively correlated with IGD-9 (0.171), Anger is negatively correlated with IGD-9 (-.029), and Hostility is positively correlated with IGD-9 (.158)

Hence out of the four dimensions of BPAQ, the results illustrate that verbal aggression and hostility are positively correlated whereas physical aggression and anger are negatively correlated with internet gaming disorder.

SUMMARY AND CONCLUSIONS:

The future is purely dependent on his/her daily routine. An exceptionally powerful routine can make you successful. Video games were made for entertainment, education and for stress reduction. But now video games have a lot of violent content in them. By playing violent video games, gamers developed aggressive tendencies and led to an increase in chances of psychological changes and affecting their pro-social behaviours and loss in their studies and work. Online violent games are also called multiplayer games, where players are linked via a community permitting them to play together through wired or wireless LAN. These games increase the level of dopamine and glutamate in the brain which gives pleasures and impetus which further turns into addiction.

Psychological researchers have made this topic " The relationship Between online violent games and aggression " very famous. (NLanzone, 2014)

The research paper aims to spread knowledge about the harmful effects of online violent games to gamers and their parents to save themselves from addiction. The paper also aims to elevate the focus of the public towards the effects of online games and to give an overview of sickness, frustration, and aggression due to net gaming and in turn effect on mental health.

According to Clark et. al, games are designed in a way that gamers feel that they are doing a very difficult task. The addiction of drugs like cocaine, heroin, and alcohols can be called behavioural but video games addiction is rather a heightened and idealized experience.

The research aimed to study the impact of playing online games that are violent on the aggression levels among individuals aged 18-37 years. And to study the relationship between violent online gaming and the dimensions of aggression among adults. In the paper two tools have been used: Internet Gaming Disorder Scale–Short-Form [IGDS9-SF], Buss-Perry Aggression Questionnaire [BPAQ] The data was collected online through questionnaires which were sent in the form of google forms. IGD S9-SF and BPAQ were administered on a total of 50 participants who had also given their consent online.

The results illustrate that verbal aggression and hostility are positively correlated whereas physical aggression and anger are negatively correlated with internet gaming disorder. The study concluded that verbal aggression and hostility are positively correlated with online violent gaming. Thus, implying that there is a significant relationship between dimensions of aggression and online violent gaming.

Questionnaire:

The questionnaire was converted into a google form. The link:
https://forms.gle/bUoFx5qbYkiywkB19

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