



## Relationship between Playing Violent Video Games and Aggression

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**Abstract:** The present study was aimed at finding out the prevalence of aggression among youth playing violent video games. For this purpose, students interested in participating in the study were approached. Buss Perry Aggression Questionnaire was administered on a sample of 40 students (20 players and 20 non-players), belonging to the age group of 15-20 years. Descriptive statistics and t-test were calculated for the two groups and analysed. No significant difference in the scores of aggression was found between the players and non-players group. Contrary to popular belief, results suggested that there is no correlation between playing violent video games and aggression among youth.

**Keywords -** Playing violent video games, Aggression, Youth.

### I. INTRODUCTON

The 21st Century has witnessed a massive change in lifestyle of Indian people, including evolution of activities carried out for leisure. Prior to these years of technology boost, leisure activities consisted of games that either demanded physical activity such as skipping a rope, or interacting with others such as playing 'Antakshari' and sometimes both, such as playing 'Gilli Danda' or 'Cricket'. These games involving both, physical activity and interaction with others, served many benefits right from burning a few calories to making life-long friends. With the passage of time, the advancement of technology spurred a transformation in leisure activities. Video games were at the centre of this transformation. "A videogame is a game which we play thanks to an audiovisual apparatus and which can be based on a story." (Esposito, 2005). They still include physical activity and interaction, however the amount of physical activity required by these games has drastically reduced from moving and balancing your whole body while skipping a rope to moving only your fingers across mobile screens or computer keyboards while playing a video game. Furthermore, interaction with others while playing these video games is either completely absent, if you are playing a single-player game or it is limited to instructing a few commands to a person, who was most probably randomly paired with you, in your team, and with whom you are not likely to interact, in future, once the game is over. This is because you barely have any idea regarding who your teammate is, what kind of person he/she is, where does he/she live, how old he/she is, what does he/she look like and at times, you do not even know whether your teammate is a 'he' or a 'she'! It becomes obvious that advantages of burning calories or making lifelong friends while playing these video games is at least far-fetched, if not implausible.

Researchers have raised questions regarding the disadvantages of video games that has violent content. Common violent video games with widespread use throughout the globe, include GTA, PUBG, Garena Free fire, APEX Legends, Fortnite, Call of Duty: Black Ops 4, Mini Militia etc. Popular belief says that playing violent video games leads to increase in violent thoughts, emotions and behaviors. This belief is supported by observations reported by kinfolk of violent video game players. Over the last few years, many researchers put this belief to test by scientifically studying the relationship between playing violent video games and aggression. "Aggression is most often defined as behavior carried out with the intent to harm another person who is motivated to avoid that harm. Violence is an extreme form of aggression that has severe harm (usually physical injury or death) as its goal." (Allen and Anderson, 2017). Most of these studies focused on aggression among youth, as they are most involved in this new transformed leisure activity (playing video games).

In 2015, The American Psychiatric Association (APA) Task Force on Violent Media analyzed 31 similar studies published since 2009 and concluded that "The research demonstrates a consistent relation between violent video game use and increases in aggressive behavior, aggressive cognitions, and aggressive affect and decreases in prosocial behavior, empathy, and sensitivity to aggression." (Carnagey et al., 2004). Another body of studies showed different results. For instance, a latest study, involving more than 1000 British adolescents as participants, resulted in contrary findings. Caregivers of these adolescents were surveyed on how often the teen participant plays violent video games and

how aggressive the participant has been over the past month. The researchers also paid attention to the level of violence in the games played by the participants. They found no correlation between playing violent video games and aggression. That is, teens who played violent video games many hours per week were not more aggressive than those who played non violent video games or no games at all (Przybylski and Weinstein, 2019).

## II. RESEARCH METHODOLOGY

- a. **Aim:** The objective of the present study was to review this belief and to investigate, if there exists, any relationship between playing violent video games and aggression.
- b. **Hypothesis:** There is no significant relationship between playing violent video games and aggression.
- c. **Sample:** The design of the present study was survey based method. Using convenience sampling technique a total of 70 respondents participated in the study. However, only 40 male participants, belonging to the age group of 15 to 20 years, were selected for the study as remaining did not qualify the selection criteria. Purposive sampling method was used to select the participants who played PUBG, as it is considered to be a violent video game.
- d. **Tools:**
  1. **Buss and Perry's (1992) Aggression Questionnaire (BPAQ):** The BPAQ has 29 items. Aggression is subdivided into four subscales: Physical aggression (9 items), Verbal aggression (5 items), Hostility (8 items) and Anger (8 items). Internal consistency reliability of the instrument was found to be 0.89. The internal consistency reliability of the four subscales - Physical aggression, Verbal aggression, Hostility and Anger was 0.85, 0.72, 0.77 and 0.83 respectively (Buss and Perry, 1992). Minimal modification was made by adding 9 filler items to the original scale to prevent the participants from guessing the purpose of the study.
  2. **Gaming Information scale (Self- Constructed):** It consisted of 4 items assessing which games were played by the participants, duration of playing PUBG and number of hours in a day they play PUBG.
- e. **Procedure:** Students, reading in the college library, were approached individually. They were told that the purpose of the research is to study 'The Trends among male youngsters'. Consent was taken and the questionnaire (with instructions), printed on a sheet of paper, was administered. Efforts were taken to ensure confidentiality of the data collected. BPAQ was scored according to the standard scoring procedure of the scale. Overall aggression of each participant was calculated by calculating the mean of the values of the four factors (Physical aggression, Verbal aggression, Hostility and Anger). After scoring BPAQ and calculating overall aggression, data provided in Gaming Information Scale was used to segregate participants into two groups-Players (participants who played violent video games) and Non-Players (participants who did not play violent video games).

## III. RESULTS & DISCUSSION

Information collected through the Gaming Information Scale sheds light not only upon whether the participant plays violent video games or not, but also upon the most common games played by today's youth, duration of playing PUBG on a daily basis and the longevity (in months) of their participation in PUBG. The information gathered suggests the following:

- a. Commonly played video games included violent as well as non-violent video games. Some of them are Player Unknown's Battlegrounds (PUBG), Call of Duty, Grand Theft Auto (GTA), Garena Free Fire, Fortnite, Clash Royale, Clash of Clans, Ludo King, FIFA, Cube Escape, Counter-Strike, 8 ball pool, Pro Evolution Soccer and various video games related to cricket.
- b. Video games related to cricket were the most popular non-violent video games. PUBG was the most popular violent video game, followed by Garena Free Fire.
- c. Among twenty boys who played violent video games, more than half that is, eleven boys played PUBG. Among those eleven boys who played PUBG,
  - i. Two boys have been playing since 1-3 months, three have been playing since 3-6 months, two have been playing since 6 months to one year and four have been playing for more than a year;
  - ii. Daily, five boys play PUBG for 0-1hr, four play PUBG for 2-3hrs, two play PUBG for 4-5 hrs and none of them play PUBG for more than five hours.

Table 1: Mean, SD and t-values of Players and Non-Players on different study variables

Factors of aggression	Players		Non-Players		t-value
	Mean	SD	Mean	SD	
Physical aggression	0.41	0.14	0.47	0.19	-1.07 (NS)
Verbal aggression	0.42	0.15	0.48	0.19	-1.04 (NS)
Hostility	0.50	0.15	0.56	0.19	-1.10 (NS)
Anger	0.47	0.20	0.48	0.17	-0.31 (NS)
Overall aggression	0.45	0.11	0.50	0.15	-1.13 (NS)

NS: Not Significant

Table 1 shows descriptive statistics and values of t-test. Difference in means of physical aggression of players as compared to non-players was not significant. So was the case for verbal aggression, hostility, anger and overall aggression. Similarly, there was a negligible difference in SD of each of the variables, while comparing players with non-players. Also, t-values of all the dimensions of the aggression were not significant either. The Freudian ‘Catharsis-hypothesis’ offers a possible explanation for the null findings of present study. Catharsis refers to a process of venting aggressive emotions as a way to get rid of them. It could be that aggressive emotions in players were released during playing violent video games. This is why, while playing the game they may seem to be aggressive, but after playing the game they come back to their natural self. In fact, they may be much more peaceful after playing the game as these games can act as outlets for relieving aggression, and they may have mental healing powers as seen in psychotherapy (Powell, 2008). A number of researches conclude that ‘violence’ in video games is not the critical variable, rather the ‘difficulty level’ of the video game is the critical variable that affects aggression (Przybylski et al., 2014). Another study has verified that the short-term effect of increase in aggression, caused by playing violent video games, lasts only for about 10 minutes - 5–10 min are needed for the effects of aggressive behavior to dissipate (Barlett et al., 2009).

#### IV. LIMITATIONS

The sample was not adequately representative of the population. Sample size was small and data was collected from the college library where students, who like spending time on reading, come. Personal history of the participants, including medical history and the aggressive tendencies were not known before the survey. The aggression levels of both conditions weren’t matched. Lastly, participants were not asked any questions with regard to their other hobbies and interests. It is possible that the non-players might be engaging in other hobbies that are violent in nature, such as Kickboxing, which could dissipate aggressive tendencies.

#### V. CLINICAL IMPLICATIONS

Numerous research studies in the past have shown a significant relationship between playing violent video games and aggression. The present study signifies an urgent need to review the conviction that video game violence leads to aggression. In the upcoming researches belonging to this field, careful modifications in the procedure should be made, considering the limitations of this study. Further research needs to be done to find out the actual critical variable, in certain video games, that influences aggression.

#### VI. CONCLUSION

The findings of the study indicate no significant relationship between playing violent video games and aggression.

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