

Impact of Violent Video Games and Aggression Among Adolescents

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Abstract

With the increasing prevalence of technology and the growing availability of gaming platforms, violent games have attained widespread popularity among young people, prompting serious concerns about their effect on mental health and behavior. Drawing on the General Aggression Model proposed by Anderson and Bushman (2002), the study explored whether frequent engagement with violent gaming material shapes hostile thinking patterns, emotional reactions, and hostile behavior in adolescents.

The research applied a quantitative correlational approach, including 150 participants (105 male and 45 female) between the ages of 10 and 19. These individuals were chosen through convenient sampling from different schools and colleges throughout Pakistan.

The researchers collected data using two identified instruments: the Violent Video Game Exposure Questionnaire (Anderson & Dill, 2000) and the Buss-Perry Aggression Questionnaire-Short Form (Bryant & Smith, 2001). The data were examined using Pearson correlation, linear regression, independent samples t-tests, and one-way ANOVA. The findings indicated a robust positive relationship among violent video game exposure and aggressive tendencies ($r = 0.84$, $p < 0.01$). Regression results demonstrated that exposure to violent games was a significant predictor of aggression, accounting for 80% of the total variance ($R^2 = 0.80$). Moreover, adolescents who spent over two hours daily playing violent games exhibited the most evident aggression levels, whereas those who were involved with non-violent games displayed the least aggressive behavior. These results prove the hypothesis that exposure to violent video games is linked to greater levels of hostile behavior in Pakistani adolescents.

Keywords: Violent Video Games, Aggressive Behavior, Adolescents, General Aggression Model, Emotional Desensitization.

Introduction

Currently in the technological age, playing video games is one of the most popular activities and a highly productive activity among adolescents. With the advancements of technology and increased accessibility of speedy internet, mobiles, tablets, computers, Play Station, Xbox, and other gaming gadgets, adolescents tend to spend most of their free time playing video games. In recent years, gaming has become increasingly popular among adolescents with the development of highly immersive and captivating games that have captured millions of gamers around the globe (Ivory, 2010).

Violent video games are immensely popular among adolescents because of the thrilling content, the games' nature, competition, and real fight situations. In this modern era, games are created not only with visual graphics but also with special effects, and therefore adolescents can emotionally attach to video game violence (Anderson & Milam, 2023).

Playing violent video games, all the time may result in imitation of such behavior, loss of control over aggression, and lack of emotional regulation. Violent video games may also negatively affect social interaction, psychological well-being, communication skills, and even school achievements of adolescents (Wei et al., 2022).

Anderson and Bushman (2001) performed a meta-analytic review investigating the influence of violent video games on aggressive cognition, aggressive emotion, physiological stimulation, and pro social behavior. Their research suggested that exposure to violent video games greatly increased aggressive ideas, rage, hostile urges, physiological arousal, and aggressive behavior while decreasing pro-social behavior and empathy. As per an investigation by the American Psychological Association from 2015, playing violent video games increases the possibility of being involved in violent actions and thoughts, being emotionally numb, and having less empathy towards violence (Miedzobrodzka et al., 2023).

They found that those individuals who frequently engage in violent video games are emotionally indifferent towards hostility and violence. Empathy, compassion, and concern about the victims of violence may also be reduced because of emotional insensitivity to violence. It has been shown by studies conducted by Carnagey et al. (2007) that frequent playing of violent video games reduces a person's emotional sensitivity towards violence in real-life situations.

According to Bartholow et al. (2006), individuals who regularly played violent video games demonstrated lower emotional sensitivity and weakened physiological responses to violent stimuli. Their finding suggested that repeated exposure to violent games may diminish empathy and emotional concerns for victims of violence.

Long-term studies have provided even stronger evidence regarding the relationship between exposure to violent games and aggressive behavior. Anderson et al. (2010) conducted a large cross-cultural longitudinal meta-analysis and found that exposure to violent video games predicted higher levels of aggressive behavior, aggressive cognition, aggressive affect, and reduced empathy across both Eastern and Western populations. Their research suggested that repeated exposure to violent gaming content might help to shape hostile thinking patterns and aggressive personality traits over time.

Research findings indicate that male adolescents commonly exhibit and display higher levels of physical aggression, impulsive behavior, and competitive aggressive behavior linked with violent gaming exposure.

Objectives

1. To examine the relationship between aggressive behavior and violent video games among adolescents.
2. To explore gender differences in aggression and exposure to violent video games.
3. To assess aggressive behavior among adolescents.

Hypothesis

H1: There would be a strong positive correlation between violent video games and aggressive behavior.

H2: Violent videos games would be strong predictor of aggression among adolescents.

H3: There would be significant differences on aggression and exposure to violent video games on the basis of gender differences.

Method

Research Design

This study used a Quantitative Correlation Research Design to examine the relationship between violent video games and aggressive behavior among adolescents.

Participants

The study was conducted on a sample of 150 adolescents. The sample was collected from different cities of Pakistan, including Lahore and Faisalabad, and with different educational institutions in Pakistan. Participants were selected through the Convenience Sampling Technique from various private and government schools and colleges. Demographic variables such as age, gender, class, gaming hours, types of games played were also measured.

Measures

Buss–Perry Aggression Questionnaire—Short Form (BPAQ-SF)

The Buss–Perry Aggression Questionnaire Short Form (BAQ-SF) is a brief self-report psychological scale used to measure aggressive behavior among adolescents. The short form consists of 12 items and measure 4 components including physical aggression, verbal aggression, anger and hostility.

Violent Video Game Exposure Questionnaire (VVGQ)

The Violent Video Game Exposure Questionnaire was used to measure the level of exposure to violent video games among adolescents. This questionnaire assessed gaming habits of participants, including frequency, duration and exposure to violent content in games.

Procedure

Permission was obtained from relevant institutional authorities before data collection. Participants were assured that all information would remain confidential and would only be used for research purposes. They all were requested to participate voluntarily and to respond honestly and carefully to all questionnaire items and all responses were screened for completeness before analysis.

Data Analysis

The collected data were analyzed using IBM SPSS Statistics in order to examine the relationship between violent video game exposure and aggressive behavior among adolescents. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were calculated to describe the demographic characteristics and study variables. Reliability analysis using Cronbach's Alpha assessed the consistency of the scales. Pearson correlation examined the relationship between violent video game exposure and aggression. Similarly, linear regression was used to determine the predictive effect of violent video games on aggressive behavior. An independent sample t-test and analysis of variance were applied to examine group and gender differences.

Results

Table 1

Frequency and Percentage of Participants (N=150)

Variable Category f %

Gender	Male	105	70%
	Female	45	30%
Age	10-13	20	13.3%
	14-16	68	45.3%
	17-19	62	41.3%
Hours	< 1hr	25	16.7%
	1-2 hrs	52	34.7%
	>2hrs	73	48.7%
Types	non-violent	28	18.7%
	Violent	57	38.0%
	Both	65	43.3%
Note. Most	participants	were boys	and reported

playing video games more than 2 hours per day. The largest portion belonged to the 14-16 years age groups and classes 7-9.

Table 2

Descriptive statistics and Reliability of Study Variables (N = 150)

Variables	N	M	SD	α
BPAQ-SF	150	43.00	9.01	0.84
VVGQ	150	17.17	8.88	0.83

Note. α = Cronbach's alpha coefficient. Both scales showed good reliability.

Table 3

Correlation and Regression Analysis Among Study Variables (N = 150)

Variable	r	β	t	R ²	p
VVGQ	0.84**	0.89	24.39	0.801	<.001
→ Aggression					

Note. A strong positive relationship was found between video game questionnaire scores and aggression ($r = 0.84, p < .001$). Regression analysis showed that VVGQ significantly predicted aggression ($\beta = 0.89, t = 24.39, p < .001$). Overall, VVGQ explained 80.01% of the variance in aggression ($R^2 = 0.801$).

Relationship between Violent Video Games and Aggressive behavior

The results indicated a strong positive relationship between violent video games and aggression among adolescents. Higher VVG were linked with higher aggression scores ($r = .84, p < .001$). Furthermore, violent video exposure significantly anticipated aggression ($\beta = .89, p < .001$), suggesting a sustained effect on Aggressive behavior.

Predictive Role of Violent Video Games

Regression analysis demonstrated that violent video game exposure was a significant considerable predictor of aggression among adolescents. The VVGQ score substantial predicted aggressive behavior ($\beta = .89, t = 24.39, p < .001$), illustrating 80.1% of variance in aggression ($R^2 = .801$). These outcomes suggested a strong predictive role of violent video game in adolescents' aggression.

Discussion

The study looked at how playing video games affects the behavior of adolescents. It found that who play video games a lot are more likely to behave aggressively. When the researchers evaluated the data, they saw a strong connection between playing violent video games and being aggressive. This means that the more adolescents play video games the more likely they are to behave aggressively.

The study also found out some things about the adolescents who were part of the study. Most of them were boys among 14 and 16 years old. A lot of them played video games for than two hours every day. Some of them played both non-violent games. This shows that playing video games is a certain thing that a lot of adolescents do in their time. It also suggests that playing video games for a long time might make adolescents more aggressive.

The results of this study are corresponding to what other researchers have found. They also fit with a theory called the General Aggression Model. This theory states that watching or playing things can make people think, feel and behave more aggressively. In general, the study says that parents should pay attention to what games their adolescents playing and try to help them make good choices, about what they watch and play. This can help prevent adolescents from behaving.

Conclusion

The study shows that playing video games is linked to aggressive behavior in teenagers. Adolescents who played a lot of video games said they got really angry and aggressive. It seems that playing these games a lot can make adolescents more hostile and angrier.

These results show that parents should keep an eye on what their adolescents playing and make sure they are not spending too much time on violent games. Parents should also know what is, in the games their adolescents are playing and make sure they have things to do besides gaming. This can help reduce aggression and support the health of adolescents.

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