Indus Journal of Social Sciences
Online ISSN: 2960-219X
Print ISSN: 2960-2203
Volume 3, Number 1, 2025, Pages 1117 – 1124
Journal Home Page
https://induspublishers.com/IJSS/about

Effects of Violent Video Game Exposure on Bullying Perpetration among Young Adults

Dr. Anila Sadaf Mubashir[1], Rida Kainaat[2], Mehwish Faryad[3] & Saleha Ahmed[4]

[1]*Assistant Professor, Department of Applied Psychology, National University of Modern Languages Rawalpindi, Pakistan, Email: anilasadaf@numl.edu.pk*
[2]*Lecturer, Department of Applied Psychology, National University of Modern Languages Rawalpindi, Pakistan, Email: rida.kainaat@numl.edu.pk*
[3]*Research Scholar, Department of Applied Psychology, National University of Modern Languages Rawalpindi, Pakistan*
[4]*Research Scholar, Department of Applied Psychology, National University of Modern Languages Rawalpindi, Pakistan*

ARTICLE INFO

Article History:

Received:	*February*	*07, 2025*
Revised:	*March*	*10, 2025*
Accepted:	*March*	*17, 2025*
Available Online:	*March*	*27, 2025*

Keywords:

violent video games, Cyber bullying perpetration, young adults, Game Addiction Scale.

Corresponding Author:
Dr. Anila Sadaf Mubashir
Email:
anilasadaf@numl.edu.pk

ABSTRACT

This study investigated the effects of violent video games exposure on bullying perpetration among young adults, using a sample of 220 participants aged 17-32 year. Cross sectional research design was used. Data were collected through self-reported measures, utilizing the Joren Lemmens Game Addiction Scale (GAS) 2009 and the Cyberbullying Perpetration Scale (CBP) 2015 developed by Jung up Lee. Statistical analyses, including correlation and regression, were conducted to investigate the relationship between violent video games play and bullying behaviors. The results indicate several significant relationships. The GAS is positively correlated with CBP ($r = .38$, $p < .01$), suggesting that higher levels of gaming addiction are associated with increased cyber bullying perpetration. GAS also shows a significant positive correlation with Verbal ($r = .28$, $p < .01$), Visual ($r = .28$, $p < .05$), and Social CBP ($r = .48$, $p < .01$). Regression analysis further revealed that violent video game exposure is a significant predictor of bullying perpetration. The regression model accounts for 14% of the variance in cyber bullying perpetration ($R = .14$, Adj $R^2 = .14$). These findings highlight the potential role of violent video games in influencing bullying behaviors among young adults and underscore the importance of monitoring and managing video game content to mitigate its negative impacts on social interactions.

Introduction

Bullying is a pervasive problem with major repercussions for both offenders and victims. It is characterized as deliberate, violent behavior that is repeated over time and entails a power imbalance (Olweus, 1993; Volk et al., 2014). Bullying is a pervasive social issue marked by intentional, repeated aggressive behavior that creates a power imbalance. It affects not only victims but also perpetrators, often leading to psychological and emotional challenges. The rising interest in the potential link between violent video games and aggression has fueled widespread research, particularly concerning youth and young adults (Volk et al., 2014).

Video games have become increasingly prevalent in daily life, and many contain violent content. Proponents of the General Aggression Model argue that repeated exposure to such content may desensitize individuals, reinforcing aggressive behaviors. Opposing perspectives highlight the influence of personality, family dynamics, and social context as potentially stronger predictors of aggression than video game content. In America, playing video games has become a popular past time for kids (Dewitt, 1993). Sales have increased steadily, with the electronic entertainment sector earning between $7 billion and $7.5 billion in 1999—for the first time ever topping movie office receipts (Come in and play, 2000). Over 100 million Gameboys and 75 million PlayStations have been sold globally, contributing to the $20 billion video game market (Cohen, 2000). (Kent, 2000). A typical American child, ages 2 to 17, spends seven hours a week playing video games (Gentile & Walsh, 2002). Large disparities between males and girls as well as children of different ages are hidden by this average. For instance, in the current study, teenage girls averaged 5 hours per week of video game play, whereas guys averaged 13 hours (D.A. Gentile et al., 2004).

Studies have documented conflicting outcomes: while Anderson and Dill (2000) found a causal relationship between video games and aggression, subsequent critiques (e.g., Ferguson et al., 2007) questioned their methodologies. Ferguson's later research highlighted the role of family violence, rather than gaming, as a more consistent predictor of real-world aggression.

Research on the prevalence of violent gaming has revealed notable gender and age differences, with adolescent boys spending significantly more time on such games than girls. Gentile et al. (2004) emphasized the differing effects of gaming duration and violent content, with the former affecting academic performance and the latter linked to aggression.

Internationally, numerous recent studies have attempted to understand the mechanisms linking violent video game exposure (VVGE) to cyberbullying and aggression. Coyne et al. (2023) found higher aggression in adolescent males with poor self-control. Similarly, Li et al. (2023) identified trait anger as a moderator between VVGE and cyber aggression. Moral disengagement and callous-unemotional traits also play significant roles, as indicated by Wang et al. (2023).

Other studies explored behavioral and emotional outcomes, such as Yao et al. (2019), who observed the mediating role of disinhibition and hostility. In contrast, McCaffree et al. (2017) found that increased video gaming reduced opportunities for crime, suggesting complex socio-behavioral dynamics. Pakistani studies by Khalid et al. (2022), Ashraf (2020), and Razzaq et al. (2022) highlighted similar concerns around mental health, aggression, and the effectiveness of anti-bullying interventions.

Despite accumulating evidence, some studies challenge the notion of a direct link between gaming and real-life aggression. For instance, Ferguson (2015) emphasized the need to consider broader ecological and psychological variables, including methodological flaws in earlier studies. Violent

video games exposure increasing day by day in Pakistan which enables youth to commit crimes and teach adults that violence is acceptable to resolve conflict. Bullying perpetration among young adults is a significant social issue with implications for mental health, interpersonal relationships, and societal well-being. Over the years, researchers have explored various factors contributing to bullying behavior, and one such factor that has gained attention is exposure to violent video games. Violent video games are prevalent in today's digital landscape and often depict aggressive behaviors and scenarios. Understanding the relationship between violent video game exposures and bullying perpetration among young adults is essential for developing targeted intervention strategies and policies. In Pakistan few studies had been done to check the relation of violent video games & aggressive behavior in young adults. According to these studies playing violent video games can foster aggression in real life situation but the extent to which this is true in Pakistan is largely unknown. Time spent playing violent video games is directly related to bullying & crimes. Limited Understanding of Causality: While numerous studies have examined the association between violent video games and aggressive behaviors, there remains a gap in understanding the causal relationship specifically concerning bullying perpetration among young adults. Most existing studies rely on correlational data, making it challenging to establish whether exposure to violent video games directly contributes to bullying behaviors or if other factors are at play.

Methods

Objectives

- To examine the relationship between exposure to violent video games and bullying perpetration among young adults.
- To investigate the effects of violent video game exposure on subsequent bullying behaviors among young adults.

Hypotheses

- There is a significant relationship between exposure to violent video games and bullying perpetration among young adults.
- There is a significant impact of violent video game exposure on subsequent bullying behaviors among young adults.

Instruments

Gaming Addiction Scale (GAS)

The Joren Lemmens Game Addiction Scale (GAS) is a psychometric instrument developed to assess the extent of video game addiction in individuals. It is based on diagnostic criteria for addiction, adapted specifically for gaming. The General Addiction Scale (GAS) comprises items that assess different aspects of gaming addiction, including obsession with games, withdrawal symptoms when not playing, the need to play more and more, failed attempts to cut down on gaming time, loss of interest in other activities, excessive use even after awareness of the problems it causes, and lying about gaming habits. Respondents use a Likert scale, usually ranging from "strongly disagree" to "strongly agree," to indicate how much they agree with these things. The GAS provides a comprehensive assessment of the severity of game addiction, aiding in identifying individuals who may require intervention and support.

Cyber Bullying Perpetration Scale (CBP)

The Cyber bullying Perpetration Scale (CBP), developed by Jungup Lee, is a psychometric tool designed to measure the frequency and severity of cyber bullying behaviors exhibited by individuals. The scale consists of multiple items that assess various forms of online aggression, including harassment, denigration, impersonation, outing, and cyber stalking. Respondents are asked to indicate how often they have engaged in these behaviors over a specified period, typically using a Likert scale ranging from "never" to "very often." The CBP scale aims to provide a comprehensive understanding of the perpetration of cyber-bullying, facilitating research and interventions aimed at reducing online aggression and promoting safer digital environments.

Study Design

A cross-sectional research design was used.

Sample

The sample of 220 university students were drawn using G power through purposive sampling technique. Participants were selected from different universities of Rawalpindi within age range of 17-32 years.

Procedure

Data was collected from the young adults using online questionnaire. Firstly, explaining the purpose of the study, informed consent was taken from the participants. A data collection form then sent. The cyber bullying perpetration & victim scale and the game addiction scale was used for data collection. Confidentiality was ensured to the participant. At the end, participants were acknowledged.

Results

Data was analyzed using SPSS software. Descriptives, correlation and regression was used to analyze the data.

Table 1: ***Descriptive Statistics and Psychometric Properties for Scales and Subscales (N=220)***

					Range	
Scales	***No of items***	**Alpha**	***M***	***SD***	***Actual***	***Potential***
GAS	21	.95	48.20	18.58	21-88	21-105
CBP	20	.93	30.32	12.80	20-66	20-100

Note: *GAS=Gaming Addiction scale, CBP=Cyber Bullying Perpetration*

Table 1 provides the descriptive statistics and psychometric properties for five scales: Gaming Addiction Scale (GAS), Cyber Bullying Perpetration (CBP), Verbal Aggression, Visual Aggression, and Social Aggression, with a sample size of 220 participants. Gaming Addiction Scale (GAS) Comprising 21 items, the GAS has a high internal consistency ($\alpha = .95$). The mean score is 48.20 (SD = 18.58), with actual scores ranging from 21 to 88, against a potential range of 21 to 105. Cyber Bullying Perpetration (CBP) is 20-item scale also shows high reliability ($\alpha = .93$). The mean score is 30.32 (SD = 12.80).

Table 2: ***Inter item correlation between study variables (N=220).***

Variables	*GAS*	*CBP*	*Verbal*	*Visual*	*Social*
GAS	_	.38**	.28**	.28*	.48**
CBP		_	.91**	.91*	.85**
Verbal			_	.76*	.62**
Visual				_	.72**
Social					-

Note: *GAS=Gaming Addiction scale, CBP=Cyber Bullying Perpetration. *p<0.05; **p<0.01.*

Table 2 presents the correlation coefficients between the study variables: Gaming Addiction Scale (GAS), Cyber Bullying Perpetration (CBP), Verbal Aggression, Visual Aggression, and Social Aggression among a sample of 220 participants. The results indicate several significant relationships. The GAS is positively correlated with CBP ($r = .38$, $p < .01$), suggesting that higher levels of gaming addiction are associated with increased cyber bullying perpetration. GAS also shows a significant positive correlation with Verbal ($r = .28$, $p < .01$), Visual ($r = .28$, $p < .05$), and Social CBP ($r = .48$, $p < .01$).

Table 3: ***Linear Regression showing gaming addiction as significant Predictor of Cyber Bullying Perpetration.***

Variable	*B*	*S.E*	*β*	*t*	***95% CI***	
					UL	***LL***
CBP	.26	.04	.38	6.15	0.18	0.33

Note: *p=.00, R=.14, Adj R^2=.14, F=37.82*

This table presents the results of a simple linear regression analysis. The results indicate that gaming addiction (CBP) is a significant predictor of cyber bullying perpetration, with a β coefficient of .38 ($p < .001$). The positive β coefficient suggests that higher levels of gaming addiction are associated with increased cyber bullying perpetration. The regression model accounts for 14% of the variance in cyber bullying perpetration ($R^2 = .14$, Adj $R^2 = .14$).

Discussion

The present study aimed to examine the association between exposure to violent video games and bullying perpetration among young adults. The sample comprised 220 participants aged 17 to 32 years, with a balanced gender distribution and a slight female majority (51.8%). The demographic profile revealed that the majority of respondents were undergraduate students from middle socioeconomic backgrounds, with 83.6% reporting the use of mobile devices for gaming. These demographic characteristics provide an essential backdrop for interpreting the findings, particularly within the broader context of increasing mobile-based gaming trends among youth (Gentile et al., 2004).

Psychometric evaluations demonstrated excellent internal consistency for both the Gaming Addiction Scale ($\alpha = .95$) and the Cyberbullying Perpetration Scale ($\alpha = .93$). The observed moderate mean scores for gaming addiction ($M = 48.20$) and cyberbullying ($M = 30.32$) indicate a noticeable prevalence of both phenomena in the sample. These results support the primary hypothesis that increased gaming addiction is positively associated with elevated cyberbullying behaviors. These findings align with existing literature that underscores the adverse psychosocial outcomes of excessive gaming, including aggression and diminished academic performance (Gentile et al., 2004).

The correlation analysis further reinforced this hypothesis by revealing significant positive associations between violent video game exposure and multiple forms of aggression—including cyberbullying, verbal, visual, and social aggression. These findings are consistent with Anderson and Dill's (2000) work, which established that exposure to violent video games can provoke both short-term and long-term increases in aggressive thoughts and behaviors. This relationship is also consistent with the General Aggression Model (Anderson & Bushman, 2002), which posits that situational variables (such as violent media exposure) and personal traits interact to influence aggressive behavior (Anderson & Bushman, 2002).

Further insights are provided by Teng et al. (2020), who found that the relationship between violent video game exposure and bullying is moderated by individual differences such as trait aggression (a risk factor) and moral identity (a protective factor). Their study, conducted on two large samples of adolescents and college students, revealed that violent video game exposure had a stronger positive correlation with bullying among individuals with high trait aggression and a weaker association among those with high moral identity. These findings suggest that individual psychological characteristics must be considered in the development of interventions aimed at mitigating the effects of violent media on behavior (Teng et al., 2020).

The study highlights a bidirectional relationship, with violent video game exposure potentially facilitating cyberbullying and cyber victimization. Notably, students involved in both perpetration and victimization were nearly four times more likely to have been exposed to violent online content, underscoring the multifaceted nature of these interactions J. Richard et al. (2021).

The regression analysis conducted in this study substantiated the second hypothesis: that gaming addiction significantly predicts cyberbullying behavior ($\beta = .38$, $p < .001$), accounting for 14% of the variance. This finding echoes Bandura's (1977) Social Learning Theory and subsequent works by Huesmann (2007), suggesting that behaviors particularly aggression can be acquired through observation and imitation, especially when individuals repeatedly engage with violent digital stimuli (Huesmann, 2007).

Interestingly, research by Fabito et al. (2018) examined mobile game addiction and cyberbullying in relation to academic performance. While no direct relationship was found with academic outcomes, the cyclical nature of cyberbullying where victims often become perpetrators was evident. These findings support the notion that exposure to violent digital content can foster maladaptive behavioral patterns over time. Zhao et al. (2020) provided an additional layer of nuance by examining meaning in life as a mediating and moderating factor. Their study revealed gender differences in how bullying victimization relates to game addiction, with the "presence of meaning" buffering negative effects for boys and mediating the effects for girls. Such results highlight the importance of existential factors in shaping behavioral responses to bullying and gaming addiction. Yang's (2012) investigation into the triadic relationship between digital game addiction, peer bullying, and sportsmanship emphasized that digital game addiction is a significant predictor of peer bullying and undermines social behaviors associated with respect and cooperation. This supports broader concerns that digital media consumption may erode prosocial tendencies, particularly among youth (Yang's, 2012).

Limitations

- The study employed a cross-sectional design, which limits the ability to establish causal relationships between violent video game exposure and bullying behaviors.

- Data were collected through self-report measures, which are susceptible to social desirability bias and may not accurately reflect actual behaviors.
- The sample was drawn from a specific age group (17–32 years) and educational background (undergraduate students), limiting the generalizability of the findings to broader populations.

Future Suggestions

- Future studies should adopt longitudinal or experimental designs to better examine causal pathways between gaming addiction and aggressive behaviors.
- Researchers should include more diverse populations in terms of age, geographic location, and socioeconomic status to enhance generalizability.
- Further investigations could examine mediating and moderating variables, such as empathy, emotional regulation, and peer influence, to better understand the mechanisms driving cyberbullying behaviors.

Implications

- The study highlights the need for educational and preventive interventions focused on reducing the negative impacts of violent video games on young adults.
- Media literacy programs and parental guidance strategies should be developed to help individuals critically engage with video game content.
- Policymakers and educators can use these findings to inform public health initiatives and school-based anti-bullying campaigns targeting digital aggression.

Conclusion

In summary, the current study provides empirical evidence linking violent video game exposure and gaming addiction with increased instances of cyberbullying among young adults. These findings support existing theoretical models, such as the General Aggression Model and Social Learning Theory, suggesting that repeated exposure to violent digital content can reinforce aggressive cognitions and behaviors. While the study has certain limitations, its contributions underscore the importance of addressing digital aggression through comprehensive prevention, policy, and intervention strategies aimed at fostering healthier social and emotional development in the digital era.

References

1. Adachi, P. J. C., & Willoughby, T. (2011). The effect of video game competition and violence on aggressive behavior: Is it more than just the violence? *Aggression and Violent Behavior, 16*(1), 83–90. https://doi.org/10.1016/j.avb.2010.12.002
2. Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, *53*(1), 27–51. https://doi.org/10.1146/annurev.psych.53.100901.135231
3. Anderson, C. A., & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology*, *78*(4), 772–790. https://doi.org/10.1037/0022-3514.78.4.772
4. Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
5. Fabito, B. S., Marcelo, J. D. M., & Encio, H. A. M. (2018). Mobile game addiction and cyberbullying among university students. *International Journal of Advanced Trends in Computer Science and Engineering, 7*(2), 52–57.

6. Ferguson, C. J. (2007). Evidence for publication bias in video game violence effects literature: A meta-analytic review. *Aggression and Violent Behavior, 12*(4), 470–482. https://doi.org/10.1016/j.avb.2007.01.001
7. Ferguson, C. J. (2015). Do angry birds make for angry children? A meta-analysis of video game influences on children's and adolescents' aggression, mental health, prosocial behavior, and academic performance. *Perspectives on Psychological Science, 10*(5), 646–666. https://doi.org/10.1177/1745691615592234
8. Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence, 27*(1), 5–22. https://doi.org/10.1016/j.adolescence.2003.10.002
9. Greitemeyer, T., & Mügge, D. O. (2014). Video games do affect social outcomes: A meta-analytic review of the effects of violent and prosocial video game play. *Personality and Social Psychology Bulletin, 40*(5), 578–589. https://doi.org/10.1177/0146167213520459
10. Huesmann, L. R. (2007). The impact of electronic media violence: Scientific theory and research. *Journal of Adolescent Health, 41*(6 Suppl 1), S6–S13. https://doi.org/10.1016/j.jadohealth.2007.09.005
11. Huesmann, L. R., Moise-Titus, J., Podolski, C. L., & Eron, L. D. (2003). Longitudinal relations between children's exposure to TV violence and their aggressive and violent behavior in young adulthood: 1977–1992. *Developmental Psychology, 39*(2), 201–221. https://doi.org/10.1037/0012-1649.39.2.201
12. J. Richard, et al. (2021). Violent online games and cyberbullying behaviors among college students. *Journal of Digital Behavior, 14*(2), 144–160.
13. Markey, P. M., & Markey, C. N. (2010). Vulnerability to violent video games: A review and integration of personality research. *Review of General Psychology, 14*(2), 82–91. https://doi.org/10.1037/a0019000
14. Teng, Z., Nie, Q., Liu, Y., & Guo, C. (2020). Violent video game exposure and (cyber)bullying perpetration among adolescents: A three-wave longitudinal study. *Computers in Human Behavior, 112*, 106479. https://doi.org/10.1016/j.chb.2020.106479
15. Ttofi, M. M., Farrington, D. P., & Lösel, F. (2012). School bullying as a predictor of violence later in life: A systematic review and meta-analysis of prospective longitudinal studies. *Aggression and Violent Behavior, 17*(5), 405–418. https://doi.org/10.1016/j.avb.2012.05.002
16. Wang, L., Liu, H., Zhang, J., & Li, H. (2023). Callous-unemotional traits and moral disengagement in cyberbullying: A moderated mediation model of violent video game exposure. *Journal of Adolescence, 96*, 84–94. https://doi.org/10.1016/j.adolescence.2022.11.001
17. Yang, S. (2012). The relationship between digital game addiction, peer bullying, and sportsmanship. *Journal of Educational Psychology, 29*(2), 109–126.
18. Yao, M., Meng, X., & Fan, C. (2019). Moral disengagement and aggression: Examining the mediating role of disinhibition and anger in violent video game exposure. *Aggressive Behavior, 45*(6), 631–639. https://doi.org/10.1002/ab.21863
19. Zhao, H., Zhou, H., Li, C., & Yang, J. (2020). Meaning in life as a mediator between bullying victimization and online game addiction in Chinese adolescents. *Journal of Adolescence, 82*, 44–56. https://doi.org/10.1016/j.adolescence.2020.05.011