

THE MODERATING EFFECTS OF VIOLENT GAMING UPON PSYCHOPATHIC PERSONALITY AND BULLYING BEHAVIOR IN PROBLEMATIC SMARTPHONE USERS.

Arooj Miran¹, Faiqa Yaseen² & Hira Jahangir³

¹MPhil Scholar, Department of Psychology, Lahore Garrison University, Lahore, Pakistan ²Assistant Professor, Department of Psychology, Lahore Garrison University, Pakistan ³Visiting Lecturer, Government College University, Lahore, Pakistan

KEYWORDS	ABSTRACT
Violent Gaming, Psychopathic Personality, Bullying Behavior, Smartphone Users	A psychopathic personality is a pattern of traits linked to impulsivity, lack of empathy & propensity to indulge in criminal behavior. It is significantly associated with bullying behavior, especially among problematic smart users. Present study explored the role of violent games on psychopathic personality and bullying behavior. Using the purposive sample approach, data was gathered from 801 young smartphone users. The results indicated a high association between psychopathic personality characteristics and bullying behavior. The results of study provide important information in
ARTICLE HISTORY	reaching the conclusion and making suitable decisions about phenomena under considerations. In this regard, the findings of moderation analysis
Date of Submission: 22-11-2023 Date of Acceptance: 24-12-2023 Date of Publication: 28-12-2023	revealed that association between psychopathic personality and bullying has become strongest with violent video games. The findings would also assist psychologists in forming support groups and educational campaigns that facilitate young adults about the negative impacts of violent games and excessive smart phone use on mental health and thus study provides clues for future research. 2023 Journal of Social Research Development
Correspondence	Faiqa Yaseen
Email:	drfaiqayaseen@gmail.com
DOI	https://doi.org/10.53664/JSRD/04-04-2023-10-761-770

INTRODUCTION

In recent years, there has been growing concern about the impact of violent video games on young people, especially with the increasing prevalence of smartphones and mobile gaming (Lissak, 2018). With easy access to the internet and wide range of game genres available at their fingertips, many young smartphone users are getting drawn into violent gaming (Işıkoğlu, Erol, Atan & Aytekin, 2021). Additionally, the violent games can contribute to aggression and desensitization to violence

(Brockmyer, 2022), especially in individuals with psychopathic personality traits (Jahic, DeLisi & Vaughn, 2021). Research suggests that psychopathy may be linked to greater likelihood of engaging in violent gaming (Visser, Batinic, Worth, Book & Toll, 2020; Nagata, Chu, Ganson, Iyer, Gabriel, Garber, Domingo & Baker, 2022). Psychopathic personality traits are characterized by pattern of behaviors, attitudes & emotions that include lack of empathy, disregard for social norms and rules, impulsivity, superficial charm, tendency towards manipulation and deceit (Tsang & Salekin, 2019). People with psychopathic traits may exhibit aggressive and violent behaviors, sense of grandiosity, and lack of remorse/guilt for their actions (Verschuere & Kaat, 2020). The commonly used ground for showing aggression and violent behavior is violent gaming (Hilgard, Engelhardt, Rouder, Segert & Bartholow, 2019). It has become popular form of entertainment among many young smartphone users (Ahmed, 2021).

Engaging in the violent gaming refers to actively participating in video games that depict violent content, such as simulated acts of aggression, killing, or destruction (Zucchino, 2022). These games typically involve players acting as characters who engage in the violent behavior, often intending to complete objectives or win a competition (American Psychological Association, 2000; Denham & Spokes, 2018). Engaging in violent gaming can range from playing games with mild depictions of violence to those with high graphic content (Bowman, Bowen, Mercado, Resignato & Chauveau, 2022). While some individuals play violent video games as entertainment or stress relief (Aswathy, Devika & Girish, 2019). There are also some cases where research suggests that those who become immersed in the same and experience desensitization to violence (Brockmyer, 2022) may be more likely to engage in bullying behavior towards others (Chen, Mao & Liu, 2022). Where bullying behavior refers to repeated aggressive/hostile actions directed toward person/group to cause harm or distress, this behavior can take many forms, such as physical aggression, verbal harassment, social exclusion, and cyberbullying (Ey & Campbell, 2020; Wojcik & Mondry, 2020). In this connection, the research on relationship between violent gaming, psychopathic personality traits, and bullying behavior has been a topic of interest among psychologists and researchers in different context with different outcomes.

Theoretical Framework

The General Aggression Model (GAM) by DeWall and Anderson (2011) is a theoretical framework that explains how exposure to violent video games can increase aggressive thoughts, feelings, and behaviors. According to the GAM, the effects of violent media on aggression are mediated by three key factors: cognitive, emotional, and physiological. The cognitive component involves forming the aggressive thoughts and beliefs due to exposure to violent media. Emotional component involves the desensitization to violence and the reduction of negative emotional responses to aggressive acts. The physiological component involves activating the body's arousal systems, such as sympathetic nervous system, which can increase readiness for aggression. In the context of the current study the GAM can be used to explain how individuals with pre-existing aggressive tendencies may be more susceptible to the effects of violent gaming. Specifically, individuals with psychopathic traits may have the cognitive biases that make them more likely to interpret social cues as threatening and to respond aggressively to these cues. The exposure to violent media can reinforce and amplify these

cognitive biases, leading toward increased aggression \mathcal{E} potentially engaging in bullying behavior (Anderson \mathcal{E} Bushman, 2018).

LITERATURE REVIEW

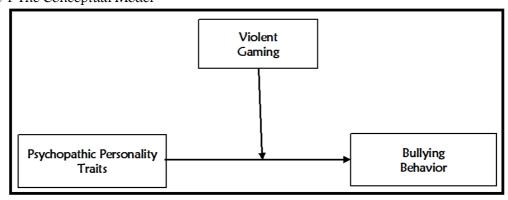
Relationship of Psychopathic Personality Traits & Bullying Behavior

Psychopathic personality traits have been associated with range of behaviors, including aggression, impulsivity, and lack of empathy. These characteristics can make individuals with the psychopathy more likely to engage in bullying behavior, which involves using power or aggression to intimidate, harm, or control others. Individuals with psychopathy may be less likely to feel guilt or remorse for actions and may view others primarily as targets for their own gratification or entertainment (Tsang Salekin, 2019). Also, they may be more likely to use aggression or manipulation to achieve their goals, without regard for feelings or well-being of others (Verschuere & Kaat, 2020). Thus, it can be hypothesized that: Psychopathic personality is likely to have significant positive association with bullying behavior.

Moderating Role of Violent Gaming

Exposure to violent video games may desensitize individuals to violence and aggression, making them more likely to engage in bullying behavior (Rodrigues et al., 2018). This effect may be mainly pronounced among individuals with psychopathic personality traits, who may be more susceptible to influence of violent gaming due to their reduced capacity for empathy and increased propensity for aggressive behavior. In other words, violent gaming may worsen relationship amid psychopathy and bullying behavior by providing a context in which aggression and violence are normalized and rewarded (Kircaburun et al., 2018). Therefore, it can be hypothesized that: The moderating role of violent gaming is likely to significantly strengthen association amid psychopathic personality traits and bullying behavior.

Figure 1 The Conceptual Model



RESEARCH METHODOLOGY

Sample & Sampling Technique

The data was gathered from 801 problematic smartphone users, age ranges between 18 to 23 years. To collect the data, a multi-stage sampling strategy was used. The first stage involved approaching

1055 young individuals and criteria of Wang et al., 2018 for screening out problematic smartphone users was used. In this connection, the criteria stated four-hour daily use for leisure activities. But for the present study, the six-hour criterion has been amended. In the current research, only those individuals who used their smartphone for at least six hours each day for leisure were included in the second stage.

Assessment Measure

The questionnaire protocol was comprised of demographics and assessment scales. The assessment tools were translated according to the MAPI (2008) guidelines. Demographics. In the current study, the frequency of engagement in violent gaming was collected through demographic portion of the survey. Participants were asked to indicate the extent to which they played violent video games on a regular basis. Subscale Psychopathy of Short Dark Triad Test. The subscale "psychopathy" of Short Dark Triad personality scale, developed by Jones and Paulhus (2013) was used the Urdu translation of scale by Yaseen, Miran, and Jamal (2021) was used. The reliability of sub-scale was evaluated and achieved a score of 0.66. Response format was 5-point Likert scale. Total items of psychopathy subscale are 7. Subscale Bullying of Forms of Bullying Behavior. Similarly, the Forms of Bullying Scale, created by Shaw et al. (2013), is used to evaluate the different forms of bullying as well as victimization, including subscale "Bullying" which has been used to assess frequency, intensity, and type of bullying.

The scale was thus translated into Urdu by Yaseen, Miran, and Jamal (2021), and its reliability was assessed and found to be 0.81. The total items of bullying subscale are 10. Procedure. The study was approved by the Board of Advanced Studies and Research. The permissions from respective authors of the scale for translation and use were taken before data collection. Data were collected in-person from participants who screened out as the problematic smartphone users. The researcher briefed the ethical codes of the right to withdraw, confidentiality, as well as anonymity. Statistical Analysis. For the hypotheses testing, the inferential statistics like correlation and moderation analysis using the PROCESS Macro Hayes (2013) were used. Model 1 of the PROCESS macro was utilized to evaluate the moderating effect of violent gaming on relationship between psychopathy as well as bullying behavior.

RESULTS OF STUDY

Correlation Matrix

Pearson product moment correlation analysis was conducted to examine the relationship between psychopathy and bullying behavior. The results are presented in table 1.

Table 1 Intercorrelation of Psychopathy, Bullying Behavior (N = 801)

Variables	1	2
1. Psychopathy	~	.58***
2. Bullying Behavior		~
Note: ***p < .01		

Table 1 reveals that the psychopathic personality traits have a significant positive relationship with bullying behavior in young problematic smartphone users.

Moderation Analysis

Moderation analysis using Hayes PROCESS 4.1 was conducted to examine the moderating role of violent gaming between psychopathy and bullying behavior in young problematic smartphone users. The results are presented in table 2.

Table 2 Regression Analysis Examining the Interaction Effects (N = 801)

Variables		Bullying Beha	vior
	В	SE	95% CI
Constant	14.49***	.33	[13.84, 15.15]
Psychopathy	.10*	.06	[.03,.22]
Violent Gaming	.16***	.41	[.65,.97]
Psychopathy x Violent Gaming	.41***	.09	[.04,1.25]
R2	.43***		
F	10.76***		

Note: *p<.05, ***p<.001

The table 2 reveals that violent gaming is the significant moderator between the relationship of psychopathy and bullying behavior. In this linking, the table also reveals that the violent gaming strengthens relationship of psychopathy and bullying behavior in young problematic smartphone users. Moreover, the conditional effects were also examined, and the results are presented in table 3 and 4.

Table 3 Conditional Effect when not Engaged in Violent Gaming.

		1	2
1	Psychopathic Personality Traits	~	.09
2	Bullying Behavior	~	~

According to Table 3, if individuals do not engage in violent gaming, the relationship between the psychopathic personality traits and bullying behavior becomes insignificant.

Figure 2 Results of Conditional Effects

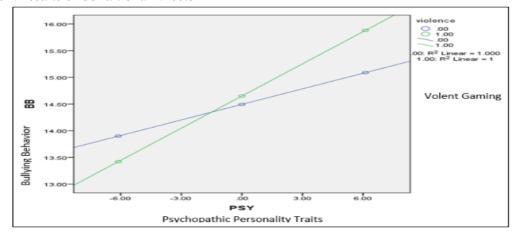


Table 4 Conditional effect when Engaged in Violent Gaming

		1	2
1	Psychopathic Personality Traits	~	.72***
2	Bullying Behavior	~	~

Note ***p<.001.

According to table 4, if individuals engage in violent gaming, relationship between psychopathic personality traits and bullying behavior is statistically significant. The results also reveal that the relationship between psychopathic personality traits and bullying behavior is strengthened among young problematic smartphone users. Therefore, the results of conditional effects are also presented in figure 2.

DISCUSSION

In recent times, there has been a growing concern regarding the impact of violent video games on the younger demographic, particularly considering the widespread use of smartphones and surge in mobile gaming (Lissak, 2018). Similarly, the violent gaming has emerged as widely accepted form of entertainment among a significant number of young smartphone users (Ahmed, 2021). Therefore, it is argued that this popular form of entertainment serves as a common platform for manifestation of aggressive and violent behaviors (Hilgard et al., 2019). Therefore, the current study investigated the moderating role of the violent gaming between psychopathic personality traits and bullying behavior among the young problematic smartphone users. The first hypothesis of the current study "there is likely to be a significant positive relationship between psychopathy personality traits and bullying behavior among young smartphone users" is accepted. As psychopathic personality traits encompass a spectrum of behaviors, such as aggression, impulsivity, and a deficiency in empathy. These traits contribute to an increased propensity for individuals with the psychopathy to engage in bullying behavior, characterized using power or aggression to intimidate, harm, or exert control over others.

Notably, individuals with psychopathy may exhibit a diminished capacity for experiencing guilt or remorse, perceiving others primarily as the targets for their own satisfaction or amusement (Tsang & Salekin, 2019). Furthermore, they may display an elevated likelihood of employing aggression or manipulation as means to achieve their objectives, often disregarding the feelings or well-being of others (Verschuere & Kaat, 2020). The second hypothesis of the current study "violent gaming is likely to moderate the relationship between psychopathy personality traits and bullying behavior among young smartphone users" is also accepted. The results indicate that if individuals engage in violent gaming, the relationship between psychopathic personality traits and bullying behavior is statistically significant. The results also reveal that relationship between psychopathic personality traits and bullying behavior is strengthened among young smartphone users. This suggests that individuals who participate in violent video games are likely to exhibit psychopathic tendencies, such as aggression, impulsivity, and lack of empathy. Statistical significance implies that observed connection between the violent gaming and psychopathic traits is not likely due to chance and is a meaningful association.

Moreover, the findings highlight that the relationship between psychopathic personality traits and bullying behavior becomes more pronounced when considering young smartphone users. In other

words, among this specific demographic, the individuals with psychopathic traits are more strongly associated with engaging in bullying behavior. There are several potential reasons for strengthened relationship such as (i) Accessibility and Exposure to Violent Content: the young smartphone users, being more digitally connected, may have increased accessibility to the violent video games. The constant exposure to such content could contribute to the amplification of psychopathic traits and, consequently, an escalation in bullying behavior (Rodrigues et al., 2018). (ii) Social Dynamics and Peer Influence: The prevalence of smartphones among the youth facilitates a more interconnected social environment. Peer influence and social dynamics play crucial roles in shaping behavior. The intensified relationship between psychopathic traits, bullying behavior among young smartphone users might be influenced by peer interactions and social norms within this specific group (Myers & Twenge, 2020). (iii) Developmental Factors: Young individuals are in crucial stage of psychological and emotional development.

The combination of psychopathic traits and exposure to violent gaming during this developmental period may have a more profound impact on shaping the behavior compared to other age groups (Feldman, 2017). Lastly, (iv) Technological Integration: The integration of gaming into smartphones provides seamless and easily accessible platform for individuals with psychopathic traits to engage in such activities. The convenience and ubiquity of smartphones might contribute to an increased association between psychopathy and bullying behavior (Patterson, 2020). In summary, the results suggest that the link between psychopathic personality traits and bullying behavior is not only statistically significant but is also heightened among the young smartphone users, possibly due to increased exposure, social dynamics, developmental factors, and the seamless integration of gaming into their digital lives.

CONCLUSION

This study sheds light on intricate relationships among psychopathic personality traits, engagement in violent gaming, and the manifestation of bullying behavior, with a particular emphasis on young problematic smartphone users. The findings reveal the statistically significant connections between violent gaming & the psychopathic traits, suggesting that the individuals involved in such gaming activities are more likely to exhibit characteristics like aggression, impulsivity & lack of empathy. These insights have implications for the various fields, including psychology, education, and policy development. Likewise, psychological interventions and educational programs could benefit from the understanding that early identification and targeted interventions may be particularly crucial for individuals with the psychopathic traits who engage in violent gaming. Moreover, the parental guidance and regulatory measures might be implemented to promote responsible gaming habits among young individuals.

Recommendations

 The study's findings may guide mental health professionals in identifying individuals with psychopathic traits who are at a higher risk of engaging in bullying behavior due to violent gaming. Early interventions, such as counseling or therapy, could be implemented to address and manage these tendencies.

- 2. Educational institutions may use the study's results to develop awareness programs targeting students, parents, and educators. These programs can provide information on the potential impact of violent gaming on psychopathic traits & bullying behavior, promoting responsible gaming habits, and fostering a supportive environment.
- 3. Parents could benefit from the study by gaining insights into the potential risks associated with excessive exposure to violent gaming, particularly on smartphones. This knowledge may inform parental guidance and restrictions on gaming content, emphasizing the importance of monitoring and setting limits on gaming activities.
- 4. Policymakers might consider incorporating findings from studies like these into development of regulations or guidelines related to age-appropriate use of violent video games. This could include implementing restrictions on access to such content for younger individuals, specially on mobile platforms.
- 5. The study may prompt further research into nuanced relationships between psychopathy, gaming habits, and bullying across diverse populations and age groups. In this connection, understanding these dynamics more comprehensively can inform targeted interventions and policies.
- 6. The tech companies and game developers could consider integrating features that promote responsible gaming, especially on mobile platforms. This could include tools for monitoring and limiting gaming time, as well as content filters to prevent exposure to excessively violent material.
- 7. The study's findings could initiate the community discussions around the broader impact of violent gaming on social behavior. Raising awareness and fostering open conversations can contribute to collective effort in addressing the potential consequences as well as promoting healthier digital habits.

Limitations

- The study may establish correlations between variables (psychopathic traits, violent gaming, & bullying behavior), but it does not imply causation. Other factors/variables not considered in the study may influence the observed relationships.
- 2. Data collected through self-reporting, such as surveys or questionnaires, may be subject to biases. Participants may underreport/overreport certain behaviors due to social desirability bias or a lack of self-awareness.
- 3. The study's cross-sectional design captures data at a single point in time. Longitudinal studies are needed to better understand the temporal relationships between psychopathic traits, violent gaming, and bullying behavior.
- 4. The study may not account for all relevant variables that could influence the relationship between psychopathic traits, gaming, bullying. For instance, family dynamics, socioeconomic factors, or mental health history might play a role.
- 5. Rapid changes in the technology could impact the study's relevance over time. For example, advancements in gaming platforms or shifts in gaming preferences may alter the dynamics between psychopathic traits and gaming behavior.

REFERENCES

- Ahmed, S. (2021). Impact of violent games on Mental Health. Graduate Journal of Pakistan Review (GJPR). https://journals.pakistanreview.com/index.php/GJPR/article/view/23.
- American Psychological Association, A. (2000). Violent video games can increase aggression. https://www.apa.org/news/press/releases/2000/04/video-games.
- Anderson, C. A., & Bushman, B. J. (2018). Media violence and the general aggression model. Journal of Social Issues, 74(2), 386–413. https://doi.org/10.1111/josi.12275.
- Aswathy, V., Devika, E., & Girish, S. (2019). "A study on impact of online gaming and its addiction among youth with *Indian Journals*. https://www.ijmra.us/project%20doc/2019/IJMIE_JUNE2019/IJMRA-15728.pdf.
- Bowman, N. D., Bowen, D. A., Mercado, M. C., Resignato, L. J., & Villemor Chauveau, P. (2022). "I did it without the hesitation. Am I the bad guy?": Online conversations in response to controversial in-game violence. New Media & Society, 146144482210788. https://doi.org/10.1177/14614448221078865.
- Brockmyer, J. F. (2022). Desensitization and violent video games. *Child and Adolescent Psychiatric Clinics of North America*, 31(1), 121–132. https://doi.org/10.1016/j.chc.2021.06.005.
- Chen, S., Mao, B., & Liu, Y. (2022). Effect of justified video game violence on aggressive behavior and moderated immersion: An experimental approach. *Aggressive Behavior*, 49(1), 68–75. https://doi.org/10.1002/ab.22054.
- Denham, J., & Spokes, M. (2018). Thinking outside the 'Murder Box': Virtual Violence and prosocial action in video games. The British Journal of Criminology, 59(3), 737–755. https://doi.org/10.1093/bjc/azy067.
- DeWall, C. N., & Anderson, C. A. (2011). The general aggression models. Human Aggression and Violence: Causes, Manifestations, and Consequences., 15–33. https://doi.org/10.1037/12346-001.
- Ey, L., & Campbell, M. (2020). Do Australian parents of young children understand what bullying means? Children and Youth Services Review, 116, 105237. https://doi.org/10.1016/j.childyouth.2020.105237. Feldman, R. S. (2017). Discovering the lifespan. Pearson Education Limited.
- Hilgard, J., Engelhardt, C. R., Rouder, J. N., Segert, I. L., & Bartholow, B. D. (2019). Null effects of game violence, game difficulty, and 2D:4D digit ratio on aggressive behavior. *Psychological Science*, 30(4), 606–616. https://doi.org/10.1177/0956797619829688.
- Işıkoğlu, N., Erol, A., Atan, A., & Aytekin, S. (2021). A qualitative case study about overuse of digital play at home. Current Psychology, 42(3), 1676–1686. https://doi.org/10.1007/s12144-021-01442-y.
- Jahic, I., DeLisi, M., & Vaughn, M. G. (2021). Psychopathy and violent video game playing: Multiple Associations in a juvenile justice system involved sample. *Aggressive Behavior*, 47(4), 385–393. https://doi.org/10.1002/ab.21956.
- Kircaburun, K., Jonason, P. K., & Griffiths, M. D. (2018). The dark tetrad traits and problematic online gaming: The mediating role of online gaming motives and moderating role of game types. *Personality and Individual Differences*, 135, 298–303. https://doi.org/10.1016/j.paid.2018.07.038.

- Lissak, G. (2018). Adverse physiological and psychological effects of screen time on children and adolescents: Literature review and case study. *Environmental Research*, 164, 149–157. https://doi.org/10.1016/j.envres.2018.01.015.
- Maier-Zucchino, J. (2022). Developing meaning: Critical violence and Eudaimonic Entertainment in seventh console generation. *Games and Culture*, 18(3), 380–401. https://doi.org/10.1177/15554120221100817.
- Myers, D. D. G., & Twenge, J. M. M. (2020). Exploring the social psychology. The McGraw-Hill LLC. Nagata, J. M., Chu, J., Ganson, K. T., Murray, S. B., Iyer, P., Gabriel, K. P., Garber, A. K., Domingo, K., & Baker, F. C. (2022). Contemporary screen time modalities and disruptive behavior disorders in children: A prospective Cohort Study. *Journal of Child Psychology and Psychiatry*, 64(1), 125–135. https://doi.org/10.1111/jcpp.13673.
- Patterson, J. M. (2020). Gabbing while gaming: Commandeering commercial, off-the-shelf (COTS ... Gabbing While Gaming: Commandeering Commercial, Off-The-Shelf (COTS) Video Games to Structure Student-Centered Social Studies Discussion. https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=97718 context=etd.
- Rodrigues, F., Bento, T., Cid, L., Pereira Neiva, H., Teixeira, D., Moutão, J., Almeida Marinho, D., & Monteiro, D. (2018). Can interpersonal behavior influence the persistence and adherence to physical exercise practice in adults? A systematic review. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.02141.
- Tsang, S., & Salekin, R. T. (2019). The network of psychopathic personality traits: A network analysis of four self-report measures of psychopathy. *Personality Disorders: Theory, Research, and Treatment*, 10(3), 246–256. https://doi.org/10.1037/per0000319
- Verschuere, B., & te Kaat, L. (2020). What are the core features of psychopathy? A prototypicality analysis using the Psychopathy Checklist-Revised (PCL-R). Journal of Personality Disorders, 34(3), 410–419. https://doi.org/10.1521/pedi 2019 33 396.
- Visser, B. A., Batinic, M., Worth, N., Book, A., & Toll, E. (2020). Psychopathic sims: Testing the cheater-hawk hypothesis in a video game. *Evolutionary Psychological Science*, 6(3), 229–240. https://doi.org/10.1007/s40806-020-00231-3.
- Wójcik, M., & Mondry, M. (2020). "The game of bullying": Shared beliefs and behavioral labels in bullying among middle schoolers. *Group Dynamics: Theory, Research, and Practice*, 24(4), 276–293. https://doi.org/10.1037/gdn0000125.