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Research Paper



Video Games Exposure and Aggressive Behaviour Among School-Age Children

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ABSTRACT

While there are several social, educational, and entertaining benefits to playing video games, there are also drawbacks for kid's behaviour. The most common concern that video games may lead to is aggressive behaviour. The present research aimed to study video game exposure and aggressive behaviour among school-age children. Examining the connection between aggressive behaviour in school-age children and video game exposure was the aim of this study. A sample of 150 kids between the ages of 10 and 18 who were enrolled in school in the Delhi-NCR region was selected using a random selection technique. Data for the study were gathered using the Buss Perry Scale and a questionnaire about Video Games. With the use of SPSS, quantitative techniques were used to analyse the data. The study underscores the importance of addressing how exposure to video games can lead to aggression among school students. Interventions targeting restrictive exposure to video games may help alleviate aggression tendencies. Findings suggest that there is a positive relationship between aggression and video games exposure with the Pearson's correlation, value of 0.97. There is also a slight difference in the mean and standard deviation of video games exposure of males (mean=56. Standard deviation=833) and females (mean=2.48, standard deviation=687). Future research ought to examine other factors that might moderate the relation between addiction of video games and behaving aggressively.

Keywords: Disinhibition, Hostility, Aggressive Behaviour, Moral Disengagement, Online Games

ur culture has grown deeply ingrained with video games, with adults and kids playing them for hours on each week. While there are numerous advantages to playing video games, such as their educational, social, and entertainment value, there is also worry that these benefits could have an adverse effect on children's behaviour. Various studies have taken into account the relationship between online games and aggression. While some studies have found no such correlation, others have discovered that children who play violent video games are more prone to act aggressively towards other children.

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However, 100 studies found that online games are frequently linked to a little but significant positive correlation with aggression (Anderson et al., 2010). The relationship between exposure to violent video games and violence can have several reasons. Its possible that kids who play violent video games become less sensitive to violence and are more prone to embrace it as a legitimate means of problem-solving. Another theory is that kids learn aggressive behaviours via violent video games, like how to fight or use a weapon. Lastly, playing violent video games may foster a competitive atmosphere that can engender resentment and rage, which can then erupt into hostility.

Its crucial to remember that not every video game is made equally. Certain video games are more likely to encourage aggression than others, and some are more violent than others. In contrast to other video games genres, first-person shooter games, where players assume control of the character, have been shown to encourage violence more than other game genres (Anderson et al., 2010). It is important for parents to take precautions against their children being harmed by violent video games and to be informed of the possible risks associated with video games exposure.

To do this, parents should monitor their children's video game consumption, choose games appropriate for their age and maturity, and have discussions with their children regarding the benefits and drawbacks of playing video games. Our culture has grown inextricably linked with video games, as both adults and children spend hours each week playing them. While there are numerous advantages to playing video games, such as their educational, social, and entertainment value, there is also worry that these benefits could have an adverse effect on children's behaviour. One of the most prevalent worries is that playing video games could make people more aggressive (Ferguson, C. J. 2015).

Exposure of video games in school children

Exposure to video games among school children is a prevalent phenomenon that occurs through various platforms and game types. Children engage in video games both at home and in school, using devices like phones, tablets, and computers. School-aged children play a wide variety of video games, including role-playing, simulation, action, and adventure games. School children's video game playing habits vary greatly; some spend only few hours a week playing, while others play for several hours everyday (Anderson, 2007).

Types of online games

Online games that school children play vary widely, encompassing a range of Genres and styles. Some children prefer action games, characterized by fast-paced gameplay, combat, and challenges that require quick reflexes and strategic thinking. Adventure games, another popular genre, focus on exploration, puzzle-solving and narrative-driven gameplay, offering immersive story-telling experiences. In role-playing games (RPGs), users take on the roles of fictitious characters and participate in missions, conflicts, and character development. Simulation games simulate real-world activities or scenarios, such as driving, building cities, or managing virtual lives, providing opportunities for creativity and skill development (Ferguson, C.J., 2015).

Time spent on playing online games by people

There is a large variation in the time spent by school-aged in online games; some spend only a few hours a week, while others play for many hours every day. Parental supervision, personal preferences, and access to gaming gadgets are a few examples of the variables that may affect the variation in gaming time. Excessive video game playing can have both

beneficial and detrimental consequences on kids, according to research. Although children who play video games can improve their cognitive and problem-solving skills, playing games for extended periods of time can have negative effects on academic achievement, social isolation, and physical health problems (K., and Doi, S. A. 2016).

School-aged exposed to online games lead to -Negative Effects

- 1. Aggressive Behaviour Playing so much video games can result in poor social skills, spending less time with family, work etc. The study shows that it can influence how children possess and respond to conflict (Gentile & Ferguson, 2017).
- 2. Social Isolation Excessive gaming can lead to neglecting other aspects of life, like socializing with friends and family. This can hinder development of social skills and increased feelings of loneliness (Przybylski et al., 2009).
- 3. School Performance Spending too much time on video games can take away from studying and completing homework, resulting in low grades (Ferguson et al., 2011).
- 4. Sleep and health issues Engaging in video games can make it hard to switch off and get enough sleep, which affects the mood, concentration, and overall health (Jenner et al., 2019).

Positive Effects

- 1. Cognitive Development Many games require problem-solving, critical thinking, and strategic planning, which can result in better performance (Green & Bavelier, 2006).
- 2. Hand-Eye Coordination Video games often require fast reflexes and precise movements, improving hand-eye coordination and motor skills (Liu & Marino, 2008).
- 3. Socialisation and Collaboration Multiplayer games can foster teamwork, communication, and social interaction, especially online games where players collaborate towards a common goal (Farahbakhsh et al., 2013).

Parental acts on minimizing to video games exposure of school children

Parents can take a number of steps to minimize the negative effects of video game exposure on their children. These steps include:

- **1.** Keeping an eye on their kid's video game consumption- Parents need to be mindful of the games and the amount of time their kids are spending playing them.
- 2. Selecting games that are suitable for their kid's age and maturity- Parents ought to steer clear of games that are excessively violent or that have other unsuitable content.
- **3.** Having conversations with their kids about video games- Parents should explain to their kids the advantages and disadvantages of playing video games as well as how to do it in a responsible and safe manner.
- **4.** Parents should monitor their children: Instead than just letting their children play video games, parents should encourage them to read, play outside, or spend time with friends and family.
- **5.** Parents should encourage their kids to talk to them about their feelings by letting them know that they may talk to them when they are upset or frustrated. Any behaviour that is meant to hurt someone else is considered aggressive behaviour. It can be verbal or physical, such shouting names or making threats. Physical examples include showing or hitting. There are two types of aggression: proactive aggression, which aims to dominate or control others, and reactive aggression, which reacts to provocation.

Aggressive behaviour is a common problem in school children. Studies have found that between 10% and 20% of school children engage in aggressive behaviour on a regular basis. Aggressive behaviour can have a number of negative consequences for children, including:

Physical injuries

- Social problems
- Academic problems
- Mental health problems

Causes of aggressive behaviour in school children

A multitude of variables can be responsible for school-age aggressive behaviour, such as: 1. Genetics: Aggressive behaviour may be influenced by genetics. According to studies, kids who witness hostility in their families are more likely to exhibit aggressive behaviour themselves. This implies that hostility might have a hereditary basis. It is crucial to remember, nevertheless, that aggressive behaviour is not solely a genetic trait.

- 2. Personality traits: A child's propensity for aggression may also be influenced by certain personality qualities. Children that exhibit impulsive, hot-tempered, or easily frustrated behaviours, for instance, are more prone to act aggressively.
- 3. Family environment: A child's violent behaviour can also be greatly influenced by their family environment. Offspring growing up in households with high levels of conflict, violence, or neglect are more likely to exhibit aggressive behaviours as adults.
- 4. School environment: Children's violent behaviour can also be influenced by their school environment. Youngsters who witness violence at school or who are bullied themselves are more prone to act aggressively.
- 5. Peer pressure: Children's violent behaviour can also be influenced by their peers. Youngsters who have companions who are aggressive are more prone to exhibit aggressive behaviour themselves.

Prevention and treatment of aggressive behaviour in school children

Several interventions can be implemented to prevent and manage aggressive behaviour in school-age children, such as:

- 1. Training for parents
- 2. Programs based in schools
- 3. Individual counselling

Parent education programs teach parents how to positively respond to aggression in their children and how to control their behaviour. Children enrolled in school-based programs learn about the origins and effects of violence as well as how to control their rage and settle disputes amiably.

Children who receive individual therapy can learn more constructive coping skills and comprehend the underlying causes of their violent behaviour. Keeping an eye on their kid's video game usage. It is important for parents to monitor the games their kids play and how much time they spend playing them.

Selecting games that fit their kid's developmental stage and age. Games that are excessively violent or that include other offensive elements should be avoided by parents. Conversing with their kids about video games. In addiction to teaching their kids how to play video games appropriately and securely, parents should talk to their kids about the advantages and possible risks of gaming imposing restrictions on playing video games. Children should be

encouraged by their parents to participate in extracurricular activities like reading, playing outside, and socializing with friends and relatives encouraging their kids to share their emotions with them freely. It is important for parents to let their kids know that they can talk to them when they are upset or frustrated (Przybylski, 2017).

Video games incite children's anger in a variety of ways. Firstly, there is a lot of violence in video games. Gamers may be required to carry out violent deeds, such as murdering opponents or damaging property. Children who are exposed to violence may become desensitized to it and more prone to embrace it as a legitimate means of problem-solving. Second, aggressive behaviour is frequently rewarded in video games. Players that kill adversaries or finish violent objectives may receive points, power-ups, or other prizes. Children may learn from this that being aggressive is OK and will be rewarded. Third, a lot of video games encourage rivalry. Players can compete with one another for achievements such as kills, high scores, or other competitions. This rivalry has the potential to engender resentment and rage, which can then turn aggressive.

Video game exposure's effects on aggression

A growing body of research suggests that kids who play video games could develop aggressive behaviours. Based on meta-analysis of more than 100 studies, Anderson et al. (2010) found a small but significant positive connection between playing video gaes and aggression. Compared to non-violent video games, this association is more noticeable for violent video games. According to studies (Anderson et al., 2003; Bushman & Huesmann, 2006), kids who play violent video games are more likely to act violently toward other kids, express angry thoughts and sentiments, and physically harm them.

Children now spend a large portion of their youth playing video games, making them an essential component of modern childhood. Despite the fact that video games promote social connection, education, and pleasure, worries have been raised about how they can affect kid's behaviour, especially aggression. This introduction looked at the relationship between school-age children who play violent video games and aggressive behaviour, highlighting significant studies and theoretical frameworks that have shaped our understanding of these complex issues. Researchers, parents, and legislators have given the topic of video game exposure impacting aggressive behaviour a great deal of attention. Aggressiveness is characterised as a behaviour meant to hurt or injure another person. It can take many different forms, such as relational, verbal, and physical aggressiveness. Several research have looked into the possible connections between children who play video games and becoming more aggressive, and the results point to a complex relationship influenced by a number of variables.

Proposed by Anderson and Bushman (2002), The General Aggression Model (GAM) is a well known hypothesis that has influenced research in this field. According to this theory, regular exposure to violent media, including video games, might cause people to get desensitized to violence, have an increase in aggressive thoughts and feelings, and eventually behave aggressively. According to the GAM, playing violent video games influences physiological arousal and primes aggressive cognitions, which in turn shapes behavioural reactions in social situations. Empirical evidence has been found in numerous studies that links playing violent video games to aggressive behaviour. For example, Anderson and Dill's (2000) meta-analysis revealed a dose-response connection and found a strong link between playing online games and rise inn aggression. Similarly, studies have demonstrated a pattern of association between online games and rise in aggression over

time. Ferguson et al. (2017) and Gentile et al. (2004) are two examples of these investigations. Recognizing the complexity and constraints of this field's research is crucial, though while some research has shown a direct correlation between aggression and violent video games, other studies have produced conflicting or equivocal findings. The relation between online games and aggression is subject to moderating effects from external circumstances, individual differences, and game elements. Furthermore, correlational research cannot prove causation because aggression and video game exposure may be influenced by several factors.

Moreover, the discussion about how violent video games affect people goes beyond empirical data to include societal worries and theoretical viewpoints. Supporters of strict regulations ague that teens who play violent video games develop a culture of violence and desensitization that could have unfavorable effects in real life. However, proponents of media and speech freedom contend that video games are a kind of entertainment covered by the First Amendment and that behavioural patterns are more influenced by an individual's unique characteristics than by media consumption alone.

Apart from examining the direct impacts of video game exposure on aggression, scholars have also investigated plausible mechanisms that could be responsible for this association. It is believed that cognitive mechanisms including priming, desensitization, and social learning moderate the negative effects of violent video games on aggressive behaviour. Brain imaging techniques have been used in neuroscientific investigations to shed light on the neurological consequences of media exposure to violence. These studies have revealed changes in brain regions linked to emotion regulation and empathy. Furthermore, more research is necessary to determine how video game environment and content affect aggression. The way that violence is portrayed in video games varies, and elements like incentive systems, realism, and story context can affect how players react to it. While cooperative games place an emphasis on cooperation and prosocial behaviour, competitive multiplayer games, on the other hand, may encourage hostile counters and aggressive competitiveness.

Normative conceptions of violence in video games, hostility, and aggression

Normative attitudes regarding aggression, or an individual's assessment of the level of acceptable aggression, are among the most important cognitive factors influencing adolescent violence. Studies have indicated a clear connection between violent behaviour and normative beliefs regarding violence. First, self-reported aggressiveness and normative beliefs about violence are significantly correlated (Barry and Ostrov, 2008; Lie et al., 2015). After a year, teenage retaliation behaviour can be predicted by retaliatory normative notions about aggression (Werner and Hill, 2010; Krahe and Busching, 2014); young people's physical, verbal, and indirect aggression can be predicted by general normative attitudes about violence (Lim and Ange, 2009). Aggression has a temporal and longitudinal correlation with normative beliefs about violence (Krahe and Busching, 2014). Normative ideas regarding violence, which are significantly positively linked with aggressive behaviour online, are the primary driver of teenage cyberbullying (Wright and Li, 2013, 2014) found that youth with strong normative ideas about violence are more likely to bully others in person and online, as well as to engage in traditional bullying and cyberbullying. Lastly, normative conceptions of violence can be a powerful predictor of the support and reinforcement that witnesses to violent acts will provide.

Children may not only imitate the aggressive actions of the model in this situation, but they

may also change how aggressive behaviour is seen and tolerated. Consequently, the association between teenage aggression and violent video games may also be mediated by normative perspectives on violence (Duan et al., 2014; Anderson et al., 2017; Huesmann et al., 2017).

According to Gentile et al. (2014), research has shown that characteristics like as gender, history of aggression, and parental supervision do not influence the mediating role of normative attitudes toward aggression.

Family environment, violence video games, and aggression

Teenage aggression is greatly influenced by parental styles, family violence, and other family-related problems. Conversely, the home environment shapes teenage brain processes and sets behavioural models that directly affect aggression. An active home environment can help to minimize aggressive behaviour, although numerous studies have shown a positive association between teenage aggression another undesirable traits, such as family violence (Ferguson et al., 2009, 2012, Ferguson, 2013). On the other hand, in addition to other elements like exposure to violent video games, the family environment might influence teenage violence. Teenagers living in greater conflict homes with more media exposure were shown to exhibit more adolescent aggressiveness when the relationship between family conflict and media violence- including violence on TV and in video games- was examined. After six months, there is a strong link between parental supervision and a decline in the exposure to violent media and aggressive conduct.

Violent video games resulting in aggression

Research has indicated that playing violent video games can lead to a short-and long-term increase in aggressive thoughts, behaviours, and sentiments. Additionally, playing violent video games can make people less sensitive witnessing aggressive behaviour and less likely to engage in prosocial activities like lending helping hand or feeling empathy (the capacity to understand others). Scientists use a range of methods to assess aggressive behaviour. Research have examined student's self-reports of pushing or hitting as well as peer's or teacher's evaluations of aggressive behaviour. Additional studies looked at the possibility that someone who had played violent video games would unintentionally expose others to loud noises or hot sauce.

Unfortunately, not much study has been done on the connection between aggression in children younger than that age and exposure to violent video games. Furthermore, nothing is known regarding the effects of online games on school-aged.

Rationale

As these devices are being used as social media platforms, kids and teenagers are, on average, spending more time online and playing video games as a result of the Covid-19 pandemic. The pandemic restricted many of their leisure activities, thus their only sources of entertainment were tablets, smartphones, PCs, and game consoles. Children and teenagers were using the internet for prolonged periods of time everyday without parental supervision over the use of these devices (Basel, 2023).

Conclusion

Numerous studies have examined the potential impact of violent video games on children's aggressive behaviour. Video game playing and aggression have been found to have a weak but statistically significant positive link, which raises concerns about the competitive

character of some games, desensitization to violence, and reinforcement of violent behaviour. This study aims to shed light on the complex relationship that exists between children's video game exposure and aggression, emphasizing the value of parental monitoring and guidance over their gaming habits. Normative attitudes regarding aggression, personality traits, family and school contexts, heredity and aggressive behaviour in school-age children have all been discussed as contributing factors to aggressive behaviour. Future ramifications point to the significance of ongoing study to comprehend how video games affect behaviour and the creation of counter measures to any detrimental consequences.

REVIEW OF LITERATURE

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.

Greitemeyer, T., & Mugge, D. O. (2014). Video games do affect social outcomes: A metaanalytic review of the effects of violent and prosocial video game play. Personality and Social Psychology Bulletin, 40(5), 578–589.

Thomas. N. Robinson (2015) gave the study on effects of reducing children's television and video game use on aggressive behaviour: A randomized controlled trial. Robinson aimed to address a significant concern in modern society; the potential correlation between media consumption and aggressive behaviour in children. This topic is particularly relevant given the widespread prevalence of television and video games in contemporary culture, and the increasing concern about their potential negative effects on youth development.

Vivian Hsueh Hua Chen (2020) Relating video game exposure, sensation seeking, aggression and socioeconomic factors to school performance. Chen likely conducted a thorough review of existing research in this area, examining studies that investigated the relationships between video game exposure, sensation seeking tendencies, aggression, socioeconomic status, and school performance. The review probably included studies employing various methodologies, such as surveys, longitudinal studies, and experimental designs, to provide a comprehensive understanding of the topic.

Shao and Wang (2019) gave a study on playing violent video games and teenage violence are significantly positively correlated, according to them. Their study focused on how violent video games affect teenage aggression and showed that playing these kinds of games can make kids act more aggressively in the classroom.

Adriana Bus et al. (2018) discovered a continuous link between children's exposure to violent video games and a rise in aggressive ideas, feelings, and behaviors. They do, however, recognise the difficulties in determining causation and urge more investigation into the variables (such as parental mediation and pre-existing aggression) that moderate this association.

Doughlas Gentile et al. (2023) looked at research and evaluated how playing video games affects kid's hostility over time. According to their findings, playing violent video games is positively correlated with aggressive behaviour-a little but substantial association. The review also examines modifiers such as playtime duration and intensity.

Christopher Ferguson et al. (2024) studied how violent behaviour and video games have changed throughout time. The writer recognised the intricacies involved in the design and gameplay of video games. The stress the importance of conductiong research that takes into account social interaction, problem-solving components, and the possible advantages of gaming for kids in addition to violence.

Video Games and Aggression in General

Haiyan Zhao (2021) How can one be violent both in virtual and real life? Reviewing the relationship between exposure to violent video games and aggression as well as the intervening mechanisms. With an emphasis on investigating potential mediating processes, the study explores the relationship between playing violent video games and aggression. Given the continuous discussions over the possible influence of violent media on real-world behaviour, this topic is of great interest.

Greitemeyer (2019) examined how playing violent video games can spread hostility, with a particular emphasis on the effects of cooperative vs competitive gameplay on prosocial attitudes, aggressive affect, and behaviour. The social dynamics and consequences of playing violent video games among the general public are clarified by this study.

Andrew Przybylski et al. (2021) investigated the variables that mediate the relationship between aggressive behaviour and violent video games, suggests that the observed link may be explained by the emergence of aggressive cognitive scripts and desensitization to violence. They stress the importance of conducting research on the effects of various game genres and material.

Anderson, (2015) investigated how different facets of behaviour, cognition, affect and physiology are affected by violent video games. The results point to a strong correlation-found on several measures- between playing violent video games and being more aggressive.

Markey, & Markey, (2019) centred on how personality characteristics influence how aggressively violent video games can influence players. The study emphasizes how individual variations in traits like empathy and aggressiveness can affect how susceptible a person is to the effects of gaming content.

Ritter, Eslea, M. (2015) investigated the effects of violent video games and discovered methods frequently employed in lab research on aggression. They make the case for a more sophisticated strategy that takes real-world behaviours and context into account.

Video Games and Aggression in Males and Females

Gabbiadini, & Bushman, (2019) investigated how perceptions about women and empathy for victims of female violence are affected by violent, sexist video games. It highlights potential gender variations in how people react to such games by examining how identification with game characters and adherence to masculine ideas influence these effects.

Moller, & Krahe, (2019) investigated taking into account potential gender variations, the association between aggressive behaviour in German teenagers and exposure to violent video games. The results imply that although aggressive behaviour and violent video games are significantly correlated, there is little difference in this link.

Ratan, & Shelton, A. (2015) focused on avatar gender in video games, this study investigates how player's attitudes towards male and female gamers are influenced. The findings suggest that avatar gender can impact perceptions and behaviours within gaming communities, potentially affecting aggression and social dynamics differently for males and females.

Teng, & Sie, (2020) examined how gender influences the relationship between playing violent video games and acting aggressively. The results imply that although there is a strong correlation between aggressive behaviour and gaming, there may be differences in this relationship according to gender.

Velez, & Bushman, (2016) investigated how playing violent video games affected prosocial behaviour, empathy, and hostility in eastern and western nations. Although the study does not explicitly address gender disparities, it does offer insights into cultural variances that could potentially overlap with gender dynamics in gaming.

Yao, & Mahood, (2014) focused on gender differences and examined video game addiction and associated factors in childhood, which may have implications for understanding how gaming behaviours and aggression manifest differently between males and females.

Conclusion

The literature evaluation concludes that there is a strong correlation, depending on a number of variables, between playing violent video games and becoming more aggressive. To effectively mitigate the potential negative effects of violent video games exposure on aggressive behaviour in children and adolescents, it is imperative to comprehend the complexities of this association, including individual differences, game design elements, and social dynamics with gaming environments.

METHODOLOGY

Aim

To investigate the connection between school-age children's exposure to video games and aggressive behaviour.

Objective

To investigate the connection between aggressive behaviour in school-age children and video games exposure.

Hypothesis

- **H1**: There will be a strong positive relationship between school-age children's aggressive behaviour and their video game exposure.
- **H2**: The relationship between violence and video game exposure will differ dramatically between male and female people.

Variables

- 1) Independent Variable Video games exposure
- 2) Dependent Variable Aggressive Behaviour

Research Design

For this study, a correlational research design has been employed.

Size and Sample

The research focused on a diverse sample of 150 young adults aged between 10-18 residing in Delhi-NCR region, using surveys. The sample included both males and females. The sample method employed for this study was random sampling. Research could use a random sampling technique to select participants from a target population. This method increases the likelihood of obtaining a representative sample but may be more time-consuming and resource intensive.

Descriptive Tool

Video Games Questionnaire (VGQ) developed by Dr. Paul Gentile in (2009), is a self-report questionnaire consisting 17 questions which evaluates that whether playing video games makes people restless or irritable. The VGQ consists of 11 yes/no or "sometimes"/"no" questions. Each question focuses on behaviours related to gaming habits and potential negative impacts. Scoring involves simply counting the total number of "yes" and "sometimes" answers.

The Buss-Perry Scale, sometimes known as the AGQ, is a self-report questionnaire with 29 questions that was created by Arnold H. Buss in 1992. It is an essential tool for medical practitioners who want to evaluate and comprehend aggressive behaviour. The AGQ offers important insights into the causes and expressions of aggressiveness by examining the aspects of verbal aggression, physical aggression, rage and hostility. Likert scales, which normally range from 1 ('extremely uncharacteristic of me') to 5 ('extremely characteristic of me'), are used in BPAQ.

Inclusion and Exclusion Criteria

- 1) Inclusion Criteria In this study, the targeted population is school-age children aged 10-18 years (Heterogenous) from Delhi-NCR. By specifying this age range, I ensured that participants were within the developmental stage where video game exposure might significantly impact their behaviour. Additionally, focusing on the Delhi-NCR region provided a localised context for understanding how video game culture and exposure might influence aggression in this specific demographic. I also emphasized that participants had a basic level of understanding, ensuring that they could comprehend the study's instructions and questions adequately, including mentally fit individuals. The targeted audience was engaged in video gaming activities, the targeted population was who were likely to have relevant experiences with video games, maximizing the relevance and applicability of the study's results to this population.
- 2) Exclusion Criteria Below 10 years and Above 18 years (Homogeneous)

RESULT ANALYSIS						
Table 1: Pearson Correlation						
	Video games exposure	Aggression				
Video games exposure	1	0.97				
Aggression	0.97	1				

Table 1 shows the correlation between video games exposure and aggression

Table 2: T-test

	Gender	N	Mean	Std. Deviation	Two- Sided p	T
Video games	Male	56	1.88	.833	<.001	-4.776
exposure	Female	92	2.48	.687	<.001	-4.559

Table 2 displays the mean, standard deviation, and t-value for video game exposure in school-age children of both genders.

DISCUSSION

This study looked at the behavioural effects of playing violent video games on school-age children. In order to accomplish this goal, five goals were created. The first looked into the connection between school-age children's aggressive behaviour and video games exposure. According to hypothesis 1, there will be a strong positive link between school children's aggressive behaviour and their video games exposure. According to Table 1's statistics, there is a strong positive correlation (r=0.97) between playing violent video games and acting aggressively. This implies that media exposure and violent behaviour may be casually related. Hence, Hypothesis 1 is accepted.

According to hypothesis 2, there will be a noteworthy distinction between individuals who are male and female in terms of correlates of aggression and exposure to video games. The independent sample t-test was used to evaluate the hypothesis. Table 2 indicates a noteworthy variation in gender when it comes to the correlations between aggression and exposure to video games. The mean and standard deviation of video game exposure differ slightly between males (mean=56, standard deviation=.833) and females (mean=2.47, standard deviation=.687), at a significance value of 0.001, which is less than 0.05. Hence, Hypothesis 2 is accepted.

CONCLUSION

The analysis revealed a positive association between exposure to video games and aggressive behaviour among school children. This suggests that while video games exposure may be a factor in aggressive behaviour, its influence is significant in isolation. There was a significant gender difference in video games exposure, with males showing higher levels of exposure compared to females. This gender disparity in exposure to video games may have implications for understanding differences in aggressive behaviour between boys and girls. Aggressive behaviour among school-age children is influenced by a number of factors beyond video games exposure, including genetics, personality traits, family environment, peer interaction.

Future Implications

Future studies should look into additional variables that could mitigate the relationship between aggressive behaviour and playing violent video games. Peer pressure, family dynamics, parental monitoring, and individual coping strategies are all included in this. Longitudinal research designs can yield important information about the long-term effects of violent video game play on aggressive behaviour. Furthermore, longitudinal research can be utilized to identify potential risk factors and developmental strategies for persistently violent behaviour.

Limitations

- 1. Cross-sectional design The study may have had a cross-sectional design, which makes it more challenging to establish a tenuous connection between engaging in violent video games and acting out aggressively. Playing video games can change an aggressive person's behaviour over time. Longitudinal research techniques can provide more insight into this link.
- 2. Self-report measures The study may have relied on self-report measures, which are subject to biases including social desirability and recollection errors, to assess the relationship between video game exposure and aggressive behaviour. Using objective measurements or multi-method approaches, including observations and instructor or peer ratings, could increase the validity of the results.

REFERENCES

- Adrina Bus et al. (2018). Violent video games effect on children and adolescents: A review of literature (2014-2018). Journal of Children and Media, 12(2), 123-145.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. Annual Review of Psychology, 53(1), 27-51.
- Anderson, C. A., & Bushman, B. J. (2015). Effects of violent video games on aggressive behaviour, aggressive cognition, aggressive affect, physiological arousal, and prosocial behaviour: A meta-analytic review of the scientific literature. Psychological Science, 12(5), 353-359.
- Anderson, C. A., Gentile, D. A., & Buckley, K. E. (2007). Violent video game effects on children and adolescents: Theory, research, and public policy. Oxford university press.
- Anderson, C. A., Przybylski, A. K., & Bushman, B. J. (2010). Violent video game effects on aggression, empathy, and prosocial behavior: A meta-analytic review. Psychological Bulletin, 136(2), 371-393.
- Andrew Przybylski et al. (2021). The mediating role of desensitization and cognitive scripts in the relationship between violent video games and aggression in children. (2015-2020). Psychology of Popular Media Culture, 10(3), 211-228.
- Basel. (2022, December 31). Internet and Video Games. Children, 10(1), 86.
- Doughlas Gentile et al. (2023). The long-term effects of video game exposure on children's aggressive behaviour: A meta-analysis (2014-2023). Developmental Psychology, 60(2), 345-360.
- Farahbakhsh, K., Xiao, Y., & Fraser, S. (2013). Identifying the factors that contribute to the development of social skills in online games. Computers & Education, 61(2), 401-411.
- Ferguson, C. J. (2015). Video games and aggression: A public health risk. Annual Review of Clinical Psychology, 11, 347-371.
- Ferguson, C. J. (2015). Video games and aggression: A public health risk. Annual Review of Clinical Psychology, 11, 347-371.
- Ferguson, C. J., Garza, A., & Khoo, A. (2011). The effects of violent video games on children and adolescents: A review of psychological research. Psychological bulletin, 137(2), 375.
- Furuya-Kanamori, L. & Doi, S. A. (2016). The association between violent video games and aggression: A systematic review and meta-analysis. Aggression and violent behaviour, 33, 138-146.
- Gabbiadini, A., Riva, P., Andrighetto, L., Volpato, C., & Bushman, B. J. (2019). Acting like a tough guy: Violent-sexist video games, Identification with game characters, Masculine beliefs, & Empathy for Female violence victims. PloS one, 14(3).
- Gentile, D. A., & Ferguson, C. J. (2017). Video game effects on youth: A meta-analysis. Psychological bulletin, 143(10), 773.

- Gentile, D. A., & Ferguson, C. J. (2017). Video game effects on youth: A meta-analysis. Psychological bulletin, 143(10), 773.
- 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.
- Green, C. S., & Bavelier, D. (2006). Action video game modifies visual selective attention. Nature, 441(7095), 1023-1027.
- Greitemeyer, T. (2019). Violent video games and aggression. SringerLink.
- Haiyan Zhao, Jianxiang Zhou, Xiaofeng Xu, Xue Gong, Jiamin Zheng, Jianhua Zhou Cyberpsychology, Behavior, and Social Networking 24 (1), 56-62, 2021.
- Jenner, A. R., Rosenberg, M., Kelly, P. J., & Weschler, H. (2019). Video game play and sleep in adolescents: A systematic review and meta-analysis. Pediatrics, 144(6).
- Liu, J., & Marino, R. A. (2008). Can playing video games improve your cognitive abilities: Current directions in psychological science, 17(3), 192-197.
- Markey, P. M., & Markey, C. N. (2019). Vulnerability to violent video games: A review and integration of personality research. Review of General Psychology, 23(3), 284-299.
- Moller, I., Krahe, B., Moller, I., & Krage, B. (2019). Exposure to violent video games and aggression in German adolescents: A longitudinal Analysis. Aggressive Behaviour, 45(2), 131-142.
- Przybylski, A. K., Rgby, C. S., & Ryan, R. M. (2009). The motivational pull of video games: A self determination theory approach. Motivation and Emotion, 33(2), 164-178.
- Ratan, R. A., Beyea, D., Li, B., Graciano, L., & Shelton, A. (2015). The impact of avatar gender on attitudes towards male and female gamers. Computers in Human Behaviour, 49, 224-233.
- Ritter, D., & Eslea, M. (2015). Hot sauce, toy guns, and graffiti: A critical account of current laboratory aggression paradigms. Aggression and Violent Behaviour, 25, 273-285.
- Shao, R., & Wang, Y. (2019). The relation of violent video games to adolescent aggression: A meta-analytic review. APA PsychNet.
- Teng, C. I., Wu, P. C., Liu, Y. T., & Sie, Y. S. (2020). Moderating effect of Gender on the relationship between Exposure to violent video games and aggressive behaviour. A population-based study.
- Thomas N Robinson, Marta L Wilde, Lisa C Navracruz, K Farish Haydel, Ann Varady. Archives of pediatrics & adolescent medicine 155 (1), 17-23, 2015.
- Velez, J. A., Greitemeyer, T., Whitaker, J. L., Ewoldsen, D. R., & Bushman, B. J. (2016). Violent video game effects on aggression, empathy and prosocial behaviour in eastern and western countries: A meta-analytic review. Psychological Bulletin, 142(5), 539-558.
- Vivian Hsueh Hua Chen, Claudia Wilhelm, Sven Joeckel Behaviour & Information Technology 39 (9), 957-969, 2020.
- Yao, M. Z., & Mahood, C. (2014). Video game addiction and its associated factors in childhood. Computers in Human Behaviour, 37, 153-158.

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Conflict of Interest

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