

## USAGE OF VIDEO GAMES AS COGNITIVE EXERCISE AND ITS INFLUENCE ON EDUCATION AMONG ADULTS (A CASE STUDY OF MULTAN DISTRICT)

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**Received:** 25 September, 2023 **Revised:** 04 November, 2023 **Accepted:** 12 November, 2023 **Published:** 18 November, 2023

### ABSTRACT

The study explores the repercussions of Usage of Video Games as cognitive exercise and Its Influence on Education among Adults in District Multan. Video games, characterized as interactive multimedia forms of entertainment experienced on various digital platforms, are scrutinized for their potential to disrupt adults' concentration on academic tasks. A substantial proportion of participants in the study strongly concurred that video games had deleterious effects on their mental health. This research underscores the urgent need to enhance awareness of the psychological consequences associated with excessive gaming among the student population, the study scrutinizes the prevalent patterns of video game consumption among adults in District Multan and evaluates adults' academic achievements as a cognitive exercise in relation to their engagement with video games. Understanding the intricate relationship between gaming and Education, it carries manifold significance. It offers invaluable insights for educators and policymakers seeking to navigate the impact of video games on adults in District Multan, A selection of 200 respondents (Students) as sample size using a simple random sampling technique targeted. Data collected via a self-administered questionnaire designed to assess the effects of video games. Data analyzed by using SPSS (Statistical Package for the Social Sciences), incorporating descriptive statistics, Current study illuminates a negative correlation between video games and both Education and health. Adults expressed that video games hindered their ability to concentrate on schoolwork and adversely affected their mental health. Further investigations are warranted to delve into the impact of video game consumption on adults' time management skills and study habits, Potential adverse consequences video games as cognitive exercise on the Education and mental well-being of adults in District Multan. It accentuates the imperative for ongoing exploration of this subject to advance a more inclusive thoughtful of the trials posed by extensive gaming among the student demographic.

**Key Words:** Video games, Education, Cognitive Exercise, Mental well-being

### INTRODUCTION

The increased use of technology, including smartphones, tablets, and video game consoles, and the Internet, among children and adolescents raises concerns almost its impact on emotional and cognitive growth. Studies in the United States show

high preparation rates with technology strategies among children under 12, with 71% of parents concerned about excessive screen time. Longitudinal studies suggest a link between more hours using devices and lower life satisfaction, as well as poorer

cognitive and academic functioning. Gaming habit is likewise on the rise, with occurrence extending from 3.5.0% to 4.2% worldwide. The World Health Organization recognizes Gaming disorder in the ICD-11 and Internet Gaming Complaint in the DSM-5. Sleep deprivation, cyberbullying, exposure to violent content, and excessive device usage have been associated with lower Education. Sleep deprivation plays a mediating role between weekend gaming and Education. Technological device use was not linked to life satisfaction, but cell phone and video game usage correlated with lower Education mediated by sleep deprivation (Ramirez, 2021).

Adults nowadays are devoting a considerable amount of time to mobile phones and video games, often at the expense of their studies and exposure to inappropriate content. This situation poses a challenge for parents and Muslim families, necessitating a comprehensive approach to address both the positive and negative impacts of TV, computers, and video games on children and adolescents. The realm of video games has undergone a revolutionary transformation, with technological advancements making them more accessible and affordable for children and teenagers. However, playing computer games can have more adverse effects on children compared to violent movies. Immersed in the game environment, their emotions become influenced, leading to unrealistic reactions and behaviors that may impact their real-life interactions. Statistics reveal that 32% of children aged 9 to 17 play a specific video game daily, and a staggering 60% attempt to do the same. This prevalence has raised concerns about the video game industry's promotion of violence and sexual harassment, with games portraying criminals attacking innocent children for points. The obsession with electronic games has become a global concern among parents, starting from the inception of the first computer game in 1962 and growing rapidly since then. While computer games can be beneficial for children's mental development, the inclusion of violent elements by some video game companies can contribute to aggression, nudity, sexual violence, and criminal behavior in young individuals and teenagers. In Pakistan, many learners use computer games in their classes and workplaces, resulting in a waste of time and negatively impacting their learning outcomes. The excessive usage of computer games

has been found to be related to adults' GPA and hampers their effective learning. Parents in the study area had limited knowledge about their children's activities and learning, which further hindered their focus on higher-level learning. Overall, the excessive use of video games has had a detrimental effect on adults' grades and attendance, placing immense pressure on their Education and overall learning experience. It is crucial to address these issues promptly and find a balanced approach that considers both the benefits and potential risks associated with technology and video game use among young individuals (Dehraj, 2019).

## **OBJECTIVE OF STUDY**

### **The Study Consists Following Objectives**

To study the patterns of video game usage among adults in the district of Multan.

To assess the Education of adults about their video game usage.

To explore the potential factors that mediate or moderate the bond between video game usage and Education.

To identify the perceptions and attitudes of adults, parents, and teachers towards video game usage and its impact on Education.

To provide recommendations for promoting responsible video game use and enhancing Education among adults

### **Significance of the Study**

The significance of studying the effects of video games on Education among adults in district Multan is multi-faceted Understanding how video gaming relates to .Education can provide valuable insights for educators and policymakers. Parents' composition an energetic part in guiding their youngsters' screen time besides gaming habits. Awareness of the limited impact of video games on Education can help parents establish healthier screen time limits and promote more balanced lifestyles for their children. Excessive gaming has been associated with various negative effects on mental health, sleep patterns, and physical well-being. By exploring its impact on Education, the study sheds light on potential connections between gaming habits and overall health among adults. Evidence-based findings can inform public policy related to screen time regulations and educational guidelines.

Policymakers can use the results to develop initiatives that encourage responsible technology use while supporting academic success among adults. The study can help identify adults who may be at risk of academic underperformance due to excessive gaming. Early identification can lead to targeted interventions and support systems to help these adults achieve their academic potential. Recognizing that not all video games have negative effects, educators can harness the positive aspects of gaming to support learning and cognitive development. Cultural and Regional Context: Conducting the study in district Multan provides insights into the specific gaming habits and academic challenges faced by adults in this region. The research contributes to the broader body of literature on technology's impact on learning outcomes. In conclusion, studying the effects of video games on Education among adults in district Multan offers valuable information for informed decision-making and intervention. It facilitates the development of strategies that promote responsible video game use while optimizing potential benefits and mitigating any negative consequences for adults' overall well-being and academic success.

### **LITERATURE REVIEW**

Savić Tot, T et al. (2023) investigated the association of video game habit throughout examination phases and the Education of higher education adults in an Eastern European country was. The research also explored how variables like age, gender, year of study, and employment status were linked to video game habits. The literature review summarized past research on the impact of video games on academic achievement, considering both positive and negative effects, along with mechanisms like time displacement, attentional effects, and sleep disruption. Conducted in December 2021, the study employed a quantitative survey approach on adults from two Serbian universities, using a convenient sampling technique to gather 233 valid responses out of 266 total participants. The survey, named "Adults and Video Games," featured sections on video game time, study time, GPA, and leisure activities, as well as general questions about demographics. The study addressed four research questions and presented its results. Variables of Nominal, Ordinal, and Scale types were utilized. The findings suggested that

increased video game time during exams correlated with lower academic grades, although high-achieving adults tended to game less and study more. Despite a weak negative correlation between video game time and GPA, statistical significance wasn't reached. Moreover, GPA did not significantly correlate with time spent on various entertainment activities. The paper concluded that while a slight negative correlation existed between video game time and exam period GPA among Serbian university adults, the grade gap between gamers and non-gamers was minimal, indicating video games as just one of many influences on Education. Future research suggestions included broader Eastern European investigations with larger samples and diverse video game dimensions, as well as exploring associations among video game usage and other factors affecting speculative attainment, like sleep and social engagement.

Quwaider, M. et al. (2019). The authors discussed how video games gained popularity and evolved from entertainment into various realms, such as education and social interactions. Their study aimed to examine players' responses and skills following video game engagement, encompassing explicit and implicit, positive and negative outcomes. Addressing supporting evidence from previous research, the study aimed to provide an encompassing view of video games' influence on player behavior, contributing to ongoing debates. Using existing literature, the study refrained from introducing novel empirical data, adopting a literature review methodology. Titled "A Survey," the study concluded a link between video games and player behavior, analyzing diverse research types and evidence. While some studies showcased positive effects like enhanced problem-solving and social bonds, others highlighted potential refusals including aggression, violence, anxiety, and stress. The authors acknowledged the need for further research to comprehensively grasp video games' impact and to develop strategies for positive outcomes while mitigating adverse effects. In essence, the study emphasized the complex relationship between video games and player behavior, urging deeper exploration and investigation for a nuanced understanding.

Babu (2019) the study emphasized the growing popularity of video gaming as a leisure activity

among youths, with dominance rates reaching as high as 78% in certain industrialized countries. The widespread accessibility of smartphones and computers exposed a significant portion of the population to the world of video games. The study highlighted the pressing need to address the impact of video games on individuals' overall health, particularly given the global surge in smartphone use and the easy availability of a wide range of video games. The study's findings indicated that medical adults who engaged in regular video gaming experienced lower Education and longer sleep durations compared to non-gaming adults, with statistically significant differences. On average, the subjects in the study group spent  $1.2 \pm 0.82$  hours per day on video games and had a sleep duration of  $7.48 \pm 0.844$  hours per day. Furthermore, a strong negative correlation was observed between video gaming duration and Education, while no significant correlation emerged between sleep duration and video gaming.

### **Theoretical Review**

In this study, we draw upon several sociological theories to observe the impact of video game engagement on various aspects of individuals' lives. These theories provide a lens through which we can understand the complex interplay between video game use and factors such as stress, Education, mental well-being, and physical health.

### **Social Integration Theory**

Social Integration Theory, developed by Emile Durkheim, posits that socially integrated individuals tend to have better mental health and well-being. We apply this theory to understand how video game engagement may influence social integration, mental state, and stress levels.

### **Time Allocation Theory**

Time Allocation Theory, influenced by the work of Becker and others, suggests that individuals allocate their time to various activities based on perceived benefits and costs. We use this theory to explore how video game usage affects time management for studying and the ability to focus on schoolwork.

### **Uses and Gratifications Theory**

Uses and Gratifications Theory, rooted in the work of Katz, Blumler, and Gurevitch, focuses on individuals' active choices in media consumption to satisfy specific needs. We apply this theory to understand why individuals turn to video games for stress relief and entertainment.

This theoretical framework guides our analysis and interpretation of the data collected in this study. By applying these sociological theories, we aim to shed light on the multifaceted association among video game engagement and various aspects of individuals' lives, ultimately contributing to a deeper understanding of the sociological implications of this widespread leisure activity.

### **Research Design Research Methodology**

Study carried Quantitative research Approach. This study cross-sectional survey was used. This design enables data collection from a quantitative diverse group of participants at a single point in time, offering insights into their perceptions, behaviors, and attitudes regarding the impact of video games on Education.

The present study was conducted in District Multan.

### **Target Population**

The target population for this study comprised adults who played game from different areas District Multan, Punjab, Pakistan. Some student gamers from 18 Kassi Gulgashat, Tuglaq Town, New Zakariya Town, Vehari chowk All, adults are different age from 6year old to 25 year old. Mostly are teenager.

### **Sample Size**

The study involved a sample of 200 adults from various educational institutions within the district and gaming zone. The participants were selected to represent different education levels, including primary, secondary, and higher education institutions.

### **Sampling Technique**

A simple random sampling technique adopted to select respondents for the study. This method allowed for the deliberate selection of individuals who could provide valuable insights into the effects



of video games on Education. The participants were chosen from diverse backgrounds and education levels to ensure a comprehensive representation of perspectives.

The primary tool used for data collection was a structured questionnaire. The questionnaire was developed based on the research objectives. It included a series of questions designed to gather information about participants' demographics, video gaming habits, Education, and perceptions of the influence of video games on various aspects of their lives.

**Pre-testing**

To certify the rationality and accuracy of survey pre-testing was done Twenty Questionnaire filled for pretest. After pre testing some hurdles were noticed and some modification made in the tool. The researcher had to change the questionnaire after pre-testing.

**Coding**

For statistical analysis, the process of coding was used in which in which numerical and mathematical proceeding digits were used for data coding the researcher were used the statically analysis.

**Data Collection Process**

The data collection process convoluted distributing the questionnaires to the selected participants in District Multan. The participants were briefed about the study's purpose and encouraged to provide honest and accurate responses. The questionnaires were administered in person and were also made available electronically for those who preferred that method.

**Data analysis tool**

After data collecting and processing all data interred in computer and analyze through SPSS26 software.

**Major Findings**

Amount of time allocated to playing video games each day is associated with adults' decisions regarding the priority of gaming relative to completing their school assignments. To understand the association of variables with video games and their impact on adults, findings elaborated in tables as;

**Table No. 01**  
**Descriptive Statistics**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Age of respondents	200	1	4	2.83	.541
Sex	200	1	2	1.32	.470
Education of respondents	200	1	4	2.38	.727
Which part of the area are you from?	200	1	2	1.76	.428
What is your family monthly income?	200	1	4	2.42	1.200
Does your family have enough money for things you need?	200	1	3	1.74	.612
How do you spend your free time?	200	1	4	2.28	1.288
When you were a kid, did you have any device for playing games?	200	1	2	1.45	.498
When did you start playing video games?	200	1	4	1.70	.671
How many video games have you played in your life?	200	1	4	1.93	1.061
Which type of video game do you prefer to play?	200	1	8	3.10	2.075
Do you like to play video games with friends	200	1	3	1.68	.836
What do you mainly use for playing video games?	200	1	5	2.59	1.037
How do you find out about new video games	200	1	4	1.73	.788
What type of games do you prefer: online or offline?	200	1	2	1.46	.499
How much time do you spend playing video games each day	200	1	4	2.23	.964
How many hours do you play video games on weekends?	200	1	5	2.74	1.135
Do you think you're addicted to video games?	200	1	2	1.58	.496
What impact does playing video games have on your academic grades?	200	1	3	2.19	.783
How much do you think you understand during most lectures?	200	1	5	2.99	1.336
What was your average academic score in the last academic year?	200	1	5	3.25	1.318

How well do you understand most lectures?	200	1	5	3.25	1.340
How often do you engage in physical activities or exercise outside of playing video games?	200	1	5	2.88	1.141
Do you often prioritize playing video games over socializing with friends or family?	200	1	5	2.78	1.213
The effect of video game on your math calculation or reading or learning English?	200	1	5	2.97	1.426
To what extent do you independently create a study schedule?	200	1	5	3.20	1.376
Do you feel that playing video games makes you more creative?	200	1	5	2.75	1.348
Video games negatively affect my sleep patterns.	200	1	5	3.16	1.402
Do you believe playing video games for long periods affects your overall health negatively?	200	1	5	3.42	1.387
Video games have a negative impact on my overall Education.	200	1	5	3.10	1.439
To what extent do you think excessive video game usage leads to lower grades?	200	1	5	3.14	1.341
To what extent do video games help you relax and reduce stress?	200	1	5	2.89	1.300
How much has playing video games affected your ability to manage time effectively for studying?	200	1	5	3.09	1.294
How negatively do video games impact your mind?	200	1	5	3.10	1.356
How negatively do video games impact your eyes?	200	1	5	3.53	1.352
To what extent do video games negatively affect your ability to focus on schoolwork?	200	1	5	3.18	1.423
How much do you believe excessive video game usage leads to lower academic grades?	200	1	5	2.92	1.399
How often do you prioritize playing video games over completing school assignments?	200	1	5	2.80	1.256
How often do you notice physical discomfort, such as eyestrain or fatigue, after playing video games for an extended period?	200	1	5	3.38	1.373
To what extent do you experience increased stress or anxiety after prolonged video game sessions?	200	1	5	3.17	1.397
Valid N (list wise)	200				

**Table No.2**  
*Chi-Square Test Results: Association between Gaming Addiction and Education*

		What was your average academic score in the last academic year?					Total
		Below average	Average	Satisfactory	Good	Excellent	
Do you think you're addicted to video games?	Yes	19	18	23	13	12	85
	No	7	16	23	39	30	115
Total		26	34	46	52	42	200

**Table No.3**  
**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.464 <sup>a</sup>	4	.000
Likelihood Ratio	21.919	4	.000
Linear-by-Linear Association	19.083	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.05

**Chi-Square Test Results**

Pearson Chi-Square = 23.464  
 Degrees of Freedom = 4  
 Asymptotic Significance (2-sided) = 0.000  
 The chi-square test results indicate a significant association between self-perceived gaming addiction and Education ( $\chi^2 = 22.374$ ,  $df = 4$ ,  $p < 0.001$ ).

video game addict have low score in academic session.

There is a significant association between the gender of respondents and their beliefs about whether playing video games for long periods affects overall health negatively.

**Finding**

According to chi square video game addiction and Education has strong relation those adults who are

**Table 4**

*Chi-Square Test Results "Gender of respondents \*Do you believe playing video games for long periods affects your overall health negatively?"*

**Gender of respondents \* Do you believe playing video games for long periods affects your overall health negatively? Cross tabulation Count**

		Do you believe playing video games for long periods affects your overall health negatively?					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Gender of respondents	Male	15	19	32	24	45	135
	Female	7	17	11	10	20	65
Total		22	36	43	34	65	200

**Table No. 05  
 Chi-Square Tests**

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.736 <sup>a</sup>	4	.315
Likelihood Ratio	4.577	4	.333
Linear-by-Linear Association	.816	1	.366
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.15.

**Chi-Square Test Results**

Pearson Chi-Square = 22.374  
 Degrees of Freedom = 4  
 Asymptotic Significance (2-sided) = 0.000

than the conventional alpha level of 0.05. Therefore, we fail to reject the null hypothesis (H0), indicating that there is no significant association between respondents' gender and their beliefs about the negative impact of prolonged video game playing on overall health. These findings suggest that gender does not play a significant role in shaping these specific beliefs among the respondents in this study.

**Result Findings**

The chi-square test was conducted to examine the association between gender and beliefs about the impact of playing video games for long periods on overall health. The results reveal that the p-value for the Pearson Chi-Square test is 0.315, which is greater

**Table No. 06**

**Time Duration for playing video games each day \* How negatively do video games impact your eyes? Cross tabulation**

		How negatively do video games impact your eyes?					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
How much time do you spend playing video games each day	A little	6	9	11	12	15	53
	Some	6	18	11	12	24	71

	A lot	1	11	10	13	19	54
	I don't play	3	2	3	3	11	22
Total		16	40	35	40	69	200

Table No. 07

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.008 <sup>a</sup>	12	.528
Likelihood Ratio	12.095	12	.438
Linear-by-Linear Association	2.181	1	.140
N of Valid Cases	200		

a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is 1.76.

**Chi-Square Test Results**

Pearson Chi-Square = .528

Degrees of Freedom = 12

Asymptotic Significance (2-sided) = 0.528

**Result/Finding**

The chi-square test results indicate that there is no significant association between the amounts of time spent playing video games each day and how negatively video games impact the eyes. Pearson Chi-Square = 11.008, Degrees of Freedom = 12, Asymptotic Significance = 0.528. Likewise, the Likelihood Ratio and Linear-by-Linear Association tests also support the conclusion of no significant association. The N of Valid Cases is 200, and 6 cells (30.0%) have expected counts less than 5, with the minimum expected count being 1.76. In summary, the statistical analysis suggests that the amount of time spent playing video games each day does not significantly correlate with how negatively video games impact the eyes, based on the responses of the survey participants.

**DISCUSSION**

Based on the study's results, video games' impact on adults is multifaceted, with participants expressing a range of perspectives across different areas. The study revealed a mixed perception regarding the effect of video games on Education. While a significant portion agreed (23.0%) that video games have a negative impression, a larger group considered the impact neutral (46.0%). This suggests that adults' opinions are divided on whether video games directly affect their academic achievements.

Participants' viewpoints were diverse regarding the influence of video games on mental health. A substantial proportion (34.5%) strongly agreed that video games negatively affect their mental state. This suggests that many adults perceive a connection between video game engagement and their mental well-being, particularly regarding adverse outcomes. Many participants reported experiencing physical discomfort, such as eyestrain and fatigue, after playing video games for extended periods. The majority (56.0%) strongly agreed they experience such discomfort. This finding underscores the potential physical toll that prolonged gaming can have on adults. Adults had varying perspectives on how video games affect their ability to manage time and focus on schoolwork. A notable portion (53.0%) strongly agreed that video games negatively impact their focus, suggesting that they believe extended gaming can hinder their academic concentration. The study highlighted differing views on the relationship between video games and stress/anxiety. A significant number of participants (49.0%) strongly agreed that they experience increased stress or anxiety after prolonged gaming. Many adults associate heightened stress or anxiety with extensive video game engagement. The results are examined through a sociological lens, incorporating the established theoretical framework that draws from sociological theories such as the Uses and Gratifications Theory, the Health Belief Model, and concepts related to time allocation, academic focus, and social learning.

Firstly, the findings from Tables 4.31 to 4.39 reveal diverse participant perceptions and experiences



regarding video games. These perceptions relate to video games' potential as stress relief, their impact on time management, academic focus, mental well-being, eye health, physical discomfort, and heightened stress and anxiety levels. Such insights align with the Uses and Gratifications Theory, which posits that individuals actively choose and use media, including video games, to fulfill specific needs, such as relaxation or entertainment. This theory helps explain the varied responses, as individuals seek different gratifications from gaming, ranging from stress relief to leisure. Secondly, the Health Belief Model offers a valuable perspective when considering the negative impacts of video games on participants' physical health, such as eyestrain and fatigue (Table 4.34). The model's framework of perceived susceptibility, severity, benefits, and barriers can be applied to understand why some participants strongly agree that video games negatively affect their eyes while others disagree or remain neutral. This highlights the role of perceived susceptibility and severity of health issues in shaping individuals' behaviors and perceptions.

Furthermore, the discussion delves into the sociological implications of these findings on time allocation for academic tasks and the ability to focus on schoolwork. Participants who agree or strongly agree that video games negatively affect their focus may face challenges in balancing gaming with academic responsibilities, which connects to sociological discussions on time allocation and social learning. Additionally, the heightened stress and anxiety levels reported by some participants following prolonged gaming sessions can be seen through a sociological lens as potential consequences of leisure choices, aligning with discussions on the social aspects of well-being and leisure activities.

#### Conclusion

In conclusion, this research delved into the influence of video games on children's as well as Youngers Education and overall well-being. Through a comprehensive analysis of various factors, several significant findings emerged. The study highlighted a clear association between adults' time playing video games and their Education. Adults who dedicated much of their time to gaming tended to have lower academic scores than their peers who allocated less time to this activity. This underscores

the importance of balancing video game engagement with academic commitments.

Additionally, the research narrated on the issue of gaming habit and its repercussions. Those who self-identified as video game addicts displayed lower Education, indicating that addiction can be a detriment to adults' educational outcomes. Furthermore, time management and the ability to focus on schoolwork were areas significantly affected by video game engagement. Adults who believed gaming negatively impacted their focus and time management skills were likelier to prioritize gaming over completing assignments, potentially leading to academic challenges.

In summary, this study emphasizes the need for adults to manage their video game habits effectively. Excessive gaming and self-perceived addiction can hinder academic success, time management, and focus on schoolwork. Interventions should be considered to promote a healthy balance between gaming and academics to support adults in achieving their educational goals. Both adults and educational institutions must recognize the potential consequences of excessive video game engagement and work towards finding strategies to mitigate these effects.

#### SUGGESTION

##### Self-Awareness

Adults should reflect on their gaming habits and their impact on Education and overall well-being. Developing self-awareness can help them make informed decisions about their gaming activities.

##### Time Management

Adults need to prioritize their academic responsibilities over excessive gaming. They can benefit from time management techniques to allocate sufficient time to study and other essential tasks.

##### Support Systems

Teachers can create support systems within educational institutions, such as counseling services, to help adults struggling with gaming addiction or its adverse effects on Education.

##### Open Communication

Parents should maintain open and non-judgmental communication about their gaming habits with their

children. Understanding their perspectives can help parents guide them effectively.

### Setting Limits

Parents can set reasonable limits on gaming time, especially on school days, to ensure that children allocate sufficient time for homework and other responsibilities.

### Incorporate Digital Literacy

Integrate digital literacy and responsible gaming education into school curricula. Teach adults about the potential risks of excessive gaming and the benefits of responsible and educational gaming.

### Teacher Training

Provide training for teachers on recognizing signs of gaming addiction or excessive screen time among adults. Equip them with strategies to address these issues effectively.

### Resource Allocation

Allocate resources for developing educational video games that align with academic standards. These games can be used as tools for learning and skill development.

### Mental Health Support

Collaborate with mental health professionals to establish support programs within schools that address gaming addiction and related mental health issues. Ensure that adults have access to counseling services.

### In-Depth Analysis

Future researchers can conduct more in-depth studies on specific aspects of video game impact, such as the relationship between specific game genres and Education or the long-term effects of gaming.

### Longitudinal Studies

Longitudinal studies tracking the same participants over an extended period can provide deeper insights into the long-term consequences of excessive gaming on various aspects of life.

### Limitation

The data collected relies on self-reported responses from a sample of 200 participants, which may

introduce response bias and may not be entirely representative of the broader population.

The study primarily focuses on the quantitative assessment of participant perceptions and does not delve into qualitative aspects or in-depth interviews, potentially missing nuanced insights.

The data is limited to the specific questions asked in the survey and does not explore other potentially relevant variables or confounding factors that could influence the relationships observed. Longitudinal data could better understand how these perceptions change over time.

The study does not consider cultural or regional variations in video game usage and its impact, which could be significant globally.

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