

Original Research

Video game use among school children and its impact on the study habits

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ABSTRACT:

Background: The present study was conducted for assessing the use of video games among school children and its impact on the study habits. **Materials & methods:** High schools were considered as the universe for the study. All students in the classes of 7th (n = 200) of these school were selected for the study. A questionnaire was given to each student. Video game addiction Scale (described previously in the literature) had questions to assess the duration of engagement with the video game play, frequency of video game use, leisure time activities, nature and attitude toward video game. All the results were recorded and analysed by SPSS. **Results:** 54 percent of the subjects never downloaded video game while 22 percent of the subjects frequently downloaded video game. Duration of play per day was more than three hours in 2 percent of the subjects while it was one to two hours in 38 percent of the subjects. While assessing the correlation of video game usage with studying time, it was observed that high video game usage time severely affected the studying. **Conclusion:** Playing video and internet games is a widespread activity among young children, and a substantial proportion of their learning time is spent on this activity, affecting their learning.

Key words: Video game, Children, Study

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INTRODUCTION

The video game industry has flourished to become the world's largest entertainment medium. The industry posted an estimated \$34.2 billion in revenue in 2012, and revenue is expected to grow at an average of 5.5% over the next five years. The advancements in technology have led to video games that are increasingly complex, immersive, engaging, and enabling of a wide range of activities, goals, and social behavior. It is now difficult to find a household in the United States that does not have some sort of video game system, whether it is from common video game consoles or pc-based computer games.¹⁻³ Screen time is the amount of time spent watching television or movies, playing video games, and using computers, smartphones, and tablets. Although television and video games were the most common devices used, smart phones and tablets are gaining widespread use among children nowadays. Previous studies reported both negative and positive effects of excessive screen use on children's health and development. Recent studies reported significant

association between screen use and cognitive development outcomes, such as short-term memory skills, academic achievement, and language development in young children. Increased screen use before the age of 5 years is a potential risk factor for aggression and attention problems during early elementary school and one of the causes of obesity among children. Studies showed a positive association between screen use and sleep problems, musculoskeletal pain, hyperactivity, and internalizing problems. In contrast, screen use was negatively associated with social support.⁴⁻⁶ Hence; the present study was conducted for assessing the use of video games among school children and its impact on the study habits.

MATERIALS & METHODS

The present study was conducted for assessing the use of video games among school children and its impact on the study habits. High schools were considered as the universe for the study. All students in the classes of 7th (n = 200) of these school were

selected for the study. A questionnaire was given to each student. Video game addiction Scale (described previously in the literature) had questions to assess the duration of engagement with the video game play, frequency of video game use, leisure time activities, nature and attitude toward video game. All the results were recorded and analysed by SPSS.

RESULTS

Out of 200 subjects, 128 were boys while the remaining 72 were girls. 84 subjects were first born

child while 81 were second born child. In 81 percent of the subjects, the type of family was nuclear type. 54 percent of the subjects never downloaded video game while 22 percent of the subjects frequently downloaded video game. Duration of play per day was more than three hours in 2 percent of the subjects while it was one to two hours in 38 percent of the subjects. While assessing the correlation of video game usage with studying time, it was observed that high video game usage time severely affected the studying.

Table 1: Video game analysis

Variable		Number	Percentage
Downloading video game	Not at all	104	54
	Occasionally	16	8
	Frequently	44	22
	Very frequently	32	16
Duration of play per day	Not using	64	32
	Half an hour	56	28
	One to two hours	76	38
	More than three hours	4	2

Table 2: Correlation of duration of video game usage and studying time

Variable	Value
Correlation coefficient	-12.25
p- value	0.001 (Significant)

DISCUSSION

Development of electronic and computer games are a great threat for youth and adolescents and can lead to psychological disorders and depression in these groups. In previous times, kids were involved playing with other children, but children of today spend most of their time on computer games as soon as they understand and acquainted with them, while these games cannot create any emotional and human relationship. Children's and adolescents attractions to the computer games cause many mental, physical and social problems for them. These effects are stimulating anger and violence, obesity, epilepsy due to games, social isolation, and other physical and mental damages. Many psychologists and mental health professionals have paid attention to the effects of these games.⁷⁻¹⁰ Hence; the present study was conducted for assessing the use of video games among school children and its impact on the study habits.

Out of 200 subjects, 128 were boys while the remaining 72 were girls. 84 subjects were first born child while 81 were second born child. In 81 percent of the subjects, the type of family was nuclear type. 54 percent of the subjects never downloaded video game while 22 percent of the subjects frequently downloaded video game. Anand V et al analysed the correlation between video game usage and academic performance. Scholastic Aptitude Test (SAT) and grade-point average (GPA) scores were used to gauge academic performance. The amount of time a student spends playing video games has a negative

correlation with students' GPA and SAT scores. As video game usage increases, GPA and SAT scores decrease. A chi-squared analysis found a p value for video game usage and GPA was greater than a 95% confidence level ($0.005 < p < 0.01$). This finding suggests that dependence exists. SAT score and video game usage also returned a p value that was significant ($0.01 < p < 0.05$). Chi-squared results were not significant when comparing time spent studying and an individual's SAT score. This research suggests that video games may have a detrimental effect on an individual's GPA and possibly on SAT scores. Although these results show statistical dependence, proving cause and effect remains difficult, since SAT scores represent a single test on a given day. The effects of video games maybe be cumulative; however, drawing a conclusion is difficult because SAT scores represent a measure of general knowledge. GPA versus video games is more reliable because both involve a continuous measurement of engaged activity and performance. The connection remains difficult because of the complex nature of student life and academic performance.¹¹

Duration of play per day was more than three hours in 2 percent of the subjects while it was one to two hours in 38 percent of the subjects. While assessing the correlation of video game usage with studying time, it was observed that high video game usage time severely affected the studying. Zamani E et al investigated the effects of addiction to computer games on physical and mental health of students. The

study population includes all students in the second year of public guidance schools in the city of Isfahan in the educational year of 2009-2010. The sample size includes 564 students selected by multiple steps stratified sampling. Dependent variables include general health in dimensions of physical health, anxiety and sleeplessness and impaired social functioning. There was a significant positive correlation between students' computer games addiction and their physical and mental health in dimensions of physical health, anxiety and sleeplessness. There was a significant negative relationship between addictions to computer games and impaired social functioning. The results of this study are in agreement with the findings of other studies around the world.¹²

CONCLUSION

From the above results, the authors conclude that playing video and internet games is a widespread activity among young children, and a substantial proportion of their learning time is spent on this activity, affecting their learning.

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