

**THE EFFECT OF ELECTRONIC DEVICES USES ON SCHOOL ACHIEVEMENT
AMONG STUDENTS AGED BETWEEN (13-17) YEARS IN JORDANIAN SCHOOLS**

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ABSTRACT

Aim: to explore the effect of electronic devices used for entertainment particularly electronic games on school achievement among adolescents aged between 13 and 17 years. **Method:** this prospective study was conducted at schools affiliated by the directory of education in Ajloun between January 2017 and January 2021. All students in the 9th, 10th, 11th and 12th grades were included in the study. The study was performed by giving the students a survey which is composed of 11 questions consisting of; the type of electronic games favored, kind of electronic device used, the family income, the average time spent on those devices and whether the parents have any control on that time, whether the students talk with each other those games, whether the students think about those games during the class, whether the students postpone doing the home works because of those games, whether the student prefer to play those games than reading the ordinary school books, whether the students think that the school achievement was adversely or positively affected by playing those games. The results were collected and analyzed using excel. **Results:** A total of 7000 students aged between 13 and 17 years were included in the study (mean 14.9 ± 1.9 year). 2400 (34%) of them were males. The main aim of using computer devices in both genders was for social media (49%). males were mainly using the computers to play violent fight games (54%). Mobile phones were the most frequently used among students at 47%. 62% of males were found to postpone their home works compared to 26% in females.

KEYWORDS: Electronic games, mobile phones, school performance.**INTRODUCTION**

For the Past few years, it had been observed the tremendous use of computer devices for entertainments in the population particularly among teen age groups. Many studies explored the adverse effects of those devices on school performance and associated aggressive behavior of individuals especially students. Other impacts on health include: digital eye strain, obesity, violence and addiction.

There is no doubt that using those instruments for games may have some benefits which may include; improving problem solving and logic skills, better hand-eye coordination, improving brain functions and increased response accuracy and attention skills.

The aim of this study is figure out the extent of playing computer games among adolescents at government schools in Ajloun- Jordan. The favored games, devices used and their relation to family income were explored.

In addition to that the impact of computer games on school performance and the influence of parents on type and time spent in playing those games.

METHOD

This prospective study was conducted at schools affiliated by the directory of education in Ajloun between January 2017 and January 2021. All students in the 9th, 10th, 11th and 12th grades were included in the study. The study was performed by giving the students a survey which is composed of 11 questions consisting of; the type of electronic games favored, kind of electronic device used, the family income, the average time spent on those devices and whether the parents have any control on that time, whether the students talk with each other those games, whether the students think about those games during the class, whether the students postpone doing the home works because of those games, whether the student prefer to play those games than reading the ordinary school books, whether the students

think that the school achievement was adversely or positively affected by playing those games. The results were collected and analyzed using excel.

RESULTS

A total of 7000 students aged between 13 and 17 years were included in the study (mean 14.9 ± 1.9 year). 2400 (34%) of them were males. The main aim of using computer devices in both genders was for social media (49%). However, males were mainly using the computers to play violent fight games (54%) which were the least prevalent in female at 4% the least. In both genders the race games were the least prevalent at 3%.

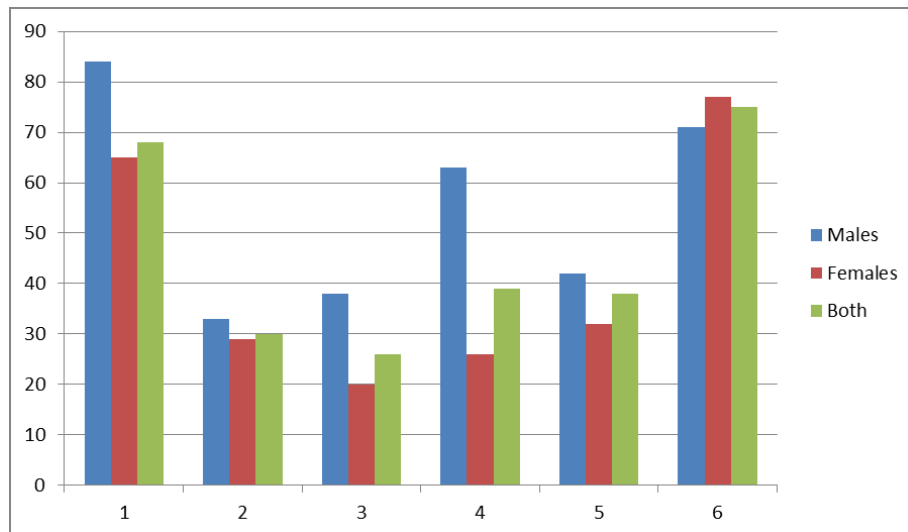
All students had at least one electronic device used for entertainment and playing games. Mobile phones were the most frequently used among students at 47% followed laptops, tablets and personal computers (PC) at 25%, 15% and 13% respectively. The same order was found in both genders but with variable percentages.

The family income did not statistically affect the use of neither those instruments nor the parent's supervision. 61% of students had a monthly income which ranged between 500 and 1500 \$ while 12% had monthly income of less than 500\$ and 27% had a monthly income of

more than 1500\$. In general, 75% spent less than 2 hours daily on those instruments but one fifth of males and only 2% of females were using those instruments for more than 4 hours daily. About half of parents (53%) did not monitor the student's use of those devices in their families. This percentage was not comparable in both genders; in females only 35% of students were asked not to consume much time on electronic games while in males this percentage was as high as 71%.

The following diagram represents the effect of those games regarding the following points:

1. The percentage of students who talk about those games at school.
2. The percentage of students who think about those games during the class.
3. The percentage of students who postpone doing the home works because of those games.
4. The percentage of student who prefer playing those games than reading the ordinary school books.
5. The percentage of students who think that their school achievement was adversely affected by playing those games.
6. The percentages of students who think that playing those games may help them in school and improve their performance.



DISCUSSION

The aim of this study is to explore the prevalence and impact of adolescent use of computer devices for entertainments among Jordan youth. In regional countries researchers presented evidences regarding the adverse effect of those devices on school achievement because of reduced studying hours at home.

In this study all students were using computer devices mainly mobile phones for entertainments for different purposes. Males were using those devices mainly for

violent video games while females the main use was for social media. Violent games were also found to be highly prevalent among males worldwide. Studies conducted in USA showed violent video games were positively associated with aggressive behavior, cognition and affect, with a relation to desensitization to graphic content and lowered social behavior. In addition, the student will try to solve any problem with violence. This study showed that using those instruments was not limited to students with middle and high family income but also it included families with limited income. This

explains the wide spread of those instruments among youths.

Although other studies showed that about one third of students spend at least 3 hours daily on those devices; in our study three quarters of students had a daily use of those devices for less than 2 hours and this time did not differ between gamers and non gamers. However, gamers were found to spend less time in reading and doing homework. In about half of the students the parents communicated with them regarding the extensive use of those instruments and advised them to spend more time in reading and doing their homework.

Compared to other regional studies, students in Jordan seem to be fewer addicts to computer devices used for entertainments. For example; only 30% of students think about those games during the class and 26% of them postpone doing their home works because of the use of those devices compared to 48% and 39% in other regional countries respectively. Males were adversely affected by those devices than females; 62% of males were found to postpone their home works compared to 26% in females. Despite this, 75% still think that the use of those devices may improve their school performance and only 38% think that it may adversely affected their school achievement.

CONCLUSION

Violent video games were frequently practiced by adolescents and puzzles electronic game were the least to be played. Male students should be advised to substitute playing violent video games with puzzles games to minimize their aggressive behavior. The parents don't play enough roles in controlling the use of electronic devices by students in their families. Compared to other regional countries students in Jordan were at lesser extent affected by the use of electronic devices for entertainments.

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