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Psychological pathology of computer and video games among elementary students

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Abstract

This study is about pathological effects of computer and video games on elementary Students in Bushehr (Iran). The samples were 231 students include 117 girls and 114 boys who selected randomly. The main instrument was a checklist that had 32 items. Alpha Cronbach was 0.93. The results Indicated that anxiety, depression and aggression were observed more among boys. In fact boys were more interested to do these games and spent more hours in a day, the result of t-test showed that these students probably suffer from psychological symptoms.

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Keywords: Psychological pathology , computer and video games;

1. Introduction

One of the most important needs for children is playing. Playing help them to learn many things Such as rules, social and coping skills. From the 1970 computer and video games were entered to the child games world. By these games children satisfied their emotional needs actively (Gunter, 2002). The main subject and content of these games is adventure.

Visual and auditory coding is necessary to do success fully these games (Real,1993).Greenfield (1994)believed that children specially boys Interested to play challenging and progressive games. Sneed and Runco (1992) reported that children Preferred computer and video games than watching TV and communicating with peers. They found that parents have negative attitude toward these games because they worried about their behavior and academic situation. The same results were indicated in many studies for example in Poland many parents felt that computer games activated negative emotions such as aggression ,lose of environmental attention and social withdrawal (Gunter,2002).One of the main concerns that has constantly raised against video and computer games is that the most of games claimed to feature aggressive elements. The issue is ever more important because new games like RESIDENT EVIL and SILENT HILL are realistic violence. Many authors claim that most computer games are violent in nature (Griffith, 1999).Some studies reported that these games have no effect on teenagers but young children can affect by games. Video games may have other effects on their behaviour (Chambers & Ascion ,1987).Heading styles

2. Method

This research conducted to determine what are the psychological effects of computer and video games on elementary students. To obtain the investigation's aims 231 students selected randomly, after that a checklist was given to their parents to complete it. Variables in this study were psychological symptoms include sleep disorders; reduce of energy and environmental attention or social activities (depression) also aggressive reactions and academic problems.

3. Results:

Findings of Chi-Square test showed that the main psychological problems among the subjects were anxiety and aggression. These results observed in table (1).

Table1 The main problems among subjects

Domain	Chi-Square	Df	P
depression	97.67	33	.000
sleep dis.	97.92	18	.000
aggression	109.70	25	.000
anxiety	137.07	24	.000
academic pro.	105.04	24	.000

Comparison between boys and girls by t-test indicated that boys impressed significantly more than girls by computer games. The results showed in tables (2) , (3) , (4) ,(5) ,(6).

Table2 Comparison between Ss in anxiety

Groups	N	MEAN	Std.Diviation	t	df	P
Girls	117	10.342	5.23	-2.70	229	.007
Boys	114	12.184	5.13			

Table 3 Comparison between Ss in aggression

Groups	N	Mean	Std.Div.	t	df	P
Girls	117	9.79	5.49	-2.94	229	.004
Boys	114	11.93	5.56			

Table 4 Comparison between Ss in sleep disorders

Groups	N	Mean	Std.Div.	t	df	P
Girls	117	8.43	3.81	-3.64	229	.000
Boys	114	10.37	4.28			

Table5 Comparison between Ss in depression

Groups	N	Mean	Std.Div.	t	df	P
Girls	117	16.85	7.65	-3.65	229	.000
Boys	114	20.53	7.66			

Table 6 Comparison between Ss in academic problems

Groups	N	Mean	Std.Div.	t	df	P
Girls	117	9.37	5.35	-5.08	229	.000
Boys	114	13.05	5.62			

Academic problems include reduction in assignments ‘activities, lose of concentration and study Lessons. The other finding is comparison between boys and girls in the mental health, to obtain this point total score of their questionnaires was compared by t-test .The result come in the next table.

Table 7 Comparison of total score between groups

Groups	N	Mean	Std.Div.	t	df	P
Girls	117	67.43	29.76	-3.87	229	.000
Boys	114	82.90	30.77			

Its observed that boys gained higher score in the test ,it means that they showed psychological symptoms significantly more than girls. This finding is conforming to previous results. The result of chi-square showed that boys spent more hours in a day to computer games. This result came in table (8).

Table 8 Comparison between groups in regard of time of play

Time	One hour	Two or more hours	sum	χ^2	df	P
Groups						
Girls	106	11	117	16.426	1	.000
Boys	79	35	114			

The last comparison between groups was performed by t-test. It ‘s found that the subjects who spent more times for video games showed more psychological symptoms.

Table 9 Comparison between Ss in total score

Groups	N	Mean	Std.Div.	t	df	P
1 hour players	185	67.14	26.067	-9.001	229	.000
2-3 hours players	46	106.96	27.99			

4. Conclusion

Boys and girls differ in response and reaction to computer games . The results of t-test indicated that boys reflected negative emotions . Especially anxiety and aggression .The result of X² showed that boys spent more hours in a day for these games so, it’s clear that they must be more affected and impressed by these games. The other subject that must be pointed is that boys preferred more complicated and difficult games than girls’ .Therefore; subsequent might be reduction of self-esteem and increasing anxiety. As the matter of fact boys lose their competency after repeated failure and felt frustration .Off course the content of these games is aggressive in other word, the main subject of them is violence (Friedman, 1995).

References

- Chambers, J. H., & Ascione, F. R. (1987). The effects of prosocial and aggressive videogames on children’s donating and helping. *Journal of Genetic Psychology, 148*, 499–505.
- Friedman, T. (1995). *Making sense of software :Computer games and interactive textuality* ,in S. G. Jones (ed), *Cybersociety:computer –mediated communication and community* (Thousand Oaks, CA:Sage).
- Greenfield, P.M.(1994).Action video games and informal education: effects on strategies for dividing visual attention ;*Journal of Applied Developmental Psychology, 15*(1):105-123.
- Griffiths, Mark (1999) .Violent video games and aggression : A review of the literature. *Aggressive and Violent Behavior* , Vol,4,No 2 ,pp,203-212.
- Gunter,B.(2002).*The effects of video games on children :the myth unmasked* .CA: Sage.
- Real,M.R.(1996). *Exploring media culture :A guide* ,Thousand Oaks, CA:Sage.
- Sneed ,C.and Runco, M.A.(1996).The beliefs adults and children hold about television and video games; *Journal of Psychology* ,126 (3) 273-284.