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INVESTIGATING THE RELATION BETWEEN THE SECONDARY SCHOOL STUDENTS' COMPUTER GAME PREFERENCES AND THEIR TENDENCY TO VIOLENCE

İLKÖĞRETİM ÖĞRENCİLERİNİN BİLGİSAYAR OYUNLARI TERCİHLERİ İLE ŞİDDET EĞİLİMLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

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Abstract: The aim of this study to explore the effects of the violent tendencies of computer games on the secondary school students, this study contains that how much these kinds of games are preferred by students and the effect of this situation on violent behavior. The working group of the study was composed of 208 students who continue their education at 5th, 6th, 7th and 8th grades of a private and state secondary school. The data of the research were gathered through a 27-question survey and data analysis was realized by using percentage, frequency and comparison test. The significance level was defined as .05 for the comparisons. The results showed that the students play computer games too much however this fact does not have an effect on their tendency to violence. Secondary school students mostly prefer action, adventure, strategy and education games. Most of the students prefer to play the games alone without going to game saloons and they feel uncomfortable because of the violence in the computer games.

Keywords: Game, adolescence, computer games, violence, computer games with violent content, tendency to violence.

Introduction

Playing has a significant place in the development and training of the child. By playing, the children recognize the social rules and learn to conform to them. They make friends by means of playing. They learn to win, lose, share, cooperate, work collectively, take on responsibilities and tasks within the group by practicing within the naturalness of playing. Playing also has a significant contribution in establishing healthy communication with the people and in gaining the skill of solving the encountered problems by taking on responsibilities.

Toys are all kinds of materials used by the child while playing. As the case may be, natural materials such as earth, gravel, sand, wood, plastic, fabric, thread or paper, or fabricated playing tools may be within the scope of toys. Playing materials may differ as per time, current socio-cultural or economic conditions and spaces. Even if there is no difference in the importance of playing for the children since the past, it is certain that toys had faced a significant evolution in the historical process. No doubt that the most of today's children, and even of individuals of each age group is computer games.

Computer games are “tools in which technology and entertainment are being used together, and today, they are tools preferred the most by all the individuals from seven to seventy seven without any limitation of age. As the technology improves, high budget computer games are being developed” (Sahin, 2005, p. 1364). “By the strength of computer games such as providing realistic virtual environments by their audio-visual features and providing effective role for the players within the game, they had become one of the main entertainments of school age children” (Brand, Knight and Majewski, 2003).

Violence is generally being defined as a form of aggression (Anderson and Bushman, 2002). Violence is “injuring or damaging someone through vulgar display of power or an object” (Olweus, 1999). As per the definition of World Health Organization: it is “usage of threat or physical power towards the individual himself, others, specific community or group which can end up with injury, death, physical damage, some developmental disorders or deprivation” (Wolf, Daichman and Bennett, 2002). And as per Englander (2003), violence is a form of attack ending up with physical or psychological pain in the person it is applied, and behaviors of causing pain that arise accidentally shouldn't be deemed as violence.

Anger is a significant mood that triggers violence. But emotions of “helplessness, loneliness and feeling under threat” (Bora, 2007) that are faced against “ruinous emotions such as grudge, hatred, hostility” (Köknel, 2000) or fancies of power are able to be effective in the generation of act of violence. Adolescents are learning violence within their families or peer groups (Sharron, 2005). As per Yılmaz (2004), “the anger of adolescents who can't properly express themselves or who can't be understood is able to transform to incompatibility and violence in time”. In this context, it can be said that the individuals in adolescence period bear more risk in respect of being inclined to violence also by the effect of their the developmental properties.

Violence had today become not only the significant problem of Turkey but also of all the countries in the world. According to the Final Declaration of Local Partnerships for Prevention of and Fighting with Violence at Schools of European Council, “violence at schools is not a new fact, but in recent years, especially as the schools are unable to keep themselves away from difficulties and stresses that affect the society and the local communities in which the school is involved, it is being observed that violence had remarkably increased” (Gittins, 2005).

In Turkey, it is known that violence is continuously increasing among students and adults. News regarding the incidents of violence occurring at schools is taking place on social media and on printed and visual media. This condition is also being pointed out in the circular published by Ministry of Education General Directorate of Guidance and Consultancy Services, and it is being emphasized that “violence, tyranny and aggressiveness incidents increase at schools each passing day” (Ministry of Education, 2006, no: 1324).

Again, due to incidents of violence showing a rapid increase among children and youth in Turkey, a Parliamentary Inquiry Commission had been established in order to inquire these incidents and to reveal the measures that can be taken. As per information included in the results of the inquiries of this commission that are realized regarding the individuals studying at secondary education institutions, in the results of studies realized by Ministry of Education at elementary and secondary education institutions and in the records of Ministry of Internal Affairs, Ministry of Justice and General Directorate of Family and Social Surveys, it is being revealed that “violence among children and youth had become a social problem in Turkey” (Report of Grand National Assembly of Turkey Inquiry Commission, 2007). Based on these records that indicate increase in incidents of violence, an implementation plan named “Strategy and Action Plan for Preventing Violence at Schools” had been prepared by Ministry of Education for preventing violence at schools and for generating a more secure school environment.

The results of many official or private researches indicate that adolescents are forming the most significant risk group in respect of violence, and that violence is threatening the adolescent population the most. Thus, examining the conditions triggering tendency of violence among adolescents in the context of different variables, sharing the findings with the stakeholders and relevant parties, and developing measures and suggestions for that are being deemed important.

In this research, this condition had been effective in preferring the secondary school students for the examination of tendency of violence. Moreover, the importance of the selected subject is becoming more prominent when the fact of “games in virtual environment that include violence may be a significant form of identification, and adolescent period is the most suitable phase in respect of impersonation and taking others as model” (Şahin, 2015) is considered.

By these reasons, the subject of the planned study is “researching the effects of preferred computer games on the tendency of violence of secondary school students”. The conditions of preference of violent computer games by the

individuals in the process of transition to adolescence, and the effect of their preference on their attitudes of violence are also among the purposes of the research.

In the direction of this general purpose, the question of “What is the effect of computer games on the tendency of violence of 5th, 6th, 7th and 8th grade students?” is forming the problem sentence of the research.

Moreover, by the research, answer had been sought for the following sub-problems:

1. What are the computer game playing frequencies of 5th, 6th, 7th and 8th grade students?
2. What are the daily computer game playing periods of 5th, 6th, 7th and 8th grade students?
3. Which types of computer games are the 5th, 6th, 7th and 8th grade students preferring?
4. What are the states of 5th, 6th, 7th and 8th grade students in preferring to play computer games as individually or with a group?
5. What are the states of 5th, 6th, 7th and 8th grade students in preferring to attend to game saloons?
6. What are the levels of 5th, 6th, 7th and 8th grade students in preferring violent computer games?
7. What are the levels of 5th, 6th, 7th and 8th grade students in being disturbed from violent computer games?
8. What are the attitudes of 5th, 6th, 7th and 8th grade students towards violence?
9. What are the attitudes of 5th, 6th, 7th and 8th grade students regarding violent computer games?
10. Do the computer game playing frequencies, daily playing periods, states of being disturbed from violent factors and type of game preferences of 5th, 6th, 7th and 8th grade students differ as per gender?

Method

This research was realized by screening model, and it is a descriptive study where it is intended to reveal current condition as it is. The research was formed quantitatively. “The screening model is a research approach intending to describe a past state or current state as it is. In the screening model, screening is being made on a universe consisting of numerous elements, and on the whole universe or on a group of examples or samples to be taken from it in order to make a general

judgment regarding the universe” (Karasar, 2008, p. 77–79). The most important advantage of screening research is “provision of numerous information obtained from a sample consisting of numerous individuals” (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz and Demirci, 2008).

Study Group

While the universe of research was the students studying at 5th, 6th, 7th and 8th grades at schools in Kırşehir where the research was carried out, its sample was determined as all the students studying at 5th, 6th, 7th and 8th grades at a private and a state secondary school of the same province in the school year of 2014-2015. 26.4% of the 208 students of the sample group was studying at 5th grade, 28.8% of them was studying at 6th grade, 24.1% of them was studying at 7th grade, and 20.7% of them was studying at 8th grade. 46.6% of the students had consisted of males, and 53.4% of them had consisted of females.

Data Collection Tools

In the research, the data was collected through a survey of 27 questions which was prepared by Şahin (2015), and the questions of survey was configured under three sections: “Questions regarding the demographic features of the participants were included in the first section, questions regarding computer game playing frequencies and habits of the participating students were included in the second section, and questions regarding attitudes of students towards violence and effect of computer games on that were included in the third section. After preparation of the survey as a draft consisting of 40 articles by also obtaining the opinions of experts, it was applied on 100 students studying at 5th grade of an elementary school at the province where the study was realized. The survey had gained its final form by addressing the questions that couldn’t be understood. And then, the Cronbach Alpha coefficient of the survey was calculated as 0.89 in the preliminary test performed.” (Şahin, 2015, p. 1367).

Analysis of Data

After implementation and collection of the surveys which were developed for the research, the data was transferred to computer environment. SPSS 13 packaged software was used in the statistical analysis of data. And percentile (%), frequency (f) and t test analyses were used in order to describe the obtained data. The critical value was adopted as .05 in the comparison.

Findings

Table 1. Demographic findings of students within the sample group.

		Frequency	Percent
Grade	5 th grade	55	26,4
	6 th grade	60	28,8
	7 th grade	50	24,1
	8 th grade	43	20,7
	Total	208	100,0
Gender	Female	111	53,4
	Male	97	46,6
	Total	208	100,0
Number of siblings	1 brother	49	23,6
	2 siblings	102	49,0
	3 brothers	46	22,1
	4 and above	11	4,3
	Total	208	100,0
Family Incomes	1500-2500	32	15,4
	2500-3500	48	23,1
	3500-4500	33	15,9
	4500-5500	40	19,2
	Over 5500	55	26,4
	Total	208	100,0

As per the data in Table 1 in which the demographic information of the students of sample group are included; 26.4% of the students was studying at 5th grade, 28.8% of them was studying at 6th grade, 24.1% of them was studying at 7th grade, and 20.7% of them was studying at 8th grade. 46.6% of the students of sample group had consisted of males, and 53.4% of them had consisted of females. 23.6% of the students did not have siblings. And 49% of them had one sibling. 27.4% of them had two or more siblings. As one of the two schools -in which the study was carried out- was private school, the income levels of students' families were naturally high. The income of 45.6% of the families was over 4.500 TRY. And 15.4% of the families were at the interval of 1.500-2.500 TRY.

Table 2. Distribution of students of sample group as per the professions and educational states of their parents.

	Father		Mother		
	Frequency	Percent	Frequency	Percent	
Professions	Officer	50	24,0	35	16,8
	Worker	36	17,4	5	2,4
	Artisan	82	39,4	10	4,8
	Teacher-Lecturer member	19	9,1	40	19,2
	Doctor	8	3,8	9	4,3
	Engineer	13	6,3	0	0,0

	Housewife	0	0,0	109	52,5
	Total	208	100,0	208	100,0
	Primary school	44	21,2	9	4,3
	Middle School	24	11,5	51	24,5
Educational Status	High school	62	29,8	79	38,0
	University	78	37,5	69	33,2
	Total	208	100,0	208	100,0

While most of the fathers of the students were tradesmen (39.4%), more than half of their mothers were housewives (52.5%). The professions of their fathers were then respectively as public servant (24%), worker (17.4%), and lecturer or teacher (9.1%). And the professions of their mothers were then respectively as teacher/lecturer (19.2%), public servant (16.8%) and tradesmen (4.8%).

The educational levels of parents of the students of study group were generally high. Majority of their mothers (33.2%) and fathers (37.5%) were university graduates. 29.8% of their fathers and 38% of their mothers were high school graduates.

Table 3. Computer game playing frequencies of students of the sample group.

Frequency of play	Frequency	Percent
Everyday	23	11,1
1-2 days a week	39	18,8
3-4 days a week	40	19,2
Weekends Only	70	33,7
1-2 days per month	32	15,3
I do not ever play	4	1,9
Total	208	100,0

11.1% of the students of the study group were playing computer games each day. Majority of the students (33.7%) were playing computer games only in the weekends. 18.8% of the students had specified that they were playing 1-2 days a week, and 19.2% of them had specified that they were playing 3-4 days a week. And the sum of ones who never play computer games and the ones playing computer games for one or two days a month was 17.2%.

Table 4. Game tool preferences of students of the sample group.

Game Tools	Frequency	Percent
PC	36	17,3
Playstation	32	15,4
Tablet	59	28,4
Mobile phone	76	36,5
Other	5	2,4
Total	208	100,0

The students were mostly preferring to play games by using their mobile phones (36.5%) and tablets (28.4%).

Table 5. Daily computer game playing periods of students of the sample group.

Playing Time	Frequency	Percent
Will not Play Every Day	88	42,3
0-1 Hour	38	18,3
12 hours	38	18,3
2-3 hours	35	16,8
3-4 hours	5	2,4
Over 4 Hours	4	19,2
Total	208	100,0

About 42.3% of the students were playing computer games each day. 18.3% of the students –who had specified that they were playing each day- were playing at most 1 hour a day, and 18.3% of them were playing at most 2 hours a day.

Table 6. Computer game preferences of students of the sample group.

Types of Games	Female		Male		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Action and adventure	30	14,4	24	11,6	54	26,0
Strategy development and educational	35	16,8	14	6,7	49	23,6
Football	9	4,3	26	12,5	35	16,8
Simulation	5	2,4	10	4,8	15	7,2
Fight	9	4,3	4	1,8	13	6,3
Car	2	9,6	6	2,9	8	3,8
War	0	0,0	6	2,9	6	2,9
Other	22	10,5	6	2,9	28	13,4
Total	54	100,0	47	100,0	208	100,0

The students of the study group were mostly preferring games with an “action and adventure” content (26%). And then they were preferring games with “strategy development and educational” (23.6%), “football” (16.8%) and “simulation” (7.2%) contents. While the games preferred by the female students the most were with “strategy development, educational, action and adventure” content, the male students were preferring games with “football, action/adventure and strategy development/educational” content.

Table 7. Game playing preferences of students of the sample group.

Tarawih	Frequency	Percent
Alone	153	73,6
With a friend	34	16,3
in Multimedia	21	10,1
Total	208	100,0

73.6% of the students were preferring games that are being played alone. The ratio of students preferring to play with a friend or as multiple was 26.4%.

Table 8. States of attendance to game saloons of students of the sample group.

Go-Go to	Frequency	Percent
Yes	32	15,4
No	176	84,6
Total	208	100,0

84.6% of the students was not preferring to attend to game saloons. And the ratio of students preferring to play by attending to a game saloon was 15.4%.

Table 9. States of preferring violent computer games of students of the sample group.

Types of Games	Frequency	Percent
I prefer	21	10,1
My preference No effect	86	41,3
Not my choice	101	48,6
Total	208	100,0

The students not preferring violent games were majority (48.6%). And the ratio of students who express that they especially prefer violent games was 10.1%. 41.3% of the students had stated that the violent state of a game was not affecting their preference.

Table 10. States of being disturbed from violence in computer games of students of the sample group.

Being uncomfortable situation from Violence	Frequency	Percent
I never Register	44	21,2
Sometimes	51	24,5
It does not matter	26	12,5
I partially going	26	12,5

be very	61	29,3
Total	208	100,0

While 29.3% of the students of sample group had stated that they were disturbed of violent games, 24.5% of them had stated that they were disturbed occasionally. And 21.2% of the students of sample group had specified that it didn't disturb them in any manner.

Table 11. Attitudes of students of the sample group regarding violence and violent computer games.

Attitudes	I definitely don't agree		I don't agree		I'm indecisive		I do agree		I definitely agree	
	F	%	F	%	F	%	F	%	F	%
Violence is being included too much in computer games.	25	11,9	39	18,8	46	21,8	69	33,7	29	13,9
Violence in computer games are making the youth insensitive against violence.	9	4,0	22	10,9	58	27,7	55	26,7	64	30,7
Violent content in computer games are being a bad example for the adolescents.	10	5,0	22	10,9	34	15,8	66	31,7	76	36,6
Computer games have an effect on increasing violent acts among adolescents.	7	3,0	15	6,9	69	33,7	78	37,6	39	18,8
Tending to violence makes the person strong.	100	48,5	61	28,7	23	10,9	20	9,9	4	2,0
Fighting is the easiest route of solution of problems among people.	131	64,4	51	23,8	15	6,9	9	4,0	2	1,0
I resort to physical violence when required.	74	35,6	39	18,8	54	25,7	25	11,9	16	7,9
Trying to solve the problems by speaking is an indicator of weakness, fragility.	129	62,4	59	28,7	4	2,0	7	3,0	9	4,0
I believe in solving the problems by speaking.	0	0,0	9	4,0	25	11,9	65	31,7	109	52,5

The findings regarding the attitudes of students relevant to violence in computer games were generally as follows: About half of the students (about 47.6%) believed

that violence is being included too much in computer games. 21.8% of the students had specified that they were undecided on this issue. The ratio of ones specifying that the violent computer games are making adolescents insensitive against violence was 57.4%. 68.3% of the student of study group were specifying that violent computer games are being a bad example for the children and youth. 15.8% of the students had specified that they had no idea on whether the violent computer games are being a bad example for the adolescents or not. The ratio of students thinking that computer games contribute to increasing violence was 56.4%. And the ratio of students being undecided on the issue was 33.7%.

And the findings regarding the attitudes of students of study group against violence were as follows: The ratio of students specifying that they don't believe that resorting to violence makes the person strong was 77.2%. Against that, 10.9% of them had specified that they were undecided on this issue. Majority of the students (88.2%) were not thinking that fighting is the easiest way of solution of problems among people. Moreover, more than half of the students of study group (54.4%) had said that they will not resort to physical violence even if it is required. And the ratio of students being undecided on this issue was 25.7%. The ratio of students specifying that "trying to solve the problems by speaking is an indicator of weakness, fragility" was 86.5. Against that, majority of the students (84.2%) had specified that they believe in solving the problems by speaking. And 11.9% of the students of sample group had specified that they were undecided on this issue.

Table 12. Comparison of computer game playing frequencies, daily playing periods, states of being disturbed from violent factors and type of game preferences of students of sample group as per gender.

	Gender	N	\bar{X}	S	sd	t	P
Playing Frequency	Female	111	3,6	1,43	206	1,83	.71
	Male	97	3,3	0,99			
Playing Times	Female	111	3,01	8,05	206	1,19	.261
	Male	97	2,42	7,10			
Being disturbed by the violence	Female	111	3,31	.93	206	.213	.000
	Male	97	2,01	1,31			
Game Type Preferences	Female	111	5,40	3,16	206	2,58	.018
	Male	97	3,93	2,48			

There is no significant difference among the computer game playing frequencies of female and male students of the study group ($t_{(206)}=1.83$ and $p>0.05$). In the same manner, when the daily playing periods of female and male students are compared, it is being observed that there is no significant difference ($p>0.05$). In other words, there is no significant difference among the weekly playing frequencies and daily playing periods of females and males.

As the result of comparison of findings regarding states of being disturbed from violent factors of female and male students of the study group, it was determined that female students were more disturbed from violent games compared to male students. This difference is of statistically significant level ($t_{(206)}=.213$ and $p<0.05$). Regarding the games preferred, it was determined that female and male students prefer different games at significant level ($p<0.05$). While female students were mostly preferring games with “strategy development, educational, action and adventure” content, the male students were mostly preferring games with “football, action/adventure and strategy development/educational” content (see Table 6).

Results and Discussion

The fact that secondary school students play computer games very much and that it increases their tendency to violence –which is among the basis hypotheses of our study- could not be verified as per the findings of this study. In literature, there are limited researches that had concluded that there is no connection in between violence games and showing aggressive behaviors (Şahin, 2015; Van Schie and Wiegma, 1997; Graybill, Strawniak, Hunter and O’Leary, 1987; Winkel, Novak and Hopson 1987). But it is possible to speak of many factors directing the children and youth to violence (Demir and Kumcağız, 2015). It shouldn’t be forgotten that social, family, genetic, situational etc factors may also cause aggressiveness (Bayraktar, 2001).

The fact that the students of study group didn’t prefer playing computer games very much is also among the findings of this study. As per the findings of the research, about 11% of the students were playing computer games each day, and 2.4% of the ones who were playing each day were preferring to play for 3 or more hours a day. Şahin (2015), Sağlam (2011) and Van Schie and Wiegma (1997) had also determined that adolescents don’t prefer playing computer games very frequently. But the results of many researches in literature are conflicting with these two findings of the study (Ulusoy, 2008; Bilgi, 2005; Anderson and Bushman 2001; Anderson and Dill, 2000; Douglas, Lynch, Linder and Walsh, 2004; Scott, 1997; Griffiths, 1997; Irwin and Gross, 1995; Calvert and Tan, 1994; Çetinkaya, 1991; Schutte et al., 1988; Anderson and Ford, 1986; Dominick, 1984). Among the results of the referred studies, there is finding that computer games increase aggressiveness in children, adolescents and youth, and that it is effective in preferring violence.

As per the results of the research, the most preferred types of computer games are games with “action and adventure” and “strategy development and educational”

content. Games with “football and simulation” content are following these. “Fight and war games” –which can be referred as having violent content- were being preferred by about 9% of the study group. Majority of the students were preferring to play by themselves without attending the game saloons. Sağlam (2011) had also obtained similar findings by his study. Sağlam had determined by his study -made with 250 students continuing private education- that 20% of the students especially prefer violent computer games, but that most of them does not prefer it. Moreover, playing alone at home instead of attending to game saloons is also among the similar findings of the studies.

And in a research performed by Funk (2003) by students of 7th and 8th grades, it was determined that the most preferred games were with fantasy and violence content and sports games with violence content. Again by the same study, it was determined that only 2% of the sample group was preferring to play games with educational content. In the same manner, as the result of the research performed by Bayraktar (2011), it had been revealed that the internet games played by the adolescents the most were games with violent, deadly content. The research findings of Funk and Bayraktar are not matching up with the findings of this study.

The attitudes of students relevant to violence in computer games were generally as follows: “About half of the students were thinking that violence was being included too much in computer games; and much more than half of the students were thinking that violent computer games are making the individuals insensitive on this issue, that violent computer games are being a bad example for the adolescents and children, and that violent computer games are contributing to increasing violent acts in society.” About half of the students did not prefer violent computer games, and they were being disturbed of this condition at significant level. But about 10% of the students especially preferred violent computer games.

And the attitudes of students of study group against violence were as follows: Majority of the students were not believing that “resorting to violence is making the person strong” and that “fighting is the easiest way of solution of problems among people”. Majority of the students of sample group were specifying that “they would not resort to physical violence even if it is required, they would try to solve the problems by speaking and that it wouldn’t be perceived as an indicator of weakness”. Şahin (2015) had also made similar determinations in his study. Also in the study of Şahin, it was determined that the children and adolescents don’t have positive attitude regarding violent computer games and violence in general.

There is no significant difference in between the computer game playing frequencies and daily computer game playing periods of female and male students of study group. In other words, the weekly playing frequencies and daily computer game playing periods of females and males are close to each other. Çetinkaya (1991) had determined by his research performed on 120 students of 9-11 age groups that the gender factor doesn’t form a significant difference on computer games. Oz (2009) had also determined by his study performed on 84 students of 4th and 5th grades that computer game playing frequency doesn’t show a significant difference as per

gender. And İnal and Çağiltay (2005), Haskan (2009), Kars (2010) and Sağlam (2011) had obtained results in the opposite direction of the determination. As the result of the referred researches, they had determined that male students allocate more time to computer games compared to female students.

By this study, it was determined that female students are being more disturbed from violent computer games compared to male students. In literature, there are many studies that will support this finding (Thomas and Smith, 2004; Giles and Heyman, 2005; Haskan, 2009; Kars, 2010; Sağlam, 2011; Şahin, 2015). And in the results of these studies, it had been determined that male students are more inclined to violence and that they prefer playing violent computer games more compared to female students, and Scott (1997) had determined by his research realized on children of age 10 that the violent behaviors increase in females playing or watching violent computer games.

Type of game preferences of female and male students of study group were also differing. While the games preferred by the female students the most were with "strategy development, educational, action and adventure" content, the male students were preferring games with "football, action/adventure and strategy development/educational" content.

Suggestions

Childhood and initial youth period has a significant share in human life for the formation and development of personality. Thus, important duties are being imposed on families in order to prevent the arise of irremediable problems. The families should inspect what their children are playing on the computer and how long they spend by the computer, and they should limit the period that the children spend by playing.

It should be searched by the families why violent computer games are being preferred by their children. Moreover, support can be taken from the experts on this issue.

Increasing the events among the members of the family by which they can spend time together may allow the children to use their preference in this manner.

Limitations such as age, period, fee etc should be imposed by the relevant and authorized institutions and commissions for sites including violent and improper elements, and the access of children and adolescents to such sites should be taken under control.

In this study, it was determined that there was no significant interaction in between the violent computer game preference of students of sample group and their tendency to violence. But as the research was performed on limited number of students studying at a private and state school, similar researches may be performed at schools of different regions, types and levels and at different grade levels.

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