

HOW THE USE OF COMPUTER TYPES AND FREQUENCY AFFECTS ADOLESCENCES TOWARDS ANGER AND AGGRESSION

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ABSTRACT

This study was conducted to research the relationship between use of computer types and frequency and anger and aggression in adolescents. The study was conducted among years 9, 10 and 11 students (secondary level) in 2008-2009 academic year. The general research tool for this study used was "Relationship research" model. The focal schools of this research were randomly selected from the Nicosia district in North Cyprus. There were a total of 214 participating students and the data collection tools were: Aggression Scale, Anger Scale and a Personal Information form. In addition, the data collected through these scales and questionnaires were analyzed by using statistical calculations of frequency, mean, standard deviation, Anova and T-test techniques at p< 0,5 level. The results of the study show that there was no significant difference between adolescences who play and those who do not play computer games. It was also found that there was no significance in the relationship of playing computer games in other places between adolescences towards anger and aggression. Together with this, the average amount of computer games played within a week among adolescences has no significant impact on the levels of their anger and aggression. Also, there was no significance observed of playing weekly computer games at an internet café and the use of computer types and frequency in relation to their anger and aggression. Moreover, there was no significant difference between adolescents' levels of anger and aggression towards computer games of sports and competitive games, war and strategic games and general logic computer games. Key Words: Adolescence, anger, aggression, computer.

INTRODUCTION

The rapid development and changes made in technology has also affected the changes in the attitudes and behavior in people. The way of communication, habits, the activities that people spend their free time with and even their life styles are affected by these rapid changes in technology. These fast changes and new trends in technology however may produce positive or negative results. Adolescence generally begins from the age of 10 and continues until the age of 20; it is a period where biological, psychological, social development and maturity takes place. With the development in this period, identity, closeness, gender and success are priorities. This period of maturity it puts forward expectations, emotions, ideas, beliefs, attitudes and behavior. Maturity has many factors within itself; who am I , what will happen, what will I do, who and what will I believe, to know how to face problems, searching for answers to the problems, searching within yourself and the difference between you and others. In these stages youngsters have more courage, are more optimistic, excited and are seeking adventure to bring out their own identity, and therefore are more open to taking risks and accepting their faults (Yörükoğlu, 1989).

In adolescence, individuals are swayed towards new relationships. They make friends from both genders and get into more matured relationships which they want to be part of and accepted (Adams, 1995; Erwin, 2000; Gander and Gardiner, 1995; Steinberg, 2007; Yavuz, 1994). Some adolescents that have a more problematic period are those that are in an abusive scope where their behaviors begin to turn into anti-social behavior (Guilmet and Whited, 2000). Whereas, the relationship mannerism in this stage should encourage them to learn their future social roles and try out new opportunities, it is both mother's and father's priority to encourage them to face their responsibilities and duties.

The word aggression may generally emphasize negativity in behavior but its dictionary definition is the approach to someone or something, to begin something or at the same time instead of approaching, attacking/aggression is used. Yet, in today's dialogue aggression is defined as a behavior when vandalizing someone or something, hurting, or even killing and fracturing.

In some studies, hostile and aggressive behaviors are treated as equals. A hostile person is someone who has feelings of dislike towards others and defines them as negative people Berkowitz (1990) draws attention to the relationship between hostile and aggressive behavior. Hostile isn't introverted aggressive behavior; it's extroverted aggressive behavior. These definitions point out that anger management is a minority and



extroverted aggression is an important variable that triggers hostility (Bridewell ve Chang, 1997: Riley, Treiberve Woods, 1989).

Even though it can be said that everybody has knowledge on what aggression is, the answer to the question "Which behaviors can be evaluated as aggressive?" is still variable. The answer to this question has still not been classified but this definition doesn't consider the reason of that person's approach. Behaviorism or social learning approaches prefer a more realistic definition where "Aggression includes all type of behaviors by being hurt or hurting". For this reason, the word *Aggression* can be defined as "physically or intentionally hurting someone, or targeting to vandalize type of behavior or intention" (Freedman, Sears, Carlsmith, 1998). Aggression, on the other hand, is putting forward a behavior aiming to vandalize an individual or a group. When aggression is defined as a behavior, it excludes the feeling that is turned into hatred. The definition includes physical aggression (for example, to hit someone) and verbal aggression (for example, to insult and accuse someone) (Bilgin, 1988).

The increased of the use of both scientific technology and the internet has brought up popular discussions of an increase in aggressive behavior. In the media, there are non-stop news about the continuous increase of aggressive behavior among youngsters, alongside with the computer; internet and computer games are being mentioned.

Like the changes that have taken place in our lives by the development of technology, children's gaming habits have also changed. The first video game that was introduced to marketing in 1970 was used as a free time entertainment by children and adults, but in time these habits have changed and developed into other diversities (Doğan, 2006).

Among children and youngsters, the most popular past-time technological tools were computer games. "Video games" and "computer games" terms were used interchangeably because both of the inputs were through joysticks or keyboards and viewing the game was through a monitor (Kirriemuir, 2002). After the first marketing production computer game *Pong* in the year of 1974, especially after the development of graphical technologies, computer games have become more and more realistic (Setzer, Duckett, 1994).

Boxer and Tisak (2005), defined the term aggression as, "A behavior that makes someone or something feel uncomfortable or irritable".

LITERATURE REVIEW

Anger is a feeling which everybody has experienced and lived. When the reasons for this feeling and its consequent behaviors are sought for, there are many views. According to Morgan (1988) anger is a temporary impression or it's a feeling that needs to get out of your system. Morgan explains that when this system doesn't perform functionally and it is obstructed, this triggers the beginning of anger. Morgan (1988) puts forward that another reason for anger is behaviors that perform anger that needs to be punished (Akt; Akgül, 2000). The reasons that make people angry are; obstructions, not being taken seriously, to be put down, to face a disbelieved attitude and facing an attack. We all may face anger in situations that may obstruct something, an issue or someone (Baltaş, Baltaş, 2004).

Anger is a normal and healthy situation. It is not morally right for a person to feel guilty when he/she experiences anger or annoyance. The unhealthiest situation is that of anger being converted into physical actions. Obstructions create energy. This energy can be used as constructive or abusive. It is healthy that anger is aimed as an external guide, mostly in a way where it is accepted by the public and mostly in long term situations that will bring advantages to the individual. In an unhealthy situation anger becomes an external guide, attacks and one largely injures himself/herself. In a more constructive view, anger brings strength to both body and mind (Baltaş, Baltaş, 2004).

While anger is defined as a symptom erupted by a strong uncomfortable and sad feeling, anger is also an individual threat or when it is faced an obstruction, depending on the threat, that leads to hopeless, weakness and the depressive feeling of sufficiency corrupts a feeling of anger and abuse (Thomas, 1983).

According to Hankins (1988), anger is an individual's transparent attack, criticism or when faced with obstruction, an introverted or universal feeling.

Anger and hostility are more related to feelings and attitudes, attacking others or other objects and in the scope of triggering, a destructive behavior (Spielberger ve ark. 1995).



Anger; 1) To be hindered, to be attacked, to be threatened, to be isolated, to be restricted, etc are types of such feelings and generally these are the reasons for performing the action of attacking someone for some reason, which is a very intense negative feeling. 2) Kubler-Ross puts forward two of the five universal compositions. Showing feelings of anger hurts and envies to someone who is on the verge of death (Budak, 2005).

The core feelings that are reflected in the adolescence period are; anger, love, fright and fancy. Anger, pressure, restrictions, disappointments, hurt, fright and rights being taken away are the feelings that are performed as reflections (Kulaksızoğlu, 2001). Although anger may be a natural feeling, it is something that may not be controlled and may lead to attacking and negative behaviors (Lerner, 1999; Kılıçarslan, 2000; Köknel, 1997; Taylor, 1988). Anger has physical, scientific and behavioral dimensions. This can be reflected through physically or through gestures, such as tense muscles, frowns, a red face, sweating, feeling cold, numbness, feeling of suffocation, having a dry mouth, etc (Archier, 1989; Arenofsky, 2001; Geçtan, 1986; Gottlieb, 1999; Retzinger, 1991; Tavris, 1982).

Anger may sometimes last for a short period, at a medium rate and it may be useful for an individual, though sometimes it may be very violent, ongoing and hurtful. When we think about it, this emotion plainly shows an affect of destruction. In many cultures anger is mostly evaluated as negative. This feeling of anger can cause a person to attack verbally or physically. This may also create corruptions among family and people (Schuerger 1979). This may also result in disrespect to an individual's identity (Deffenbacher 1992). Anger that is hidden deep beneath can also cause pysical illnesses such as, high blood pressure, coroner artiary illnesses and cancer (Bitti ve ark. 1995, Siegman 1993, Spielberger ve ark. 1991). The literature supports these claims that similar illnesses that are mentioned above can also occur (Ellis 1997, Martin ve Watson 1997).

2.2. Adolescent and Anger Reactions during the Adolescence Period

Today in the west, "adolescence" means "to grow" (Yörükoğlu, 1998). The word "adolescence" was first used in the 15th Century (Muuss, 1996) and the root of its meaning comes from the Latin word "adolescere". Adolescere means "to grow" and "to mature". In Latin, this word carries the meaning of to grow and to mature; it doesn't convey the construction of the situation, but it conveys a period of time. This word today also defines an individual's speed and continuity of the development on the universe (Yavuzer, 1998, sf. 277).

Generally, the childhood is a calm period but when adolescence comes, intense variables are at work. There may also be diversity whilst getting to know themselves, their social lives and judgmental abilities (Bernstein, Clarke-Stewart, Penner, Roy, Wickens, 2000).

The adolescence, from childhood to adulthood, carries a number of developments and the person matures biologically, physically, mentally and socially (Yavuzer, 1998).

Erikson defines this period as seeking for identity and the answer to "who am I?" Whilst in search of their identity, they focus on their gender roles, occupation and ideology (religion, politics). Therefore, maturity is a period of clashes between ego identity and role.

According to Spengle (1980), the emotional adolescent world is full of contradictions. On one hand, there are feelings of isolation; the need of joining to a group, not obeying their elders and on the other hand, there is seeing a brighter future rather than worry and hopelessness. This is an obvious contradiction within their emotions (Akt; Baygöl, 1997).

According to the Ministry of Education, the definition of youngsters is, "by approaching the teenage period and bio-psychologically leaving behind their childhood, it's an age group between 12-24, it's the period that starts public responsibilities" (Kulaksızoğlu, 2002).

2.15. Aggression and Computer Games That Can Be Played on the Computer and the Internet

In most of the research literature, reasons for playing games are as follows: Curiosity and wanting to be warned (Grauman, 1971), boredom, stress, anger together with wanting to be far away from anger and the feeling of being unsuccessful (Toksöz, 1999).

Anderson and Ford (1986) measured undergraduate learners' feelings of the "enemy" after a computer game based on violence. Their results showed that computer games that involve violence affected their emotions in a negative manner. They also claim that those who play games have an increase in their feelings of animosity and



anxiety.

Kubey and Larson (1990) explain that, in the research scope of 483 associations between the age groups of 9-15, 63% of male children from a high socio-economic level play video games. On the contrary, other researchers believe that (Braun and others, 1986; Dominick, 1984) there are no significant relationship between playing video games and changes in social class (Alantar, 1996).

A study made by Calvert and Tan (1994), looked at adolescents' computer games that involved violence or/and watching, feelings of animosity, thoughts of attacking and results of their physical actions. With this aim, a questionnaire was distributed to collect the adolescents' feelings after playing a computer game. As a result, a comparison was made of their feelings when they played computer games that involved violence and when they played computer games that was based on educational points. Their results pointed out that youngsters developed a headache and felt nauseous when they had thoughts of attack.

Funk (1995) studied 357 year 7 and 8 students about their computer game practices. These students were asked to define the most played computer games using a scale of 1 to 5. The most preferred games with a 32% agreement were those that involved fantasy and violence. 29% thought that computer games that involved sports and violence were popular. 20% of the students preferred the general entertainment games and 1% were those that put violence into practice by people. In this sample, only 2% preferred games that involved education. The National Coalition on Television Violence, an institution that made an evaluation in the year 1989, showed that out of 176 computer games, 55.7% involved a high level of violence. Only 20% of these games were educational. A research made by the same institution in 1990, showed games that involved violence increased to 82% (NCTV, 1990).

Kubey, Lavin and Barrows (2001) have observed that those university students using the internet for more that 11.18 hours are more likely to be poor achievers academically compared to students using the internet for 3.84 hours and below.

According to Berson and Berson (2003), 92% of youngsters between the ages 12-18 have access to the internet at home. This search shows that a high percentage of these youngsters utilise their time entering chat lines and only 1% use the internet for research and education purposes.

Bilgi, (2005), has researched computer games and aggressive behaviour. This study included a total of 310 students; 134 female and 176 male. As a direct result of these, it has been found that students who spent more time playing these computer games were more anti–social and aggressive. Students playing these types of computer games at home were found to be at higher risk of aggressive behaviour in comparison to students playing the same type of games at an internet cafe. Students playing games involving combat, warfare and advanture carry a higher risk of developing anti social behaviour and aggression compared to somebody who is not playing these types of computer games at all.

Mathews et al. (2005) conducted a medical research to show how much adolescents' brains were affected when they played violent games.44 adolescents who were selected randomly were asked to play violent or non-violent computer games in 30 minutes and at the same time their brain were examinated by FMRI device. As a result of this, it was observed that adolescents who played violent video games had emotional activity in the amygdala part which is a higher scale than the adolescents who did not play these video games at all.

Kurfallı (2005) did a research in Uşak Anotalian Girls Career High School and Uşak Technical Vocational High School. There were 205 adolescent participants (67 female and 138 male adolescents) taking parts in the research on the education of computer games in it's effect on activity that students study. They looked at how often, how long, where and what kind of computer games students played. The pursuit of other social activities was examined. The adolescents were asked various questions about the games; whether they had advantage of computer games, did they benefit from these games, were these games social networking and educational for the students. The result of the research shows that there is no proof of computer games affecting or blocking adolescents from their social activities.

A research conducted by Suhail and Bargees (2006) using 200 pupils concluded that pupils using the internet found it difficult to be social with other people. Another research shows that youngsters who spend long hours on the internet find themselves isolated and find it difficult to interact and form friendships with others (Kraut et all, 1998).



Lee et al. (2007) looked at Korean adolescents and their preferred game types. 627 adolescents were selected from primary and secondary schools. 'Korea Internet Loyality Test was implemented where the participants were classified as 'normal', 'potential risk group' and 'high-risk group' as classified. The results showed that 4% of the participants were in 'high risk group'; It was interesting to see that 96% of male adolescents were in the high risk group. At research, adolescents on the internet being played games preferred by determining the time spent on the game type, on weekdays and weekends.

METHODOLOGY

This study is conducted to research the relationship between the use of computer types and frequency and its effects on adolescences' anger and aggression. A general research tool has been used to put forward this study. It is also a relationship research model. The general research tool "is a sample of taking point of views of participants as individuals or as a group to reach the target of the study" (Karasar, 2000). The relationship research "is aimed to find the two or more variables among the varieties and/or to show the degree in which it is varied." It is made up of relation in solutions, correlation types, relations or relations that are in comparison (Karasar, 2000). The sample in the study represents the secondary schools in Nicosia. It is made up of randomly selected classes. It has been limited to the Nicosia district of TRNC in 2007-2008 academic year and the participants are those of the students studying in the secondary education institutions. Classes were chosen randomly where the questionnaire reached 300 students and a data collection tool was also used.

The research data was collected through a "Personal Information Form", and a questionnaire that pointed out an individual's personal emotional view and their "anger and aggression reactions". Below, you will find a short explanation of the data collection tool. This measure tool is equal to PP1 and has been limited to the anger levels. The scale was made up of 34 statements and it was evaluated based on a 4-level Likert scale as follows: "Always" (4), "Mostly" (3), "Sometimes" (2) and "Never" (1).

To be able to collect data and put the questionnaire into practice, necessary permission was acquired from the Ministry of Education in Nicosia. Then the questionnaire was distributed to 300 students.

The collected data was put into and was analyzed the SPSS 11.0 program. Later tables were draw and necessary comments and explanations were made. The Personal Information Form was made-up of the school that the student studied at, the class which the student studied in, gender, whether they have a computer at home or not, where they play the computer, an average time computer games played in a week at home, an average time computer games played in a week at an internet café, the frequency of how much they played computer games based on sports and racing, adventure, war and strategic games and logic games. Arithmetic average, standard deviation and the average were analyzed. The students' reaction towards anger and aggression is shown as an average in the limitation data given below.

Options	Weight	Boarders
Never	1	1.00-1.75
Sometimes	2	1.76 -2.50
Mostly	3	2.51-3.25
Always	4	3.26-4.00

In the measuring of the students' anger and aggression the average points have been calculated.

To test whether there is significance between the levels of anger and aggression a t-test was performed and to analyze the differences or similarities between 3 or more groups ANOVA was used. If there were any significance among the variables then the Post-Hoc LSD test was used.

RESULT AND DISCUSSION

It can be seen that there is a significant difference between adolescences who play computers and those who doesn't (t=.348= P>0.05). There is no significant difference of those adolescences' anger and aggression frequencies related to playing computer games at different places (F=1.591, p>.005). There was no significant difference in adolescents playing computers at home for a week in relation to their anger and aggression. Together with there being no significant difference in adolescents playing a variation of computer games at an internet cafe in a week in relation to their anger and aggression, there was also no significant difference in adolescents playing sports and racing, war and strategic and logic games in relation to their anger and aggression. However, it can be seen that there is a significant difference between female and male adolescents



(t=.689= P>0.05). Also, no significant difference can be seen among adolescents studying at different schools (F=2.764, p<.005). There was no significant difference between the ages of adolescents in relation to their anger and aggression (F=.631, p>.005). According to the results that have been analyzed there was no significant difference between the use of computers and their types in relation to their anger and aggression (t=1.288= P>0.05). A significant difference can be seen among adolescents in the weekly use of computers in relation to their anger and aggression. This difference among adolescents can be explained as the difference between 16-19 hours of use and 8-11 hours of use per week.

Suggestions

- 1. The content and information about the results of the internet and computer games are not sufficient enough. Therefore, meetings should be arranged to gather information. In addition, because of the widespread use of computers at home, they should be put to wiser uses.
- 2. There can be studies made to encourage computer games based on educational purposes.
- 3. The schools' psychological counselors can arrange anger management programs and group guidance.
- 4. Seminars should be arranged to make students aware of the influences which may be caused by constantly using the internet and playing computer games.

Table 1. Standard deviation and the mean of adolescence anger level

	N	Minimum	Maximum	Mean	Std.
					Deviation
1. I instantly take part.	214	1,00	4,00	2,28	,93
2. I get angry easily.	214	1,00	4,00	1,98	,85
3. My anger is easily enlightened.	214	1,00	4,00	1,95	,98
4. I get angry when others mistake slow me		1,00	4,00	2,58	,97
down.					
5. I get angry if a am not awarded after		1,00	4,00	2,21	1,09
completion of a successful chore.					
6. I loose control when I get angry.	214	1,00	4,00	2,27	1,15
7. I say whatever comes to my mouth when I am		1,00	4,00	2,26	1,04
angry.					
8. To be criticized in front of others annoy me.	214	1,00	4,00	2,68	1,07
9. When I get obstructed I feel like hitting		1,00	4,00	2,30	1,15
someone.					
10. I go mad after completing a successful chore	214	1,00	4,00	2,16	1,07
if it is evaluated as bad.					

In Table 2, the average results of the participants can be seen. As can be seen in the table, some statements were given as "always" and some were given as "never".

The statements which the students marked as "mostly" are "I instantly take part" ($\overline{x}=2,28$), "I get angry when others' mistakes slow me down" ($\overline{x}=2,58$), and "To be criticized in front of others annoy me." Students who answered "sometimes" are; "I get angry easily" ($\overline{x}=1,98$), "My anger is easily enlightened" ($\overline{x}=1,98$), "I get angry if a am not awarded after completion of a successful chore" ($\overline{x}=2,21$), "I lose control when I get angry" ($\overline{x}=2,27$), "I say whatever comes to my mouth when I am angry" ($\overline{x}=2,26$), "When I get obstructed I feel like hitting someone" ($\overline{x}=2,30$), and "I go mad after completing a successful chore if it is evaluated as bad" ($\overline{x}=2,16$).

In Table 1, the average results can be seen of the participants. As can be seen in the table some statements were given as "always" and some were given as "never".

Students who answered as "mostly" are; "I can control my anger" ($\overline{x}=2,57$), "I show my anger" ($\overline{x}=2,60$), "I am patient towards others" ($\overline{x}=2,59$), "I protect my cold blooded features" ($\overline{x}=2,58$), "I can control my behavior" ($\overline{x}=2,77$), "I try to be out-going and understanding" ($\overline{x}=2,63$), and "Whoever makes me angry, I tell them to their face" ($\overline{x}=2,52$).

Students who said "sometimes" to the statements are as follows; "I hide my anger" ($\overline{x} = 1, 93$), "I frown or become miserable" ($\overline{x} = 2,09$), "I say hurtful words to others" ($\overline{x} = 2,00$), "I do things such as slamming doors" ($\overline{x} = 2,12$), "I deeply get angry, but I don't show it" ($\overline{x} = 2,10$), "I argue with others" ($\overline{x} = 2,22$), "I deeply have hatred which I don't tell anybody" ($\overline{x} = 1,85$), "Whatever makes me go mad I attack it" ($\overline{x} = 2,13$), "I control my



anger before it gets out of control" ($\overline{\times}$ =2,34), "I get more angrier than what I show" ($\overline{\times}$ =2,28), "I calm down more when I make comparisons to others" ($\overline{\times}$ =2,22), "I say bad things" ($\overline{\times}$ =2,00), "Inside I get more angry than what I show others" ($\overline{\times}$ =2,27), "I can't control my temper" ($\overline{\times}$ =2,08) and "I can control my temper" ($\overline{\times}$ = 2,39).

Students who answered the statements as "never" are; "I keep my distance from others" ($\overline{x} = 1, 57$) and "I secretly criticize other people" ($\overline{x} = 1, 62$).

Table 2. Standard deviation and the mean level of adolescence in aggression

Table 2. Standard deviation and the	N	Minimum	Maximum	Mean	Std.
					Deviation
1. I keep my anger under control.	214	1,00	4,00	2,57	,94
2. I show my anger.	214	1,00	4,00	2,60	,93
3. I hide my anger.	214	1,00	4,00	1,93	,85
4. I am patient towards others.	214	1,00	4,00	2,59	,97
5. I frown or become miserable.	214	1,00	4,00	2,09	1,04
6. I keep my distance from others.	214	1,00	4,00	1,57	,86
7. I say hurtful words to others.	214	1,00	4,00	2,00	,97
8. I protect my cold blooded features.	214	1,00	4,00	2,58	1,01
9. I do things such as slam doors.	214	1,00	4,00	2,12	1,08
10. I deeply get angry but I don't show it.	214	1,00	4,00	2,10	,99
11. I can control my behavior.	214	1,00	4,00	2,77	1,02
12. I argue with others.	214	1,00	4,00	2,22	,92
13. I deeply have hatred which I don't tell anyone.	214	1,00	4,00	1,85	1,00
14. Whatever makes me go mad, I attack it.	214	1,00	4,00	2,13	1,03
15. I control my anger before it gets out of control.	214	1,00	4,00	2,34	1,03
16. Secretly I criticize people.	214	1,00	4,00	1,62	,89
17 I get angrier than what I show.	214	1,00	4,00	2,28	1,09
18. I calm down more when I make comparisons to	214	1,00	4,00	2,22	1,00
others.					
19. I say bad things.	214	1,00	4,00	2,00	1,01
20. I try to be out-going and understanding.	214	1,00	4,00	2,63	1,06
21. I get more angry than what I show others.	214	1,00	4,00	2,27	1,06
22. I can't control my temper.	214	1,00	4,00	2,08	1,07
23. Whoever makes me angry I tell them to their		1,00	4,00	2,52	1,01
face.					
24. I can control my temper.	214	1,00	4,00	2,39	,94

A t-test was administered to measure whether the relationship between the level of adolescents' anger and attack in gender, and whether the adolescent has a computer at home or not and whether they play the computer or not was significant. The t-test results can be seen in Table 3.

Table 3. T-test results in the adolescence anger and aggression level according to their gender

	N	X	SS	t	Sd	p	Explanation
Female	96	76.07	12.42	,689	212	.487	P>0.05
Male	118	77.31	13.62				Not significant
Yes	203	77.02	13.08	1.288	212	.199	P>0.05
No	11	71.81	12.62				Not significant
Yes	183	76.88	13.29	.348	212	.728	P>0.05
No	31	76.00	11.89				Not significant

As can be observed in Table 3, the average of female adolescent is ($\overline{\mathbf{X}}$ =76.07, SS= 12.42) in comparison to male mean as ($\overline{\mathbf{X}}$ =77.31, SS=13.62). It shows that the mean of female adolescent compared to male adolescents is lower. According to the data, it can be seen that there is no significant difference between female and male adolescents (t=.689= P>0.05). The mean of adolescents who have computers at home is ($\overline{\mathbf{X}}$ =77.02, SS= 13.08)



and those who don't have a computer at home is (X=71.81, SS=12.62). In terms of the relationship between the type of computer usage and frequency with regards to anger and aggression level, the results suggest that there is no significant difference between those adolescents that own and don't own a computer (t=1.288= P>0.05). The mean of adolescents who play computer games is (X=76.88, SS= 13.29), in comparison to those who don't play

computer games as (\times =76.00, SS=11.89). According to the given results of the data, it can be said that there is no statistically significant difference between those who play computer games to those who don't play computer games (t=.348= P>0.05).

CONCLUSION

As a conclusion, it can be observed that technology is not only taking place in our social lives, but also in our educational lives too. It is a matter of fact that with the development of technology we can be defeated mentally and physically too. This can affect humans both in a negative and a positive way. The negative factors should be dealt with constructively and focus should be on the positive sides. From childhood to the adolescence, it is a very challenging and diverse period for those involved. In this period, they experience effects of adolescence in their social lives with family and friends together with their educational lives within their learning environments and classrooms. It is very difficult to challenge a growing and maturing person, so it's not right to take a chance to be in control of them, but to make them feel that they are in control unconsciously. Therefore, the use of computer types and frequency among adolescences and its relationship with anger and aggression are important factors that must be taken into consideration. Seminars and meetings should be held to make the adolescent learner aware of what the pros and cons of playing computer games via home computers or through the internet are.

REFERENCES

- Alantar, M. (1996), "Video game play and some personality traits of adolescents do not play in free time activities comparison of assessment", Unpublished Ph.D. Thesis, Istanbul: Marmara University Social Sciences Institute.
- Anderson, C.A. ve Ford, C.M. (1986), "Affect of the game player: Short-term effects of highly and mildly aggressive video games." *Personality and Social Psychology Bulletin*, 12(4), 290-402.
- Baltas, A., Baltas, Z. (2004), Stress and Coping Ways, Istanbul: Remzi Bookstore.
- Baygöl, E. (1997), 'Adolescent Reactions of the examination of Anger', Unpublished Master Thesis, Uludag University, Social Sciences Institute, Bursa.
- Berkowitz, L. (1965), 'The concept of agressive drive: Some additional considerations', *Advances in Experimental Social Psychology*, c. 2. New York: Academic Press.
- Bernstein, D. A.; Clarke-Stewart, A.; Penner, L. A.; Roy, E.; Wickens, C.D. (2000), *Psychology*, 5.basım; Houghton Mifflin Company, Boston, New York.
- Berson, I. Berson, M. (2003), Digital literacy for effective citizenship. Social Education. 67(3): 164-167.
- Bilgi, A. (2005), "Primary school level kids, some who play computer games and some who don't. A research about there agressive behaviour, depression and loneliness", Unpublished Master Tehsis, İstanbul: Marmara University Social Science Institute.
- Bridewell, B.W. ve E. Change. (1997). Distinguishing Between Anxiety, Depression and Hostility: Relations to Anger-in, Anger-out and Anger Control. *Personal Individual Differences*. 22 (4),587-590.
- Budak, Selcuk. (2005), Dictionary of Psychology, Ankara: Science and Profession Publications.
- Calvert, S.L., ve Tan, S.L. (1994), "Impact of Virtual Reality on Young Adults' Physiological Arousal and Aggressive Thoughts: Interaction Versus Observation", *Journal of Applied Developmental Psychology*, 15; 125-139.
- Deffenbacher, J. L., Stark, R. S. (1992), 'Relaxation and Cognitive Relaxation Treatments of General Anger', Journal of Counseling Psychology, 39 (2): 158–167.
- Doğan, FÖ. (2006), "Video games and children: violence in video games", *Symposium Journal*, Ekim 2006. http://psikiyatridizini.org/viewarticle.php?article_id=5610>, 3.06.2008
- Funk, J. B., ve Buchman, D. D. (1995), "Video game controversies", Pediatric Annals, 24, 91-94.
- Gectan, E. (2004), Psychoanalysis and later, Metis Publications, Istanbul.
- Kirriemuir, J. (2002), "Video gaming, education and digital learning technologies", *D. Lib Magazine*, 8(2), Retrieved February, 25, 2003 from http://www.dlib.org/dlib/february02/kirriemuir/02kirriemuir.html, 2 February 2002
- Kubey, R.W., Lavin, M.J., Barrows. JR. (2001), Internet use and collegiate academic performance decrements: Early findings. *Journal of Communication*, 366-382.
- Kulaksızoğlu, A. (2002), The Psychology of Adolescence, 3rd edition, Istanbul: Remzi Bookstore.



- Kurfallı, H., (2005) "The Effect of Computer Games Education Activities". Gaziantep University Science Congress.
- Lee, M-S., Ko, Y-H., Song, H-S., Kwon, K-H., Lee, H-S., Nam, M.& Jung, I-K. (2007). Characteristics of internet use in relation to game genre in Korean adolescents. Cyber Psychology & Behavior, 10(2), 278-285.
- Lerner, H. (2004), Dance of Anger, Istanbul: Heritage Publications.
- National Coalition on Television Violence(NCTV) (1990), "Nintendo Tainted by Extreme Violence", NCTV News, 11; 3-4.
- Mathews V, Kronenberger WG., Wang Y., Lurito JT, Lowe MJ, Dunn DW, (2005), "Media violence exposure and frontol lobe activation measured by functional magnatic resonance imaging in aggressive adolescents";29:287-292
- Setzer, V.W. ve Duckett, G.E. (1994), "The risks to children using electronic games", *Retrieved April*, 08, 2003 from http://www.ime.usp.br/~vwsetzer/video-g-risks.html, 12 June 2007
- Shuerger, J. M. (1979), 'Understanding and Controlling Anger', *Helping Clients with Special Concerns*, Ed. Elsenberg S., Patterson, L. E. Boston: Houghton Mifflin Company, s.79–102.
- Spielberger, C. D., Crane, R. S., Kearns, W. D. (1991), 'Anger and anxiety in essential hypertension', *Stress and Emotion: Anxiety, Anger and Curiosity*, 265–279.
- Spielberger, C. D., Crane, R. S., Kearns, W. D. (1991), 'Anger and anxiety in essential hypertension', *Stress and Emotion: Anxiety, Anger and Curiosity*, 265–279.
- Suhail, K., Bargees, Z. (2006), Effects of excessive internet use on undergraudate students in Pakistan. Cyber Psychol Behav, 9(3): 297-307.
- Toksöz, MR (1999), "A new type of media as interactive computer games", Unpublished Master Thesis, Ankara: Ankara University Social Sciences Institute.
- Yavuzer, H. (1998), Child Psychology, 16th publication, Istanbul: Remzi Bookstore.
- Yörükoğlu, A. (1998), Children's Mental Health, 22nd Publication, İstanbul: Özgür Publications.