

Original Article

The Relationship between Adolescents' Level of Aggression and their Participation in Social Activities

Hatice Pekince, PhD

Lecturer, Department of Public Health Nursing, Kovancilar Vocational High School, Firat University Elazig, Turkey

Behice Erci, PhD

Prof. Dr, Department of Public Health Nursing, School of Health, Inonu University, Malatya, Turkey

Correspondence: Hatice Pekince, PhD Lecturer, Department of Public Health Nursing, Kovancilar Vocational High School, Firat University Elazig, Turkey E-mail: hatturk23@hotmail.com

Abstract

Background: Depending on the increasing physical strength in adolescence and the environmental conditions of the adolescent, the frequency of enjoying violence and acting aggressively increases.

Aim: This research was done in order to determine the relationship between the adolescents' participation in social activities and their levels of aggression.

Material: The universe of this descriptive research consists of 1049 students studying in the final grade of 4 high schools selected from 11 general high schools connected to the Directorate of National Education in Elazig city center.

Methods: The data of the research were collected by using Personal Information Form, Aggression Scale and Social Functionality Scale. The data were collected by applying face-to-face interview technique and this study was conducted between 2011 and 2012 as descriptive study.

Results: It's been determined that average score of the participation in social activities of adolescents have been determined as 22.85 ± 11.67 , and their average score for recreational activities are 18.02 ± 7.08 . It's been determined that the 45.3% of the adolescents in the study are aggressive. It's also been determined that as aggression increases in adolescents, their level of participation in social activities also increases.

Conclusion:: To reduce adolescents' aggression levels, consulting services can be provided for them and their parents.

Keywords: Adolescents, Aggression, social activity, nursing.

Introduction

Adolescence; is probably one of the hardest periods of life humans have to face. This period is defined as the period of stress and enthusiasm on one hand, and a period of development of individuality and social aspects of the adolescent on the other hand (Adams, 1995). Today, 1 in every 4 people is in puberty. According to World Health Organization (WHO) 2013 data, approximately 1.8 billion of the world population is comprised of teens between age 10 to 24 (WHO, 2020). According to the 2018 data of Turkey Statistics Institution, people between ages 10 and 24 do consist of 23,5% of the population in Turkey (Turkstat, 2019). These results have shown that adolescents have a significant

intensity in the population of either Turkey and the world. Depending on the increasing physical strength and the environmental conditions that the adolescent experiences, one could also see an increase of violent behavior and a fancy for violence (Gonultas and Atici, 2014). In our day, aggression is a rapidly increasing concept due to family dynamics, environment and visual media (Kahya, 2018).

Another important developmental aspect in adolescence is the social development. It is known that an individual's socialization begins in the family first and goes beyond the family to cover school environment and goes on rapidly in the axis of friend groups in adolescence (Sahin and Ozcelik, 2016). The activities that

adolescents participate in, are important structures forming the environment for an adolescent. Research suggest that, participating in the activities of a certain purpose, in accordance with the configured environment and programs, has positive effect in formation of the identity and personality of the adolescent (Alpaslan, 2012). When the literature is analyzed, it is emphasized that aggression among adolescents has been seriously tackled and has been defined as a major public health problem. However, there isn't enough studies for the prevention of aggression in adolescents, taking necessary precautions and directing them to social activities. Therefore, public health nurses have important tasks on identifying the adolescents with aggressive tendencies, preventing these acts, cooperating with families and giving the necessary training to the families and taking necessary precautions (Kilicarslan and Atici, 2016).

Aim; Our aim in this research is to determine the relationship between the aggression levels of adolescents and their levels of participation to social activities.

Materials and Methods

This research was done between months September 2011-June 2012, in identifier-relational method. The research's population consists of 1049 senior students in high schools Karsiyaka, Hıdır Sever, Gazi and Korgeneral Hulusi Sayın, which are selected among 11 of them by drawing a lot, which are located in Elazığ city center and are subject to Education Directorate General. No sampling method has been used as the complete population was aimed to be used for the research. 803 of the students participated in the study. Thus 76.5% of the universe was able to be reached.

Data Collection: The data of this research has been collected by means of personal information form, the scale of aggression and social functioning scale (participation in social activities).

Personal information form: This form is comprised of 8 questions of socio-demographic characteristics including the age, gender, number of siblings, parents' level of education, parents' occupational group and level of income.

Aggressiveness Scale: The Aggressiveness Scale was developed in 1998 by Tuzgol (Tuzgol, 2000). Aggression scale consists of 45 articles

aimed at measuring open, hidden, physical, verbal and indirect aggression related behaviors among adolescents. Scale has 30 aggression related, and 15 non-aggressive related items. Non-aggressive expression in the scale are as follows: 2, 4, 8, 10, 13, 16, 24, 28, 33, 35, 37, 38, 39, 40, 44, and other items are the ones related to aggression. Scale has 5 likert type answering system. The scale consists of items that include individuals' own emotions and behaviors. Individual marks one of the options which are (5) always, (4) Frequently, (3) Sometimes, (2) rarely, (1) never, in order to define how fitting for himself/herself that particular statement he/she read. For the options that the individual marked, the points in parentheses are given. For the 15 non-aggressive articles in the scale, ratings are done in reverse. The sum of the reversed numbers and others, forms the aggression score of the person. High scores on the scale indicate that the level of aggression increases. Tuzgol found the Cronbach's alpha of the scale as 0.71 (Tuzgol, 2000). In this study, the Cronbach's alpha was found to be 0.81.

Social Functioning Scale (SFS): Social functioning scale (SFS), is a tool that evaluates role functions that requires judgment done for the whole social role of the person. SFS quantitatively evaluates basic skills, in terms of social behavior.

SFS was developed by Birchwood et al. (Birchwood and et al, 1990) and its validity and reliability study was done by Erakay on 2001 (Erakay and Gulseren, 2002). Having a total of 7 sub-dimensions, in SFS survey, primary social activities and recreational activities sub-dimension that are included in the social functionality scale were evaluated, in order to determine on what kinds of social activities that adolescents do participate in their free time. The scale which is 5 point likert type, consists of 38 articles. Individual marks one of the options which are (5) always, (4) Frequently, (3) Sometimes, (2) rarely, (1) never, in order to define how fitting for himself/herself that particular statement he/she read. The options and individual marked, correspond to the points contained within parentheses. For evaluating free time, the lowest point was 0 and the highest was 45; and for primary social activities, the lowest point was 0 and the highest was 66. The higher the points, the more the participation in social activities. In the analysis of the reliability of the scale, internal consistency coefficient is 0.807,

and the alpha coefficient of our research is 0.88 (Erakay and Gulseren, 2002).

The data was gathered at the schools selected for the research, in November and December of 2011, for 4 weeks, 1 day per week in the guidance, with the counselor being present, in the classroom, accompanying the students at all times. They've been given an average 20 to 30 minutes to fill the survey. For the questions that the students did not understand, an explanation without a comment was made.

The Data Assessment: Data analysis was made using SPSS 20 package program. Socio-demographic data and aggression levels are expressed in terms of numbers and percentage distributions. In the statistical evaluation, the effect of the number of siblings, father's educational level and level of income of the family to the participation in social activities and the aggression level was measured using ANOVA, the effect of age, mother's educational level and mother's occupation to the level of aggression and scale of participation to social activities was measured using Kruskal-Wallis Variant, for the effect of gender to the level of aggression and the scale of participation to social activities, t test was carried out in independent groups, and in order to determine the relationship between the participation to social activities and levels of aggression, Pearson Correlation analysis was used.

Ethical Considerations; Before commencing the research, necessary written permits were obtained from the Provincial Directorate of Education. The school managements in which the research was carried out were informed. In order to carry out the research, necessary approvals were obtained from Malatya provincial Ethics Board for Clinical Research (2011/121). The adolescents have been informed regarding the necessity of true and sincere answers and that they are free to participate in the research or not, to their liking and their verbal consents were obtained. Written and verbal consent was obtained from the parents for adolescents under 18 years of age.

Results

The data obtained in the research is presented in table 1. It's been determined as seen in Table 1, the age distribution of the sample group ranged between 16 to 19, most participants were 17 years old, and 56% of them were females. It's also been determined that most participants have

2 siblings, their mothers were mostly house wives, and close to the half of the mothers were primary school graduates. It's been determined that while 57.6% of the sample group consisted of participants whose fathers' are self employed (farmer, driver, tradesmen etc.), the level of education for fathers was 30.6% primary school, and more than half the sample group had middle income levels (Table 1).

As seen in table 2, 45.3% of adolescents participated in the research were determined as aggressive and 54.7% of them were found to be non-aggressive (Table 2). As it is presented in table 3, the point average of adolescents in participating in primary social activities was 22.85 ± 11.67 and their level of participating in recreational activities was 18.02 ± 7.08 (Table 3).

Table 4 shows that it's been determined that the aggression levels in adolescents intensified in age group 16, followed by age group 19, and the statistical difference in between is insignificant. ($p > 0.05$). When the points participation in primary social activities subscale is examined, age group 19 was found to be higher than others, and the difference in between groups is insignificant statistically. ($p > 0.05$). It's been determined that the total point average of participation in social activities and recreational activities subscale of participation in social activities is higher in age group 19 over other age groups and the difference in between groups is insignificant statistically. ($p > 0.05$)

Table 4, presents that male adolescents' aggression levels were higher than female adolescents, and the difference in between is statistically significant. ($p > 0.001$). It's been found out that total points of male adolescents' participation to primary social activities are higher than female counterparts, and the difference in between is statistically significant. ($p < 0.001$) Again, it's been found out that male adolescents' points of recreational activities are higher than female counterparts, and the difference in between groups is statistically significant. ($p < 0.05$)

As seen on table 4, adolescents with lower income families, have higher average aggression scores compared to adolescents with different income level families, and the difference in between groups are statistically significant ($p < 0.05$).

Table 1. Socio-demographic distribution of adolescents (n: 803)

Age groups	Number	%
16	18	2.2
17	470	58.5
18	263	32.8
19	52	6.5
Gender		
Female	450	56.0
Male	353	44.0
Number of siblings		
1	86	10.7
2	235	29.3
3	217	27.0
4	122	15.2
5	64	8.0
6 or more	79	9.8
Mother's occupation		
Officer	15	1.9
Retired	8	1.0
House wife	762	94.9
Self employed	18	2.2
Mother's level of education		
Not a primary school graduate	242	30.1
Primary school graduate	371	46.2
Secondary school graduate	85	10.6
High school graduate	80	10.0
University graduate	25	3.1
Father's occupation		
Officer	134	16.7
Worker	93	11.6
Retired	113	14.1
Self employed	463	57.6
Father's level of education		
Not a primary school graduate	57	7.1
Primary school graduate	246	30.6
Secondary school graduate	182	22.7
High school graduate	221	27.5
University graduate	97	12.1
Family level of income		
Good	224	27.9
Middle	496	61.8
Bad	83	10.3

Table 2. The distribution of adolescents based on aggression levels

		N	%
Level of aggression	Aggressive adolescents	364	45.3
	Non-aggressive adolescents	439	54.7

Table 3. Adolescents' Social (Activity) Functionality Scale Score Averages

Participation in social activities	Min.	Max.	X±SD
Social primary activities	0.00	69.00	22.85±11.67
Recreational activities	0.00	45.00	18.02±7.08

Table 4. The comparison of adolescents points of participating in social activities (functionality) and aggression, based on their age groups, genders and family income levels

	Aggression	Participation in social activities		Total participation in social activities
		Primary social activities	Recreational activities	
Age groups	X ± SD	X ± SD	X ± SD	X ± SD
16 (N=18)	128.78±26.92	18.00±13.19	14.67±10.62	32.67±22.65
17 (N=470)	120.97±20.82	22.45±11.01	17.78±6.52	40.23±15.71
18 (N=263)	120.55±21.74	23.51±11.97	18.48±7.59	42.00±17.80
19 (N=52)	124.04±21.49	24.90±14.69	19.04±7.49	43.94±20.04
	K-Wx ² : 2.700 p>0.05	K-Wx ² :4.897 p>0.05	K-Wx ² : 7.071 p>0.05	K-Wx ² : 6.736 p>0.05
Gender				
Female (N=450)	117.77±21.09	19.56±9.74	17.56±6.63	37.12±14.79
Male (N=353)	125.57±20.85	27.06±12.56	18.61±7.59	45.67±18.27
	t: 5.22 p<0.001	t: 9.53 p<0.001	t: 2.10 p<0.05	t: 7.33 p<0.001
Family income level				
Good (N=223)	124.09±21.69	25.84±11.87	19.62±6.97	45.46±16.99
Middle (N=496)	118.28±20.04	21.79±10.71	17.57±6.86	39.36±15.78
Bad (N=83)	130.93±23.92	21.20±14.94	16.41±7.93	37.61±20.90
	F: 15.91 p<0.05	F: 10.46 p<0.05	F: 9.06 p<0.05	F: 12.05 p<0.05

Table 5. The relationship between adolescents' aggression levels and their participation in social activities

Participation in social activities	Aggression
Social primary activities	0.176**
Recreational activities	0.084*
General sum	0.156**

* p<0.01, ** p<0.001

This difference is caused by the fact that adolescents with good income level families are more important compared to middle and lower income families. It's been determined that the total average points for participation to social activities and recreational activities, and primary social activities in adolescents with good income families are higher compared to families of other income levels and the difference in between groups is statistically significant. ($p<0.05$). This difference is caused by the fact that the ones with the good income families are more meaningful and the ones with middle income families are more important compared to lower income families (Table 4).

Correlation analysis made in table 5, shows that there is a positive relationship between aggression points of adolescents and their participation in social activities. Again it's been found out that there is a positive relationship in social primary activities, and in between recreational activities and aggression levels, the relationship is positive but weak (Table 5).

Discussion

According to our findings, the age of the adolescents did not affect their levels of aggression, and most aggression is concentrated in the age group 16, but the difference in between groups was not significant. This result is in conflict with some of the literature. In the literature, it was found that adolescents' age and aggression affected each other, and as the age increased, the levels of aggression increased (Deniz et al, 2002, Hasan, 2018, Yavuzer, 2011, Kesen et al, 2006). But the findings of Kaya showed similarities with our findings and they determined that the most aggression was to be found in age group 16 and the difference in between groups is statistically insignificant

(Kaya, 2009). The reason for the level of aggression of age group 16 being higher than others, is probably that this period is the most enthusiastic, most active, and the most confusing period in adolescent life. Borum stated that the violent behavior in adolescents peaked in 15-16 ages and diminished in the following ages, which in a way supports our findings (Borum, 2000). Yavuzer suggested that age group 14 is the group with the most anti-social behavior (Yavuzer, 2011). In our research, we've found that the difference in between groups regarding age an participation in social activities are statistically insignificant, but the highest level of participating in social activities were by age group 19. The reason could be that this age is the end of puberty, and the period in which the transition to adulthood and the maturation happens, and interest levels to various activities are increased.

Our research examined attitudes of aggression according to gender and found that male adolescents were more aggressive compared to female counterparts. When the literature is examined, in the research done by Giles and Heyman, Balat et al., and Kaya, regarding the relationship between aggression and gender, they suggest that males are more aggressive compared to their female counterparts (Kaya, 2009, Giles et al, 2005, Balat et al, 2006). Thus, our results are consistent with the literature. This difference can be explained with the patriarchal culture of our society, traditional gender roles and the effect of androgenic hormone which is also known as the male hormone, on aggression (Kulaksizoglu and Arıcak, 2000). Families promote aggression for their male children from a very early age, but prevent their daughters from presenting such behavior patterns. When thought in scope of the traditional gender roles, this conclusion supports the expectations of behavior, of the society, from

their male adolescents. Also, the reflection of a violent and bully male figure in visual media, can also trigger violent behavior on adolescents who are looking for a role model to build their personality upon. In this study, the relationship between the genders and participation to social activities have been found to be statistically significant and it's been found to be higher in male adolescents, compared to female counterparts. The reason for this is thought to be the families changing attitude against their sons and daughters, which allow sons to be more free in their free time and usually restricts girls from outside activities. Like in most communities, in our society, girls do get social passively, with emphatic expectations; and males are expected to be more powerful and active, and are expected to use their strength (Kulaksizoglu and Arıcak, 2000).

The difference between family income levels and aggression of adolescents in our study were statistically significant. As perceived by the adolescents, "bad" income level families children have more aggression points compared to other levels of income, and the difference in between them are statistically significant. As the adverse economic situations effect the inter-family relations, it will also adversely effect the adolescent who is growing up in a problematic environment. In these conditions, we can deduct that the aggressive behavior is a consequence and a rebel against the feel of limitation. Many studies can be found in literature that supports our findings. Aglamaz, Dogan, in their research, have found out that bad income levels effect the aggression, as the income levels decreased, the level of violence increased (Aglamaz, 2006, Dogan, 2001). Also Kilic and Kaya have stated that the relation between the level of income and aggression is statistically insignificant, and the level of income does not effect the level of aggression, which is inconsistent with our findings (Kaya, 2009, Kilic and Murat, 2012). In this research, the relationship between the family income levels and participation in social activities have been found to be statistically significant, and as the level of income increased, the points for participation to social activities also increased. In a period which the brand passion, competition among friends and psychological fluxes, and boredom is high, it's thought that an economical well being, which means providing for the needs of the adolescent, and the provisions of necessary tools for some social

activities, makes it effective. (ex. sports shoes, racket, concert tickets etc.)

In our research, we also conducted studies on the relationship between the participation in social activities and adolescent aggression and found out that there is a relationship, which is positively related to social primary activities, and again positively related to recreational activities. As the aggression increases, the points for participation in social activities also increases. While Kaya did not detect any statistically significant relation in between aggression and hobbies/activities outside school (Kaya, 2009). Balkaya found out that adolescents who join recreational activities in their free time, do form a more positive personality development, compared to others (Balkaya and Ceyhan, 2007). In Saglam's study, it's been determined that programs like group counseling on aggressive students, are quite effective in diminishing their aggressive behaviors (Saglam, 2008). In our study, cafe / coffee house visits and/or TV watching activities being perceived as social activities can be suggested as a reason for increasing aggression as the social activities increase.

Limitations of the study: The results cannot be generalized to students studying in all high schools in the city of Elazig, since the senior students studying in 4 high schools are included in the research.

Conclusion: Considering these findings obtained from this study, 45.3% of adolescents participated in the study found to be aggressive, there is statistically significant difference regarding aggression, between groups based on gender, adolescents' perceived family income level, and male adolescents with higher income levels found to be the most aggressive among them. It was also determined that gender, number of siblings, educational level of mother and father, occupation of the father, and perceived income level of the family, effected the participation in social activities, and the adolescents who are males, with less siblings, with university graduate parents and with higher income parents, have a higher participation level in social activities. It was also found that there is a significant statistical relation in between aggression and participation in social activities, as aggression increases, participation in social activities also increases with it.

Suggestions; Anger management counseling and stress coping counseling services for adolescents,

and for parents, encouraging their teens to do more social activities and to be given information on preventing aggressive behavior, could be suggested. Also an improvement on families' educational levels and motivation for the adolescents to be engaged in social activities can also be suggested.

Acknowledgements: The authors would like to thank the participants who took part in the study without whose time and contributions it would not have been possible to undertake this work.

References

- Adams J.F. (1995) Understanding Adolescence, B.Onur (Ed.), Imge Yayınları, Ankara.
- Aglamaz T. (2006) High school students' aggression point interns of examining self-disclosure, school type, sex, class level, parent's education level and families monthly income level. Unpublished Master's Thesis. Samsun: Ondokuzmayıs University Institute of Social Sciences.
- Alpaslan A.H. (2012) Adolescent Mental Health and Sports, Kocatepe Medical Journal, 13, 181-185.
- Balat G.U. & Akman B. (2006) Investigation of The Psychological Status of The High School Students with Regard to Their Sociodemographic Characteristics, *Journal of Child and Adolescent Mental Health*, 13(1), 3-12.
- Balkaya A. & Ceyhan E. (2007) Investigating The Levels of Sense of Identity Acquisition of High School Students in Terms of Some Variables, *Journal of Social Sciences*, 1, 433-446.
- Birchwood M. Smith J. Cochrane R. and et al, (1990) The Social Functioning Scale. The Development and Validation of a New Scale of Social Adjustment For Use in Family Intervention Programmes with Schizophrenic Patients. *Br J Psychiatry*, 157, 853-859.
- Borum R. (2000) Assesing Violence Risk Among Youth. *Journal of Clinical Psychology* 10, 1263-1288.
- Deniz E.M. Hamarta E. Arslan C. (2002) Examining the problem solving skills of high school students in terms of various variables, *Educational Administration:Theory and Practice*, 8(3), 374-389.
- Dogan S. (2001) The Effect of parents approach to the aggressive behavior of girls and boys in their adolescence belonging to different socio-economic levels. Master Thesis. Kocaeli University Institute of Social Sciences, Izmit.
- Giles J.W. & Heyman G.D. (2005) Young children's beliefs about the relationship between gender and aggressive behavior. *Child Development*, 76(1), 107-121.
- Gonultas O.& Atici M. (2014) An Investigation of Anger and Aggression Levels of Middle School Last Class Students' Regarding Some Variables, *Cukurova University Institute Of Social Sciences*, 23(1), 370-386.
- Hasan A.S. (2018) Investigation of Iraq and Level of Aggression In Turkey College Students, Rebullic of Turkey, Selcuk University Health Sciences Institute, Master thesis, Konya.
- Kahya Y. (2018) The Effects of Media on Social Deviation and Violence on Youth, *SDU Faculty of Arts and Sciences Journal of Social Sciences*, 45, 43-57.
- Kaya F. (2009) An investigation of contributors to violent behaviour among high school students. Master Thesis. Istanbul University Health Sciences Institute, Istanbul.
- Kesen F.N. Deniz M.E. Durmusoglu N. (2006) The relationship between adolescents aggression and anger levels: A Research On Cultivation Dormitations. *Selcuk University Journal of Social Sciences Institute*.7, 353-364.
- Kilic E. & Murat M. (2012) An Investigation of Aggression Levels of 9th Grade Students Studying at General High Schools with Regard to Some Variables and Continuous Anxiety Levels, *Gaziantep University Journal of Social Sciences Institute* (<http://sbe.gantep.edu.tr>) 11(3), 835 -853.
- Kilicarslan S. & Atici M. (2016) Investigating of The Effects of Psycho-Educational Programme That is Applied to Parents and Adolescents Towards Reduction of Aggressive Behavior in Adolescents, *Adnan Menderes University, Journal of Institute of Social Sciences*, 4(1), 20-41.
- Kulaksizoglu A. & Arıcak O.T. (2000) Relationship between aggression, self-esteem and locus of control in university students. *Trakya University Journal of Scientific Research*, 1(2), 87-94.
- Results of Population Censuses, 1935-2000 and results of Address Based Population Registration System, 2007-2018 Access: <http://www.turkstat.gov.tr/Start.do?jsessionid=J1hvcrb2lZwNby731nRKVCvnzx8Dwy11LHpKKxQQGd7cVnd6TgM!-1329404082>
- Saglam S.P. (2008) An experimental study on the effects of the group guidance program that was prepared for the organization of leisure times on the aggressive behavior of students, Master Thesis. Mersin University Institute of Social Sciences, Mersin.
- Sahin S.& Ozcelik C.C. (2016) Adolescence and Socializing, *Cumhuriyet Nursing Journal*, 5(1), 42-49.
- Tuzgol G. (2000) Examining Aggressiveness Levels of High School Students Whose Parents Have Different Attitudes in Terms of Various Variables, *Turkish Psychological Counseling and Guidance Journal*, 2(14), 39-48.
- WHO (2020). Adolescent health Access: <https://www.who.int/news-room/factsheets/detail/adolescents-health-risks-and-solutions>
- Yaprak Erakay S.& Gulseren S. (2002) To investigate the validity and reliability of the Turkish version of Social Functioning Scale in patients with schizophrenia. *Spring Symposiums VI, Congress Abstract Book*, p.134-135.
- Yavuzer H. (2011) *Child and Crime*, 14. Printing Istanbul, Remzi Bookstore.