

THE EFFECTS OF SOME VARIABLES ON ANGER LEVELS OF STUDENTS DOING SPORTS

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Abstract

The research has been done with the aim of revealing the relation of high school students' anger levels who do sport at school to different variables. As the research model, descriptive model has been taken up in quantitative research methods. The research group consists of 527 adolescent students who study at various high schools in Karaman province center. Adolescent Anger Rating Scale (AARS) has been used in order to determine participants' anger levels that was developed for 11-19 age adolescents by Burney (2001) and was adapted to Turkish by Aslan and Sevinçler-Togan (2009). With this scale, four anger type points are obtained: reactive anger, instrumental anger, anger control and total anger. Multiple regression analysis has been used in order to determine cause and effect relation between dependent and independent variables. SPSS (Statistical package for social sciences) package programme has been used so as to evaluate data and finding estimated values. It can be said that total anger point average of participant adolescent is (Mean=77,41), instrumental anger point average of adolescent anger level sub-dimension is (Mean=14,78), reactive anger point is (Mean=20,20) and anger control point average is (Mean=42,) which are in low levels. According to the results, a low level meaningful relation between anger levels was found in Do you do sport?, How often do you do sport?, family income and school type variables.

Key Words: Adolescent, Anger, Sports, Education

SPOR YAPAN LİSE ÖĞRENCİLERİNİN ÖFKE DÜZEYLERİNİN BAZI DEĞİŞKENLERE OLAN ETKİSİNİN İNCELENMESİ

Özet

Bu araştırma; okul sporlarına katılan lise öğrencilerinin öfke düzeylerinin farklı değişkenlerle olan ilişkisini ortaya koymak amacıyla yapılmıştır. Araştırma modeli olarak nicel araştırma yöntemlerinden betimsel yöntem benimsenmiştir. Araştırma grubunu Karaman İl merkezinde çeşitli liselerde öğrenim gören 527 ergen öğrenci oluşturmaktadır. Araştırmaya katılanların öfke düzeylerinin belirlenmesi amacıyla, Burney (2001) tarafından 11-19 yaş arası ergenler için geliştirilen, Aslan ve Sevinçler-Togan (2009) tarafından Türkçeye uyarlanan Ergen Öfke Değerlendirme Ölçeği (Adolescent Anger Rating Scale-AARS) kullanılmıştır. Ölçek ile dört tür öfke puanı elde edilmektedir: Tepkisel öfke (reactive anger), araçsal öfke (instrumental anger) ve öfke kontrolü ve toplam öfke puanı. Araştırmada bağımlı ve bağımsız değişkenler arasındaki sebep sonuç ilişkisini belirlemek için çoklu regresyon analizi yapılmıştır. Verilerin değerlendirilmesinde ve hesaplanmış değerlerin bulunmasında SPSS (Statistical package for social sciences) paket programı kullanılmıştır. Araştırmaya katılan ergenlerin öfke toplam puan ortalaması (Ort.=77,41), ergen öfke düzeyi alt boyutlarından araçsal öfke puan ortalaması (Ort.=14,78), tepkisel öfke puan ortalaması (Ort.=20,20) ve öfke kontrol puan ortalaması (Ort.=42,435) düşük seviyelerde olduğu söylenebilir. Sonuçlara göre, Spor Yapıyor musunuz?, Ne sıklıkta spor yapıyor Sunuz?, Aile gelir durumu ve öğrenim gördüğü okul türü değişkenleri ile öfke puanları arasında düşük düzeyde anlamlı bir ilişki bulunmuştur.

Anahtar Kelimeler: Ergen, Öfke, Spor, Eğitim

Introduction

Adolescence is a process that begins with the end of the childhood and progresses psychologically to reach adulthood (Koç, 2004). Adolescence, in a broad sense, is the transition period from childhood to adulthood with individual biological, psychological and social changes (Yavuzer, 2003).

The first manifestation of puberty is 10 years of age in healthy girls and 12 years of age in males. Psychosocial development lasts longer and can last up to twenty-eight (Neyzi et al, 2002). Getting accustomed to rapid physical growth, the onset of sexual development and the occurrence of psychosocial changes affect the person in this age group and his / her communication with the environment. For this reason, in this period, problems related to physical growth and development, sexual development and psychosocial developments are encountered (Cromer, 2011). The area where the increasing body energy during puberty will be analyzed in the most effective way is the sport. Sport is also a means of socializing. Dissemination of the sport and the young people actively work in a sport will strengthen community mental health (Duman, 2009). Anger is an emotional response for unannounced desires, unwanted results and unmet expectations that is innate, developed in the first years of life, encountered very often in daily life of child or young, extremely natural, universal, nonviolent and unaggressive, enriching life and a need for sustaining life (Balkaya, 2006; Eşiyok et al, 2007). How the anger is expressed is very important. Anger is interpreted according to the way it is expressed and gone through a trouble due to results in expressing it (Erkek et al, 2006). Anger emerges in different forms in individuals. These are; anger introversion, anger extroversion and anger control (Bostancı at al, 2006; Lerner, 2007). Sport serves to improve the relations between people and to increase social participation. At the same time, it increases collaboration and solidarity between people (Açıkada, 1994). The importance of sport in society is increasing day by day (Duman, 2009). Sport teaches adolescents how to make aggressiveness impulse proper for social rules and renders it harmless naturally. Educators have expectations from sport. One of them is to ensure clearing the cumulative energy on children and adolescents (Başaran, 1996). At the same time, many researchers stated that sport is not only a free time activity but also is a remedial exercise that directs confined energy to suitable areas, ensures remained senses to come to light and has a therapeutical part (Yıldırım, 2003). It is impossible to uncouple sport from education. Since, sport and sportive activities are one of the important fields and activities that is done by adolescents who are in puberty and study at secondary education (Yıldırım, 2003). In brief, it is seen in recent years that aggressive behaviors between adolescent students increased. For this reason, it is seen that sport, which is important both social and psychological aspect, plays a key role in removing these behaviors. In this context, schools need to be prompted to organize sportive activities. In this situation adolescents both live happy and healthy life and can cope with problems more easily which enables to reveal this subject.

Research Model

This research is a descriptive study. Descriptive statistics is a statistical process which enables gathering, describing and presenting numerical values related to a variable (Büyüköztürk, 2010).

Research Group

Research group consists of 527 students who are at 1st, 2nd, 3rd and 4th grade high schools (Vocational High School, Sport High School, Fine Arts High School, Anatolian High School Science High School, Religious Vocational High School and Health High School) which are attached to 2016-2017 academic year Karaman Directorate of National Education.

Table 1. School and Grade Status of Participant Sample Group

		n	%
School	Vocational High School	64	12,1
	Sport High School	65	12,3
	Fine Arts High School	75	14,2
	Anatolian High School	123	23,3
	Science High School	75	14,2
	Religious Vocational High School	51	9,7
	Health High School	74	14,0
Grade	1st Grade	381	72,3
	2nd Grade	96	18,2
	3rd Grade	39	7,4
	4th Grade	11	2,1
Gender	Female	264	50,1
	Male	263	49,9

Data Collection

Firstly, current data related to the aim of the research has been given systematically with the literature search. Thus, a theoretical frame on the subject was formed. Secondly, a 7- questioned-information form, Adolescent Anger Rating Scale (AARS), which was developed for 11-19 age adolescents by Burney (2001) and was adapted to Turkish by Aslan and Sevinçler-Togan (2009) has been used to gather participants' personal information and forming independent variables of the search.

Data Collection Tools

Requisite data collection tools which are for achieving determined goals related to the search have been given below respectively;

Personal Information Form

A 7- questioned-information form has been prepared by the researcher with the aim of forming independent variables of the search and gathering information about personal features of 527 students who study at high schools affiliated to Karaman National Education Directorate.

Adolescent Anger Rating Scale (AARS)

Adolescent Anger Rating Scale was administered in the United States in 2000 which was developed by DeAnna McKinnie-Burney, for teenagers between the ages of eleven and nineteen. The researchers included individuals up to the age of twenty-three within the scope of the studies of the Turkish form in order to carry out their monitoring studies in the context of the developer program for the control of anger control and the final applicable age limits of the scale in the light of the obtained statistical findings are given in the discussion. In a Turkish version of the study, a quadruple Likert-type Adolescent Anger Rating Scale was used, consisting of forty items as in the original. Four different anger points are obtained from four sub dimensions of the scale: reactive anger, instrumental anger, anger control and total anger.

1. Reactive Anger (**Nmadde= 20**): It is a sudden and nervous reaction to fear, threat or negative feeling.

2. Instrumental Anger (**Nmadde= 8**): It is a negative feeling that stimulated late reaction which ended up a planned and wanted revengeful behavior.

3. Anger Control (**Nmadde= 13**) It is a cognitive and behavioral method used in measuring anger reaction

A five stage study has been done in order to provide reliability and validity of original form of Adolescent Anger Rating Scale (McKinnie-Burney, 2001):

1. Various anger theories have been defined by considering the weaknesses and weaknesses of current anger scales, and a goal and rationality for AARS has been developed by examining the literature. Based on the examination of the literature, hundred and six potential items were formed to measure three types of anger-related behaviors. A group of experts evaluated the hundred and six substances and decided whether they were valid or not. As a result of this evaluation some items were eliminated, some expressions were changed and some items were added.

2. A preliminary study has been carried out to evaluate the consistency of AARS and to examine the materials. As a result of this preliminary study, fifty one substances were obtained by reducing the number of substances.

3. Data have been collected to assess the reliability and validity of the AARS using fifty one items. The number of items was reduced to forty-one with the last revise.

4. The sample was created.

5. It has been reapplied for the validity and credibility of forty-one AARS. Internal consistency and test retest validity have been performed in reliability tests. The Cronbach's alpha coefficient for the 6th and 8th grade (N=2171) is between (.80) and (.92) while it is between (.81) and (.94) for the 9th and 12th grades (N=2013).

The test retest reliability has been obtained by applying the same group to a vehicle at different times. Correlation coefficients have been obtained for the subscales (.71) and (.74) over the AARS scores applied to a group of hundred and nineteen people with fifteen days intervals (.79) for the total score. Validity studies were begun with a hundred and one items questionnaire from the question pond. An expert group consisting of eight volunteer members was formed to examine and decide the test items. A three-part survey was conducted to the experts to examine the validity and relativeness of AARS. Each expert was asked to describe five behaviors related to (i) instrumental anger and (ii) to reactive anger, and (iii) to develop at least one descriptive behavior for the first two items. A decision has been made in the direction of the answers of the eight experts.

The Turkish version of the Adolescent Anger Rating Scale (AARS) was developed by Aslan and Sevinçler-Togan (2009) (Aslan and Sevinçler-Togan, 2009).

The internal consistency (Cronbach Alpha) reliability coefficient of this study has been found as .81 for total anger.

Data Analysis

Multiple regression analysis has been performed to determine the causal relationship between dependent and independent variables in the study. SPSS 21 (Statistical Package for Social Sciences) package program has been used to evaluate the data and to calculate the calculated values.

Results

Personal Characteristics of Research Group

The data and comments on the demographic characteristics of the students participating in the survey are given below.

Table 2. Demographic Features Dispersion of Sample Group

Personal Characteristics of Research Group	n	%	
School Type	Vocational High School	64	12,1
	Sport High School	65	12,3
	Fine Arts High School	75	14,2
	Anatolian High School	123	23,3
	Science High School	75	14,2
	Religious Vocational High School	51	9,7
	Health High School	74	14,0
Family Income Status	0-1000	120	22,8
	1001-2000	188	35,7
	2001-3000	124	23,5
	3001-4000	55	10,4
	4001-üzeri	40	7,6
Do you do sport?	Yes	365	69,3
	No	162	30,7
How do you make use of your spare time?	Attending physical activities	58	11,0
	Attending social activities	108	20,5
	Attending cultural activities	19	3,6

	Attending artistic activities	44	8,3
	Resting	229	43,5
	Other	69	13,1
Do you have difficulty in using of your spare time?	Always	21	4,0
	Sometimes	283	53,7
	Never	223	42,3

When Table 2 examined, it is seen by the gender variable that 263 (%49,9) of the participants are male while 264 (%50,1) of them are female. According to age variable; 25 (%4,7) of the participants are at the age of 13-14, 462 (%87,7) of them are at the age of 15-16, and 40 (%7,6) of them are at the age of 17-18. According to the place where most of life is spent variable 25 (%4,7) of the participants live in metropolis, 372 of them (%70,6) live in city center, 60 (%11,4) of them live in country town, and 70 (13,3) of them live in town and village. According to the mother educational background variable; 29 (%5,5) of the mothers are literate, 249 (%47,2) of them are primary school graduate, 103 (%19,5) of them are secondary school graduate, 100 (%19) of them are high school graduate, 36 (%6,8) of them have bachelor degree and 10 (%1,9) of them have master degree. According to the father educational background variable; 16 (%3) of the mothers are literate, 164 (%31,1) of them are primary school graduate, 128 (%24,3) of them are secondary school graduate, 103 (%19,5) of them are high school graduate, 95 (%18) of them have bachelor degree and 21 (%4) of them have master degree. According to mother professional status variable; 391 (%74,2) of the mothers are housewives, 37 (%7) of them are officers, 60 (%11,4) of them are workers, 39 (%7,4) of them are at other occupational groups. According to mother professional status variable; 109 (%20,7) of the fathers are officers, 160 (%30,4) of them are workers, 87 (%16,5) of them are tradesmen, 57 (%10,8) of them are retired and 114 (%21,6) of them are at other occupational groups. According to participants' monthly income; 120 (%22,8) of them earn 0-1000 TL, 188 (%35,7) of them earn 1001-2000 TL, 124 (%23,5) of them earn 2001-3000 TL, 55 (%10,4) of them earn 3001-4000 TL and 40 (%7,6) of them earn 4001 and over. When doing sport rate of participants is examined it has been seen that 365 (%69,3) of them said 'Yes' and 162 (%30,7) of them said 'No'. When these students' recreative activities examined 58 (%11) of them said they attend physical activities, 108 (%20,5) of them said they attend social activities, 19 (%3,6) of them said they attend cultural activities, 44 (%8,3) of them said they attend artistic activities and 69 (%13,1) of them said they attend other recreative activities in their leisure time. Finally, for the question of whether participants have difficulty in recreation or not; 21(%4) of them said 'Always', 283 (%53,7) of them said 'Sometimes' and 223 (%42,3) of them said 'Never'.

Table 3. Participants' Psychologic Levels Results

	n	Mean	Ss	Min	Max
Instrumental Anger	527	14,7818	4,08836	8,00	32,00
Reactive Anger	527	20,2049	6,55307	13,00	52,00
Anger Control	527	42,4269	6,55670	23,00	77,00
Total Anger	527	77,4137	13,59489	44,00	161,00

Participants' anger dimension and anger sub-dimension point average are examined in Table 3. At the end of this examination it has been seen that total anger point average of participants included in the study is =77,41 which is in low level, instrumental anger sense point average from anger sub-dimensions is =14,78 which is in low level, reactive anger sense point average from anger sub-dimensions is =20,20 which is in low level and anger control sense point average from anger sub-dimensions is = 42,43 which is in low level.

Table 4. Standard Multiple Regression Analysis Results Related to Anger Regression

	B	SH_B	β	t	P	Dual r	Partial r
(Constant)	72,951	4,623	-	15,779	,000	-	-
Do you do sport?	,349	1,804	,012	,193	,847	-,011	,008
How often do you do it?	,259	,797	,020	,326	,745	,023	,014
Family income	1,738	,507	,150	3,428	,001	,145	,148
School type	-,223	,277	-,036	-,807	,420	-,021	-,035

R= 0,151 R²= 0.023

F_(4,522)= 3,049 p= .017

When Table 4 is examined it is seen that there is a negative and low level relation between anger point and point for doing sport or not. It has been seen that this relation is not meaningful statistically (t=0.193, p=0.847). There is a positive and low level relation between anger point and doing sport frequency. It is seen that this relation is not meaningful statistically (t=0.326, p=0.745). There is a positive and low level relation between anger point and family income. It is seen that this relation is meaningful statistically (t=3,428, p=0.001). There is a negative and low level relation between anger point and school type point. . It is seen that this relation is not meaningful statistically (t=-0,807, p=0.420).

Regression point that shows the effects of doing sport, frequency of doing sport, family income and school type variables on anger level is 0,15 and these four independent variables explain the % 2,3 of the changes in the dependent variable which is anger level. The effects of doing sport, frequency of

doing sport, family income and school type variables on anger level is meaningful (**Sig.: 0,000<0,05**). According to standardized Beta coefficient, the order of importance of independent variables over dependent variable is as family income ($\beta=0,150$), school type ($\beta=-0,036$), frequency of doing sport ($\beta=0,020$) and doing sport ($\beta=0,012$).

According to t-test results related to regression coefficient meaningfulness, the effect of family income variable on anger level is meaningful (**Sig.=0,001<0,05**), but doing sport, frequency of doing sport and school type variables do not have effect on anger level (**Sig.>0,05**). When the correlation between doing sport and anger level is -0,011, other independent variables drop to 0,008. When the correlation between doing sport and anger level is 0,023, other independent variables drop to 0,014. The correlation between family income and anger level is 0,145, other independent variables drop to 0,148 and when the correlation between school type and anger level is -0,021, other independent variables drop to -0,035.

Discussion, Result and Suggestion

The results of the Adolescent Anger Rating Scale and the statements made on it are presented below.

According to the results, it has been understood that the levels of instrumental anger, reactive anger and anger control levels and total anger level of adolescents included in the research. Therefore, it can be concluded students are willing to revenge, do not show nervous behavior in fear or in a negative situation. This is thought to be the preventive role of sport. However, it can be said that the level of behavioral condition which removes instrumental and reactional effects which is shown in the anger control is low. Anger control is a cognitive and behavioral method that is used to resolve reactive or instrumental responses to anger (quot:Aslan and Togan, 2009).

In the study by Starner and Peters (2004), it has been determined that as the anger level of the students increased, the anger, the anger and the anger control levels of the students increased. Result can be attributed to the fact that it does not support this work. Yet, another study found that adolescents felt themselves at a moderate level of anger (Özmen et al.,2016). Again, according to another study, it is shown that the level of subscale levels of continuous anger and anger expression styles of the teachers included in the research are not in support of the study (Temel, V., 2015). According to the work by Nas et al. 2016, the averages of continuous anger scores of the athletes participating in the research was found at low level. This one supports the work. The work done by Temel et al. in 2016 is parallel to the fact that the anger and some sub-dimensions are low. And also The work done by Akpınar et al.in 2012 supports the low level of subordination of the styles of expression of constant anger and anger in the same way.

A low level of correlation has been found between the anxiety points and the frequency of doing sports, how often you are doing sports, family income status, school type variables, ($R= 0,151$ $R^2=$

0.023, $p < 0.05$). The four mentioned variables explain the 2.3% of the total variance in the anger point. Although the result is meaningful, the relationship is low. According to the standardized regression coefficient (β), the relative importance order of the anger levels of the predictor variables is family income situation, school type, frequency of sports making and sporting situation. From here, family income is more important among the variables. When the t-test results of the significance of the regression coefficients are examined, it can only be concluded that the family income status variable is an important (significant) predictor of anger. According to work done by Temel et al. in 2016, finding a meaningful difference supports the work according to the variables of the doing sports.

Suggestions

Similar studies can be suggested to generalize the results of the research.

This research has been carried out on students in different branches of sports. In order to help generalize the results obtained, it is possible to investigate the relationship between problem solving skills and sub-dimensions of different sports people (high school students, street children, working children, national athletes, etc.) according to different variables.

In order to abolish words or behaviors that intensify the anger necessary therapy can be consulted and it can be stopped before further phases.

In this study, the effects of anger levels are consulted but issues (such as decision making, problem solving skills, anxiety) that can be related to anger level are examined.

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