

# The effects of sports on university students' continuous anger and anger sub-levels

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## Abstract

In this study, the effect of sports on the anger levels of university students was examined. The study group consisted of 101 male and 99 female students studying at Selçuk University. The continuous anger levels of the individuals who do and do not sports participate in the study were determined by the "Continuous Anger Subscale" of the Continuous Anger - Anger Expression Scale Scale, which was adapted to Turkey by Özer. To analyses data, the independent t-test and ANOVA were conducted. According to the data of 18-20 (40 students), 21-23 (126 students), 24 years and over (34 students); The difference between the two groups who do and do not sports was important for the continuous anger subscale score as a result of two independent sample t tests ( $p < 0.05$ ). According to this, the score of the anger subscale is higher than that of the individual who does not perform. The p- value for anger subscale score was found to be significant ( $p < 0.05$ ). According to this, the individual who plays sports has a higher score on the subscale of anger than the individual who does not. Sports has played an active role in the suppression of the anger as the university student's constantly raising the level of anger. P value for anger subscale score of independent two-sample T-test for testing whether male and female subjects had significantly different scores of continuous anger subscale scores ( $p < 0.05$ ). According to this, the score of the male individual is higher than that of the female anger. It can be said that men can express their anger more easily than women. There was a significant difference between the father professions ( $p < 0.05$ ) for the continuous anger subscale scores. The scores of the continuous anger subscale scores of the private sector and the self-employed individuals of the father occupation were the same, while those of the father sector occupation were lower than the scores of the continuous anger subscale of the public sector. These results show that while the anger of the individuals whose father is the private sector and self-employed remains at the same level, the levels of continuous anger of the individuals working for the father in the public sector are found to be low.

**Keywords:** Anger level, university student, adolescents, athletes, non-athletes.

## INTRODUCTION

Adolescence is the period in which the individual begins to develop during the childhood period and reaches physiological maturity (13).

Adolescence is a difficult life for a developing child. After a period of fairly long and balanced behavior, the child suddenly goes into adulthood, an unstable and disordered stage (18,27).

The cause of this variable emotional state seen in adolescents may be due to the lack of satisfying a basic need, the lack of satisfying, and the adolescent tries to express himself in some way. When these wishes and needs are met positively, the teenager is happy, otherwise they are worried and show different emotional reactions (27).

In everyday life, the individual faces many different situations based on human relations. While

some of these situations bring out desirable and positive feelings such as joy, laughter, laughter, and others, they can cause unwanted and negative emotions such as anxiety, sadness and frustration due to obstacles, conflicts and problems caused by them. These negative emotions can affect the life of the individual in a positive way. One of the emotions experienced by the individual is anger sentiment (4,7-9,11,12,14,19,28).

Anger is caused by interactions between people and is a feeling that is experienced when an individual's plans, wants and needs are obstructed, and he perceives injustice, injustice and threat to his / her own self (2,10,12).

The feeling of anger also differs in terms of expression. Individuals may show their anger in the form of throwing, directing and controlling.

Throwing bribery involves keeping the anger under pressure and not expressing it; as well as verbal such as profanity, insult, criticism as well as physically manifesting such as being outwardly directed and damaging to objects. Control of the pupil is usually patient, calm, tolerant and understanding in relation to others and often controlling and calming the anger tendency (17,23).

Anger emerges in different forms in individuals. These; an inner appearance of the anger, outer appearance of the anger and anger control (6,15,17,24-26).

Outrageous outburst; is an adaptive response to the stress that is caused by the anger. Anger; is an alternative mechanism of adjustment that is used against the factors of anger that exist by hiding or angering someone. Anger control is the control experience that expresses anger with individual reactions, to the extent that one controls the anger in relation to others, or tends to calm down to what extent (24).

Anger is one of the important emotions in human life. It can be thought that it is important to express anger and anger in relation to the stress coping and problem-solving approaches of the individual when expressing anger and anger are thought to be a stress and problematic situation mainly caused by interpersonal problems. For this reason, it is important to recognize and understand the anger well, and in the direction of these determinations, school health can play a key role in early detection of mental and physical problems in improving adolescents' ability to cope appropriately. In this study, the effects of self-esteem, continuous anger and anger expression styles and individual-familial demographic characteristics of university students who do sports and do not play sports are being investigated.

## MATERIALS & METHODS

### Research Model and Sample

This study was conducted in accordance with the general screening model. The research universe of the research consists of students who are studying at the Faculty of Agriculture, Faculty of Medicine and Faculty of Sports Sciences of Selçuk University. The study group of the study consists of 200 students studying at university. Of the students participating in the survey, 99 are female and 101 are male. Students are between 18 and 24 years old.

## Data Collection Tools

### Continuous Anger and Anger Expression Scale

Spielberger and colleagues developed the scale of continuous anger and anger expression. Translation to Turkish and adaptation work was done by Özer. The first ten items of thirty-four items measure the level of constant anger, while the other twenty-four items determine the way an individual expresses anger. The scale is a quadrant Likert type measurement. Internal consistency coefficients calculated from the scale; seventy-nine for constant anger dimension, eighty-four for control anger, seventy-eight for anger out and sixty two for anger suppression.

High scores from the Continuous Anger Subscale indicate that the level of anger is high, the high scores in the Anger Inside Scale show that the anger is suppressed, The high scores on the Anger Out Scale show that the anger is easily expressed, The high scores on the Anger Control Scale show that the anger can be controlled (21).

### Data analysis

The normal distribution fitness test for the data was also tested using the Kolmogorov-Smirnov test, again using the plate test for variance homogeneity. In order to apply parametric tests, both normal distribution fitness and variance homogeneity are required at the same time. Non-normal distribution of data and non-homogeneous variance of the data requires using non-parametric tests. ANOVA (One-way ANOVA) test for more than two groups from the parametric tests and independent two-sample T test for independent two groups were used for the analysis of the Kolmogorov-Smirnov test and the leaf test. In the analysis of the data, SPSS 15 Statistical Package Program was used.

## RESULTS

101 (50.5%) of the students did not play sports, 99 (99.5%) did not play sports and the majority (63%) were in the age range of 21-23 years in the demographic information of the subjects participating in the research (79.5%) and primary school graduates (67%), while the majority of the income level (82%) was moderate.

Continuous anger subscale and anger subscale scores were found significant difference between groups ( $p < 0.05$ ; Table 2). For both variables, individuals who do sport had higher scores than individuals who do not sport. On the other hand,

there was no significant difference between groups in anger outward subscale and anger control subscale scores ( $p>0.05$ ).

**Table 1.** Demographic data.

		n	%
Satatus	Sports	101	50.5
	Non-sports	99	49.5
Gender	Male	101	50.5
	Female	99	49.5
Age	18-20	40	20.0
	21-23	126	63.0
	24 and above	34	17.0
Number of Siblings	1,00	81	40.5
	2,00	87	43.5
	3,00	32	16.0
Education Status	Primary School	8	4.0
	High School	10	5.0
	University	182	91.0
Mother Profession	Housewife	159	79.5
	Public	20	10.0
	Private	21	10.5
Father Profession	Self Employment	82	41.0
	Public	70	35.0
	Private	48	24.0
Mother Education	Primary School	134	67.0
	High School	47	23.5
	University	19	9.5
Father Education	Primary School	94	47.0
	High School	56	28.0
	University	50	25.0
Income	Low	18	9.0
	Intermediate	164	82.0
	High	18	9.0

Scores of male and female was not different for continuous anger subscale, anger subscale, and anger control subscale ( $p>0.05$ ). Beside, anger outward

subscale scores in male individuals was higher than female ( $p<0.05$ ).

Anova, which conducted to compare the anger levels of age groups, revealed that there were no significant difference in scores of continuous anger subscale, anger subscale, anger outward subscale, and anger control subscale between age groups ( $p>0.05$ ; Table 4).

Table 5 presents the comparisons of anger scores for number of siblings. No significant difference was found between groups in scores of continuous anger subscale, anger subscale, anger outward subscale, and anger control subscale ( $p>0.05$ ).

Table 5 shows the comparisons of anger scores for number of siblings. There was no significant difference between groups in scores of continuous anger subscale, anger subscale, anger outward subscale, and anger control subscale ( $p>0.05$ ).

As seen in Table 7, Anova did not reveal any significant difference between mothers' professions in all subscales ( $p>0.05$ ).

Table 8 shows comparisons subscales according to the fathers' professions. The results of Anova revealed that anger subscale, anger outward subscale, and anger control subscale had similar scores for father's profession variable ( $p>0.05$ ). On the other part, continuous anger subscale scores was found significantly different for father's profession variable ( $p<0.05$ ).

**Table 2.** Difference between sports status and scales.

		n	Mean	SD	T	p
Continuous anger subscale	Sports	101	23.84	.57	15.682	0.000*
	Non-sports	99	20.83	.50		
Anger subscale	Sports	101	18.78	.43	5.385	0.021*
	Non-sports	99	17.40	.41		
Anger outward subscale	Sports	101	17.15	.39	2.072	0.152
	Non-sports	99	16.30	.44		
Anger control subscale	Sports	101	22.24	.51	0.436	0.510

\*  $P<0.05$

**Table 3.** Differences between gender and scales.

	Gender	n	Mean	SD	t	p
Continuous anger subscale	Male	101	22.63	.56	0.527	0.469
	Female	99	22.06	.55		
Anger subscale	Male	101	18.44	.43	1.277	0.260
	Female	99	17.76	.42		
Anger outward subscale	Male	101	17.39	.45	5.171	0.024*
	Female	99	16.06	.37		
Anger control subscale	Male	101	22.25	.52	0.473	0.492

\*  $p<0.05$

**Table 4.** Difference between age and scales.

	Age	N	Mean	SD	F	p
Continuous anger subscale	18-20	40	21.90	.80	2.120	0.123
	21-23	126	22.91	.53		
	24 and above	34	20.79	.77		
Anger subscale	18-20	40	17.70	.63	2.145	0.120
	21-23	126	18.54	.39		
	24 and above	34	16.94	.63		
Anger outward subscale	18-20	40	16.48	.51	1.129	0.325
	21-23	126	17.04	.40		
	24 and above	34	15.88	.62		
Anger control subscale	18-20	40	23.40	.70	2.323	0.101
	21-23	126	21.83	.45		
	24 and above	34	21.00	.96		

**Table 5.** Difference between number of siblings and scales.

	Number of Siblings	n	Mean	SD	F	p
Continuous anger subscale	1	81	22.84	.66	1.006	0.367
	2	87	21.71	.54		
	3	32	22.84	1.07		
Anger subscale	1	81	17.91	.42	0.134	0.875
	2	87	18.21	.49		
	3	32	18.28	.81		
Anger outward subscale	1	81	17.09	.50	0.535	0.587
	2	87	16.55	.41		
	3	32	16.31	.75		
Anger control subscale	1	81	21.75	.54	0.670	0.513
	2	87	21.90	.56		
	3	32	22.94	.88		

**Table 6.** Difference between educational status and scales.

	Education Level	n	Mean	SD	F	p
Continuous anger subscale	Primary School	8	22.75	1.54	0.792	0.454
	High School	10	20.20	1.30		
	University	182	22.45	.42		
Anger subscale	Primary School	8	18.13	1.78	0.026	0.974
	High School	10	17.80	.95		
	University	182	18.12	.32		
Anger outward subscale	Primary School	8	17.75	1.50	0.273	0.761
	High School	10	16.40	1.07		
	University	182	16.70	.31		
Anger control subscale	Primary School	8	21.88	1.90	0.004	0.996
	High School	10	22.10	2.04		
	University	182	22.01	.37		

Starner & Peters (24) found a positive relationship between persistent anger and anger-in, anger-out-of-sight, and anger control. As the anger of the students increased, the level of anger, anger, and anger control increased. There was a negative relationship between anger outburst and anger expression style and anger control expression style. As the level of anger outbursts and levels increases, the anger control of students decreases.

The difference between the anger subscale scores was significant for sporting situation (Table 2). According to this, the individual who plays sports has a higher score on the subscale of anger than the individual who does not. According to this result, exercising plays an important role in suppressing the anger of the athletes.

**Table 7.** Differences between maternal occupations and scales.

	Mother's Profession	N	Mean	SD	F	p
Continuous anger subscale	Housewife	159	22.26	0.45	0.266	0.767
	Public Sector	20	22.20	1.16		
	Private Sector	21	23.19	1.10		
Anger subscale	Housewife	159	18.14	0.34	0.129	0.879
	Public Sector	20	17.65	1.02		
	Private Sector	21	18.24	0.75		
Anger outward subscale	Housewife	159	16.63	0.34	0.594	0.553
	Public Sector	20	16.55	0.73		
	Private Sector	21	17.67	0.94		
Anger control subscale	Housewife	159	21.87	0.39	1.961	0.143
	Public Sector	20	24.00	0.99		
	Private Sector	21	21.14	1.17		

**Table 8.** Differences between father profession and scales.

	Father's Profession	n	Mean	SD	F	p
Continuous anger subscale	Self-employment	82	23.10	.71	3.669	0.027*
	Public Sector	70	20.91	.59		
	Private Sector	48	23.17	.63		
Anger subscale	Self-employment	82	18.43	.49	0.729	0.484
	Public Sector	70	17.61	.45		
	Private Sector	48	18.25	.66		
Anger outward subscale	Self-employment	82	17.37	.50	2.854	0.060
	Public Sector	70	15.80	.47		
	Private Sector	48	17.00	.54		
Anger control subscale	Self-employment	82	21.88	.53	0.393	0.676
	Public Sector	70	22.41	.68		
	Private Sector	48	21.63	.64		

\* P<0.05

**Table 9.** Differences between mother's education and scales.

	Mother's Education	n	Mean	SD	F	p
Continuous anger subscale	Primary School	134	22.39	.49	0.592	0.554
	High School	47	22.74	.78		
	University	19	21.11	1.24		
Anger subscale	Primary School	134	18.28	.38	0.364	0.695
	High School	47	17.68	.60		
	University	19	17.89	.89		
Anger outward subscale	Primary School	134	16.75	.38	0.496	0.610
	High School	47	17.02	.53		
	University	19	15.89	.78		
Anger control subscale	Primary School	134	21.75	.46	0.744	0.477
	High School	47	22.27	.65		
	University	19	23.16	.99		

Lutwak et al. (2001), in a study investigating the relationship between shame and anger expression, have determined that the withdrawal of the anxious people has driven their anger into them (20). When the students who participated in the research

examined the continuous expression of anger and anger; no significant difference was found between the variables of active sports making and sports type (3).

The difference between the anger subscale and the anger control subscale scores was not significant (Table 2). Starner & Peters (24) found a positive relationship between persistent anger and anger-in, anger-out-of-sight, and anger control. As the anger of the students increased, the level of anger, anger, and anger control increased. There was a negative relationship between anger outburst and anger expression style and anger control expression style.

The study's results showed that male and female had different different scores of continuous anger subscale, anger subscale, anger subscale and anger subscale scores (Table 3). According to this, the score of male sub-scale is higher than that of female sub-scale. It can be understood from this that men can express their anger more easily than women.

In a study investigating the relationship between shame and anger expression, Lutwak et al. have determined that the withdrawing people have turned their anger through repression (20).

In the study, the continuous anger subscale score was different for their father's profession. According to the results of the post hoc tests, the scores of the continuous anger subscale scores of the private sector and the self-employed of the fathers were the same, while the scores of the subscales of the continuous anger subscale of the fathers were lower than those of the public sector (Table 8). These results show that the private sector and self- the anger level of the children remains low (neither high nor low), and the anger of the people who work for the public parents can be low.

According to the father's occupation variable, the father's occupation, self-employed occupation and pensioner are more likely to feel anger because of the high levels of anger than workers and farmers, while the father occupational officers can suppress their anger due to high level of anger according to tradesmen, farmers, retired and self-, those who are self-employed by the father occupation, those who are employed by the workers, the farmers and the retired, and those who are retired by the father's profession are more likely to express their anger because of the high levels of anger outcasts compared to those who are father-occupied farmers, and those who are paternal workers are workers and artisans and those who are father- it can be concluded that the level of anger control is high and that they can keep their anger under control.

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