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Examination of anger levels of prospective teachers of physical education and sports

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Abstract

The purpose of this descriptive research is to determine the anger levels of prospective teachers of physical education and sports. For this purpose, State Trait Anger Scale was applied on total 264 prospective teachers, 94 of whom were 1st year students, 152 of whom were final year students at Physical Education and Sports Teaching Department of Kocaeli University. As a result of the scale applications, significant differences were observed in anger-out subscale in terms of gender variable and in anger control subscale in terms of age variable in the final year students. On the other hand, in the first year students was found a significant difference in anger-in subscale only in terms of income status.

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Introduction

Anger, which is stated to differ across cultures, is viewed as a universal feeling that has an important place in daily life. It is also defined as a strong feeling that leads to eliminate the stimulants disturbing an individual related to the cognitions formed because of frustration, threat and injustice (Balkaya and Şahin, 2003; Biagio, 1989). It was stated that contrary to common belief, there was no direct relationship between external events and anger and that

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anger arousal is caused by the thoughts and beliefs, that is, cognitive processes, of an individual and the feeling of anger can reduce with the change in illogical beliefs (Ellis, 1992; Robins & Novaco, 1999; Taylor, 1988). It was mentioned that angry people used different ways to reflect their anger and they particularly used expressions in the form of words, crying and direct aggression very often (Köknel, 1999). According to Spielberger (1991), the tendency to suppress angry thoughts and feelings is defined as “Internalized Anger”; the tendency to behave aggressively to people and objects around is defined as “externalized anger”; the ability to prevent and control anger is defined as “Anger Control/Management” (cited by: Bridewell & Change, 1997). Aggression, one of the forms of anger expression, is said to arise from the feeling of anger. (Balkaya & Şahin, 2003; Weiner, 1993). It was stated that even those who are not aggressive can show aggressive reactions when they believe the others are ill-intentioned, and anger and aggression in children and adolescents is one of the most important problems of the teachers and school counselors (Akdeniz, 2007; Cenkseven, 2003; Duran & Eldeklioğlu, 2005; Weiner, 1993). When considered in view of the need that teachers have to consult their students at school, and considering the importance of relaxation and exercise to get rid of the feelings of anger, it is important to encourage children and young people to do sports. Explanations about the fact that as well clearly experiencing the anger related to a situation with the displacements of feelings such as suppressed anger or rage, one can move away from the exasperating situation and turn to relaxing physical activities to remove anger (Geçtan, 1998) constituted the starting point of this study. One of the important things that can be replaced with anger at schools of adolescents and children is sports. The ones who manage sports activities at schools are physical education and sports teachers. Physical education teachers are in a supportive position to eliminate negative feelings such as anger at schools. All this information and the research results in the literature reporting that “the likelihood of helping others decreases when the feeling of anger arises” (Aktaş and Coştur, 2007; Tekinsav, Aydın and Sorias, 2010), and physical education teachers managing sports which is recommended to get rid of anger ranked five at a rate of 12,2% among the educators who were prone to violence (Çiftçi, 2006) necessitated to do detailed studies about the subject. As exercise helps foster relaxation, the anger levels of prospective teachers of physical education and sports managing sport activities which are important to eliminate anger have become a concern. In this regard, this study investigates the anger levels of prospective teachers of physical education and whether the determined anger changes depending on the variables such as grade, gender, age and number of years spent doing sports.

1.1. Problem Statement

Everyone knows that activities such as sport are promoted to prevent anger which is stated to have been prevalent in recent years and that each student takes physical education and sports lesson at schools. Considering the fact that each individual takes this course and the contribution of it in terms of emotional well-being, the question arose as to what the anger levels of prospective physical education teachers who manage sports are. Considering this basic question, it was aimed to compare the anger levels of prospective physical education teachers who were in their first year of education and those in their final year of education before starting their profession. It was also aimed to seek an answer to the questions as to whether their anger levels differ depending on the variables such as the grades attended, age, gender, economic situation, number of years spent doing sports if the prospective teachers of physical education who are in their first and final year at university experience anger.

2. Methodology and Data

2.1. Participants: This is a descriptive research. It began with totally 344 students, 213 of whom were 1st year students, 141 of whom were final year students at Physical Education and Sports Teaching Department of Kocaeli University and lasted for two years, including the academic years 2012-2013 and 2013-2014. Considering only the valid questionnaires of those attending university and voluntarily participating in the questionnaires during the administration period, the study was completed with 246 students in total, including 94 (38.2%) first-year students and 152 (50.8%) final year students.

2.2. Measures

2.2.1. “State-Trait Anger Scale” (STAS): It is a four-point Likert-type scale developed by Spielberger (1983) and adapted to Turkish by Özer (1994) measuring the feeling and expression of anger. The scale consists of four subscales including “state-trait anger”, “anger-in”, “anger-out” and “anger control”, and 34 items. Since it was stated that the studies about the state anger scale had not yet been completed (Savaşır&Şahin, 1997), the state anger scores were not computed in this study. In addition, the scale does not have a final total score; it is comprised of the

total scores of the four subscales. Trait anger expresses how an individual usually feels about himself and the anger level he experiences. The lowest score in the trait anger scale is 10 and the highest score is 40. High scores show that the anger level is high. The lowest score for each subscale including anger-in, anger-out and anger control is 8, and the highest score is 32. High anger control scores show that anger can be controlled; high anger-out subscale scores show that anger can easily be expressed; high anger-in subscale scores show that anger is suppressed (Özer, 1994; Savaşır and Şahin, 1997). The reliability analysis of the scale in this study was found to be $\alpha = ,742$.

2.2.2. Personal Information Form: A five-question information form was prepared and used by the researcher in order to determine the prospective physical education teachers' grades, age, gender, monthly income levels and number of years spent doing sports.

2.3.Data Analysis

The data obtained from the study was analyzed statistically and its significance was tested at the level of 0.05. During the statistical analysis, descriptive frequency and percentage distribution of the personal characteristics of the prospective physical education teachers were determined. Mean and standard deviation values were used to determine the scores obtained from the State-Trait Anger scale. According to the test of normality, it was determined that the data showed normal distribution, and independent group t test was used for the two-set comparisons or one way analysis of variance (one way-ANova) was used for three or more-set comparisons.

3. Findings

In this part, the mean scores and standard deviations the prospective physical education and sports teachers got from the anger subscales, and their frequency and percentage distribution are given in tables.

Table 1. Anger Score Mean and Standard Deviation Values of the Prospective Teachers Who Participated in the Research According to the Grades They Attend

VARIABLES		Total N (%)	Year	P
			Mean± SD	Value
Trait Anger	1st Year	94 (38.2)	21.25±5.77	,188
	4 th Year	152(61.0)	20.26±5.69	
Anger -in	1st Year	94 (38.2)	15.18± 3.80	,301
	4 th Year	152(61.0)	15.71±3.94	
Anger-out	1st Year	94 (38.2)	16.24±4.13	,894
	4 th Year	152(61.0)	16.17±3.61	
Anger Control	1st Year	94 (38.2)	22.53±4.95	,134
	4 th Year	152(61.0)	21.58±4.69	

When examining Table 1, no significant difference was found in terms of the grade the prospective physical education teachers included in the scope of the research attend at university and the subscales of the anger scale.

Table- 2 Sample Group Mean and Standard Deviation Values of Anger Levels by Gender

VARIABLES		Total N (%)	1st Year	4th Year	Total
			Mean ± SD	Mean ± SD	Participants Mean ± SD
Trait Anger	Female	121 (38.2)	21.98±6.18	20.16±5.82	20.97±6.03
	Male	125(61.0)	20.27±5.08	20.19±5.55	20.32±5.43
	P		0.157	,976	0,371
Anger-in	Female	121 (38.2)	15.761± 3.85	15.26±3.90	15.48±3.87
	Male	125(61.0)	14.40±3.65	15.92±3.92	15.52±3.93
	P		,087	,307	0,935

Anger –out	Female	121 (38.2)	16.07±4.31	15.46±3.56	15.48±3.87
	Male	125(61.0)	16.47±3.97	16.67±3.8	15.53±3.93
	P		.645	.039*	.058
Anger Control	Female	121 (38.2)	22.66±4.59	21.67±4.71	22.11±4.66
	Male	125(61.0)	22.35±5.47	21.48±4.72	21.78±4.95
	P		0.761	0.807	0.589

When Table-2 is examined, no significant difference was found in terms of trait anger, anger-in and anger control by the gender variable in neither 1st nor 4th year students. At the level of anger-out, the mean scores of anger-out of female and male students in their 1st year were the same, whereas a significant increase in the scores of anger-out in female students in the 4th year was observed.

Table 3. Mean and Standard Deviation Values of Anger Scores By Age

VARIABLES		N (%)	1st Year Mean ± SD	4th Year Mean ± SD	Total Participants Mean ± SD
Trait Anger	Under 20 yrs	63(25.6)	21.10±6.11	23.33±5.39	21.32±6.04
	21-25 yrs	160(65.0)	21.63±5.31	20.23±5.81	20.62±5.74
	26-30 yrs	23(9.3)	19.00±5.65	18.95±4.59	18.95±4.54
	P		0.756	0.240	0.239
Anger-in	Under 20 yrs	63(25.6)	15.46±3.90	18.66±5.39	15.47±4.14
	21-25 yrs	160(65.0)	15.34±3.32	15.59±3.92	15.61±3.82
	26-30 yrs	23(9.3)	13.50±10.60	15.00±3.13	14.86±3.77
	P		0.798	0.296	0.693
Anger-out	Under 20 yrs	63(25.6)	15.91±4.16	16.50±3.27	15.96±4.064
	21-25 yrs	160(65.0)	16.77±4.081	16.31±3.76	16.45±3.84
	26-30 yrs	23(9.3)	16.50±6.36	15.00±2.34	15.13±2.65
	P		0.629	0.296	0.256
Anger Control	Under 20 yrs	63(25.6)	22.86±4.88	24.50±4.42	23.02±4.83
	21-25 yrs	160(65.0)	21.94±5.23	21.04±4.69	21.26±4.81
	26-30 yrs	23(9.3)	23.50±0.707	23.76±4.01	23.74±3.83
	P		0.668	0.014*	0.008*

Considering Table-3, according to the age variable of the 1st and 4th year students included in the study, no significant result was found in terms of trait anger, internalized and externalized anger scores. Considering in terms of anger control, it was seen that there was a significant difference between the age and anger control scores for the 4th year students. When the ages were examined, the anger control score means of the ones under 20 and over 26 were found to be close to each other, and when the 1st and 4th year students included in the study were taken into consideration as a whole, a significant difference was found in terms of age, particularly in favor of the group below 20.

Table 4. Mean and Standard Deviation Values of Anger Scores by Economic Situation

VARIABLES		N (%)	1st Year Mean ± SD	4th Year Mean ± SD	Total Participants Mean ± SD
Trait Anger	1000TRY and below	63(25.6)	23.23±5.35	20.81±5.71	21.62±5.67
	1001-1500TRY	67(27.2)	20.34±4.53	19.42±5.94	19.82±5.36
	1501-2000TRY	80(32.5)	20.11±6.31	20.54±5.69	20.55±5.92
	2001TRY and more	36(14.6)	22.05±6.85	19.27±4.93	20.66±6.052
	P		0.208	0.604	0.359
Anger-in	1000TRY and below	63(25.6)	16.52±3.73	16.12±4.09	16.25±3.95
	1001-1500TRY	67(27.2)	14.93±3.36	16.32±3.79	15.72±3.65
	1501-2000TRY	80(32.5)	13.65±4.26	14.57±3.77	14.45±4.062
	2001TRY and more	36(14.6)	16.22±3.24	16.11±3.77	16.16±3.47

			0.038*	0.118	0.023*
Anger-out	1000TRY and below	63(25.6)	16.95±3.99	16.40±3.74	16.58±3.80
	1001-1500TRY	67(27.2)	15.55±2.91	15.15±3.071	15.32±2.99
	1501-2000TRY	80(32.5)	16.04±4.36	16.40±3.70	16.36±3.93
	2001TRY and more	36(14.6)	16.83±5.57	16.77±3.81	16.81±4.70
			0.609	0.272	0.157
Anger Control	1000TRY and below	63(25.6)	21.86±4.82	22.40±4.68	22.22±4.69
	1001-1500TRY	67(27.2)	22.83±4.40	20.44±5.37	21.47±5.08
	1501-2000TRY	80(32.5)	22.88±4.80	21.86±4.25	22.22±4.41
	2001TRY and more	36(14.6)	22.33±6.35	21.11±4.33	21.72±5.39
			0.888	0.279	0.757

As seen in Table-4, no significant difference was found between the economic situation of the prospective physical education teachers included in the study and trait anger, externalized anger and anger control. When the 1st year students and all the participants included in the scope of the study were evaluated together, anger-in mean scores of the individuals with a monthly income level of 1000 TRY and below and 2001 TRY and over were seen to be high

Table 5. Mean and Standard Deviation Values of Anger Scores by the Number of Years Spent Doing Sports

VARIABLES		N (%)	1st Year Mean ± SD	4th Year Mean ± SD	Total Participants Mean ± SD
Trait Anger	0-4 yrs	62(25.2)	21.71±5.73	20.39±6.21	20.84±6.34
	5-9 yrs	71(28.9)	21.36±6.88	20.50±5.89	20.90±6.33
	10-14 yrs	89(36.2)	20.57±4.76	20.03±5.16	20.24±4.98
	15-20yrs	24(9.8)	23.40±5.17	20.15±6.00	20.83±5.88
	P		0.729	0.982	0.882
Anger-in	0-4 yrs	62(25.2)	16.33±3.81	14.66±3.98	15.22±3.97
	5-9 yrs	71(28.9)	15.27±4.02	15.15±3.02	15.21±3.49
	10-14 yrs	89(36.2)	14.55±3.45	16.64±3.75	15.82±3.76
	15-20 yrs	24(9.8)	14.20±4.76	16.42±5.35	15.95±5.22
	P		0.359	0.061	,655
Anger-out	0-4 yrs	62(25.2)	16.33±4.16	15.73±3.34	15.93±3.62
	5-9 yrs	71(28.9)	16.42±4.75	16.76±3.87	16.60±4.27
	10-14 yrs	89(36.2)	16.11±3.66	16.25±3.70	16.20±3.67
	15-20yrs	24(9.8)	15.60±3.91	15.73±3.43	15.70±3.44
	P		0.974	0.590	0,684
Anger control	0-4 yrs	62(25.2)	22.19±3.96	21.41±4.47	21.67±4.28
	5-9 yrs	71(28.9)	22.24±6.03	21.28±4.60	21.73±5.29
	10-14 yrs	89(36.2)	22.88±4.60	21.53±5.1	22.06±4.95
	15-20 yrs	24(9.8)	23.40±4.39	22.68±4.13	22.83±4.10
	P		0.912	0.744	0.753

As seen in Table- 5, no significant difference was found between the number of years spent doing sports and anger subscales.

4. Discussions

In this part, the data shown in the tables were interpreted along with the data in the literature. In Table 1, when the 1st year and 4th year students were compared in terms of the feeling of anger, no significant difference was observed between the two groups of students. The reason for that was thought to be the research group's being engaged in sports and the effect of relaxation through exercise.

When the anger level was considered according to gender variable in Table 2, no significant result was seen in any anger subscale in terms of the 1st and 4th year students, whereas it was only seen in the 4th year students that externalized anger showed a significant increase in women. When the literature studies were taken into consideration, it was seen that there were studies showing there was no relationship between anger and age variable

(Sharkin, 1993; Stoner and Spencer, 1987; Güleç, 2002); and there were results supporting our findings as well (Albayrak and Kutlu, 2009). Researchers state that gender is important for anger expression; men are easily perceived when they express their anger (Travis, 1982); women suppress and do not show their anger as a result of learning depending on culture; and anger is a masculine feeling (Güleç 2002; Sharkin, 1993). When the data were evaluated considering these explanations, it was thought that higher anger-out scores of men compared to women could be the result of cultural learning.

In Table 3, no significant result was found in any of the anger subscales in terms of age for the prospective teachers studying in their 1st and 4th year. It was seen that anger control scores showed a significant difference in favor of the individuals under 20 and over 26 in the 4th year students and when all the participants were taken into account together. When the studies conducted were reviewed, in contrast to our study, it was mentioned that anger, which is a function of adolescents for coping with some difficulties and adaptation, was intense and experienced frequently. Compared to young people, a positive significant difference was found in anger reactions of older individuals (Kulaksızoğlu, 1998; Stoner & Spencer, 1987). When the explanations stating that individuals learn to externalize anger in a proper way through displacement during the socialization process and that relaxation techniques are good for anger control (Köknel, 1999; Sharkin, 1988) were considered, it was considered that the participants in the study were supported in terms of socialization and relaxation by doing sports, and in this way they externalized anger in a proper way and the ways they express anger were affected. Moreover, considering the information expressing that with the increase in age towards the end of the adolescence period, the skills for coping with feelings and expressing feelings in a proper way develop (Kulaksızoğlu, 1998), it was thought that anger management skills of prospective teachers developed since they were at the end of their adolescence and in their adulthood period by age.

When the anger level was considered in economic terms in Table 4, no significant result was found in any of the anger subscales for those in their 1st and 4th year. Only when the 1st year students and all participants were taken into account together, it was observed that anger-in mean scores of the individuals with a monthly income of 1,000TRY and below and 2,001TRY and more were significantly high. When a limited number of studies comparing anger level and economic situation in the literature were considered, it was seen that there were studies in which no association was found between socio-economic situation and anger (Bilge, 1997) and it was also seen that, in contrast to our study, there were studies reporting increase in anger-out as the family income level increased (Kısaç, 1997). Though not directly related to the economic situation, when the thoughts that university freshmen experience loneliness and they emotionally reflect anger to themselves as a result of this feeling of loneliness (Johnson et al. 2001; Cheng and Furnham, 2002), were taken into account and evaluated with our findings, it was seen that our findings supported this information in the literature since anger-in subscale scores of the prospective teachers studying their 1st year were significant. However, it was also thought that more detailed studies should be planned on the subject.

When Table 5 was considered, no significant result was found between the number of years spent doing sports and anger subscales both for those in their 1st and 4th years. It was put forward that anger prepares an individual for a struggle to cope with distress, provides energy for action, and is a support for defense. In the light of this information, this result was positively supported because the participants in both groups engaged in sports that required struggle and action. A limited number of studies indicated that those in a team had high scores in trait anger and those who were not in a team had high scores in anger control. It is suggested that there is a need for further, more detailed studies on the subject (Geen, 1990; Retzinger, 1991; Greene et al. 1995).

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