



personality and development in old age. Part II. Erik
Erikson: resolutions of psychosocial

tasks", *The Journal of nursing care* 12 (5):
27–8, 1979 May

Science, Movement and Health, Vol. XIII, ISSUE 2 supplement, 2013
September 2013, 13 (2), 576-581

EVALUATION OF TRAIT ANGER-ANGER EXPRESSION IN TEAM AND INDIVIDUAL SPORTS ACCORDING TO GENDER AND SPORT EXPERIENCE

ZEHRA CERTEL¹, ZIYA BAHADIR², EBRU OLCAY KARABULUT³

Abstract

The aim of this study was to determine the correlation of trait anger-anger expression styles of the athletes who played team sports and individual sports and to explore whether or not their trait anger-anger expression styles differed in terms of gender and sports experience. The sample of the study was consisted of a total of 354 athletes who were recruited using random sampling method, were aged 23 ($\bar{X}_{age}=22.99\pm 3.49$) and played sports for averagely 9 years ($\bar{X}_{year}=9.57\pm 4.85$). In the current study, The State-Trait Anger Scale (STAS) which was developed by Spielberger in 1983 in order to explore trait anger-anger expression styles and Turkish adaptation of which was performed by Özer (1994) was used. For the data analysis; descriptive statistics methods such as frequency (n), percentages (%), arithmetical means (\bar{X}) and standard deviation were used for the analysis of the personal information. In order to detect the differences; Mann-Whitney U test, Kruskal Wallis and Spearman correlation analysis of Non-Parametric tests were used because normal distribution and homogeneity conditions were not obtained in the variables of gender and sport experience. In light of the study-results; it was seen that trait anger, anger-in and anger-out levels of the athletes were at a moderate level while their anger control level was above moderate level. Trait anger-anger expression styles of the athletes did statistically not differ in terms of gender and sport experience ($p>.05$). On the other hand; there was statistically significant difference in the scores of anger control on behalf of athletes of team sports in terms of playing team sports or individual sports ($p<.05$). Also; there was a negative and significant correlation between anger control and trait anger-anger out ($p<.05$).

Key Words: Trait anger, anger-in, anger-out, anger control, team sports, individual sports.

Introduction

Anger is naturally one of the most intense emotions of human beings in the interpersonal relations. The leading anger causes are frustration, being neglected, being subject to humiliation, being subject to an arbitrary behavior and being subject to aggression (Atkinson et. al., 1996). Anger, one of the human emotions, is differently described. Kennedy (1992) describes anger as “an effective experience that takes place after an individual warns the other in face of a danger towards himself.” (Kısaç 1997) describes anger as “one of the basic emotions experienced when an individual perceives a threat, injustice and inequity towards himself when his plans, wishes and needs are obstructed”. Lerner (2004) describes anger as a message related to the fact that things go wrong, we are hurt, our rights are violated, and our wishes and needs are obstructed.

It is very important how anger is expressed. People express anger differently. These anger expressions are anger-in, anger-out and anger control

(Özer, 1994; Lerner, 2004; Stanner and Peters, 2004; Tambağ and Öz, 2005; Sung et al., 2006; Bostancı et. al., 2006). Anger-in is restricting and hiding anger. Anger-out is the reflection of reactions towards people or objects. What is desirable and healthy about anger emotion is to control anger (Balkaya, 2001). Anger, universally experienced by many people in daily life, is differently manifested in each culture (Balkaya, 2001). Culture of the people plays a key role in expressing emotions and turning these emotions into behaviors. In the traditional families that possesses traditional characteristics of the society; expectations of the society and socially-determined behavior patterns govern one's behaviors. It is prevented to express anger verbally while behavior such as obedience, submission, not talking and repression are approved (Sala, 1997).

Today; sports help terminate aggression, decreases anger-bursts and stress but also sportive competitions –particularly football- are regarded as a setting in which aggressive and violent actions increase. Kiper (1984) argues that sportive setting is a natural place for the occurrence of aggressive

¹School of Physical Education and Sports, Akdeniz University, Antalya, TURKEY

²School of Physical Education and Sports, Erciyes University, Kayseri, TURKEY

³School of Physical Education and Sports, Ahi Evran University, Kırşehir, TURKEY

Email: zcertel@akdeniz.edu.tr



behaviors and therefore is a suitable place for aggressive behaviors to be easily modeled and imitated because frustration, which is thought to cause anger and aggression, always exists in sports. Athletes of individual sports struggle against the opponent while athletes of team sports fight against the rival team. In this sense; the aim of this study was to determine the correlation of trait anger-anger expression styles of the athletes who played team sports and individual sports and to explore whether or not their trait anger-anger expression styles differed in terms of gender and sports experience.

Material and Method

The study was undertaken with 354 athletes who played team sports in different teams [basketball (n=53), handball (n=73), football (n=76)] and individual sports [badminton (n=88) and other individual sports (n=64)] during the 2010-2011 season. Sportive age of the athletes was ($\bar{X}_{year}=9.57\pm 4.85$) and their age was ($\bar{X}_{year}=22.99\pm 3.49$). 90% of the athletes studied at Ege University. Data about the athletes were presented in Table 1.

Table 1. Data about the athletes.

Variables		n	%
Gender	Female	150	42.4
	Male	204	57.6
Type of Sport	Basketball	76	21.5
	Handball	53	15.0
	Football	73	20.6
	Badminton	88	24.9
	Other individual sports	64	18.1
Age	18-20 years	61	17.2
	21-25 years	241	68.1
	26 \geq years	52	14.7
Educational status	High School Degree	4	1.1
	University Student	318	89.8
	University School Degree	32	9.0
Living place	County	38	10.7
	City	72	20.3
	Metropolitan City	244	68.9
Sports experience	1-9 years	48	13.6
	10-14 years	108	30.5
	15-19 years	143	40.4
	20 \geq years	55	15.5
Participation in National Team	Yes	118	33.3
	No	236	66.7
TOTAL		354	100

When Table 1 was analyzed; 150 of the participants were females (42.4%) and 204 were males (57.6%). 76 of the participants played football (21.5%),

53 of the participants played basketball (15.0%), 73 of the participants played handball (20.6%), 88 of the participants played badminton (24.9%) and 64 of the



participants played individual sports such as fitness, taekwondo (17.2%). 61 of the players were aged between 18 and 20 years (17.2%); 241 players between 21 and 25 years (68.1%) and 52 players over 26 years (14.7%). 4 of the participants had high school degree (1.1%), 318 of them were university students (89.8%) and 32 of the participants had university degree (9.0%). 38 of the participants lived in counties (10.7%), 72 lived in cities (20.3%) and 244 lived in metropolitan cities (68.9%). 48 of the participants had a sports experience of 1-9 years (13.9%), 108 had a sports experience of 10-14 years (30.5%), 143 had a sports experience of 15-19 years (40.4%) and 55 had a sports experience of 20 ≥ years (15.5%).

The State-Trait Anger Scale (STAS)

In the current study, The State-Trait Anger Scale (STAS) which was developed by Spielberger in 1983 in order to explore trait anger-expression styles and Turkish adaptation of which was performed by Özer (1994) was used. The scale is composed of 34 items and of four subscales and is used to determine trait anger-expression styles among adolescents and adults. The subscales of the scale are trait-anger (10 items), anger-in (8 items), anger-out (8 items) and anger control (8 items). Trait anger means that anger level is high, anger-in means that anger is restricted,

anger-out means that anger is easily expressed and anger control means that anger can be controlled. Lower scores obtained from trait-anger, anger-in and anger-out are regarded positive while higher scores obtained from anger control are seen positive. Cronbach alpha values were separately calculated in the Turkish form and Cronbach alpha values were .79 for "trait anger", .84 for "anger control", .78 for "anger-out" and .62 for "anger-in" (Özer, 1994). In our study; Cronbach alpha values were .81 for "trait anger", .86 for "anger control", .74 for "anger-out" and .68 for "anger-in".

Analysis of the Data

For the data analysis; descriptive statistics methods such as frequency (n), percentages (%), arithmetical means (\bar{X}) and standard deviation were used for the analysis of the personal information. In order to detect the differences; of Non-Parametric tests, Mann-Whitney U test was used because normal distribution and homogeneity conditions were not met in the variables of gender and sport experience. As for the analysis of the correlation between trait anger-expression styles; Spearman correlation analysis was used.

Results

Table 2 included Trait Anger-Expression Styles in terms of gender.

Table 2. Comparison of the athletes' scores related to trait anger-expression styles in terms of gender

Scale	Gender	n	Mean	U	p
Trait anger	Female	150	181.30		
	Male	204	174.70	-.601	.548
Anger-in	Female	150	166.26		
	Male	204	185.77	-1.779	.075
Anger out	Female	150	172.61		
	Male	204	181.10	-.774	.489
Anger control	Female	150	167.19		
	Male	204	185.08	-1.629	.103

When Table 2 was analyzed in relation with gender, it was seen that there was no statistically significant difference among the scores of trait-anger (U = -.601, p=.548; p>.05), anger-in (U = -1.779,

p=.075; p>.05), anger-out (U = -.774, p=.489; p>.05) and anger control (U = -1.629, p=.103; p>.05). Table 3 included the comparison of trait anger-expression styles of the athletes in terms of gender.



Table 3. Comparison of trait anger-anger expression styles of the athletes in terms of gender

Scale	Type of Sport	n	Median	χ^2	p
Trait anger	Basketball	76	189.24	3.799	.434
	Handball	53	186.18		
	Football	73	181.45		
	Badminton	88	172.22		
	Other individual sports	64	159.14		
Anger-in	Basketball	76	175.26	2.268	.687
	Handball	53	175.30		
	Football	73	186.47		
	Badminton	88	183.88		
	Other individual sports	64	162.98		
Anger-out	Basketball	76	176.30	.710	.950
	Handball	53	178.55		
	Football	73	169.52		
	Badminton	88	182.07		
	Other individual sports	64	180.88		
Anger control	Basketball	76	189.02	7.573	.109
	Handball	53	191.83		
	Football	73	183.53		
	Badminton	88	152.48		
	Other individual sports	64	179.48		

When Table 3 was examined it was seen that there was no statistically significant difference between trait anger ($\chi^2 = 3.799$, $p=.434$; $p>.05$), anger-in ($\chi^2 = 2.268$, $p=.687$; $p>.05$), anger-out ($\chi^2 = .710$, $p=.950$; $p>.05$) and anger control ($\chi^2 = 7.573$, $p=.109$; $p>.05$) in terms of type of sports. Table 4 included information about trait anger-anger expression styles in terms of playing individual sports or team sports.

When Table 4 was analyzed in relation with playing individual sports or team sports, it was seen

that there was no statistically significant difference among the scores of trait-anger ($U = -1.724$, $p=.085$; $p>.05$), anger-in ($U = -.387$, $p=.669$; $p>.05$), anger-out ($U = -.651$, $p=.515$; $p>.05$) while a statistically significant difference existed in the score of anger control ($U = -2.182$, $p=.029$; $p<.05$). Table 5 included information about trait anger-anger expression styles in terms of sportive experience (Sportive Age).

Table 4. Comparison of the athletes' scores related to trait anger-anger expression styles in terms of playing individual sports or team sports

Scale	Sportive Branch	n	Mean	U	p
Trait anger	Team	202	185.62	-1.724	.085
	Individual	152	166.71		
Anger-in	Team	202	179.32	-.387	.699
	Individual	152	175.08		
Anger out	Team	202	174.44	-.651	.515
	Individual	152	181.57		
Anger control	Team	202	187.77	-2.182	.029*
	Individual	152	163.85		

* $P<.05$



Table 5. Comparison of the athletes' scores related to trait anger-anger expression styles in terms of sportive experience (Sportive Age).

Scales	Sportive Experience (Sportive Age)	n	Mean	χ^2	p
Trait anger	1-9 years	48	185.93	1.238	.744
	10-14 years	108	183.45		
	15-19 years	143	171.68		
	20 \geq years	55	173.60		
Anger-in	1-9 years	48	183.38	.353	.950
	10-14 years	108	175.50		
	15-19 years	143	175.43		
	20 \geq years	55	181.68		
Anger out	1-9 years	48	192.81	2.844	.416
	10-14 years	108	184.50		
	15-19 years	143	168.12		
	20 \geq years	55	174.79		
Anger control	1-9 years	48	165.10	1.692	.639
	10-14 years	108	172.06		
	15-19 years	143	183.43		
	20 \geq years	55	183.59		

When Table 5 was analyzed in relation with sportive experience (Sportive Age), it was found out that there was no statistically significant difference among the scores of trait-anger ($\chi^2 = -1.238$, $p=.744$; $p>.05$), anger-in ($\chi^2 = .353$, $p=.950$; $p>.05$), anger-out

($\chi^2 = 2.844$, $p=.416$; $p>.05$) and anger control ($\chi^2 = 1.692$, $p=.639$; $p>.05$). Spearman Correlation Test was performed in order to determine the correlation in trait anger-anger expression styles of athletes and (r) values were presented in Table 6.

Table 6. Correlation values of athletes between the scores of trait anger-anger expression styles

	Trait anger	Anger-in	Anger out	Anger control
Trait anger	1	$r = .364^{**}$ $p = .000$	$r = .592^{**}$ $p = .000$	$r = -.358^{**}$ $p = .000$
Anger-in		1	$r = .353^{**}$ $p = .000$	$r = -.048$ $p = .367$
Anger out			1	$r = -.406^{**}$ $p = .000$
Anger control				1

When Table 6 was analyzed, it was discovered that there was a positive correlation between trait anger, and anger-in ($r=.364$; $P=.000$; $P<.05$) and anger-out ($r=.592$; $P=.000$; $P<.05$) while a negative correlation between trait anger and anger control ($r=-.358$; $P=.000$; $P<.05$). There was a statistically significant difference between anger-in and anger-out ($r=.353$; $P=.000$, $P<.05$) whereas no significant difference occurred in anger control ($r=.048$; $P=.367$; $P>.05$). Also, there was a negative and strong correlation between anger-out and anger-control ($r=-.406$; $P=.000$; $P<.05$).

Discussion

The aim of this study was to determine the correlation of trait anger-anger expression styles of the athletes who played team sports and individual sports and to explore whether or not their trait anger-anger

expression styles differed in terms of gender and sports experience.

As a result of the study findings; there was no statistically significant difference between the scores of the trait anger-anger expression styles of the athletes and gender ($p>.05$). The study of Yerlisu Lapa et al. (2012) on taekwondo player reported that scores of anger-in, anger-out and anger control were higher among the male players. The study of Balkaya (2003), Olmuş (2001) and Baygöl (1997) on adolescents and university students indicated that gender did not play a role in trait anger-anger expression styles. In this sense; it may be concluded that athletes showed similar behaviors and attitudes because of the motivating factors such as their expectations of winning the competitions and their anger expression styles did not differ because they experienced similar processes. It was found out that no statistically significant difference existed between the scores of trait-anger, anger-in and anger-out in terms of playing team sports or individual



sports ($p>0.05$) whereas there was statistically significant difference in the scores of anger control on behalf of athletes of team sports ($p<0.05$). The study of Certel and Bahadır (2012) on team players demonstrated that there was no statistical significant difference between trait-anger, anger-in, anger-out and anger control. When it is considered that behaviors of players may directly or indirectly affect the team, the athletes are aware that the team may be damaged when they react against frustrations. Therefore; it may be suggested that athletes of team players have higher anger-control and that is, they can control their anger. However, there was no statistically significant difference between trait-anger anger expression styles in terms of sportive experiences ($p>0.05$). There was a positive and significant correlation between trait anger, and anger-in and anger-out while a negative and significant correlation between trait anger and anger control.

Conclusions

According to the results of the study; it may be said that gender and sportive age of the athletes did not affect trait anger-anger expression styles and athletes of team sports had higher anger controls as compared to those who played individual sports. The highest positive correlation was between trait-anger and anger-out and anger-out and trait-anger reduced as anger control increased. In this sense; seminars may be held in teams in order to help athletes control their angers and individual guidance may be provided. Also; studies on anger types may be conducted with different sample groups and different trainer types.

References

- Atkinson, R., L., Smith, E., E., Bem, D., J., & NOLEN-Hoeksema, S., 1996, Hilgard's "Introduction to Psychology", New York, Harcourt Brace Company.
- Balkaya, F., Şahin, N.,H., 2003, Multi-dimensional anger inventory. Turkish Psychiatry Journal, 14 (3): 192-202.
- Balkaya, F., 2001, Development of Multi-dimensional anger inventory, Master thesis, Ankara, Ankara University.
- Baygöl, E., 1997, Evaluation of anger reactions among the adolescents, Master thesis, Bursa, Uludağ University.
- Bostancı, N., Çoban, Ş., Tekin, Z., Özen, A., 2006, Anger Expression Styles of University Students in terms of gender. Crisis Journal, 14 (3): 9-18.
- Certel, Z., Bahadır, Z., 2012, Evaluation of the correlation between Self Esteem and trait anger-anger expression styles among the athletes who played team sports, Selçuk University, Journal of Physical Education and Sports, 14 (2): 157-164.
- Kennedy, H.G., 1992, Anger and Irritability. British Journal of Psychiatry, 161, 145- 153.
- Kısaç, İ., 1997, Levels of trait anger-anger expression among the university students in terms of some variables, Unpublished Doctorate Thesis, Hacettepe University, Social Sciences Institute, Ankara.
- Kiper, İ., 1984, Correlation of Aggression Types with various Economic, social and academic variables, Master thesis, Ankara.
- Lerner, H., 2004, Anger Dance, 5th edition, (Translation: Gül, S), Istanbul, Varlık Publication.
- Olmuş, G., Ö., 2001, Evaluation of adolescents' trait anger-anger expression styles in terms of domestic psychological Patterns, Master Thesis, Marmara University, Istanbul.
- Özer, A., K., 1994, Prestudy of trait anger-anger expression styles, Turkish Psychiatry Journal, 9/31: 26-35.
- Sala, G., 1997, Evaluation of Anger Expression Types of the students who studied at Zonguldak Karaelmas University, Master Thesis, Ankara, Hacettepe University.
- Starner, T.M., Peters, R.M., 2004, Anger expression and blood pressure in adolescents. The Journal of School Nursing, 20 (6): 335-342.
- Sung, K., M., Puskar, K., R., Sereika, S., 2006, Psychosocial Factors and coping strategies of the young. A Rural Pennsylvania Higher School. Public Health Nursing, 23 (6): 523-529.
- Tambağ, H., Öz, F., 2005, Anger expression styles of the adolescents who lived with their families and who lived in orphanages. Crisis Journal, 13 (1): 11-21.
- Yerlisu Lapa, T., Aksoy, D., Certel, Z., Çalışkan, E., Özçeli, K.M., A., Çelik, G., 2012, Evaluation of Trait Anger-Anger Expression In Taekwondo Athletes According To Gender And Success, 3rd. World Conference. On learning, teaching & educational leadership. 25-28 October. Belgium.