

Comparison of Continuous Anxiety Level of Some Individual Fight Athletes

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Abstract Aim of this study is to specify and compare the continuous anxiety level of athletes dealing with sports branches such as boxing, weight lifting, kickboxing and wrestling. There are a lot of factors negatively affecting athletes' performance. One of them is high anxiety. As long as anxiety levels of athletes increase, they can not put in performance that they wish. In order to determine continuous anxiety status of athletes, continuous anxiety inventory was used by Spielberger and his friends (1970) who developed it. Samples of research was formed with 55 male boxer, 72 male wrestler, 56 male weight lifter, 61 male kickboxer who joined to Turkey Championship in 2012 and were chosen by random sample method. In data analysis, SPSS 15 package software was used and "Kolmogorov-Smirnov" test was used to determine whether datas had normal distribution, "Anova-Homogeneity of variance" test was used to determine homogeneity and it was determined that datas had homogeneous and normal distribution. In analysis of datas, descriptive statistics, one-way analysis of variance for determining difference between variables which was more than 2 and tukey test for determining relationship between variables were carried out. At the end of the study, it was specified that anxiety level of wrestlers are less than other athletes. In terms of branches, as a result of continuous anxiety scores comparing, wrestle and kickboxing, a significant difference was found between wrestling and weight lifting, wrestling and boxing statistically significant ($p < 0,05$).

Keywords: Anxiety, Individual Sports, comparison

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1. Introduction

In the direction of endless requests and requirements of people, in modernizing and developing world, new inventions take place in science and technology. Sports is affected from these alterations and new exercise methods and medicines positively affecting performance of athletes such as doping or derivative, are developed by scientist in order to increase performance of them. Athletes got their performance range up by exercising with workout methods developed by scientific datas and by using doping and derivative medicine. It was no longer possible that athletes can improve their performance by only keeping to their physical working and can break substantial records by improving themselves. Ranking got difficult in team and individual manner. Athletes and trainers must care their psychological workout as well as that they care their physical workout in order to succeed in team and individual matter. With the psychological practice, it will be provided to cope with factors such as anxiety and stress affecting performance of athletes. When we look at the interviews made with Turkish athletes

attending 2012 London olympics, it is seen that although Turkish athletes were well-prepared physically, they could not give good performance that they had given in exercises in competition setting because of the causes such as anxiety, thrill and stress because they could not well-prepared psychologically.

Competitive anxiety and its effect on the sport performance is one of the important subjects of sport psychology [1,2]. High level of anxiety symptoms (intensity of anxiety) usually is debilitating and has negative effect on the performance [3,4]. On the other hand, research findings have challenged this assumption that anxiety always blocks the sport performance [5-9]. As long as researches showing the relationship between psychological size and performance advances, sportive activities has gained more different dimension and it has been determined that intellectual activities; i.e. psychologic intelligence, attention, memory, will, trial, comparing, explicating, anxiety are present and play a part in all sportive activities [10].

In every competition settings and especially in professional sports made in high level, it is determinant of status of anxiety and stress because of existence of exterior rewards and penalties, uncertainty of result,

strength of competitor, results taken by teams and individuals in their last competitions, how much important results are to athletes and how athletes perceive their physical, technical, tactical and psychological capacities in relation to competitor they encounter [11].

Anxiety, as lexical meaning, is a negative feeling in the event of dangerous and new situations [12,13,14,15].

Sport increases its impact area on all people on earth as both active and passive participant every passing day and extends its influence area gradually. With the relevancy concentrating on sports, a significant competition environment has been formed throughout countries and they has mobilized every possible opportunities to use positive impacts of sport. With the aid of developing science and technology in this context, records in sport renewed every passing day and economy, technology, education and development level of countries that teams and athletes competing in sports arena represent, started to compete each other. Thereby, sports became a significant factor showing the development level of a country [16].

Anxiety can negatively affect right decision making skills of athletes in their behaviour. The more anxiety level increases the more athlete moves away from right decision making and presentation of his skills in a good way. Athletes who are in excessive oppression and stress can perform false moves. Excessive anxiety can get athletes forget some moves that they splendidly know and recurrently performed in their exercises and also it can cause negations on their sportive performance by causing confusion in their feelings [16].

Original purpose of anxiety is to provide people to maintain their life and provide progress of adaptation behavior of them. With the help of this sense, it can be provided that positive behaviors are formed depending on physical and biological reactions formed by body in order to beware negative feelings and cope with them when new and dangerous situations are encountered with. Major factor determining quality of this behavior is motivation and will of individual who encountered with situation [17].

Sports scientists potently research in order to increase performance of athletes and produce new exercise method in order to enhance their performance to culminating point. In sequence of these researches, it was became clear that only physical exercising is not enough for enhancing performance of athletes and psychological capacity and workout is an important factor at the same time [17].

Hence, many high level athletes not only owe their success to their physical and physiological capacities but also to their psychological features. Successful athlete has superior abilities to prepare psychologically himself for competition, motivate himself, manage his concerns, concentrate and determine his aims [18].

World's leading athletes believe that the most challenging competitor of individual is himself. If an athlete learn to defeat himself, it is too easy for him to defeat the others. Dr. Loehr emphasize that the most challenging competitor of individual is himself and it is primarily required individual must realize thoughts and behaviors retaining him from being at will and later he must transform these negative feelings and thoughts to positive feelings and behaviors [19].

In today's sports, winning in spite of everything philosophy, on the one hand, gets each competition become a major significance for athletes in terms of

economical and social terms, on the other hand, it loads heavy stress on athletes. In this environment no matter how athlete's physical features are splendid and exercise period he spend is flawless, coping skill with anxiety is so important in reaching to success. In this point, psychological preparation must take part in exercise periods of absolute athletes and it must be carried out in different forms in accordance with nature of sports branches that is performed. Principally, all sports branches have several qualifications. Team sports have different nature from individual sports. Accordingly, it is thought that people performing individual sports have more anxiety intensity in proportion to people performing team sports [20].

Continuously perceiving the situation which creates anxiety and stress as dangerous and menacing is identified as intensity and frequency of instant sensitive reactions increasing and continuity gaining [21]. Continuous anxiety can not be observed in behaviors of individual but in different times and conditions, severity of detected instant anxiety reactions can be helpful [22].

Basic aim of this study is to determine and contrast general anxiety level of athletes performing boxing, wrestling, weight lifting and kickboxing which take part in amateur sports branches.

In many researches made about anxiety in sports, it was shown that high anxiety negatively effects performance of athletes. For this reason, to provide athletes to have adequate information about anxiety and to be a resource to researchers who are going to study on anxiety in sport, are the aims of this study.

2. Material and Method

2.1. Sample

Samples of research was formed with 55 male boxer, 72 male wrestler, 56 male weight lifter, 61 male kickboxer who joined to Turkey Championship in 2012 and were chosen by random sample method.

2.2. Data Collection Tool of Research

In order to determine anxiety level of athletes, Continuous Anxiety Inventory developed by Spielberg (1970) is used in this research. Inventory is a self evaluation survey formed with short statements. It was adapted to Turkish by Oner and Le Compte (1985). It is informed that test changes between 83rd and 87th of Alpha reliability, 71st and 86th of test reliability and 34th and 72nd of item reliability [22].

2.3. Analyzing of Datas

SPSS 15 package software was used for analyzing datas obtained. In order to learn whether datas have normal distribution or not, one sample test "Kolmogorov-Smirnov" was used and it was determined that datas have normal distribution. Later, in order to evaluate whether datas are homogeneous or not, "Anova-Homogeneity of variance" test was carried out and it was determined that datas are homogeneity. After this first examination, it was determined to use parametric test method in statistical analysis. In order to determine relationship between

descriptive statistics and variables which are more than two, one-way analysis of variance “one- way Anova” was used and for determining relationship between variables "Tukey" test was carried out.

lifting ($=48,866\pm3,997$) branch appears in rank 1, boxing ($=47,466\pm4,454$) branch appears in rank 2, kicboxing ($=47,433\pm3,829$) branch appears in rank 3 and wrestling ($=40,433\pm5,587$) branch appears in rank 4.

3. Findings

In this section findings that were gained as a result of research are presented and tried to explain in 3 table.

In **Table 1**, when descriptive statistics findings showing continuous anxiety level of athletes are examined, weight

Table 1. Descriptive statistics findings by sports branches

	Mean	S. Deviation
Boxing	47,466	4,454
Weight Lifting	48,866	3,997
Kickboxing	47,433	3,829
Wrestling	40,433	5,587

Table 2. Continuous anxiety level of athletes by age and sport age variable

Age	Mean	S. Deviation	Sport Age	Mean	S. Deviation
17	45,900	6,033	1-3	48,636	5,385
18	46,400	5,240	4-5	45,535	5,187
19	45,080	5,620	6-7	45,330	5,753
			8<	45,055	5,539

In **Table 2**, when continuous anxiety scores of athletes based on age, sport age and rating variable, it is specified that continuous anxiety score of athletes whose age is at

19 is lower than athletes in 17 and 18 and continuous anxiety score of athletes whose sport age is above 8 is lower than athletes whose sport age is under 8.

Table 3. Results of tukey and variance test based on age variable

Between-group	Sum of Squares	Mean Square	F	P
	87,695	43,847	1,414	,245
Age variable		Mean Difference	S. Deviation	P.
17	18	-1,31935	,79860	,226
	19	-,81935	1,01263	,698
18	17	1,31935	,79860	,226
	19	,50000	1,07841	,888

In **Table 3**, when variance analysis is examined, it can not be found any significant difference between age variable and continuous anxiety level statistically ($p>0,05$). When continuous anxiety scores of athletes are compared

with regard to age variable, it can not be found any significant difference between all variables statistically ($p>0,05$).

Table 4. Results of tukey and variance test based on sport age variable

Between-group	Sum of Squares	Mean Square	F	P
	221,603	73,868	2,415	,067
Sport Age Variable		Mean Difference	S. Deviation	P.
1-3	4-5	-,20478	,83469	,995
	6-7	,27488	1,05617	,994
	8<	-3,30593	1,28690	,052
4-5	1-3	,20478	,83469	,995
	6-7	,47966	1,13150	,974
	8<	-3,10115	1,34942	,101
6-7	1-3	-,27488	1,05617	,994
	4-5	-,47966	1,13150	,974
	8<	-3,58081	1,49657	,081

In **Table 4**, when variance analysis is examined, it can not be found any significant difference between sport age variable and continuous anxiety level statistically ($p>0,05$). When continuous anxiety scores of athletes are compared

with regard to sport age variable, it can not be found any significant difference between all variables statistically ($p>0,05$).

Table 5. Results of variance analysis and tukey test of athletes who attended to study

Between-group	Sum of Squares	Df	Mean Square	F	P
	1113,025	3	371,008	16,353	,000*
(I) BRANCHES		Mean Difference	S. Deviation	P.	
BOXING	WEIGHT LIFTING	0,000	1,230	1,000	
	KICKBOXING	0,000	1,230	1,000	
	WRESTLING	7,03333*	1,230	0,000*	
WEIGHT LIFTING	BOXING	0,000	1,230	1,000	
	KICKBOXING	0,000	1,230	1,000	
	WRESTLING	7,033	1,230	0,000*	
KICKBOXING	BOXING	0,000	1,230	1,000	
	WEIGHT LIFTING	0,000	1,230	1,000	
	WRESTLING	7,03333*	1,230	0,000*	
WRESTLING	BOXING	-7,03333*	1,230	0,000*	
	WEIGHT LIFTING	-7,03333*	1,230	0,000*	
	KICKBOXING	-7,03333*	1,230	0,000*	

In Table 5, when variance analysis is examined, it is found a significant difference between continuous anxiety levels statistically ($p < 0,05$). In consequence of comparing continuous anxiety level of athletes, there is a significant difference between wrestling & kickboxing and weight lifting & boxing branches statistically ($p < 0,05$), but it can not be found any significant difference between other branches statistically. ($p > 0,05$).

4. Discussion and Conclusion

In scope of study, when descriptive statistic findings of athletes are examined, it is determined that athletes in weigh lifting branch ($=48,866 \pm 3,997$) is rank 1, athletes in boxing branch ($=47,466 \pm 4,454$) is rank 2, athletes in kickboxing branch ($=47,433 \pm 3,829$) is rank 3, athletes in wrestling branch ($=40,433 \pm 5,587$) is rank 4 and wrestlers have lower continuous anxiety level than other athletes. In consequence of comparing the continuous anxiety scores based on branches, it is found a significant difference between wrestling & kickboxing, wrestling & weight lifting, wrestling & boxing branches statistically ($p < 0,05$).

Sreiber remarked that performances of athletes can be improved by considering effects of instant and continuous competition anxiety and preventing negative effects harming performance of athletes [23]. Tol (1995). In his book named "Effect of Anxiety to Performance", determined that anxiety level increasing directly drops the success, for this reason anxiety must be kept in intended level [24]. Coksevim and his friends (2008), examined instant, continuous and short symptoms of kickboxers before and after the match and they found a significant difference statistically [25]. Tazegul, in his research in 2012, found that coping skill of wrestlers are more developed than athletes in boxing, kickboxing and weight lifting [26]. In research of Bastug in 2009, he found that high anxiety negatively affects the performance of athletes [27]. According to Martens, anxiety levels that athletes have before the game can effect result of competition and their performance during competition [28]. Jones and his friends (1993), stated that anxiety levels is determinant on performance [29]. Starting from these datas, it can be said that wrestlers are more successful in international championships because their anxiety levels are low.

When anxiety scores of athletes attending the study are examined considering age variable, it is determined that continuous anxiety scores of athletes at 19 is lower than athletes at 17 and 18. In consequence of literature examining related to issue, studies that support datas of this research are found. But in some studies, it can not found any relationship between identity age and anxiety. Civan and Ark, in their study in 2010, found that continuous anxiety scores of athletes who are above 22 is lower than athletes who are under 22. [30].

Koç (2004), at the end of his research, came through that; "professional football players are less often affected from factor affecting their instant anxiety level as their ages rise and they mostly pull together" [18]. Arseven and Guven (1992) analyzed datas related to anxiety level of athletes who are from different branches (basketball, handball, volleyball, and athleticism) and separated two groups in competition environment considering ages (over the age of 20 and under the age of 20), but they could not

found any significant relationship between results [31]. Erbas and Kucuk (2012), could not found any significant relationship between instant anxiety sport and ages of basketball players statistically [32]. It is thought that differences showing up in between studies originated from personality characteristics of individuals attending study.

When continuous anxiety scores of athletes attending study are examined considering sport age variable, it is determined that continuous anxiety scores of athletes whose sport age is over 8 are lower than athletes whose sport age is under 8. When some studies showing the relationship between anxiety and sport age are examined, it is showed up that the more sport age rises, the more anxiety decreases.

Basaran and Ark (2009) found that continuous anxiety level of athletes whose sport age is 5 is lower than athletes whose sport age is 4 and 3 [33]. Engür (2002), in his research in which 279 athletes attended, evaluated the experiences that athletes have in thier sports branches in terms of "Instant Anxiety" levels mean score and indicated that there are no significant difference in "Instant Anxiety" mean score in experiences of athletes statistically [34]. In another research, no matter what is the branche of athlete, it was emphasized that they must have a certain anxiety level for performance and experiences of athletes are important to keep low this anxiety level [33]. It is thought that exercise age increasing can positively affect on anxiety level by decreasing it. For this purpose, designing exercise correctly and adequately and planning it in the manner that athlete can improve his features that he needed will increase his performance. Mistakes in exercise planning or mistakes in determining the age to start sports are the factors for emerging unexpected results in stress and anxiety level [9].

Consequently, it is determined that general anxiety level of wrestlers are lower than athletes who are in scope of research and continuous anxiety scores of athletes whose biological and sports age are above are lower than other athletes.

5. Suggestions

- Psychological support must be given to athletes whose anxiety level is high
- Situations that create anxiety and stress must be determined and mental exercises must be done in order to overcome these troubles.
- Meditation and yoga must be provided athletes to do in order to reduce anxiety level of them who have high anxiety level.
- Athletes must inspire themselves to overcome negative situation that creates anxiety.
- They must think how can they overcome these negative situation than to be carried away to negative feelings and thoughts in anxious situations.

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