The Comparison of Elite Wrestlers' State of Anxiety Before-after Weighing

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Abstract   Anxiety is one the significant factor which affects performance of athletes in a negative way. The purpose of this research is to compare elite wrestlers' state of anxiety before-after weighing. A state of anxiety inventory developed by Spielberg and adapted to Turkishby Ömer and Le Compte has been used in order to detect wrestlers' state of anxiety before-after weighing. SSPS 20 package software has been used while analyzing the data on this research. After it has been stated that datum has both an homogenous and normal distribution; it has been decided that parametric test method should be used in statistic analysis. In statistic analysis, diagnostic statistic and co-sample t test has been implemented. On the consequence of these analyses, the wrestlers' state of anxiety before weighing has been higher than the state of anxiety that wrestlers have after weighing.

Keywords: state of anxiety, wrestlers, weighing

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1. Introduction

Anxiety, in terms of dictionary meaning, is a negative feeling that it is felt while facing with either a dangerous or unexpected condition [1,2,3].

The state of anxiety is subjective fear that an individual feels it due to a stressful situation [4].

Stress and anxiety can affect ability of making right decisions negatively in athletes' attitude. An athlete, who is under anxiety and stress, is unable to make right decisions and to perform his/her ability however S/he desires. Athletes, who are under extreme pressure, might have inappropriate behaviors. Not only stress makes athletes forget the actions which is well known and performed by athletes many times in trainings but also it causes athletes to perform negative actions while raising a chaos in athletes' feelings [5].

Today, it has been mentioned that there are many factors affecting athletes' sportive efficiency level. While some parts of these factors are evaluated under the name of environmental factors; some other parts of these factors are evaluated as internal factors. Athletes' psychological preparations are significant factors to be successful in performing sports. Athletes' psychological conditions and their performances are in a close relation with their level of anxiety [6,7].

As long as the researches which show relation between athletes' psychological state and their performance progress; sportive actions has gained a different dimension and it has been detected that mental activitiessuch as intelligence, attention, memory, self control, judgment, comparison, analyzing, anxiety are included in all these sportive activities [8].

It has been adopted that Anxiety affects performance in the researches which are carried out in the field of sport psychology. It should be taken care of that anxiety will not affect performance in a negative way and there should be techniques in order to cope with these situations [9].

Presence of external reinforcement and punishments, uncertainty of conclusion, dominance of opponent, scores athletes have in latest competitions, at what degree of importance of these scores have according to athletes, how athletes comprehend their physical, technique, tactic physiological capabilities as compared to their opponents' capabilities, stress and anxiety are definitive in all competitive environment and especially researches which are carried out in high level sports [10].

Every competition has a great deal of significance for athletes in terms of social and economical factors. In accomplishing success, the ability of coping with anxiety an extremely important criterion no matter how perfect an athlete is in terms of physical features and no matter how perfect training duration is. Psychological preparation should be different in accordance with fundamentals of different sports. Team sports have different dynamics compared to individual sports. It has been thought that individual athletes have more intense anxiety level than team sport athletes [11,12].

Scientists have developed new training systems in order to increase athletes' performances to the top level. Researches carried out by scientists shows that not only physical trainings is not merely significant to increase athletes performances but also psychological factors have a significant place in athletes progress [13,14].

The world's most successful athletes believe that the hardest athlete to dominate is athletes themselves. If an athlete learns to dominate his/her previous success; s/he learns easily how to dominate other athletes. For this reason, athletes should know what retains him/her from his/her goals [15].

The purpose of this research is to compare elite wrestlers' state of anxiety before-after weighing.

2. Material and Method

2.1. Samples

Samples of this study consist of 40 elite wrestlers who attended Young wrestlers' Turkey Championship in 2012. 95 wrestlers were met and 40 wrestlers out of these were decided to be in this research.

2.2. The Purpose of Gathering Information of the Research

A state of anxiety inventory developed by Spielberg (1970) and adapted to Turkishby Ömer and Le Compte (1985) has been used in order to detect wrestlers' state of anxiety before-after weighing. This inventory is a self-evaluation questionnaire that consists of short statements. It has been declared that Alpha reliability is between .83 and .87. Repetition of test reliability is between .71 and .86. Article reliability is between .34 and .72 [16].

2.3. Analysis of Data

SPSS 20 package software has been used for the analysis of data. Kolmogorov-Smirnov test has been used in order to have whether data had a normal distribution or not. Therefore, it has been found that data has had a normal distribution. Later on, Anova-Homogenety of variance test has been used in order to evaluate whether data has not had a homogeneous. After that, it has been found that data has had a homogeneous result. After the first examination; parametric test technique has been decided to be used in the statistical analysis of examined data. Diagnostic statistic and co-sample t test has been used.

3. Results

In this section, results which have been found at the end of statistical analysis have been given in 2 different charts and graphics.
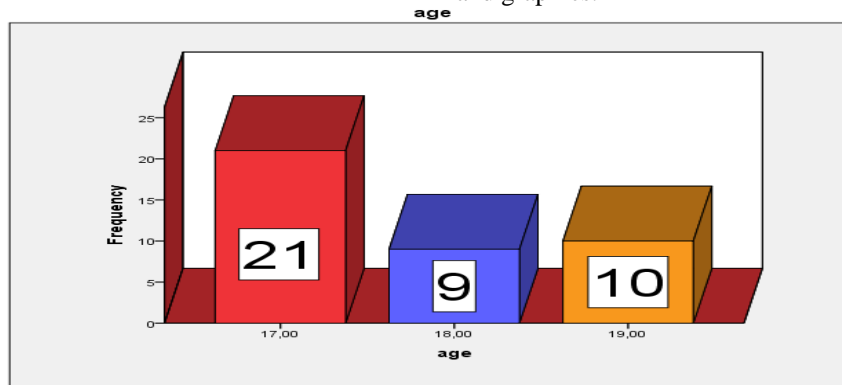
Graphic 1. Distribution of athletes' age who have attended this stud

On this chart, the data and distribution of athletes who have attended in this research have been given above. 21 wrestlers who are 17, 9 wrestlers who are 18, 10 wrestlers who are 19 have attended. 40 wrestlers attend this study in total.
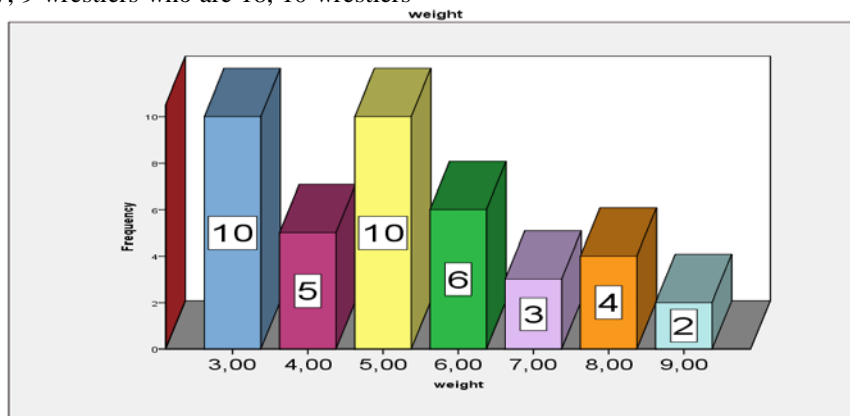
Graphic 2. The frequency distribution that shows wrestlers' pre-match weight loss

Reviewing graphic above, it has been determined that 10 wrestlers have lost 3 kilos, 5 wrestlers have lost 4 kilos, 10 wrestlers have lost 5 kilos, 6 wrestlers have lost 6 kilos, 3 wrestlers have lost 7 kilos, 4 wrestlers have lost 8 kilos, 2 wrestlers have lost 9 kilos.

Chart 1. The results of diagnostic statistic of state of anxiety

	N	$\overline{x}$	±
Level of anxiety at pre-weighing	40	48,850	6,228
Level of anxiety at post-weighing	40	37,400	11,160

Reviewing diagnostic statistics which have shown the wrestlers' level of anxiety on chart 1, it has been determined that pre-weighing has been (=48,850±6,228) and post-weighing has been (=37,400±11,160).

Chart 2. The Results of co-sample t test

Mean	Std. Deviation	T	p
11,45000	8,42448	-8,596	,000

As a consequence of comparison of wrestlers' pre-weighing and post-weighing state of anxiety points on chart 2, a reasonable difference has been found statistically ($p < 0,05$).

4. Discussion

Reviewing elite athletes' pre-weighing and post-weighing state of anxiety scores, it has been understood that measure score which has been carried out 30 minutes before weighing is higher than the score which has been carried out 1 hour after weighing. In addition to the consequence of comparisons of anxiety scores at pre-weighing and post weighing; a reasonable difference has been found statistically ($p < 0,05$). After analyzing results, many studies covering wrestlers and other branches have been attained. However, the study which compares level of anxiety at pre-weighing and post-weighing has not been found. Özbay compares national professional wrestlers' state of anxiety at pre-game and post-game. As a result of this comparison, he has determined that there is a reasonable difference statistically. Özbay has determined (2012)that post-game state of anxiety of wrestlers who are over-weight is lower than the ones who have both less over-weigh problems and none over-weigh problems.

Morgan (1970) apply 3 types of IPAT parallel anxiety test to 7 university wrestlers at Missouri university. The first test has been given before the season starts. The second test has been given before the game that is considered as an easy game by the coach. The third test has been given before the game that is considered as a hard game by the coach. Surprisingly, anxiety results that have been identified before games have been lower than the ones that are during pre-season anxiety results. However, there is no difference between easy games and hard games in terms of anxiety results. Afterwards, Morgan and Hammer have applied same IPAT anxiety test to four wrestlers who are from different colleges. Anxiety test have been given orderly at the beginning of the season, during the tournament, after wrestlers prepared (4 hours before the tournament), 1 hour before the first game and 15 minutes after tournament. It has been observed that anxiety has been increased 1 hour ago before the game.It has been noticed that anxiety has been decreased after tournament. It has been identified that anxiety level in real conditions have been lower compared to previous tests at later tournaments [17].

Morgan and Hammer have found that pre-game state of anxiety have been higher than post-game state of anxiety in the research on 29 wrestlers [18].

Screiber (2004)statedthat an increase might be seen on wrestlers' performances by preventing negative influences and state of anxiety [19].

Tazegüland his friends stated in their studies which were carried out in 2015 that wrestlers' anxiety score was lower than boxer, kick boxers were [20].

Çoksevimand his friends observed pre-game, post-game state of anxiety of kick boxers and short-time tempo. They found (2008) found a reasonable difference in statistical analysis [21].

In the meetings when wrestlers have weighed, it has been asked some questions about wrestlers' condition and how wrestlers have felt themselves. As a result of these questions, wrestlers' biggest concern is whether they are on the right weigh that they are expected to or not. Therefore they generally don't eat anything until the weighing time. In addition to meetings having been carried out, wrestlers have experienced some kind of anxiety on their mind that they think their performance level would decrease according to their weight loss. Rather than that wrestlers want to eat something as soon as they finish weighing. Therefore, the biggest reason why wrestlers have high anxiety scores is not being able to reach aimed weigh in accordance with their performance level. According to Martens, the state of anxiety during pre-game might affect both in-game performance and result of the game [22]. Jones and his friends (1993) stated that anxiety has a significant impact on performance [23].

A meeting with Dr Hamdi who was a grek romen national team coach once states his thoughts on his observation below:

Weight loss that is planned both by athlete and by coach, weight loss duration and amount of lost weight might affect the state of anxiety at pre-game. If an athlete decides to lose weight by his own will not obeying what coach says, an increase will be seen in athlete's performance. Also, Wrestlers who lost weight because of coach's will had an unpleasant situation while weighing. They did not even want to be weighed.

It has been believed that power decrease related to weight loss increases the state of anxiety. An athlete who feels powerless might be affected his/her state of anxiety in a sport branch that is based on power and advanced performance such as wrestling. Koral J. and Dosseville F. (2009) have found as a result of their studies that wrestlers who have sudden weight loss have low performance conditions [24]. Roemmich and Sinning (1997) have stated as a result of their studies that wrestlers who have lost weight have low performance conditions [25].

Civan and his friends (2010) compared state of anxiety and continuous anxiety of individual athletes and team athletes at pre-game and post-game. As a result of this comparison, it was found that average state of anxiety scores had different results in different sport types. Average score of state of anxiety had the highest score in individual sports. Team athletes' state of anxiety average score was found that it had a lower score than individual athletes had ($P < 0, 05$). It was found that continuous anxiety at post game between individual athletes and racket based sport had no reasonable relation. However, it was found that team sport athletes' continuous anxiety average score had a higher score than individual athletes and racket based sport athletes had.

Consequently, it has been found that wrestlers have a high state of anxiety at pre-weighing. Meetings with national team athletes and national team coach result in that one of the significant reason why wrestlers have thoughts on their mind that they will not be able to lose weight they desire along with their performance level.

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