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**ORIGINAL ARTICLE**

# A RESEARCH ON ANXIETY STATES OF STUDENTS FROM DIFFERENT UNIVERSITIES WHO REGULARLY DO SPORT

*Abstract*

This research has been made for the students studying at the different culture profiled universities to determine the anxiety level and to investigate according to some variables. The research group consists of 164 students who have been engaged studying in Celal Bayar University and Batman University and practicing regular exercises. In the research, Spielberger Trait-State Anxiety Inventory were used as data collection tools.. Translation in to Turkish language, reliability and validity studies was done by Öner and Le Compte in 1983. Independent Samples t-test was used for the comparison of the independent tests for the evaluation of the collected data. Results were investigated on the basis of $p < 0,05$ significance level. As a result of this research, no significant difference was found between universities and anxiety levels according to the gender ($p > 0,05$). As a result, doing regular exercise has a positive effect on anxiety and no affect of anxiety level by the universities or gender.

**Keywords**: Sport, anxiety, undergraduate

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## INTRODUCTION

Sports and physical activities have positive impacts not only on physical but also mental health. The literature on this field mostly belongs to the adulthood period (Karakaya, Coşkun, Ağaoğlu, 2006:163). Sports have actively or passively become more and more influential over people all over the world. This increasing interest towards sports has established a competition between countries which have begun to use their resources to utilize sports' positive impacts (Gümüş, 2002). There are several factors influencing sportive productivity level. Some of these factors are evaluated as environmental factors and some are assessed under the title of domestic factors, including psychological factors (Gülşen, 2008).

Sports branches, due to their own nature, necessitate several individual features, motivations and physical skills (Gürer et. al. 2007:161). Therefore, in selection of athletes and during trainings, particularly these features and their development should be taken into consideration (Erkan, 1998:32). Success in sports depends on a good performance. Good performance is only possible when condition, technique and tactics and more importantly psychological factors merge. Self-confidence is among the most critical cognitive factors. Self-confidence or lack of self-confidence depends on whether a person is aware of his or her own skills and talents. If the feeling of confidence helps the athlete, it may also help to increase his or her performance (Roberts, 1986:25). High levels of anxiety negatively affect the athlete's performance. Negative mental processes, which occur due to anxiety, cause several physical symptoms (Yılmaz et. al., 2002:724). When anxiety is not controlled, it negatively affects athletes' performances and achievements and may result in failure (Yılmaz and Koruç, 2004: 418).

Anxiety, which occurs due to a threat, is a broad concept including several highly complicated emotional and motivational situations. This threat is related to subjective evaluation of a situation. During performances or social occasions, physical danger, insecurity or uncertainty, anxiety harms an individual's self-respect (Pijpers, Oudejans, Holsheimer, Bakker, 2003:287). The concept of anxiety was analysed under two categories by Spielberger: state anxiety and trait anxiety. State anxiety often occurs due stress concerning environmental factors. It mostly depends on logical factors and the reasons lying behind it can be understood by others as well. It is usually experienced by all individuals and it depends on a temporary situation (Öner, Le Comte, 1983:1).According to Karabulut (2013:245) "Trait anxiety occurs when emotional reactions' frequencies and intensity against stressful

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situations, which are considered as dangerous or threatening, increase and become permanent". Anxiety based living turns anxiety into a negative concept and locates it behind abnormal behaviours rather than normal behaviours (Öner, 1977). Everyone lives anxiety and stress in different ways. Stress is caused by both psychological and social factors. As these factors are experienced differently, it is clear that anxiety has a psychological aspect besides its physiological dimension. Furthermore, anxiety can be seen as a threat to an individual's characteristic values (May, 1977:205).

The athlete's feelings when he or she is happy, fearful or angry, his or her attention, coordination or tactical behaviours can be influenced negatively because these feelings cause the loss of the importance of technical and tactical behaviours which aimed by the athletes to win the competition or activity. When the athlete feels euphoria, fear or anger, his mental functions particularly thinking and conception skills are weak. He cannot consciously control his movements. These intense feelings should be eliminated in order to reach the psychological and physical state of balance. This situation is valid for all sports branches (Gloud, 1986:86). Over the last 20 years, several studies have been analysing the impacts of exercise over neurotic and personal anxiety. The practical analyses of all unregulated studies show that there is a decrease in heavy and chronic anxiety due to exercises. All these studies investigate the impact of controlled and long term exercises on chronic and heavy anxiety (Ragling, Morgan, 1987). Anxiety can play an important role in making decisions concerning physical risks. In the state of anxiety, participations may avoid risks (Freixanet, 1991:1089).

In this research, study group students were chosen from Batman University and Celal Bayar university due to quick reach.The sample of this study is partially constituted by students from the University of Batman. According to the official statistics, the number of athletes in the Batman Province exceeds 10.000 (Aktürk et.al. 2011). In this context, the aim of this research is to investigate states of anxiety of the students of different university with diverse student profiles who regularly do sports.  This study is important in terms of presenting the anxiety levels of university students with different backgrounds and this research is important for revealing anxiety situations of students from different universities and cultures.

# METHODS

## Population and Sample

The research was conducted with two different universities which are assumed to host different students with diverse cultural profiles. All the students do sports regularly. The population of the research is the Celal Bayar University and the University of Batman. 'Regular exercise" means doing any sort of sports at least three days a week. A total number of 164 students participated in the survey. 93 of the students are male, 71 are female. After collecting data, 24 scales were not evaluated as the filled forms were incomplete or incorrect.

## Data Collecting Tools

In this research, the questionnaire method was employed. In order to measure the athletes' level of anxiety, State Trait Anxiety Inventory STAI, which was developed Spielberger and his colleagues (1970), was used. The scale is a type of "self-evaluation". It includes 40 articles consisted of short statements. The scale has two parts; each consists of 20 items: "State Anxiety From" and "Trait Anxiety Form" in order to identify recent feelings. The Four Score Likert Scale indicates that The Alpha Reliability is between .83 and .87; Test-Retest Reliability is between .71 and .86 and Item Reliability is between .34 and .72 (Aydemir, Köroğlu 2000:153; Öner, 1977). These tests were developed by C.D. Spielberger, R.L. Gorsuch and R.E. Lushene, their reliability was checked by N.Öner and A.Le Compte and they were used in several researches (Aydemir, Köroğlu, 2000:154).

## Data Collection

The inventory, thanks to the courtesy of instructors, was used in the classroom before the lectures begin. In order to collect the data in a complete way, researchers explained the procedure concerning the study's aim and answers to the inventory and only voluntary students were encouraged to participate in the survey.

## Data Analysis

Statistical analyses were made by using the software 'SPSS for Windows 16.0' at the School of Physical Education and Sports in University of Batman. In order to determine the differences between anxiety Scores percentage-frequency distribution was used. In comparing

quantitative data of the two groups, the Independent Samples T Test was used for independent samples. The results were analysed in accordance with the p<0,05 significance level.

## RESEARCH FINDINGS

This chapter presents and evaluates the research findings.

**Table 1:** State Anxiety and Trait Anxiety Scores of the Students

| Celal Bayar Uni. | N | Min. | Max. | Age (mean) | Mean (X) |
|---|---|---|---|---|---|
| State Anxiety | 100 | 31 | 57 | 20,83 | 43,40 |
| Trait Anxiety | 100 | 31 | 63 | 20,88 | 46,23 |
| **Uni. of Batman** | | | | | |
| State Anxiety | 64 | 35 | 57 | 23,18 | 43,51 |
| Trait Anxiety | 64 | 37 | 67 | 22,87 | 46,09 |

According to the Table 1, 100 students at the Celal Bayar University and 64 students at the University of Batman were reached. All these students do sports regularly as stated earlier. The mean of state anxiety at the Celal Bayar University is X=43,40 the mean of trait anxiety is X=46,23. These numbers at the University of Batman are found X=43,51 and X=46,09 respectively. The minimum and maximum values in these scores are similar.

**Table 2:** State Anxiety Scores of the Students According to the University

| University | N | Min. | Max. | Mean (X) | Std. Deviation | P (P<0,05) |
|---|---|---|---|---|---|---|
| Celal Bayar Uni. | 100 | 31 | 57 | 43,40 | 5,67 | 0,890 |
| Uni. of Batman | 64 | 35 | 57 | 43,51 | 4,38 | |

The data presented on Table 2 shows that state anxiety Scores of the Celal Bayar University students is 43,40. It is 43,51 for University of Batman students. Accordingly, statistically no significant difference was found between state anxiety Scores. There is no significant difference according to the P<0,05 value.

**Table 3:** Trait Anxiety Scores of the Students According to the University

| University | N | Min. | Max. | Mean (X) | Std. Deviation | P (P<0,05) |
|---|---|---|---|---|---|---|
| Celal Bayar Uni. | 100 | 31 | 63 | 46,23 | 5,37 | 0,879 |
| Uni. of Batman | 64 | 37 | 67 | 46,09 | 5,91 | |

According to the data presented on Table 3 trait anxiety Scores of the Celal Bayar University and University of Batman are 46,23 and 46,09 respectively. Accordingly,

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statistically no significant difference was found between state anxiety Scores. There is no significant difference according to the P<0,05 value.

**Table 4:** State Anxiety Scores of the Students According to the Gender

| Gender | N | Sta. Mean (X) | % | Std. Deviation | P (P<0,05) |
|--------|-----|---------------|------|----------------|------------|
| Female | 71 | 43,18 | 43,3 | 5,18 | 0,574 |
| Male | 93 | 43,64 | 56,7 | 5,21 | |

According to the Table 4, 43,3% the students are female, 56,7% of them are males. It was identified that state anxiety scores of the female students are 43,18. Male students' scores are 43,64. Accordingly, statistically no significant difference was found between state anxiety scores according to the gender. There is no significant difference according to the P<0,05 value. P>0,05

**Table 5:** Trait Anxiety Scores of the Students According to the Gender

| Gender | N | Tra. Mean X) | % | Std. Deviation | P (P<0,05) |
|--------|-----|--------------|------|----------------|------------|
| Female | 71 | 45,97 | 43,3 | 5,61 | 0,682 |
| Male | 93 | 46,33 | 56,7 | 5,57 | |

The data presented on the Table 5 shows that trait anxiety scores of the female students are 45,97 and male students' scores are 46,33.Accordingly, statistically no significant difference was found between trait anxiety scores according to the gender. There is no significant difference according to the P<0,05 value. P>0,05

**CONCLUSION AND DISCUSSION**

There has been a recent increase in the number of studies on anxiety. Many studies analysed the connection between sports and anxiety level. There are several factors influencing athletes' anxiety levels and the positive or negative impacts of these factors in terms of performance were widely studies. Regular physical exercise has different dimensions in different provinces which have diverse cultural profiles. Therefore it is significant to do research on anxiety levels of individuals who do sports regularly. The studies that dealt with the connection between the anxiety and performance functions indicate that the athletes with high levels of anxiety makes more mistakes than the athletes with lower levels of anxiety(Yılmaz and Koruç, 2004:418, Aras, 2010:22).

This research identified that the means of state anxiety scores for the universities are 43,40±5,67 and 43,51±4,38. It was found that the scores are proximate. P= 0,890 was found

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and statistically no significant difference was identified. According to the research findings, it is possible to state that there is no difference between state anxiety levels of different students of two diverse universities. Berkem (2001:41), in a similar research where he employed anxiety scale, also could not reach a significant difference. Tanenbaum and Milgram (1978) compared state and trait anxiety levels of voluntary students during competitions. For that purpose they grouped physical education students and evaluated the results (Quoted in Başaran et. al., 2009:541).In case of trait anxiety in both groups of athletes, competitors at a lower of level than those who have observed the level of anxiety.

This research identified that the means of trait anxiety scores for the universities are46,23±5,37 and 46,09±5,91. Table 3 reveals that scores are proximate. P=0,879 was found (P>0,05). Başaran et. al. (2009:536) analysed state anxiety in different sports branches and reached various results. Some branches included significant levels of anxiety whereas no significance difference was found in other branches. Thus, this research produced similar results in analysing anxiety levels of students who are studying in different universities and doing sports regularly. The findings indicated that there are no significant differences between anxiety scores.

There are also no significant differences were identified in terms of the athletes' state and trait anxiety levels according to their genders. Tables 4 and 5 showed that state anxiety scores are 43,18±5,18; 43,64±5,21(P=0,574) and trait anxiety scores are 45,97±5,61; 46,33±5,57 (P=0,682). Literature review also supports these research findings. Civan et. al. (2010:199) compared means of state and trait anxiety scores in terms of gender. They found that the difference between male and female students' means of state anxiety is not statistically significant (P>0,05). These results coincide with Özbekçi (1989)'s research on athletes' state anxiety, Engür (2002)'s research about impact of motivation towards success on state anxiety and Yücel (2003)'s study on taekwondo players' state and trait anxiety levels. Similarly, Türkmen, Kul and Bozkuş (2013:106) in their research were not able to find a significant difference in terms of gender. These studies support research findings of this study. Özbekçi (1989) analysed state anxiety scores of basketball, volleyball and athletics players and could not find a correlation between age, competition and stress levels.

As a result, doing sports regularly has the same impact on students with different cultural profiles at different universities. It can be considered as a factor eliminating anxiety. Students, who do sports at universities, benefited from sports activities. Even they belong to different

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cultures, doing sports regularly may abolish an anxiety based situation. As a result of these findings, it can be said that university students' anxiety levels are not affected by gender or their universities. It is necessary to conduct researches about schools or regions which have different cultures. This study provides an insight for the future studies. Considering the cultural differences, presenting the positive effects of sports would result in removing the obstacles and increase in the number of people who are interested in sports.

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