Evaluation of Anxiety Between Athlete Girls and Non-Athlete Girls

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Abstract: The aim of this study was to assess and determine the level of anxiety between athlete and non-athlete young girls. This study tried to ensure if there was significant difference between athlete and non-athlete young girls. The study population consisted of 160 girls with an age range of 20 to 30 years of whom 80 were athletes and 80 were not. This study was performed in a descriptive method in which a kind of questionnaire was used to measure the level of anxiety affecting the study population; the average score pertaining to each group was calculated through descriptive statistics; finally, inferential statistical was employed to calculate the t coefficient in order to measure the difference between these two groups. The results rejected the null hypothesis according to which there is no difference between the two groups of athlete and non-athlete girls: the level of anxiety of athlete girls was significantly lower than that of non-athlete girls.

Key words:

INTRODUCTION

According to psychologists, human being is a biological set of mental – social elements; this means that outdoor and indoor changes affect human lifestyle, health and disease. With the progress in medical technologies and related sciences, physical and psychological effects have been specified, and vice versa, and it became clear that these two factors were inseparable (Loin.1975)

Almost 70% of all diseases affecting human have a close relationship with its way of life and its view of the world: they affect human social class, job, inheritance and physical and mental growth when it is a child. In the meantime, sport plays the same role as resting and sleeping, causing the body to store energy. (orwin.1973)

In addition, sport physiologists have also proved that physical training is an appropriate mean to prevent mental and psychological difficulties and the anxiety which is the subject of the present study. Physical training is emphasized as a device to access to mental and psychological conditions. (Muller1975)

Anyway, recent studies have presented real evidences on the effects of sport on medical patterns. Today, mental health problems are endemic in human societies. According to the recent statistics of WHO, half a million people suffer from psychological discomforts of whom near 150 millions are affected by nervous disorders such as anxiety and depression. Much attention is paid today to the use of methods of treating and preventing psychological discomforts. (Hussey.1976) One of these new methods is physical training. Saym (1978), Drosin (1968) and Wood (1977) proved that sport is able to create significant physical comfort and reduce occasional anxiety (Dersicol 1976; Moler and Armmstrong 1975; Ervin 1973; Folkniz 1998). Lepon (1978), Morgan and Hortzman (1976) proved a negative relationship between physical fitness and anxiety. In other words, the level of anxiety is decreased as the level of physical training and fitness is high (Shwartz, Davidson, Gelhen, 1978).

In a classification from different kinds of anxiety, the latter was divided into two groups of physical level and cognitive anxiety. These researchers argue that physical training can be useful for individuals affected by physical anxiety; while meditation can be more useful for those who are kindly affected by cognitive anxiety (Folkinz and Saym, 1981).

Methodology:

The method used in this study was a descriptive one. The study population included all athlete girls of the clubs situated in north-east of Tehran in 1995 with an age range of 20 to 30 years old, and also non-athlete girls several months after their last sport activity. Sampling was performed in a cluster random method.

The study population included 80 athlete girls and 80 other girls with no physical training since several months. The two groups were selected in order to assess their level of anxiety. To that end, a number of 160 samples were investigated. The research environment was composed of 4 sport clubs located at north-east of Tehran providing different kinds of sports. Given the number of the clubs in the said area, four clubs were selected randomly and then 20 athlete girls plus 20 non-athlete girls were selected from each club.

Self-rating anxiety scale (SAS) was used for this reason, which was a 20-item report assessment device. Each question was scored on a scale of 1-4 based on physical and emotional symptoms of anxiety. Since there were positive worded and negative worded questions, one of the characteristics of this scale was that the subject
would be less able to keep track of special methods in its replies. At the end, the correlation coefficient was calculated for 80% of the questions. This scale is developed in a way that individuals with lower level of anxiety would get lower scores, and vice versa. If a subject replies correctly all the items, it will be given a score of 20, but it will be given no score if none of its replies is correct (a score for each correct reply). Obtaining a score through 0 to 5 indicates low level anxiety, 6 to 10 means average level of anxiety, 11 to 15 stands for high anxiety and 16 to 20 shows very high anxiety and a disease.

After data collection, in order to analyze the results, first the distribution of scores related to the level of anxiety was described. Then, central indexes were calculated, and the number of dispersion indexes (including standard deviation, variance, and variation range) were determined. Finally, the research hypothesis test was performed through t-test method for independent groups.

**Results:**

The results of this study are shown in tables 1 and 2. According to table 1, the level of anxiety for the group of athlete girls was 20% (minimum) and 52% (maximum). This level for the group of non-athlete girls was respectively 20% (minimum) and 49% (maximum). With regards to average score: the first group had an average score of 33.7%, and the second group had an average score of 35.7%. As can be seen, the level of anxiety of the second group like the first group was less than average and approximately at the same level. In fact, no significant difference has been identified to this stage between the two groups.

<table>
<thead>
<tr>
<th>Variation range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average level of anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>20</td>
<td>52</td>
<td>33.7</td>
</tr>
<tr>
<td>Non-athlete</td>
<td>20</td>
<td>49</td>
<td>35.7</td>
</tr>
</tbody>
</table>

Then, t-test was carried out. According to the data of table 2, standard deviation of the two groups was different. According to the t-test, the standard deviation 1.96 and 2.63 disapproved the null hypothesis. Based on the data obtained, it could be judged that the level of anxiety for the group of athlete girls is considerably lower than that of non-athlete groups.

<table>
<thead>
<tr>
<th>Athlete girls</th>
<th>X 1</th>
<th>33.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SSX 1</td>
<td>3330.8</td>
</tr>
<tr>
<td>Non-athlete girls</td>
<td>X 2</td>
<td>35.76</td>
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<tr>
<td></td>
<td>SSX 2</td>
<td>3668</td>
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<td>2.063</td>
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<td></td>
<td>Sd</td>
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**Discussion and Conclusion:**

According to results of the present study, the average difference between the two groups of girls is clearly revealed. It is obvious that this difference is significant with a reliability level of 95%. According to the research literature, sport and physical training are very effective to lessen the level of anxiety between individuals.

According to the results, it becomes clear that the mental health conditions of athlete girls are more favorable than non-athlete girls.

**REFERENCES**


