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Sports competition anxiety between inter-college and inter-university female football players

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Abstract

The purpose of this study was to investigate the difference of Sports Competition Anxiety between Inter-College and Inter-University Female Football Players. Forty four (N=44) female aged 19-25 years participated in the study. Participants took part in the study voluntarily, and all subjects were also informed about the purpose and protocol of the study. The subjects were divided into two groups: Group-A: Inter-College Female Football Players: (N₁=22) and Group-B: Inter-University Female Football Players: (N₂=22). The Sport Competition Anxiety Test (SCAT; Martens, 1977) to assess the effect of anxiety on the performance of athletes was used for the present study. In this study, convenience sampling, often called availability sampling, is a special non-probability sampling technique that relies on collecting data from people in the community who are readily available to participate in the study. Under the data analysis, exploration of data was made with descriptive statistics and graphical analysis. Unpaired t-test was employed for the present investigation. The SPSS (statistical package for the social sciences) version 20.0 was used for all analyses. For testing the hypotheses, the level of significance was set at 0.05. The calculated exceeds the critical value (7.6088>2.018), hence the means of Inter-College football Players and Inter-University football Players are significantly different at 0.05 level of significance regarding Sports Competition Anxiety.

Keywords: Sports competition anxiety, inter-college, inter-university, football players

Introduction

By nature, human beings are competitive and ambitious for the excellence in all athletic performances. Not only every man but every nation wants to show their supremacy by challenging other Individual, state, group or nation ^[1]. Anxiety is a negative emotional state in which feeling of nervousness, worry, and apprehension is associated with activation or arousal of the body ^[2]. Performance anxiety is not uncommon in sports, as to some extent, fear of performance helps in achieving desired concentration. However, the excess will lead to a rush of adrenaline termed as anxiety. Whenever you feel short of breath, sweating, shaking or high heart beat rate. You lose concentration, your actions become disjointed and you feel paralyzed at the beginning of an important sporting event ^[3]. A highly competitive sport environment leads to anxiety among players. Competitive anxiety is one of the factors to decrease athlete's performance ^[4]. Anxiety refers to a sort of nervous and fear emotion formed by frustration of self-esteem and self-confidence, or increasing of the sense of failure and guilty, which is resulted by the threat from being unable to achieve goals or to overcome obstacles ^[5]. The sports competition anxiety test constructed by Martens in the year 1977 was based on the notion that an athlete's perception of threat in a competitive situation is measurable through self report. It should therefore, be understood that sports competition anxiety is nothing but situational or episodic anxiety very specific to sport competition situations ^[6]. Anxiety in particular, plays an important role in competition and in competitive sports. Anxiety and sports are deeply related with each other. He further stated that anxiety is not always bad but it can help the players in focusing and alerting in performing their actions ^[7]. In many sports athletes are expected to deliver perfect performance outcomes, perfectionism in athletes has been shown to be related to characteristics that may undermine performance particularly competition anxiety. Anxiety is a negative emotional state in which feeling of nervousness; worry and apprehension are associated with activation or arousal of the body ^[8]. Performance is the outcome of athlete's biological, psychological, sociological, and physical construct.

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In the games and sports, psychological and physiological factors play a significant role in determining the performance level [9]. In today's competitive world of sports everyone needs physical, mental and emotional fitness in all level of competitions for the successful participation. In the field of sports, anxiety plays a very crucial role in success [10]. Competitive anxiety is the anxiety generated in a sport, competitive situation. It is a specific term of anxiety that occurs as function of the competitive situation [11]. Competition is a situation in which two or more individuals or groups struggle for complete or larger share of a particular goal in which the successor their performance is related to each other. Thus, sports competition may be considered--as an open conflict when the individual or group makes effort to surpass the other individual or the group in any sporting activity for which the competition is held [12].

Selection of subjects

Fourty four (N=44) female aged 19-25 years participated in the study. Participants took part in the study voluntarily, and all subjects were also informed about the purpose and protocol of the study. The subjects were divided into two groups:

Group-A: Inter-College Female Football Players.

(N₁=22).

Group-B: Inter-University Female Football Players.
(N₂=22).

Selection of tools

The Sport Competition Anxiety Test (SCAT; Martens, 1977) to assess the effect of anxiety on the performance of athletes was used for the present study.

Sampling technique

In this study, convenience sampling, often called availability sampling, is a special non-probability sampling technique that relies on collecting data from people in the community who are readily available to participate in the study.

Statistical techniques

Under the data analysis, exploration of data was made with descriptive statistics and graphical analysis. Unpaired t-test was employed for the present investigation. The SPSS (statistical package for the social sciences) version 20.0 was used for all analyses. For testing the hypotheses, the level of significance was set at 0.05.

Results

Table 1: Frequency table (value, frequency & frequency) of inter-college and inter-university female football players regarding sports competition anxiety

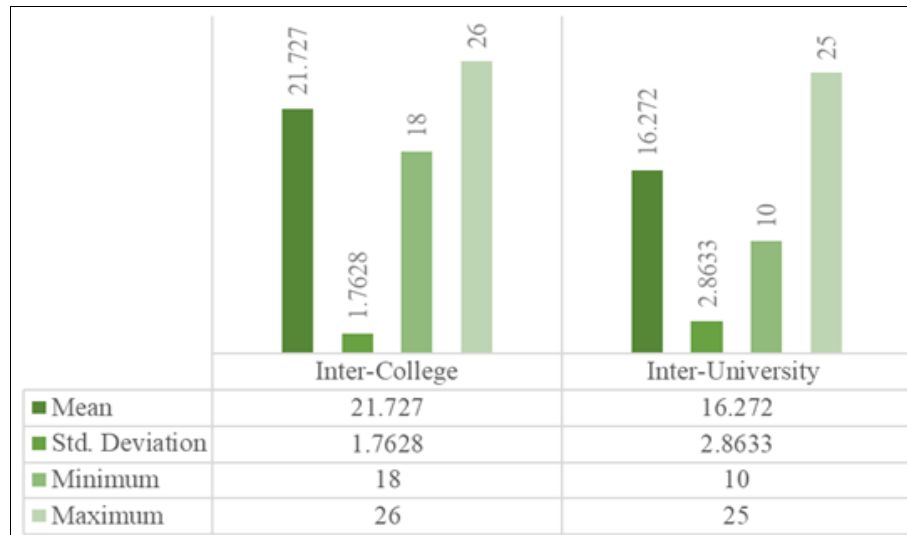
| Inter-college female football players | | | Inter-university female football players | | |
|---------------------------------------|-----------|-------|--|-----------|-------|
| Value | Frequency | % | Value | Frequency | % |
| 18 | 1 | 4.55 | 10 | 1 | 4.55 |
| 19 | 1 | 4.55 | 13 | 1 | 4.55 |
| 20 | 4 | 18.18 | 14 | 4 | 18.18 |
| 21 | 2 | 9.09 | 15 | 3 | 13.64 |
| 22 | 8 | 36.36 | 16 | 3 | 13.64 |
| 23 | 3 | 13.64 | 17 | 3 | 13.64 |
| 24 | 2 | 9.09 | 18 | 4 | 18.18 |
| 26 | 1 | 4.55 | 19 | 2 | 9.09 |
| | | | 25 | 1 | 4.55 |

Table 2: Descriptive statistics of inter-college and inter-university female football players regarding sports competition anxiety

| Inter-college female football players | | | Inter-university female football players | |
|---------------------------------------|------------------|--------|--|--|
| Minimum | min = | 18 | 10 | |
| Maximum | max = | 26 | 25 | |
| Range | R = | 8 | 15 | |
| Size | n = | 22 | 22 | |
| Sum | sum = | 478 | 358 | |
| Mean | \bar{x} | 21.727 | 16.272 | |
| Median | \tilde{x} | 22 | 16 | |
| Standard deviation | s = | 1.804 | 2.930 | |
| Variance | s ² = | 3.255 | 8.588 | |
| Mid-range | MR = | 22 | 17.5 | |
| Interquartile range | IQR = | 3 | 4 | |
| Sum of squares | SS = | 68.363 | 180.363 | |
| Mean absolute deviation | MAD = | 1.347 | 2.115 | |
| Root mean square | RMS = | 21.798 | 16.522 | |
| Std error of mean | SE \bar{x} | 0.384 | 0.624 | |
| Skewness | γ_1 = | 0.128 | 0.815 | |
| Kurtosis | β_2 = | 4.062 | 6.640 | |
| Coefficient of variation | CV = | 0.083 | 0.180 | |
| Relative standard deviation | RSD = | 8.304 | 18.009 | |

Table 3: Unpaired t-test results between inter-college ($N_1=22$) and inter-university ($N_2=22$) regarding sports competition anxiety

| Sports competition anxiety | | |
|----------------------------|---------------|---------------------|
| | Inter-college | Inter-university |
| Mean | 21.727 | 16.272 |
| Variance | 3.1074 | 8.1983 |
| Stand. Dev. | 1.7628 | 2.8633 |
| n | 22 | 22 |
| t | 7.6088 | |
| d. o. f | 42 | |
| critical value | 2.018 | |
| t > critical value | ☞ | there is sig. diff. |

**Fig 1:** Graphical representation of mean, standard deviation, minimum, and maximum value of inter-college and inter-university female football players regarding sports competition anxiety

Step 1: Find t value and degrees of freedom

To find t value and degrees of freedom we will use following formulas:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{X_1, X_2} \cdot \sqrt{\frac{2}{n}}}$$

$$S_{X_1, X_2} = \sqrt{\frac{1}{2} (S_{X_1}^2 + S_{X_2}^2)}$$

$$d. o. f = 2n - 2$$

\bar{X}_1 = Mean of data for group 1
 \bar{X}_2 = Mean of data for group 2
 S_{X_1, X_2} = Grand Standard Deviation
 S_{X_1} = Standard deviation of data for group 1
 S_{X_2} = Standard deviation of data for group 2
 $d. o. f$ = degrees of freedom
 n = Total number of values

In this example we have:

$$\bar{X}_1 \approx 21.7273$$

$$\bar{X}_2 \approx 16.2727$$

$$S_{X_1}^2 = \frac{1}{n-1} \sum_{i=1}^n (X_{1i} - \bar{X}_1)^2 \approx 3.1074$$

$$S_{X_2}^2 = \frac{1}{n-1} \sum_{i=1}^n (X_{2i} - \bar{X}_2)^2 \approx 8.1983$$

$$S_{X_1, X_2} = \sqrt{\frac{1}{2} (S_{X_1}^2 + S_{X_2}^2)} \approx 2.3776$$

After substituting these values into the formula for t we have:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{X_1, X_2} \cdot \sqrt{\frac{2}{n}}} = \frac{21.7273 - 16.2727}{2.3776 \cdot \sqrt{\frac{2}{22}}} \approx 7.6088$$

The degrees of freedom is:

$$d. o. f = 2n - 2 = 2 \cdot 22 - 2 = 42$$

Step 2: Determine critical value for t with degrees of freedom = 42 and $\alpha = 0.05$.

In this example the critical value is **2.018** (see the table below).

The calculated t exceeds the critical value (**7.6088 > 2.018**), so the means are significantly different.

Fig 2: Graphical explanation of unpaired t-test results between inter-college ($N_1=22$) and inter-university ($N_2=22$) regarding sports competition anxiety

The calculated exceeds the critical value ($7.6088 > 2.018$), hence the means of Inter-College football Players and Inter-

University football Players are significantly different at 0.05 level of significance regarding Sports Competition Anxiety.

Table 4: Table of critical values for two tailed tests

| D.O.F. | 0.05 | 0.01 | 0.001 |
|--------|--------|--------|---------|
| 1 | 12.706 | 63.657 | 636.619 |
| 2 | 4.303 | 9.925 | 31.599 |
| 3 | 3.182 | 5.841 | 12.924 |
| 4 | 2.776 | 4.604 | 8.61 |
| 5 | 2.571 | 4.032 | 6.869 |
| 6 | 2.447 | 3.707 | 5.959 |
| 7 | 2.365 | 3.499 | 5.408 |
| 8 | 2.306 | 3.355 | 5.041 |
| 9 | 2.262 | 3.25 | 4.781 |
| 10 | 2.228 | 3.169 | 4.587 |
| 11 | 2.201 | 3.106 | 4.437 |
| 12 | 2.179 | 3.055 | 4.318 |
| 13 | 2.16 | 3.012 | 4.221 |
| 14 | 2.145 | 2.977 | 4.14 |
| 15 | 2.131 | 2.947 | 4.073 |
| 16 | 2.12 | 2.921 | 4.015 |
| 17 | 2.11 | 2.898 | 3.965 |
| 18 | 2.101 | 2.878 | 3.922 |
| 19 | 2.093 | 2.861 | 3.883 |
| 20 | 2.086 | 2.845 | 3.85 |
| 21 | 2.08 | 2.831 | 3.819 |
| 22 | 2.074 | 2.819 | 3.792 |
| 23 | 2.069 | 2.807 | 3.768 |
| 24 | 2.064 | 2.797 | 3.745 |
| 25 | 2.06 | 2.787 | 3.725 |
| 26 | 2.056 | 2.779 | 3.707 |
| 27 | 2.052 | 2.771 | 3.69 |
| 28 | 2.048 | 2.763 | 3.674 |
| 29 | 2.045 | 2.756 | 3.659 |
| 30 | 2.042 | 2.75 | 3.646 |
| 31 | 2.04 | 2.744 | 3.633 |
| 32 | 2.037 | 2.738 | 3.622 |
| 33 | 2.035 | 2.733 | 3.611 |
| 34 | 2.032 | 2.728 | 3.601 |
| 35 | 2.03 | 2.724 | 3.591 |
| 36 | 2.028 | 2.719 | 3.582 |
| 37 | 2.026 | 2.715 | 3.574 |
| 38 | 2.024 | 2.712 | 3.566 |
| 39 | 2.023 | 2.708 | 3.558 |
| 40 | 2.021 | 2.704 | 3.551 |
| 42 | 2.018 | 2.698 | 3.538 |
| 44 | 2.015 | 2.692 | 3.526 |
| 46 | 2.013 | 2.687 | 3.515 |
| 48 | 2.011 | 2.682 | 3.505 |
| 50 | 2.009 | 2.678 | 3.496 |
| 60 | 2 | 2.66 | 3.46 |
| 70 | 1.994 | 2.648 | 3.435 |
| 80 | 1.99 | 2.639 | 3.416 |
| 90 | 1.987 | 2.632 | 3.402 |
| 100 | 1.984 | 2.626 | 3.391 |
| 120 | 1.98 | 2.617 | 3.373 |
| 150 | 1.976 | 2.609 | 3.357 |
| 200 | 1.972 | 2.601 | 3.34 |
| 300 | 1.968 | 2.592 | 3.323 |
| 500 | 1.965 | 2.586 | 3.31 |

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Conflict of interest

The authors declare no conflicts of interest.

References

1. Sanyal O. A comparative study of sports competitive anxiety between individual and team game players. *Int J Yogic Hum Mov Sports Sci.* 2018;3(1):1303-1305.
2. Kerketta I. A comparative study of sports competition anxiety between district levels male volleyball and soccer players. *Int J Phys Educ Sports Health.* 2015;1(3):53-55.

3. Khan MA. A comparative study of sports competition anxiety among the difference male athletes. *Int J Phys Educ Sports Health*. 2017;3(5):534-537.
4. Esfahani N, Soflu HG. The comparison of pre-competition anxiety and state anger between female and male volleyball players. *World J Sport Sci*. 2010;3(4):237-242.
5. Sharma RL. A comparative study of sports competitive anxiety between male and female volleyball players of Jammu and Kashmir. *Int J Physiol. Nutr Phys Educ*. 2018;3(1):145-146.
6. Singh S, Prakash V. A comparative study of sport competition anxiety of attacker and defender university level football players. *Int J Yogic Hum Mov Sports Sci*. 2019;4(1):1176-1780.
7. Zala AJ. A comparative study of sports competition anxiety among state levels male handball, basketball and football players. *Int J Yogic Hum Mov Sports Sci*. 2019;4(1):1123-124.
8. Lal M. Comparative study of sports competition anxiety between north zone and west zone kho-kho players of all India inters university. *Indian J Appl. Res*. 2014;4(10):575-576.
9. Rahaman A. A comparative study of sports competition anxiety between male and female inter-collegiate softball players of Manipur. *Indian J Phys Educ Sports Appl Sci*. 2019;9(3):8-11.
10. Saxena A, Sathe VB. A comparative study of sports competition anxiety of rural and urban male players. *Int J Appl Res*. 2016;2(5):375-376.
11. Velmurugan M. A comparative study of competition anxiety between men and women kabaddi and kho-kho players. *Int J Appl Res*. 2015;1(5):258-260.
12. Gamit AK. A comparative study of sports competition anxiety between male and female cricket players of Gujarat. *Indian J Appl Res*. 2013;3(2):301-302.