

STATE ANXIETY AND ITS RELATION TO SCORING ACCURACY IN FUTSAL FOR FEMALE STUDENTS

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ABSTRACT

The study aimed to investigate state anxiety and its relation to scoring accuracy in futsal for female students. The researcher hypothesized the existence of a statistically significant correlation between state anxiety and scoring accuracy in futsal. The researcher, being a futsal instructor, observed that some students fail to score goals due to either the importance of the match, inadequate preparation, or psychological factors, including state anxiety, which affects the students on the field. Therefore, the researcher decided to study this problem and understand the extent of anxiety's impact on students during the performance of scoring skills in futsal.

The descriptive method was used as it is appropriate for solving the research problem. The research population consisted of fourth-year female students, totaling 43 students. Several statistical methods (mean, standard deviation, Pearson correlation coefficient) were used to interpret the raw scores. The following key conclusions were reached:

- *A correlation was found between state anxiety and scoring performance in futsal for female students.*
- *A correlation was found between state anxiety and scoring in futsal.*

Keywords: *Anxiety, State Anxiety, Trait.*

INTRODUCTION

The importance of the research lies in scoring in futsal, which plays a significant role in the outcomes of matches by increasing the team's score with as many goals as possible during the match to achieve victory. Given that most futsal players suffer from anxiety during scoring, the researcher studied state anxiety and its relation to scoring accuracy in futsal to understand the negative impact of anxiety on futsal players during scoring. Therefore, trainers should pay attention to this aspect as it directly affects performance and, consequently, sports achievement.

Research Problem

The researcher, being a futsal instructor, noticed that some students fail to score goals during local matches due to the importance of the match, inadequate preparation, or psychological factors, including state anxiety, which affects students on the field, especially attackers. Therefore, the researcher decided to study this problem and understand the extent of anxiety's impact on students during the performance of scoring skills in futsal.

Research Objective

Identify the relationship between state anxiety and scoring accuracy in futsal for female students of the Faculty of Education for Girls, Department of Physical Education and Sports Sciences, University of Kufa, 2021-2022.

RESEARCH METHODOLOGY

The researcher used the descriptive method in a survey style as it is the best and easiest method to achieve the objectives of this research, as survey studies focus on the present and study the situation more deeply, providing researchers with detailed and analytical information, called the study of the current situation.

Research Sample

The sample is a necessity in scientific research. Therefore, the researcher randomly selected fourth-year female students from the Faculty of Physical Education and Sports Sciences, University of Kufa, for the academic year 2021-2022, totaling 35 students out of 44 after excluding 9 students for non-cooperation.

Research Tools and Data Collection Methods

Research Tools: The researcher used the following tools to obtain the required information and data:

- Futsal field.
- Three futsal balls.
- Whistle.
- Measuring tape.
- Colored adhesive tape.
- Chalk.

DATA COLLECTION METHODS:

- Arabic sources.
- Tests and measurements used in the research.
- State Anxiety Inventory for Athletes, prepared by Nizar Talib.

Pilot Experiment

To achieve accurate and correct results and follow the proper scientific context, it was necessary to conduct a pilot experiment on 9 fourth-year female students from the Faculty of Physical Education and Sports Sciences, University of Kufa, outside the main research sample. The purpose of the test was to:

- Identify obstacles that may face the researcher during the main experiment.
- Understand the actual work involved in the main experiment.
- Assess the efficiency of the assisting staff.
- Understand the sample's comprehension of the test items.
- Consider the time required to execute the test.

SCIENTIFIC BASIS OF THE TEST

Test Validity: Test validity depends on how well the test measures the skill or attribute it claims to measure. The test is considered valid when it measures what it claims to measure. To determine the test's validity, the researchers distributed a questionnaire to a group of experts who confirmed the validity of the selected test.

Test Reliability: Reliability refers to the accuracy, precision, and consistency with which the test measures the intended attribute. To determine the test's reliability, the researchers applied the test to a sample of 6 students outside the research sample, then re-applied the test after 7 days to the same sample and calculated the Pearson correlation coefficient, showing an acceptable reliability value.

Test Objectivity: Objectivity is the degree to which the obtained results are consistent regardless of who administers the test. The reliability of the test is influenced by its objectivity. To determine the test's objectivity, the researchers involved judges during the pilot experiment and calculated the Pearson correlation coefficient between the judges' scores.

Table 2: Homogeneity of the Sample

Measurements	Unit	Mean	Std. Deviation	Median	Skewness Coefficient	Statistical Value
Height	cm	163.50	3.10	164	0.80	Homogeneous
Weight	kg	62.20	5.90	62.5	0.75	Homogeneous
Age	years	23.80	0.15	23.5	0.60	Homogeneous

Table of Sample Homogeneity with Degrees of Freedom (34) and Significance Level (0.05)

TESTS AND MEASUREMENTS USED IN THE RESEARCH

Scoring Accuracy Test: Test of Scoring (Shooting) Accuracy with Foot on Intersecting Rectangles (1):

- **Purpose:** Measure scoring accuracy.
- **Required Tools:** Three futsal balls, a wall, and three intersecting rectangles drawn on the wall.
- **Performance Specifications:** The tester stands behind the line and shoots three balls at the rectangles, aiming to hit the smallest rectangle. The tester can use either foot.

Measuring State Anxiety in Students: Test Name: Measuring State Anxiety in Students.

- **Purpose:** Identify the level of state anxiety in students.
- **Performance Method:** A state anxiety measurement form with 20 questions is given to the students. The student fills out the form honestly and calmly. Each question has five answers (Always, Often, Rarely, Sometimes, Never). The tester chooses one answer for each question by marking a checkbox. The results are recorded and calculated using the correction key. There are 10 questions with the same scores (1, 3, 4, 7, 9, 10, 12, 14, 15, 16) and 10 reverse-scored questions (2, 5, 6, 8, 11, 13, 17, 18, 19, 20). Scores can be calculated manually or by any means deemed appropriate by the researchers. Anxiety scores range from 20 for low anxiety to 40 for moderate anxiety and 81 for high anxiety. This form was evaluated by experts to ensure its suitability for the Iraqi environment.

Scientific Basis of the Test:

- **Pilot Experiment:** The pilot experiment aims to ensure the clarity of the scale's instructions and items for students and identify the time required for responses, along with any difficulties or obstacles faced by the researchers.
- **Scale Validity:** The researcher used face validity by presenting the scale to a group of experts and considering their opinions on the scale's suitability for measuring psychological needs components.
- **Scale Reliability:** The researcher re-administered the pilot sample test to fourth-year futsal students after one week and performed statistical calculations using the Pearson correlation coefficient, showing an acceptable reliability value.
- **Scale Objectivity:** The scale is considered objective as it contains standardized, non-changeable scores, providing accurate and unbiased results.

MAIN EXPERIMENT

The main experiment was conducted on the research sample, consisting of fourth-year female students from the Faculty of Physical Education and Sports Sciences, University of Kufa. A total of 23 students were randomly selected after excluding 3 students for non-cooperation.

Statistical Methods

The following statistical methods were used in the research:

- Mean
- Standard Deviation
- Pearson Correlation Coefficient

RESULTS

Table 3: Means and Standard Deviations of Research Variables and Pearson Correlation Coefficient Values

Variables	Mean	Std. Deviation	r Value	Table Value	Statistical Significance
State Anxiety	40.46	10.70	0.28	0.32	Significant Differences
Scoring	6.83	2.98	0.30	0.32	Significant Differences

The table shows that the state anxiety achieved a mean of 40.46 with a standard deviation of 10.70, and the scoring achieved a mean of 6.83 with a standard deviation of 2.98. To understand the relationship between scoring accuracy in futsal, the correlation coefficient was 0.480, higher than the table value at the significance level of 0.050 with degrees of freedom 34, indicating a significant correlation between state anxiety and scoring accuracy in futsal.

The researcher concludes that anxiety positively affects performance, helping students to perform better and maximize their abilities. Some students view anxiety as something that helps them perform to their best abilities.

The current study showed a significant correlation between state anxiety and shooting accuracy in futsal among female students. This finding is of great importance in the field of women's sports, as it indicates the impact of psychological factors on physical performance. State anxiety can result from the psychological pressures faced by players during matches, such as expectations of success and fear of failure. These pressures can lead to increased tension and anxiety (Martens, 1977). Additionally, anxiety can affect physical performance by increasing muscle tension, heart rate, and sweating. These physiological responses can impair the players' ability to focus and control the ball while shooting (Weinberg & Gould, 2019).

From a skill perspective, players with higher skill levels may be better able to cope with state anxiety by relying on their technical and tactical abilities (Craft, Magyar, Becker, & Feltz, 2003). Moreover, more experienced players may be better at managing feelings of anxiety by using advanced psychological strategies such as mental imagery and self-motivation (Morris, Spittle, & Watt, 2005).

Psychological training programs should include techniques such as progressive relaxation, meditation, and deep breathing exercises. These techniques can help reduce anxiety levels and improve performance (Williams & Krane, 2015). Training players to use mental imagery can also help enhance self-confidence and reduce anxiety. Players can visualize themselves successfully performing in various game situations (Vealey & Greenleaf, 2010). Additionally, providing a supportive environment from coaches and peers can help reduce anxiety. Social support includes offering encouragement, motivation, and positive feedback (Rees & Freeman, 2007).

CONCLUSIONS

From the results, analysis, and discussion, the researcher concluded the following:

- Different results for the effect of state anxiety on students' scoring performance in futsal.
- A significant correlation between state anxiety and scoring in futsal.

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