A Comparative Study on Anxiety Level among Male and Female Athletes of Jammu University

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ABSTRACT

Anxiety is a prominent psychological factor that influences sports performance across all levels. The purpose of this study is to compare anxiety levels between male and female athletes from the University of Jammu. Using the anxiety scale developed by Dr. Subhash Sarkar and Mr. Goutam Das (2018), data from 60 athletes (30 male, 30 female) aged 18–25 were analyzed. Statistical analysis using an independent t-test revealed no significant gender difference in anxiety levels. These findings challenge common assumptions about gender-related emotional variance in sports and underscore the importance of individualized mental training over generalized assumptions.

INTRODUCTION

In the realm of competitive sports, psychological readiness plays a role as critical as physical training. Among psychological factors, anxiety has received substantial attention due to its direct impact on athletic performance. Anxiety manifests both physically and psychologically and can lead to performance decrement if not effectively managed.

Background
Anxiety in sports settings is often linked to perceived pressure, performance expectations, fear of failure, and lack of confidence. It may manifest through symptoms such as rapid heartbeat, shallow breathing, muscle tension, or negative thoughts. While both male and female athletes experience anxiety, some theories suggest women may be more vulnerable to performance-related anxiety due to socio-cultural expectations or different coping styles.

Definitions
- **Spielberger (1983)** defined anxiety as "the subjective feeling of tension, apprehension, nervousness, and worry associated with activation of the autonomic nervous system."
- **Freud (1926)** described it as "a state of distress or unease resulting from inner conflict or perceived danger, whether real or imagined."

REVIEW OF LITERATURE

Prior research has yielded mixed results on gender differences in sports-related anxiety. Some studies have reported higher anxiety levels in female athletes due to emotional sensitivity or hormonal variations. Others suggest that males may suppress anxiety more due to social norms that discourage emotional expression, potentially skewing self-reported data.

For instance, Smith et al. (2016) found that female high school athletes scored significantly higher in trait anxiety, while another study by Kim and Duda (2017) on collegiate basketball players reported no significant gender difference. These contradictions indicate the need for more context-specific research, especially in Indian university settings where cultural and academic pressures also play a role.

METHODOLOGY

Objective
To compare anxiety levels among male and female athletes at the University of Jammu and determine whether any statistically significant differences exist.

Hypothesis
Null Hypothesis (H₀): There is no significant difference in anxiety levels between male and female athletes.

Sample Selection
Sixty university athletes (30 males and 30 females) aged between 18 and 25 were selected using a **random sampling** method. Participants were drawn from team sports such as volleyball, cricket, football, kabaddi, and basketball.

Instrumentation
The **Anxiety Scale by Subhash Sarkar and Goutam Das (2018)** was employed. It consists of **48 items** across **six dimensions**, designed specifically for measuring anxiety in an Indian sports context.
- **Reliability:** Boys = 0.79, Girls = 0.80
- **Dimensions include:** Emotional instability, worry, fear, self-doubt, performance pressure, and physiological response.

Data Collection
Before administration, the nature and objectives of the study were explained to participants to ensure informed consent. The questionnaires were administered under controlled conditions to minimize external stressors or distractions.

Statistical Analysis
SPSS 22.0 was used for analysis. The **independent samples t-test** was used to compare the anxiety levels between genders. Levene's test was first conducted to check the equality of variances.

RESULTS

Descriptive Statistics

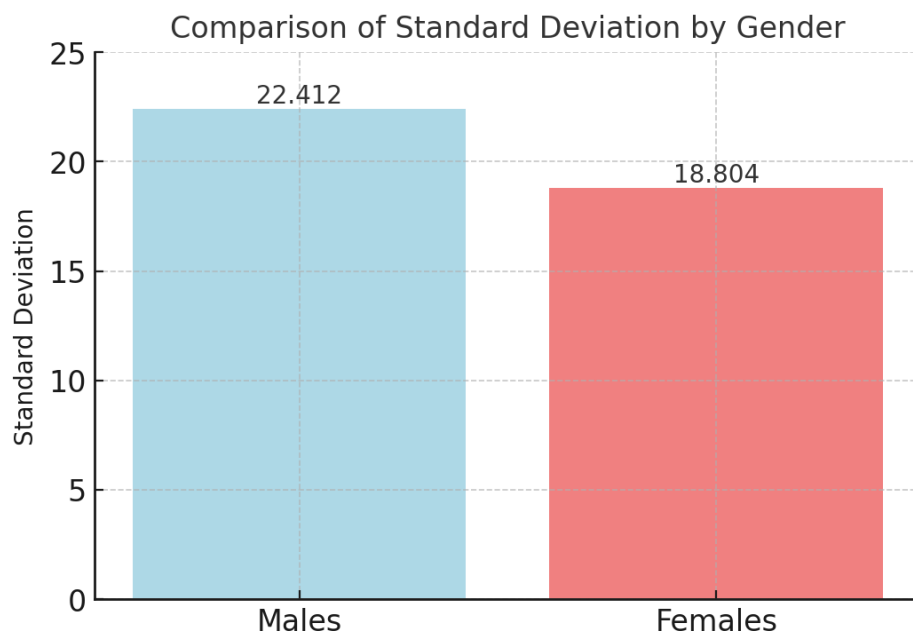| Gender	N	Mean Anxiety Score	Std. Deviation	Std. Error Mean
Male	30	98.33	22.412	4.092
Female	30	91.70	18.804	3.433

Figure 1 illustrates a bar chart comparing the average anxiety levels of male and female athletes.

Levene's Test for Equality of Variances
- **F = 1.173, Sig. = 0.283**
- Since $p > 0.05$, the variances are equal, justifying the use of a t-test assuming equal variances.

Independent Samples T-Test

t-value	df	Mean Difference	Std. Error Difference	p-value (2-tailed)
1.221	58	6.500	5.322	0.227

Since the p-value is greater than 0.05, the null hypothesis is accepted, indicating **no significant difference in anxiety levels** between male and female athletes.

DISCUSSION

Although male athletes recorded a slightly higher mean score for anxiety (98.33 vs. 91.70), this difference was not statistically significant. These findings align with prior research (Kim & Duda, 2017) which also found no significant gender-based differences among collegiate athletes. It may be inferred that both male and female athletes are exposed to similar stress levels, training regimens, and performance expectations, particularly in institutionalized environments such as universities.

This result may also reflect evolving social norms and more equitable treatment of male and female athletes in academic institutions. Another consideration is the limitations of self-reporting methods, where social desirability bias might mask true emotional states.

CONCLUSION

The findings support the null hypothesis that gender does not significantly influence anxiety levels in university athletes. This suggests that psychological training programs should focus on individual needs rather than generalized assumptions about gender.

RECOMMENDATIONS

1. **Larger Sample Size:** Future studies should consider a broader sample to improve generalizability.
2. **Mixed Method Approach:** Qualitative interviews could supplement questionnaires to explore personal anxiety experiences.
3. **Sport Type Comparison:** A comparison between individual and team sports may reveal different anxiety patterns.
4. **Level of Competition:** Analyze anxiety in athletes across local, national, and international levels.
5. **Other Psychological Variables:** Explore correlations with self-esteem, motivation, and coping mechanisms.

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