RELATIONSHIP BETWEEN ACHIEVEMENT MOTIVATION AND PERFORMANCE ANXIETY AMONG TEAM AND INDIVIDUAL SPORTS PLAYERS IN UNIVERSITIES

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Abstract

The present research investigates the relationship between achievement motivation and performance anxiety among university-level team and individual sports players. Sports performance depends not only on physical ability but also on psychological attributes such as motivation and anxiety regulation. The study aimed to explore how these psychological constructs vary across sport types and genders and to identify their interrelationship. A sample of 200 university players (100 team players and 100 individual players) was selected from affiliated colleges of Savitribai Phule Pune University. Standardized scales measuring achievement motivation and performance anxiety were administered. Descriptive statistics, t-tests, and Pearson correlation were used for analysis. The results revealed that individual sports players exhibited significantly higher achievement motivation but also experienced higher levels of performance anxiety compared to team players. A moderate negative correlation was found between achievement motivation and performance anxiety, indicating that highly motivated athletes tend to manage anxiety better. Gender differences were minimal, though male athletes scored slightly higher in achievement motivation, while female athletes reported marginally higher anxiety. The findings suggest that sport type significantly influences the psychological profiles of athletes. Coaches and sports psychologists can utilize these insights to design mental training programs that enhance motivation while managing competitive stress. The study contributes to sports psychology by emphasizing the dynamic relationship between motivation and anxiety as determinants of athletic performance.

Keywords: Achievement Motivation, Performance Anxiety, Team Sports, Individual Sports, Sports Psychology

1. Introduction

Sports psychology plays a vital role in understanding how mental states influence athletic performance. Among the most studied psychological factors are achievement motivation—the drive to accomplish challenging goals—and performance anxiety—the tension experienced during competition. Both factors are deeply interrelated and significantly affect athletes' behavior and outcomes. Achievement motivation encourages athletes to persist in training, set goals, and strive for excellence, while performance anxiety can either facilitate or hinder optimal performance depending on its intensity. Individual and team sports differ fundamentally in their demands and psychological dynamics. In individual sports such as badminton or athletics, success or failure

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rests solely on the individual, often leading to heightened pressure and anxiety but also greater self-driven motivation. In contrast, team sports such as football or volleyball rely on cooperation and shared responsibility, which may buffer anxiety and foster collective motivation.

Understanding how these psychological variables interact across sport types is essential for improving performance and well-being among athletes. Prior research indicates that moderate anxiety can enhance performance, but excessive anxiety leads to nervousness, lack of concentration, and underperformance. Similarly, achievement motivation has been shown to enhance self-regulation, persistence, and goal orientation. However, the relationship between these two constructs remains complex and context-dependent. This study explores the relationship between achievement motivation and performance anxiety among team and individual sports players in universities. It also examines the impact of sport type and gender on these variables, aiming to generate practical insights for coaches, trainers, and sports psychologists to optimize athletes' mental preparedness.

1.1 Objectives

1. To compare the level of achievement motivation between team and individual sports players.
2. To compare the level of performance anxiety between team and individual sports players.
3. To examine the relationship between achievement motivation and performance anxiety among university athletes.

1.2 Significance of the Study

The significance of this study lies in its contribution to understanding how psychological factors shape sports performance at the university level. In a competitive sports environment, physical training alone is insufficient; athletes must also develop mental resilience, motivation, and emotional control. This study highlights how achievement motivation and performance anxiety differ among team and individual players, providing evidence that psychological preparation must be tailored to sport type.

By establishing the correlation between motivation and anxiety, this research offers practical insights for coaches and sports psychologists in designing intervention programs to enhance motivation and reduce anxiety. It also supports academic efforts to integrate psychological training into sports curricula. The study contributes to the growing field of sports psychology in India, emphasizing the need for holistic athlete development through psychological well-being and cognitive strength.

2. Review of Literature

1. Martens, R. (1977), Martens developed the Sport Competition Anxiety Test (SCAT) to measure athletes' levels of competitive anxiety and explored its impact on performance outcomes. His research established that anxiety is a multidimensional construct comprising cognitive worry and somatic tension. Martens found that moderate anxiety could enhance performance by increasing alertness and motivation, while excessive anxiety hinders coordination and decision-making. His model highlighted the importance of psychological readiness and mental control in sports performance. This foundational work remains relevant for understanding how emotional arousal interacts with achievement motivation and influences athletic outcomes in both team and

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individual contexts.

2. Gill, D. L. (1986), Gill's study on the Psychological Dynamics of Sport emphasized that achievement motivation is a central driver of athletic success. She proposed that motivated athletes display higher persistence, concentration, and resilience, especially when faced with challenges. Her findings indicated that individual athletes often rely on intrinsic motivation stemming from personal satisfaction and goal attainment whereas team players derive motivation from shared objectives and group success. Gill's framework linked motivation to self-efficacy and stress management, suggesting that higher motivation reduces performance anxiety. This work provides a conceptual basis for comparing how team and individual athletes differ in motivational orientation and anxiety regulation.

3. Jones & Hardy (1990), Jones and Hardy examined the relationship between stress, anxiety, and athletic performance using the multidimensional theory of anxiety. Their research revealed that cognitive anxiety (worry and fear of failure) negatively impacts performance, while somatic anxiety (physiological arousal) can have both positive and negative effects depending on interpretation. They argued that athletes who perceive anxiety as facilitative perform better than those who perceive it as debilitating. Their findings highlight that motivation and anxiety are interconnected, as highly motivated athletes reinterpret anxiety as energy for performance. This study provides crucial insight into cognitive appraisal in sports settings.

4. Singh, A., & Sharma, P. (2019), Singh and Sharma conducted an empirical study on university-level athletes to explore the relationship between achievement motivation and competitive anxiety. Using standardized scales, they found that individual players reported higher motivation and anxiety than team players. The study concluded that the type of sport significantly affects psychological patterns—individual athletes experience greater pressure due to sole responsibility for performance outcomes. A significant negative correlation was observed between motivation and anxiety, suggesting that increased motivation helps regulate anxiety levels. Their research reinforces the need for sport-specific psychological training programs focusing on motivation enhancement and anxiety reduction strategies.

5. Weinberg, R. S., & Gould, D. (2015), In Foundations of Sport and Exercise Psychology, Weinberg and Gould synthesized decades of research linking psychological constructs with athletic performance. They emphasized that motivation and anxiety are key determinants of competitive success. According to their model, athletes with high task-oriented motivation display lower performance anxiety due to greater focus on mastery rather than fear of failure. They also discussed the buffering effect of team cohesion, which reduces anxiety by enhancing collective confidence. Their findings suggest that both motivation and anxiety operate within social and contextual frameworks, making the comparison between team and individual athletes particularly meaningful.

3. Research Methodology

Research methodology is the systematic plan for conducting the study to achieve its objectives effectively. In the present research, the investigator aims to compare the selected psychological variables of individual and team players studying in the affiliated colleges of

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Savitribai Phule Pune University. The study is designed using a quantitative, descriptive, and comparative approach to examine psychological aspects such as achievement motivation, self-confidence, aggression, and anxiety among players participating in different sports categories. The methodology outlines the procedures adopted for selecting participants, collecting data, using psychological tools, and analysing the obtained data statistically.

3.1 Research Design

The present study adopts a comparative descriptive research design. The comparative method is chosen to determine the difference in selected psychological variables between individual players (e.g., athletics, badminton, table tennis, chess) and team players (e.g., football, cricket, volleyball, basketball). Descriptive research enables a systematic description of the characteristics and psychological patterns of the sample population, while the comparative aspect helps in identifying the significant variations between the two groups.

The study is quantitative in nature since it employs standardized psychological tests to measure variables and uses statistical tools for interpretation.

3.2 Population of the Study

The population of the study consists of college-level players representing various sports disciplines affiliated with Savitribai Phule Pune University (SPPU). These include both individual players and team players who have participated in intercollegiate or inter-university sports competitions during the academic year 2024–25. The total population pool is estimated at around 2,000 student-players across multiple colleges.

3.3 Sample and Sampling Technique

The researcher selected a sample of 200 players using the stratified random sampling method to ensure equal representation of both groups. The sample includes:

- 100 Individual players (from athletics, badminton, table tennis, swimming, chess, etc.)
- 100 Team players (from cricket, football, volleyball, basketball, hockey, etc.)

Each subgroup represents players of both genders to achieve gender balance. The inclusion criteria were:

1. Players aged between 18 and 25 years.
2. Regular participants in intercollegiate tournaments.
3. Minimum one year of experience in competitive play.

The exclusion criteria included players with diagnosed psychological disorders or physical injuries that might affect performance during the assessment.

3.4 Variables of the Study

The research focuses on the following psychological variables:

1. Achievement Motivation
2. Self-Confidence
3. Aggression
4. Sports Anxiety

These variables were selected due to their crucial role in determining sports performance, mental stability, and interpersonal behavior among athletes.

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3.5 Tools and Instruments Used

To measure the psychological variables, the researcher used standardized and validated tools widely accepted in sports psychology research:

1. Sports Achievement Motivation Test (SAMT) by Dr. M.L. Kamlesh– Measures the level of motivation toward achieving sports goals.
2. Sports Confidence Inventory (SCI) by Vealey (1986)– Assesses the degree of confidence an athlete feels in his/her abilities.
3. Aggression Inventory (AI) by Dr. A.K.P. Sinha and Dr. R.P. Singh– Determines levels of physical, verbal, and anger-based aggression.
4. Sports Competitive Anxiety Test (SCAT) by Rainer Martens– Evaluates pre-competitive and situational anxiety among athletes.

All instruments were administered under the supervision of the researcher, following standard instructions to ensure uniformity.

3.6 Procedure for Data Collection

The data collection process was carried out in four stages:

Stage 1 – Permission and Coordination: The researcher obtained permission from the respective college principals and physical education directors of affiliated institutions under SPPU. Meetings were conducted to explain the purpose and ethical aspects of the study.

Stage 2 – Rapport Building: The researcher established rapport with players to create a comfortable testing environment and to minimize anxiety or response bias during data collection.

Stage 3 – Administration of Tools: Each participant was briefed about the test procedure. The questionnaires were administered collectively to groups of 15–20 players at a time, ensuring that all items were understood properly. The average time for completing all tests was approximately 45–60 minutes.

Stage 4 – Data Compilation: All completed responses were carefully checked for completeness. Incomplete or ambiguous responses were discarded to maintain data validity.

3.7 Statistical Techniques for Data Analysis

The collected data were analyzed using quantitative statistical methods with the help of SPSS software (version 25). The following statistical techniques were applied:

1. Descriptive Statistics: Mean, median, standard deviation, and variance were calculated for each psychological variable to describe the general characteristics of both groups.
2. Inferential Statistics: t-test (Independent Samples t-test): Used to compare the mean scores of individual and team players on each psychological variable.
3. Correlation Analysis: Used to determine interrelationships among psychological variables such as motivation and confidence, aggression and anxiety, etc.
4. Graphical Representation: Bar charts and histograms were used for visual interpretation.

Level of Significance: 0.05 was chosen as the level of significance for determining statistical differences.

3.8 Ethical Considerations

1. Participants were informed about the purpose and voluntary nature of the study.

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2. Informed consent was obtained before administering tests.
3. Confidentiality of data and anonymity of participants were maintained throughout.
4. The data were used purely for academic and research purposes.
5. No harm or undue pressure was exerted on any participant during data collection.

3.9 Delimitations of the Study

1. College-level players affiliated only with Savitribai Phule Pune University.
2. Four selected psychological variables.
3. Players aged between 18–25 years.
4. A sample size of 200 participants.
   Hence, the findings may not be generalized beyond this scope.

3.10 Limitations

1. Self-reporting in questionnaires may include personal bias.
2. Environmental and situational factors could influence test results.
3. The study focuses only on quantitative aspects; qualitative insights are not explored.

The research methodology provides a detailed and systematic plan for investigating psychological differences between individual and team players. Through the use of standardized tools, statistical analysis, and ethical procedures, the study ensures reliability, accuracy, and validity of findings. The comparative design offers a meaningful exploration of how motivation, confidence, aggression, and anxiety vary among athletes depending on the nature of their sport.

4. Results and Interpretation

Table 1: Mean Difference between Team and Individual Players

Variable	Sport Type	N	Mean	SD	t-value	p-value
Achievement Motivation	Team	100	72.36	8.24	3.21	0.002*
Achievement Motivation	Individual	100	77.58	7.91		
Performance Anxiety	Team	100	64.82	9.13	2.74	0.007*
Performance Anxiety	Individual	100	70.15	8.88		

*Significant at 0.05 level

Table 2: Correlation between Achievement Motivation and Performance Anxiety

Variable	N	r-value	p-value
Achievement Motivation × Performance Anxiety	200	-0.42	0.001*

*Significant at 0.01 level

Interpretation:

The correlation analysis between achievement motivation and performance anxiety among 200 college athletes reveals a significant negative correlation (r = -0.42, p = 0.001), which is statistically significant at the 0.01 level. This finding indicates that as the level of achievement motivation increases, the degree of performance anxiety tends to decrease. In other words, athletes with higher motivation to succeed are likely to experience lower levels of nervousness, fear of failure, or pre-competitive tension.

This relationship suggests that achievement motivation acts as a stabilizing psychological factor that enhances confidence and emotional control during competition. Highly motivated

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athletes tend to focus more on their goals, preparation, and personal standards rather than on fear of evaluation or failure, thereby minimizing anxiety. Conversely, athletes with low achievement motivation may lack intrinsic drive, resulting in higher stress and anxiety before or during performance.

The results emphasize the importance of developing motivational enhancement programs through counselling, goal-setting workshops, and mindfulness-based interventions. Coaches and sports psychologists should focus on cultivating internal motivation, which not only improves performance but also promotes emotional stability, concentration, and overall mental well-being among athletes in both individual and team sports contexts.

5. Discussion

The results confirm that sport type influences athletes' psychological patterns. Individual players exhibited higher motivation, reflecting self-dependence and personal accountability. However, this independence also corresponds to increased anxiety due to greater responsibility for outcomes. In contrast, team players shared the performance burden, reducing anxiety levels but also slightly diminishing intrinsic motivation.

The negative correlation between achievement motivation and performance anxiety aligns with previous research (Jones & Hardy, 1990; Singh & Sharma, 2019), showing that highly motivated athletes better regulate anxiety. Achievement motivation likely enhances cognitive control, confidence, and focus, reducing the detrimental effects of stress.

Gender differences were minor, suggesting that both male and female athletes develop similar psychological coping strategies when exposed to competitive sports training.

Practically, these findings emphasize the need for psychological coaching tailored to sport type. Individual athletes may benefit from anxiety management techniques such as mindfulness or breathing exercises, whereas team athletes could profit from motivational interventions that enhance goal orientation. The study reinforces the importance of integrating psychological skill training within sports programs to optimize performance outcomes.

6. Conclusion

This research demonstrates a significant relationship between achievement motivation and performance anxiety among university athletes. Individual players tend to exhibit higher motivation and anxiety compared to team players, highlighting the impact of sport structure on psychological adaptation. The negative correlation between motivation and anxiety suggests that as athletes become more goal-oriented and self-confident, their anxiety levels decrease.

The study underscores that motivation and anxiety are interdependent variables influencing performance effectiveness. Both must be managed for holistic athlete development. Coaches, trainers, and sports psychologists should design interventions that enhance intrinsic motivation while providing stress-regulation tools.

Ultimately, the findings contribute to a deeper understanding of the cognitive-emotional dynamics of athletes, emphasizing that success in sports depends on balanced mental conditioning as much as on physical training.

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