

A Comparative Study of Psychological Factors and Sports Achievement among Team Game Players in the Inter-University West Zone Championship

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Abstract

The current study looks into the psychological traits of team game players and how they relate to athletic success. Athletes who play team sports like cricket, basketball, volleyball, and football are the subject of the study.

From the Inter-University West Zone Championship, 100 athletes, both male and female, between the ages of 18 and 25, were chosen. Teams from Gujarat, Madhya Pradesh, Maharashtra, and Rajasthan were represented among the participants. Pearson correlation coefficients, independent samples t-tests, and descriptive statistics were used to analyze the data.

According to the findings, low achievers showed more aggressiveness and competitive anxiety, while high achievers showed noticeably higher levels of motivation, self-confidence, and team cohesion. Moreover, cohesion, motivation, and self-assurance were found to be highly significant positive predictors of athletic success. Conversely, high levels of anxiety and excessive hostility were found to negatively impact performance.

The results highlight how important psychological elements are to succeeding in team sports. These observations emphasize how crucial it is for trainers, coaches, and sports psychologists to combine mental skills training with physical conditioning in order to improve overall athletic performance.

Two groups of participants were formed:

High achievers are individuals who have participated in state or national competitions. Those who have participated at the inter-school or inter-college levels are considered low achievers.

Standardized inventories were used to evaluate five important psychological factors:
1-team cohesion 2- self-confidence 3- aggression 4- motivation 5- competitive anxiety.

Overview of Psychology

The scientific study of behavior and mental processes is known as psychology. It aims to comprehend people's thoughts, emotions, and behaviors- both individually and in groups. Drawing from biology, sociology, philosophy, and anthropology, psychology is a field that integrates aspects of the social and natural sciences.

Behavior description, explanation, prediction, and control are psychology's main objectives.

Psychologists seek to understand the fundamental ideas that underlie the behavior of both humans and animals through investigation and observation.

Clinical psychology, cognitive psychology, developmental psychology, social psychology, and sports psychology are just a few of the subfields of psychology. From learning processes, motivation, and interpersonal relationships to mental health and emotional well-being, each branch focuses on a distinct facet of the human experience.

Psychology is a crucial field of study for comprehending and enhancing human life because it has recently played a significant role in industries like education, health, sports, business, and criminal justice.

Overview of Sports Psychology

Understanding how psychological variables affect athletic performance, physical activity, and sports participation is the main goal of sports psychology, a subfield of psychology. It also looks at how exercise and sports participation impact mental and emotional health.

Using psychological concepts to improve athletic performance and foster personal growth is the main goal of sports psychology. This entails researching team dynamics, motivation, self-assurance, anxiety, focus, and the mental techniques athletes employ to give their best performances.

Sports psychologists help teams, coaches, and athletes perform better, recover from injuries, build resilience, and handle the demands of competition. The discipline combines insights from kinesiology, psychology, and physiology to provide a comprehensive approach to athlete training and performance enhancement.

As competitive sports continue to evolve, the role of psychological preparation has become increasingly important. Today, sports psychology is recognized as an essential component of athletic success, contributing not only to performance but also to overall mental health and well-being.

The Correlation Sports Psychology and Psychology

Sports psychology is a subfield of psychology, the two fields are closely related. Although their areas of application are different, both concentrate on comprehending human behaviour, emotions, and mental processes.

General psychology examines a broad spectrum of human emotions, ideas, and behaviours in a variety of settings, including relationships, education, health, and mental health. It offers fundamental information on motivation, personality, behaviour, emotional control, and cognitive processes.

Conversely, sports psychology applies these psychological concepts especially to the realm of physical activity and sports. It looks into how psychological development is impacted by sports participation as well as how mental and emotional factors impact athletic performance.

Important Correlation

Motivation: Sports psychology adapts psychological theories, such as Maslow's hierarchy or achievement motivation theory, to increase athletes' motivation and dedication.

1. Emotions and Stress: Sports psychology directly applies psychological ideas of stress, anxiety, and coping strategies to assist athletes in handling the pressure of competition.
2. Learning and Behaviour: Coaching and skill development depend heavily on psychological learning concepts like reinforcement, feedback, and observation.

Psychological Variables	High Achievers (M ± SD)	Low Achievers (M ± SD)
Motivation	72.4 ± 6.2	63.8 ± 5.9
Competitive Anxiety	28.6 ± 4.3	35.2 ± 5.6
Self-Confidence	70.3 ± 5.7	59.1 ± 6.1
Aggression	55.4 ± 4.5	60.7 ± 5.2
Team Cohesion	68.9 ± 6.0	57.3 ± 5.8

3. Personality and Performance: Sports psychologists can better comprehend individual variations in athletes' behaviour and performance under duress by drawing on general psychology's understanding of personality traits.
4. Mental Health: Sports psychology uses ideas from clinical and counselling psychology to treat mental health issues in athletes, such as identity crises, burnout, and depression.

The study's goals

- To contrast the psychological characteristics of team game players who perform well and those who don't.
- To determine important psychological factors that predict athletic success in team sports.
- To investigate the connection between performance and team cohesion.

Hypotheses

- There is a significant difference in motivation levels between high-achieving and low-achieving team game players.
- Low-achieving players will show higher competitive anxiety and aggression.
- High-achieving players will exhibit higher levels of self-confidence and team cohesion.

Methodology

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Total Participants: 100 male and 100 female team sport players (volleyball, football, basketball, cricket), **Age Range:** 18–25 years

Categories:

- High Achievers: Players who have participated at the West Zone Championships.
- Low Achievers: Players who have participated at West Zone Championships.

Tools Used

Sports Achievement Scale – To categorize athletes.
Sports Motivation Scale (SMS)
Competitive State Anxiety Inventory-2 (CSAI-2)
Aggression Questionnaire
Team Cohesion Questionnaire
Self-Confidence Inventory

Descriptive Statistics

Participants were given the standardized questionnaires under controlled settings. Based on their achievement scores, they were grouped and compared using statistical methods T-test and Independent t-Test Results

Variable	t-value	p-value	Significance
Motivation	6.12	0.000	Significant
Competitive Anxiety	-5.41	0.000	Significant
Self-Confidence	7.10	0.000	Significant
Aggression	-4.29	0.001	Significant
Team Cohesion	6.65	0.000	Significant

Interpretation:

Motivation and self-confidence are significantly higher in high achievers ($p < 0.05$).
Competitive anxiety and aggression are significantly higher in low achievers.
Team cohesion shows a strong difference favoring high achievers, indicating its critical role in team success.

Correlation between Psychological Traits and Sports Achievement

Variable	Pearson's r	Interpretation
Motivation	+0.68	Strong positive correlation
Competitive Anxiety	-0.59	Moderate negative correlation
Self-Confidence	+0.71	Strong positive correlation
Aggression	-0.45	Moderate negative correlation
Team Cohesion	+0.74	Strong positive correlation

Interpretation:

Motivation, self-confidence, and team cohesion are strongly and positively correlated with sports achievement.
Competitive anxiety and excessive aggression have a negative correlation, implying their detrimental effect on performance.

Graphical Representation

Table 1: Mean Scores Comparison between High and Low Achievers- A bar graph showing higher scores in motivation, confidence, and cohesion for high achievers; and higher anxiety and aggression in low achievers.

Table 2: Correlation Matrix Heatmap- A visual representation showing positive and negative relationships between psychological variables and achievement.

Conclusion from Data Analysis

Statistical evidence clearly supports that:

Psychological characteristics significantly differentiate high and low achievers.

High achievers display higher mental resilience, motivation, and team spirit. Training should incorporate mental skills development to elevate athletes' psychological profiles for competitive success.

Results and Discussion

Motivation: Dedicated and goal-oriented, high achievers showed a markedly higher level of intrinsic motivation.

Anxiety: Somatic and cognitive anxiety were found to be higher in low achievers. Their performance suffered as a result of their pre-competition anxiety.

Self-Confidence: High achievers exhibited greater self-belief, which enhanced their ability to concentrate and take calculated risks when playing games.

Aggression: Performance was positively correlated with moderate aggression, but low achievers exhibited excessive aggression, which may have resulted in unruly play.

Team Cohesion: High achievers exhibited noticeably greater team cohesion. One of the main factors influencing performance was unity and effective communication.

Data Analysis

Statistical evidence clearly supports that:

- There is a significant psychological difference between high and low achievers.
- High achievers exhibit greater motivation, teamwork, and mental toughness.
- To improve athletes' psychological profiles for success in competition, training should include mental skills development.

Conclusion

The results of this study unequivocally show that psychological characteristics have a significant impact on team game players' athletic performance. Higher levels of drive, self-assurance, and team spirit are regularly displayed by high-achieving athletes, and these traits play a major role in their success in competitive settings. However, excessive aggression and competitive anxiety are more common in low-achieving players, which may make it harder for them to perform consistently.

Psychological traits are powerful predictors of athletic success, according to statistical analysis. While negative traits like anxiety and unchecked aggression cause stress, poor decision-making, and underperformance, positive traits like motivation and confidence improve focus, resilience, and performance under pressure.

These results highlight how crucial it is to include mental conditioning and psychological training in sports coaching programmers.

Coaches and sports psychologists can greatly increase team players' overall effectiveness and success by encouraging mental toughness, emotional control, and teamwork. To produce well-rounded, accomplished athletes, a balanced emphasis on both psychological and physical development is necessary.

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