

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.

Keywords: *Psychology, Self-Confidence, Team Cohesion, Aggression, Competitive Anxiety, Mental Skills Training.*

I. INTRODUCTION

The participants of this study were systematically divided into two groups with respect to achievement and exposure to competition. The high achievers included people who had been competing at the state or national levels, where the standards of performance are high and the level of challenge is tough. The low achievers consisted of those who had participated in competitions in inter-school or inter-college competitions [1]. This classification was important because it clearly differentiated the experience, skill, and competitive environment to which each group was exposed, thus allowing a meaningful comparison between participants of varying levels of achievement. To examine the issues these groups psychological standards were made including assessment of

five psychological factors considered of paramount importance. For instance, team cohesion or friendly and interdependent behaviour of individuals in a group to achieve a common goal [2]. Similarly, is assertiveness which is the belief in one's own ability to perform certain activities. Towards others, the term "aggression" can be video game related or behaviour within sports which can be performance enhancing or harmful. This was followed closely by motivation which is the concept of effort that is consistent over time and is something that originates from within the individual, not an external factor [3]. The last factor is Competitive Anxiety, which can be defined as the emotional, stressful arousal that one brings into a competitive athletic activity. These psychological contexts were central to the paper's objectives, which were to demonstrate that the level of attainment is not just linked to the physical, but also mental and emotional strength [4].

II. OVERVIEW OF PSYCHOLOGY

Psychology is a science which delves into understanding the behaviour and thinking patterns of humans, with particular focus on how individuals and groups act, feel and think. It respects diversity and includes philosophical, biological, and social aspects implying that both orthogonal and non-orthogonal aspects of the behaviour are considered [5]. The scope of psychology is much broader than that of experimental and welfare based biomedical sciences. Although both (doctor patient and psychologist patient) relationships highlight communication, morality in the contexts of interaction and life, psychiatry still stands more on the medical side with more emphasis on restoration and management rather than prevention of mental disorders [6].

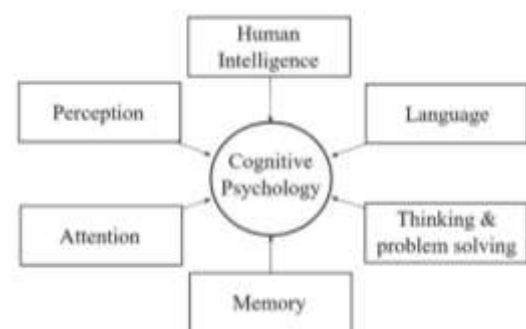


Figure 1. 5 Components of Cognitive Psychology [7]

Figure 1 illustration the general subjects that researcher's touch upon when considering the cognitive approach within the field of psychology. It brings up such issues as how people think, perceive, focus attention, remember, solve problems, respond to new environments, and use language or other symbols deal with mental processes. Even more such domains as everyday life skills, moral and religious beliefs, attitudes and stereotypes, and values (for example, behaviour patterns), interests, and activities can be included in this list particularly because studies within these domains are becoming more prevalent [7].

One of the core goals for psychologists is to reveal the basic rules dictating the behaviour of all living organisms, people and animals included, by carrying out investigations and making observations that are carefully conducted in a methodical manner. This area of knowledge is also broken down into various areas of concentration such as clinical psychology, cognitive psychology, developmental psychology, social psychology, and also the area of sport psychology [8]. Each of these other disciplines is dedicated to the exploration of particular features of basic personhood – whether perception, learning and why people seek goals, interaction psychology concerning communication or well-being and pathology of nervous system functions. By unpacking these aspects, psychology as a subject enables one to understand the reasoning as well as the emotions and actions exhibited towards different environments by human beings [9].

The importance of psychology in the contemporary world is on the rise as it has multiple areas where it can be applied. In addition to the educational aspect of its application where it helps to improve the teaching and learning process, it is applied in the field of healthcare where it deals with psychological well-being, in sports where it aids in improving performance and motivation, in businesses where it helps in creating appropriate working conditions and last but not least, in the justice sector where it the concept of understanding and rehabilitation is being revised [10]. Given the varied roles that it plays in society, it can be safely said that psychology is a developmental science that has proved very useful for human survival and the development of societies.

III.OVERVIEW OF SPORTS PSYCHOLOGY

Psychology is a science that deals with the human mind and behaviour. If this sounds abstract, then you wouldn't be wrong. Many people don't know that psychology relies heavily on mathematics [11].

Sports psychology is the science that studies human behaviour and the mind in connection with sports. This science of psychology has taken it in mind that doing sports and exercise does affect the mind in some positive or negative way and has gathered enough data and studies to prove this [12].

The psychology of sport has its purpose in enabling professional athletes or people pursuing same to better their performance, to heal more effectively from damage, to harden their mind, and to endure the stress incumbent upon each and every sports competition. By merging kinesiology, psychology and physiology, it proposes a total package in training and performance improvement making every individual full equipped both physically and mentally [13]. Moreover, these two elements allow to use more dynamic skills which include concentration enhancement, self-efficacy and the abilities to cope in adaptive manners. The dynamic nature of sports characterized by the desire to excel by athletes, has led to the understanding of the importance of psychological training in such preparation [14]. Today, sport psychology is an accepted discipline that champions successes in sport since it sharpens performance and is interested in mentally healing persons as well. Both these aspects - targets and coping with experiences will support indispensable power in maintaining success or any pleasure in sporting activities in the long run [15].



Figure 2. Ecological sport psychology delivery (ESPD) model [16]

The figure 2 depicts how sports psychologists' understanding of their practice is shaped by a swim of different factors, including national, organisational and sport-specific cultures, education and training, personal experiences, and existing views or conventions. The reflections are the driving force in helping the practitioner to comprehend situations and establish the necessary measure(s) for preventing and solving problems that concern athletes and/or their teams [16].

The increase in competitive sports is a motivating force for the development of psychological preparation in the field of the ancient sport. Nowadays, sports psychology is approached not only as a means for impeccable physical exertion but also as a way of protecting the health for which the athletes' compete. By emphasizing both resilience and

emotional intelligence, it teaches the athletes to handle adversity and thrive in endurance activities over the long term [17].

Sports psychology is just one area of psychology, but there is some difference in application. Despite this difference, both studies explicate the intention of learning human behaviour, emotions, and cognitive processes. General psychology scope includes however not limited in analysing varied human experiences in areas such as education, family, health, and state of a person among others [18]. The areas of motivation, personality, cognition, emotional regulation are discussed in the above given areas. Sports psychology builds on these generic concepts, but is more precise in its application in that it is applied to exercise and sports, with a focus on how mental and emotional factors affect performance, and how sports provide psychological development [19].

IV. IMPORTANT CORRELATION

Motivation in sports psychology refers to applying established psychological models such as Maslow's hierarchy of needs, and also the Achievement Motivation Theory to influence the drive and commitment of sports people. Appreciating the various forms of motivations that influence individuals, either driven by desires of individual support, personal growth or professional success is important since it brings the concept of psychology of sport into picture and helps the athletes to remain goal oriented and motivated to achieve what they set to do in terms of performance [20].

1) Emotions and Stress: Olympic bubble means that voters sidelined or limited themselves on scrutinizing the performance of the athletes or even the national athletic federations, as the progress of the athletes of their countries is the sole or best option of presenting the national political interests to other countries.

2) Learning and Behaviour: Coaching and skill improvement rely on such psychological learning concepts as reinforcement, feedback, and observation.

3) Personality and Performance: There is a need for sports psychologists to effectively comprehend variations in behavior and performances under pressure by relying on the understanding of these behaviors from the field of general psychology.

4) Mental Health: Sports psychology treatment using the techniques of clinical and counseling psychology helps in recovery from mental health problems including identity mismatch, burnout, and depression in athletes.

A. The study's goals

The primary purpose of the research is the examination the mental qualities between successful and less successful

players of team sports, pinpointing psychological variables that determine sporting behaviour and assessing the connection between group solidarity and performance amongst its members [21].

B. 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 [22].

V. METHODOLOGY

Table 1 Comparison of Psychological Variables between High and Low Achievers

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

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

C. Categories

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

D. 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

E. 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.

Table 2 T-Test Analysis of Psychological Variables

Variable	t-value	p-value	Significance
Motivation	6.12	0.000	Significant
Competitive	-5.41	0.000	Significant

Anxiety			
Self-Confidence	7.10	0.000	Significant
Aggression	-4.29	0.001	Significant
Team Cohesion	6.65	0.000	Significant

F. 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.

Table 3 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

G. 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.

H. Graphical Representation

Table 2 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 3 Correlation Matrix Heatmap- A visual representation showing positive and negative relationships between psychological variables and achievement.

I. Conclusion from Data Analysis

1) 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.

VI. RESULTS AND DISCUSSION

The findings of this research demonstrate that greater intrinsic motivation, self-confidence and team cohesiveness are characteristics of high achievers whereas lower abilities in these factors hinder their focus, risks and communication skills. Besides, low achievers were found better experienced higher levels of somatic and cognitive anxiety and backed by their unwarranted aggressiveness brought about disruptive play. Also, it has been positive to learn that moderate levels of aggressiveness and synergy in the team is a psychological skills and is helpful in performance improvement in team sports.

A. 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.

VII. 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 programmes.

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.

Conflict of Interest: The corresponding author, on behalf of second author, confirms that there are no conflicts of interest to disclose.

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