



ROLE OF ANXIETY FACTOR ON THE PHYSICAL FITNESS PERFORMANCE OF CRICKET PLAYERS

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Abstract

The present investigation is in the framework of ex-post-facto research. Keeping the objectives in view, appropriate research design is adopted. The sample for the present study are the cricket players of Gulbarga University who took part in Periyar University inter-collegiate cricket tournaments, were administered Anxiety scale and Physical fitness tests to assess the differences in their psychological and physiological factors. The sample consists of 100 cricket players selected randomly from the various colleges of Periyar University. The selected sample were firstly administered Anxiety scale and according to that the total sample were divided into two groups of High Anxiety group (50) and Low Anxiety group (50) after the group divide both group's physical fitness was measured in five physical tests i.e. speed, endurance, flexibility, agility and strength. The collected data were analyzed by statistical procedure and presented in analysis part of the study. Hence there were significant differences found in physical fitness test performances of the Low and high Anxiety cricketers, in all the tests Low Anxiety cricketers have higher fitness performance than high Anxiety cricketers.

Key Words: Anxiety, physical fitness variables and Performance.

INTRODUCTION

Applications of psychology to sports and athletics are numerous. They focus both on the individual athlete and on the team. Psychology is increasingly involved with athletes, coaches, and trainers to enhance athletic performance through improved physical and mental training. Examples of psychological techniques applied to helping athletes acquire motor skills and improve performance range from visual motor behavior research where athletes mentally practice movements, to anxiety reduction techniques like thought stopping and relaxation training. A knowledge of psychology is essential for understanding each individual's motivation and developing that motivation to an optimal level for athletic performance. In addition to facilitating athletic performance psychology

is important in rehabilitating athletes from physical injuries and psychological trauma, as well as in providing more routine counseling services.

A great deal of research has been devoted to the effect of anxiety on sports performance. Researchers have found that competitive state anxiety is higher for amateur athletes in individual sports compared with athletes in team sports (Simon & Martens, 1977). Anxiety exerts a variety of effects on athletic performance. These effects vary based on sport, gender and level of experience. In order to facilitate peak performances by athletes, sport psychologists must consider the three different facts of anxiety: cognitive anxiety, somatic anxiety, and self-confidence. Given the research that indicates that successful

athletes who interpret their anxiety as being facilitative is characterized by high scores on self-confidence and low scores on somatic and cognitive anxiety, sport psychologist should work towards achieving this ideal state among their clients. Let us now turn our attention to the variety of treatments that are available for the treatment of anxiety within the athletic context. Stress is a state that results from the demands that are placed on the individual which require that person to engage in some coping behavior (Jones, 1990). Arousal can be considered to be a signal to the individual that he or she has entered a stressful state and is characterized by physiological signs (Hardy 1996). Anxiety results when the individual doubts his or her ability to cope with the situation that causes him or her stress (Hardy 1996). Another important point that needs to be clarified is the difference between state and trait anxiety (Spielberger, 1966).

While state anxiety can be considered to be more situational in nature and is often associated with arousal of the autonomic nervous system, trait anxiety can be thought of as a world view that an individual uses when coping with situations in his or her environment (Spielberger, 1966). Trait anxiety influences performances in that individuals with high trait anxiety will attend more to information related to state anxiety (Hardy 1996). Previous research outside of sport and exercise psychology has indicated that individuals with high trait anxiety who are state anxious attend to threat related information, while individuals with low trait anxiety who are state anxious will attend away from threat related information (MacLeod, 1990). Within the context of sports, those individuals who are low trait anxious and experience high state anxiety would find it facilitative to a peak

performance; but, those individuals with who are high trait anxious and experience state anxiety will find it debilitating to athletic performance (Hardy 1996).

Origin

No one knows when or where cricket began but there is a body of evidence, much of it circumstantial, that strongly suggests the game was devised during Saxon or Norman times by children living in the Weald, an area of dense woodlands and clearings in south-east England that lies across Kent and Sussex. It is generally believed that cricket survived as a children's game for many generations before it was increasingly taken up by adults around the beginning of the 17th century. Possibly cricket was derived from bowls, assuming bowls is the older sport, by the intervention of a batsman trying to stop the ball from reaching its target by hitting it away. Playing on sheep-grazed land or in clearings, the original implements may have been a matted lump of sheep's wool (or even a stone or a small lump of wood) as the ball; a stick or a crook or another farm tool as the bat; and a stool or a tree stump or a gate (e.g., a wicket gate) as the wicket.

Derivation of the name of "cricket"

A number of words are thought to be possible sources for the term "cricket". In the earliest known reference to the sport in 1598 (*see below*), it is called *creckett*. The name may have been derived from the Middle Dutch *krick* (-e), meaning a stick; or the Old English *cricc* or *cryce* meaning a crutch or staff.^[1] Another possible source is the Middle Dutch word *krickstoel*, meaning a long low stool used for kneeling in church and which resembled the long low wicket with two stumps used in early cricket.

Early 17th century

A number of references occur up to the English Civil War and these indicate that cricket had become an adult game contested by parish teams, but there is no evidence of county strength teams at this time. Equally, there is little evidence of the rampant gambling that characterized the game throughout the 18th century. It is generally believed, therefore, that village cricket had developed by the middle of the 17th century but that county cricket had not and that investment in the game had not begun.

Statement of the Problem

To understand the role of Anxiety factor on the physical fitness performance of cricket players.

METHODOLOGY

Selection of Subjects

The present investigation is in the framework of ex-post-facto research. Keeping the objectives in view, appropriate research design is adopted. The sample for the present study are the cricket players of

Periyar University who took part in Periyar University inter-collegiate cricket tournaments, were administered Anxiety scale and Physical fitness tests to assess the differences in their psychological and physiological factors. The sample age ranges from 18-25 were selected, those students studying in post graduate and under graduate in Gulbarga University. And questionnaire was administered to collect the relevant data in order to make the detail analysis of the study. Cricket players are the independent variables. The Anxiety behaviour is the dependent. The sample consists of 100 cricket players selected randomly from the various colleges of Periyar University. The selected sample were firstly administered Anxiety scale and according to that the total sample were divided into two groups of High Anxiety group (50) and Low Anxiety group (50) after the group divide both group's physical fitness was measured in five physical tests i.e. speed, endurance, flexibility, agility and strength. The collected data were analyzed by statistical procedure and presented in analysis part of the study.

Category	High Anxiety	Low Anxiety	Total
Samples	50	50	100

Objectives of the Study

1. To study the impact of Anxiety factor on the physical fitness performance of cricket players.
2. To study the difference between sample sub-groups in relation to their physical fitness performance.

Hypothesis of the Study

The following hypothesis has been formulated

3. There is a significant impact of Anxiety factor on the physical fitness performance of cricket players.

4. There is a significant difference in the physical fitness performance among sample sub-groups.

Tools

- Personal data framed to collect information regarding the personal and socio demographic status of the sample.
- Anxiety scale developed by K. P. Sinha and L. N. K. Sinha (SCAT). The responses are scored with the help of manual.
- Physical fitness test.

For the measurement of performance, the physical fitness ability test developed by

AAHPER (1976) was used. The test measures performance of players in five

different areas. These are mentioned as under:

Sl.No.	Motor ability	Test	Unit of Measurement
1	Speed	50 yard dash	Time
2	Endurance	12min. Run and walk	Distance
3	Flexibility	Sit and reach test	Inches
4	Agility	Shuttle run 10X4 yard	Time
5	Strength	Pull ups	Score

• Keeping the objectives of the study in view Mean, SD and t-test statistical methods were used to assess the significant differences between sample sub-groups.

RESULTS

The study attempts to examine the role of Anxiety behaviour on the physical fitness performance of Periyar University cricket players. The data were organized, statistically analyzed and presented in the tables

Table-1
Mean, SD and t-values of Physical fitness tests among two groups (N=100)

Anxiety		Speed	Endurance	Flexibility	Agility	Strength
High	M	12.48	2011.4	3.76	17.25	11.28
Anxiety	SD	1.31	160.8	0.45	1.92	2.62
Low	M	11.25	2219.2	4.80	15.25	12.65
Anxiety	SD	1.69	169.2	0.41	1.92	3.02
t-values		4.10**	6.23**	9.19**	5.26**	2.54**

**Significant at 0.01 level

The results given in Table-1 clearly reveal that there is significant effect of Anxiety factor on the physical fitness test performance like speed, endurance, agility, flexibility and strength. The performances of cricketers of High Anxiety are lower than Low Anxiety sample. The t-values on these tests are significant to suggest the significant differences in the ability.

In Table-1 the mean scores of speed tests in two groups' shows that the mean scores of high Anxiety cricketers were 12.48 while the mean score of low Anxiety cricketers were 11.25. This shows that the

high Anxiety cricketers have taken more time to complete the given task, while the Low Anxiety cricketers are taken less time. The t-value 4.10 is significant at 0.01 level which states that there is a significant difference in the speed performance between the two groups. This clearly indicates that there is significant role of Anxiety factor on physical fitness performance of cricket players. The mean scores of endurance test of both sample sub-groups shows that the scores of Low Anxiety cricketers (2219.2) were significantly higher than the High Anxiety cricketers (2011.4). The t-value

(6.23) is significant and shows the significant differences between the two groups in the physical fitness performance.

Table also gives the score of flexibility among both sample sub-groups. It is seen that the mean score of Low Anxiety cricketers is 4.80 and mean score of high Anxiety cricketers is 3.76. The t-value of 9.19 which is significant and also reveals that the Low Anxiety cricketers performance is higher than high Anxiety cricketers. The results given in table indicates that Low Anxiety cricketers have taken significantly less time (15.25) than the high Anxiety cricketers (17.25) in agility performance test. The t-value (5.26) which is significant at 0.01 level and also exposed that the Low Anxiety sample have shown high agility performance than high Anxiety sample.

Table-1 also presents the results of strength test of both sample sub-groups. It is seen that mean score of Low Anxiety cricketers (12.65) is higher than the high Anxiety cricketers (11.28). The t-value is 2.54 which is significant at 0.01 level and also reveals that the Low Anxiety cricketers have higher strength than high Anxiety cricketers.

CONCLUSIONS

_ There is a significant difference in physical fitness test of speed between Low and high Anxiety cricketers. Low Anxiety cricketers have significantly higher performance in speed test than the high Anxiety cricketers.

_ There is a significant difference in physical fitness test of endurance between Low and high Anxiety cricketers. Low Anxiety cricketers have significantly higher performance in endurance test than the high Anxiety cricketers.

_ There is a significant difference found in physical fitness test of agility between sample sub-groups: Low Anxiety sample have significantly higher performance in agility than the high Anxiety sample.

_ There is a significant difference observed in physical fitness test of flexibility of both groups and the Low Anxiety cricketers are performed higher than high Anxiety cricketers.

_ There is a significant difference in physical fitness test performance of strength between sample subgroups and the Low Anxiety cricketers have shown high strength performance than the high Anxiety cricketers.

_ Hence there were significant differences found in physical fitness test performances of the Low and high Anxiety cricketers, in all the tests Low Anxiety cricketers have higher fitness performance than high Anxiety cricketers.

_ Anxiety factor have played the significant role on the performance of cricket players. This is proved in the analysis part.

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