

Pattern Change in Cognitive Anxiety Level in Term of Intensity and Direction during the Cricket Match

Jyostnasis Ghosh

Abstract

Anxiety plays an imperative element in sports. The degree of anxiety also varies depending upon the player's own perception on an event and different competition conditions. The present study was to focus on the pattern change in cognitive anxiety level in term of intensity and direction during the cricket match. A total of 44 male cricket players completed the modified Mental Readiness Form- Likert (MRF-2 questionnaire) from All India Inter University Cricket Tournament 2006 held at L.N.I.P.E, Gwalior, Madhya Pradesh. The first and second half cognitive anxiety data were analyzed by employing the analysis of variance (ANOVA) with at 0.05 level of significance. The outcome of the analysis is diversified that means the results of cognitive anxiety intensity (4.38*) was significant and cognitive anxiety direction (0.13) was insignificant difference throughout the match.

Keyword: cognitive anxiety, intensity, direction, Mental Readiness, Cricket

Introduction

Anxiety is an emotional state which is complicated to characterize, especially difficult to constantly perceive in sports performance. The word nervousness is habitually used as synonymous with anxiety. In most of the situation, more or less everyone has been feeling nervous. Nervousness can be experienced at various levels of intensity. A leading researcher (John 1995) in the area of competitive anxiety has suggested that the effects of anxiety can occur in such complex and unpredictable ways that it has the potential to be extremely stressful for athletes and can often lead to poor performance. Although many athletes may cope successfully under this competitive pressure, it is not uncommon for athletes to "choke" or loss mental control and perform poorly at crucial moments. Therefore, investigators are constantly trying to understand the nature and the causes of competitive anxiety and its effects upon performance. A significant development in anxiety research has been the conceptualization of competitive anxiety as multidimensional. Distinctively, the separation of anxiety into different components i.e. cognitive (mental component) and somatic (physiological components) anxiety suggest that two components are independent and self-directed because they influence the

Assistant Professor, Department of Physical Education, Barrackpore Rastraguru Surendranath College, Barrackpore, Kolkata, West Bengal

behaviour differently and have different antecedents and consequences on performance. This helped lead to the development of multidimensional anxiety theory that hypothesizes cognitive anxiety which will differ throughout the performance in event, based on the probability of success or failure.

Anxiety plays a paramount role in sports participation, which produces anxiety. The level of anxiety also varies with a number of different conditions. It is probable to be greater in higher competitive sports than in relatively non-competitive sports, because in the competitive sports participants are made upon them to succeed. The study of cognitive anxiety on sports performance has a most important topic and interesting area for sports psychologists. The degree of perceived cognitive anxiety is an important variable to be considered in the performance. Nowadays, the phenomenon of sports in most of the fields will create lots of pressure among the players due to the winning expectation or 'do or die' competitiveness. Sports have thus experienced an enormous intention qualitatively as well as quantitatively with positive and negative results. The extreme sports performance principles in modern high sports make the man to his most optimal performance without passing the limits to pathological condition. Every increased performance demands increased input, increased engagement in its return lead to increased stress.

Cricket is now becoming a highly technical and popular sport in the world. Players do practice innumerable hours to pick up their skills and talent, as a whole to improve the performance. The cricket game is the involvement of high level of mental and physical training to create competitive sport. Likewise the modernization in other field, this field has also made speedy turns in utilizing more scientifically developed method of training. The cricket training process provides room to individual players to ensure a capacity to copy with the load that involves competitive play. Though the demand of cricket plays are varied according to the system of play and tactics employed. Players exhibit different kinds of movement during a match, the implementation of skills such as fundamental skills, basic techniques, tactics and positioning depending upon his total makeup with cognitive level of applications.

Objective of the study

The present study was to focus on the pattern change in cognitive anxiety level in term of intensity and direction during the cricket match.

METHODOLOGY

Selection of subjects

For the purpose of the study forty four (N-44) male cricket players was selected from All India Inter University Cricket Tournament 2006 held at L.N.I.P.E, Gwalior, Madhya Pradesh.

Selection of variables

To understand the players mental pressure, the following variables has been selected for the study:

Cognitive Anxiety Intensity

Cognitive Anxiety Direction

Further, to see the pattern of changing of these selected variables the following match stages were considered i.e. a) first half and b) second half of the match.

Selection of questionnaire

The modified state of Mental Readiness Form- Likert (MRF-2) was used. The Mental Readiness Form (MRF) originally designed by Murphy, Greenspan, Jowdy and Tammen (1989) as an alternative measure to the Competitive State Anxiety Inventory-2 (CSAI-2) and is considered both less time consuming and a less intrusive measure of competitive anxiety. The Likert- type scale version of the Mantel Readiness Form (MRF-2) is rated on 11 point Likert scale and consisted of continuous scale anchored with the terms Calm – Worried.

Administration of MRF-2 and collection of data

The Mental Readiness Form- Likert was administrated during the All India Inter University Cricket Tournament Championship. Procedure of the study was explained to the participants by the investigator before the match starts. All the data collection took place within few seconds after the end of the each half of each player where by the participants completed the MRF-2.

Statistical analysis of data

The change of pattern in anxiety level in term of intensity and direction during the cricket match, the analysis of variance (ANOVA) was utilized. The level of significance was set at 0.05.

Results

To study cognitive anxiety intensity and direction during the first and second half of the cricket match, means and standard deviations were computed and data connected to this have been presented in the table.

Table-1

Descriptive statistics of cognitive anxiety in term of intensity and direction during the first and second half of the cricket match

Variables	First Half	Second Half
	M+SD	M+SD
Cognitive Anxiety Intensity	5.77 ± 1.97	6.27 ± 2.41
Cognitive Anxiety Direction	0.05 ± 1.67	0.18 ± 1.46

The above table indicated that the cognitive anxiety intensity mean value during first half 5.77 was lower than the second half 6.27 of the match and in case of cognitive anxiety direction the flow of mean was same that is mean value of first half was 0.05 and second half was 0.18.

Intensity and Direction of Cognitive Anxiety

Cognitive anxiety in term of intensity and direction of the cricket players at two different half i.e. during the first half and second half of the match, the analysis of variance was adopted and the level of significance was set at 0.05.

Table-2

Significance of difference of cognitive anxiety intensity of cricket players during the first and second half of the match

Source of Variance	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-ratio
Between	3	49.69	16.56	4.38*
Within	40	151.29	3.78	

*Significant, $F_{.05}(3, 40) = 2.84$

It is evident from the table-2 that there was significant difference of cognitive anxiety intensity of cricket players during the match; as the calculated value of F-ratio (4.38*) was the higher than the tabulated F-value (2.84) at 0.05 level of significance with (3, 40) degree of freedom.

Table-3**Significance of difference of cognitive anxiety direction of cricket players during the first and second half of the match**

Source of Variance	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-ratio
Between	3	0.78	0.26	0.13
Within	40	81.38	2.03	

Significant, $F_{.05}(3, 40) = 2.84$

It can be observed from the table-3 that the cognitive anxiety direction indicates a F-ratio (0.13) for the test means, which was not significant as it less than the F-value (2.84) required for significant at 0.05 with (3,40) degree of freedom.

Discussion of finding

These findings highlight the importance of measuring anxiety intensity and direction dimensions during match. The cognitive anxiety varies throughout the match but the directional interpretation of cognitive anxiety did not facilitative.

References

- Agyajit Singh (1992), "Sports Psychology: A Study of Indian Sportsmen", (Delhi: Friends Publication), pp. 36-37.
- Carolina Lundqvist (2006), "Doctoral Dissertation", pp. 21.
- Harold M. Barrow and Rosemary McGee (1979), "A Practical Approach to Measurement in Physical Education", (Philadelphia: Lea and Febiger).
- Joanne Butt, Robert Weinberg and Thelma Horn (2003), "The Intensity and Directional Interpretations of Anxiety Fluctuation throughout Competition and Relationship to Performance", *Journal of Sport and Exercise Psychology*, vol.17, pp. 35.
- Maynard W.I., M. J. Smith and L. Warwick-Evans (1995), "The Effects of Cognitive Intervention Strategy on Competitive State Anxiety and Performance in Semiprofessional Soccer Players", Swansea University, *Journal of Sports and Exercise Psychology*, (Human Kinetics Publishers Inc) vol.17.
- J.P. Thomas (1964), "Let us Coach", (Calcutta, Y.M.C.A), pp. 2.
- Keith F. Bell (1983), "Championship Thinking", (London: Prentice Hall Inc.), pp. 121.

Analysis of Cardiovascular Endurance and Anaerobic Power between Intervarsity Players of Indigenous Games

Subhadip Pal

Abstract

The purpose of the present investigation was to compare cardiovascular endurance and anaerobic power of male intervarsity players of indigenous games. To achieve the set objectives, twenty four (N=24) male players (N₁=12 Kho-kho players and N₂=12 Kabaddi players) of Indian indigenous games were selected from Vidyasagar University, West Bengal, India. Data was collected during their residential training camps for the participation of Inter University tournament. The age of the students ranged from 19 to 25 years. Total two variables cardiovascular endurance and anaerobic power were selected for this study. Cardiovascular endurance was measured by the performance of 600 yard run/walk on standard track with the help of stop watch in minute. Anaerobic power was measured by standing broad jump in meter unit. Data was analyzed using SPSS, (Version 20.0) software. The level of significance chosen was 0.05. To compare between the mean scores of cardiovascular endurance and anaerobic power between indigenous games of Kho-kho and Kabaddi players the Independent Sample t-test was applied. The results of the study showed that Kho-kho players were significantly better than the Kabaddi players in comparison with cardiovascular endurance. This study provides base information for devising training module for enhancement of performance of the players of the two Indian indigenous games.

Keywords: Cardiovascular endurance, anaerobic power, indigenous games.

Introduction

The word 'indigenous' refers to the notion of a place-based human ethnic culture that has not migrated from its homeland, and is not a settler or colonial population. Indigenous games are recreational activities that originated from a particular cultural group, community or people. These games are different from your mainstream sports, which are regulated by international federations, and have fixed rules. Indigenous games are recreational activities that originated from a particular cultural group, community or people. These games are different from your mainstream sports, which are regulated by international federations, and have fixed rules. Playing indigenous games not only improves physical development and brain stimulation. They get to experience and let their imagination wonder. Children also learn social skills because most of these games are played in a group. They also learn and understand rules. These games can also be of great benefit to them, they require physical activity, social skills, creativity,

SACT, Department of Physical Education, Debra Thana SKS Mahavidyalaya, Paschim Medinipur, West Bengal; India.