

## Fluctuation of Cognitive Anxiety Intensity and Direction during the Different Stages of Judo Competition

**Mukesh Mitra**

Assistant Professor, Department of Physical Education, MBB College, Agartala, India

---

### Abstract

Sports competitions are almost perfectly designed to evoke experiences of stress among the participants. The competitive situation involves demands placed on athletes to perform their very best, often under intense pressure and specific conditions. **Objective** of the study was to analysis the fluctuation of cognitive anxiety intensity and cognitive anxiety direction during the different stages of judo competition. **Subjects:** For the purpose of the study total 288 male judo players was selected from All India Intervarsity Judo Competition which had held at University of Manipur, Manipur - 2008. **Questionnaire:** The questionnaire of modified version of Mental Readiness Form- Likert (MRF-2) was used. **Statistic:** To see the fluctuation of cognitive anxiety intensity and direction during the different stages of competition of judo players, the analysis of variance (ANOVA) was utilized with level of significance was set at 0.05. **Results:** It is evident that there was no significant difference of cognitive anxiety intensity and cognitive anxiety direction of judo players during different stages of competition; as the calculated value of F-ratio 1.124 and 1.253 was lower than the tabulated F-value (2.636) at 0.05 level of significant with (3,284) degree of freedom. **Discussion of findings:** Based on the results of the present study, the cognitive anxiety intensity and cognitive anxiety direction did not change significantly throughout the competition because the expectations of success among the judo players possibly remained stable throughout the stages of competition.

**KEYWORD:** fluctuation, cognitive anxiety, intensity, direction and Judo

---

### Introduction

The competitive anxiety has perceived a responsible amount of attention during the past decade. The area of anxiety is considered as one of the most important concepts of psychoanalytic theory. It is cooperate in the development of personality as well as in the dynamics of personality function. Moreover, it is of central significance in Freud's theory of the neuroses and psychoses and in the treatment of these pathological conditions. Anxiety differs from other painful conditions like tension, pain, and melancholy by some specific quality of consciousness. The term anxiety to facilitate with fear because fear is habitually considered as a sense of being afraid by something from the external environment, preferred by Freud. Competitive sports are always equipped with evoke experiences of stress among the participants. The competition environment is engaged with intense pressure and specific conditions where the athletes to perform their very best under such circumstances. For healthier understand about the effects of anxiety on athletes, it is essential to have a more complete understanding of the phenomenon of anxiety itself. A significant development in anxiety research has been the conceptualization of competitive anxiety as multidimensional. Distinctively, the bifurcate of anxiety in to cognitive anxiety as treated as mental component (psychological) and that can be influence the behavior differently and have different antecedents and consequences on athletic performance. This is assisted to lead the development of anxiety theory that the

cognitive anxiety will vary throughout the performance and it depends upon the probability of success or failure. How an athlete handles the psychological component of anxiety determines how successful he would be. Anxiety may be used sometimes as an encouraging motivational strength in sports performance. Judo is a sport and treated as unprotected combat sport. It is comparable in many ways with boxing and classical forms of wrestling, but it has tremendous advantages in these sports. The frequency of popularity in Judo is increased day by day and the trends are expectedly to continue further. The name 'Judo' may be portraying as a science for the study of prospective powers of the total body and mind and the way of applying them is most efficiently in combative activities. It happens, because the changing in today sports scenario, which is prepared by increase knowledge in the field and other new science disciplines. In judo maintaining the higher performance is not an easy task, a player may require greater amount of concentration and perfection, thus the players maintaining ones potential level of arousal in a changing environment of opponent is extremely difficult.

### **Objective of the study**

The objective of the study was to analysis the fluctuation of cognitive anxiety intensity and cognitive anxiety direction during the different stages of judo competition.

### **METHODOLOGY**

#### **Selection of subjects**

For the purpose of the study total 288 male judo players was selected from All India Intervarsity Judo Competition which had held at University of Manipur, Manipur in the year of 25-30<sup>th</sup> Dec. 2008. The participants is age range from 18-25 years.

#### **Selection of variables**

Keeping the athletes and situational demand of competition in mind, the following variables had been selected for the study:

Cognitive Anxiety Intensity

Cognitive Anxiety Direction

Further, to study the fluctuation of these selected variables the following different competition stages were considered i.e. (a) during the first round, (b) during the second round, (c) during the third round, (d) during the fourth round.

#### **Selection of questionnaire**

The questionnaire of modified version 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.

#### **Procedure for administration of questionnaire and collection of data**

In order to ensure participation and to minimize the risk of concentration disruption, the Mental Readiness Form (MRF) was used. The questionnaire was administrated during the All India Intervarsity Judo Competition. Procedure of the study was explained to the participants by the investigator before the first round of the competition. All the data collection took place within few seconds after the end of the fight of each player of each round where by the participants completed the Mental Readiness Form- Likert (MRF-2) for different stages of competition i.e. (a) during the first round, (b) during the second round, (c) during the third round, (d) during the fourth round of the competition.

### Statistical analysis of data

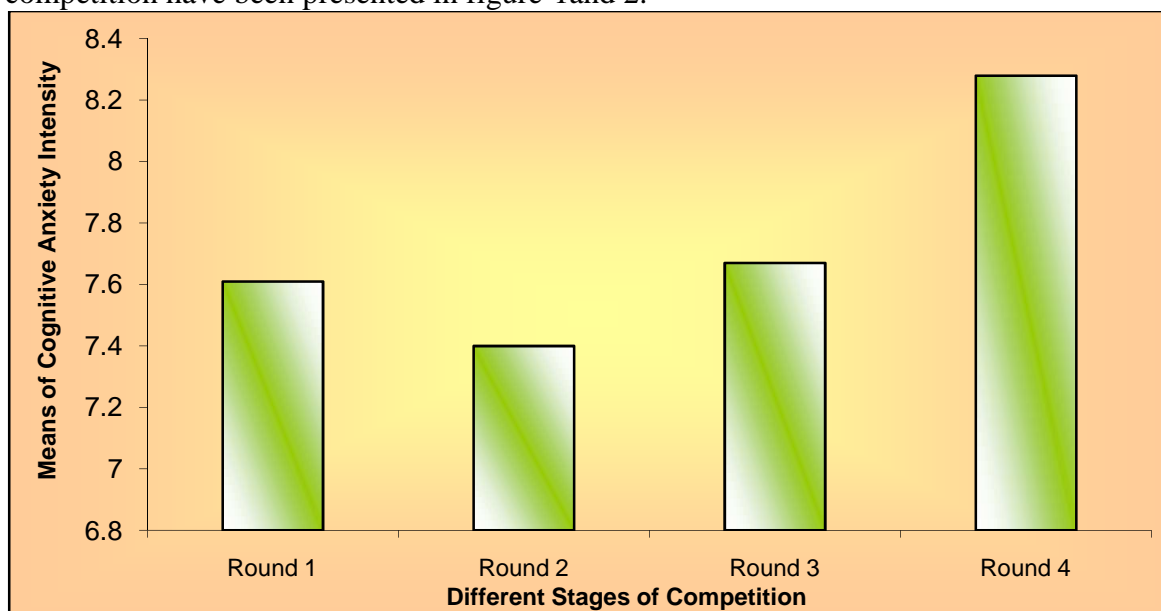
To see the fluctuation of cognitive anxiety intensity and direction during the different stages of competition of judo players, the analysis of variance (ANOVA) was utilized. The level of significance was set at 0.05 level.

### Results

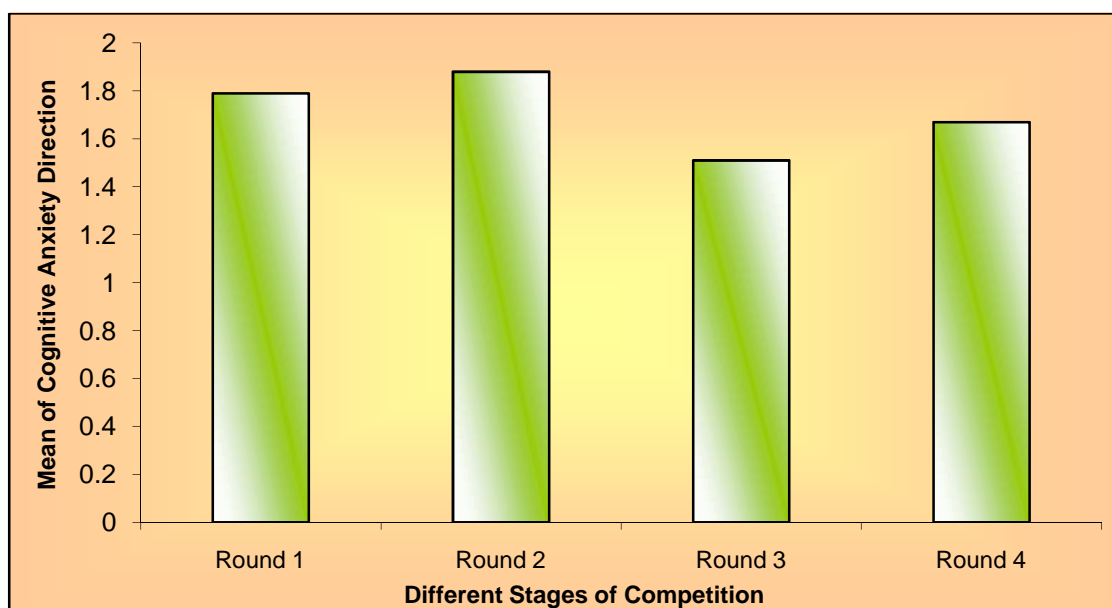
#### Descriptive data of means and standard deviations of cognitive anxiety intensity and cognitive anxiety direction during the different stages of competition among the judo players

Variables	<u>Round- 1</u> M+SD	<u>Round- 2</u> M+SD	<u>Round- 3</u> M+SD	<u>Round- 4</u> M+SD
<b>Cognitive Anxiety Intensity</b>	7.61 $\pm$ 2.60	7.40 $\pm$ 2.44	7.67 $\pm$ 1.58	8.28 $\pm$ 1.38
<b>Cognitive Anxiety Direction</b>	1.79 $\pm$ 1.10	1.88 $\pm$ 1.54	1.51 $\pm$ 1.38	1.67 $\pm$ 1.21

It can be observed from the table that the judo players cognitive anxiety intensity mean value was lowest during the first round of the competition (M=7.61), which gradually raised higher value (8.28) to fourth round of the competition. It was evident that there was gradational increase in the level of cognitive anxiety intensity as the actual time of final round of the competition. In the case of cognitive anxiety direction, the judo players are of high mean value (1.79) can be observed throughout the first round of the competition, which gradually declines the mean value (1.67) to fourth round of the competition. It was evidentiary that there was gradational decrease in the level of cognitive anxiety direction at the actual time of final round of the competition. The symbolic diagram to exhibit the image of cognitive anxiety intensity and cognitive anxiety direction of judo players during the different stages of competition have been presented in figure-1 and 2.



**Fig.1: Means of cognitive anxiety intensity of judo players during different stages of competition**



**Fig.2: Means of cognitive anxiety direction of judo players during different stages of competition**

For the fluctuation of cognitive anxiety intensity and direction of judo players at different stages of competition i.e. (a) during the first round, (b) during the second round, (c) during the third round, (d) during the fourth round the analysis of variance (ANOVA) was adopted.

**Significance of difference of cognitive anxiety intensity of judo players during different stages of competition**

Source of Variance	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-ratio
Between	3	17.476	5.825	1.124
Within	284	1470.742	5.178	

\*Significant,  $F_{0.05}(3, 284) = 2.636$

It is evident from the above table that there was no significant difference of cognitive anxiety intensity of judo players during the different stages of competition; as the calculated value of F-ratio (1.124) was lower than the tabulated F-value (2.636) at 0.05 level of significant with (3,284) degree of freedom. Cognitive anxiety intensity fluctuates across the competition but these fluctuations are not significant throughout the competition.

**Significance of difference of cognitive anxiety direction of judo players during different stages of competition**

Source of Variance	Degree of Freedom	Sum of Squares	Mean Sum of Squares	F-ratio
Between	3	5.355	1.785	1.253
Within	284	404.589	1.425	

\*Significant,  $F_{0.05}(3, 284) = 2.636$

It can be observed from the table that the cognitive anxiety direction indicates a F-ratio (1.253) for the test means, which was not significant as it less than the F-value (2.636) required for significant at 0.05 with (3, 284) degree of freedom. However, there was a trend in this result, indicating that two changes between paired means were approaching significance throughout the competition (i.e. during the first round and during the second round or during the third round and during the fourth round). Cognitive anxiety direction was higher during the first round and then declined from first round to fourth round of the competition. The directional interpretations of cognitive anxiety are not fluctuating significantly across the competition.

### **Discussion of findings**

Results of the present study indicate that the cognitive anxiety intensity and cognitive anxiety direction did not change significantly throughout the competition. It was attributed to the fact that when the judo players are in the stage of first round, the judo players level of cognitive anxiety in the state of clam and when the players gradually goes towards the final round their calm state converted into worried state. In terms of players, directional perceptions of anxiety symptoms, most of all the judo players in this study indicated less facilitative and perceived their cognitive anxiety to be helpful towards performance in critical situation. The significant inclined in players levels of cognitive anxiety from first round to final round in the present study suggests that expectations of success in the judo players possibly remained stable throughout the stages of competition. The results of cognitive anxiety intensity and direction showed insignificant because of all the groups are equal. The result of the study is in consonance with the finding of Gould, 1984; Martens, 1990 and O.Thomas, I.Maynard & S. Hanton, 2004.

### **References**

- Agyajit Singh, (1992) "Sports Psychology: A Study of Indian Sportsmen" (Delhi: Friendly Publications, pp.36-37.
- Carolina Lundqvist, (2006) "Competing Under Pressure", Doctoral Dissertation, (Stockholm University), pp.09
- George Glass, (1977) "Competitive Judo" (London: Faber and Faber), pp.9
- Hanton S., O. Thomas and I. Maynard, (2004) "Competitive Anxiety Responses in the Week Leading up to Competition: the Role of Intensity, Direction and Frequency Dimensions", Psychology of Sport and Exercise, vol. 5,
- Jack H.H.Hewellyn and Judy A.Blucker, (1982) "Psychology of Coaching Theory and Application", pp.79
- J.P. Thomas, (1964) "Let us Coach" (Calcutta Y.M.C.A), pp.2
- Joanne Butt, Robert Weinberg and Thelma Horn, (2003) "The Intensity and Directional Interpretations of Anxiety Fluctuation throughout Competition and Relationship to Performance." Journal of Sports and Exercise Psychology. vol.17, pp.35
- Keith F Bell, (1983) "Championship Thinking" (Englewood Cliffs, N. J.Prentice Hall Inc.), pp.121
- Sigmund Freud, (1948) "Inhibitions, Symptoms and Anxiety". (London; The Hogarth Press), pp.61