

## **COMPARISON OF SOMATIC TENSION, COGNITIVE WORRY AND SELF CONFIDENCE OF INTERUNIVERSITY LEVEL ATHLETES OF SELECTED TRACK AND FIELD EVENTS**

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### **ABSTRACT**

The purpose of study was to investigate and compare somatic tension; cognitive worry and self confidence of inter varsity level athletes of selected track and field event. The study was delimited to sprinters and jumpers of selected track and field. The study was further delimited to the Inter University level athletes. The study was delimited to asses' competition anxiety level of competitive inventory – 2. The data containing to somatic tension, cognitive worry and self confidence were collected from 27 items of the questionnaire as per the slandered procedure laid down in the normal sports competition anxiety test. There was no significant difference in self-confidence between sprinters and jumpers from track and field athletics. Cognitive worry of sprinters and jumpers were not significantly different. Sprinters and jumpers competition anxiety is of same level. Cognitive worry, somatic tension and self confidence of inter university level sprinters and jumpers are of similar level.

**KEY WORDS:** Somatic Tension, Cognitive Worry, Self Confidence and Sprinters And Jumpers

### **INTRODUCTION**

Usually before competition athletes experience stress or anxiety due to increased psychological demand of the sports competition situation. Anxiety is a physiological response to a real or imagined threat. A certain amount of anxiety is needed for peak performance. But higher level of anxiety physically inhibits performance by causing muscular tension and disturbing coordination of the movements, there for it is very important aspect to be handled. It highly helps a coach to prepare the athletes physically and mentally in such a way that he himself is able to resist and tolerate any kind of psychological eventually, which may occur before or during the competition. Among all the various sports events present no doubt track and field has the maximum utilization of mechanical theories. Track and field get the popularity because of its similarity with daily life doing.

Anxiety is a state of mind in which the individual responds with discomfort to some event that has occurred or is going to occur (causes, 1980). The persons worries about events, their

occurrences and consequences, in general are the source of anxiety. Symptoms of somatic anxiety comprise mental worries and fears. In simple words, it is a type of emotional disturbance. The curtail such disturbing selections. The self awareness that the students develop in the process of interaction with people and environment leads to compare himself with his peers in competition. It also develops the feeling of confidence and courage as result of success or failure in his endeavours.

Psychology is a behaviour science has made his contribution for improving sports performance it helps coaches to coach more effectively and athletes to perform more proficiently. Psychology is also concerned with the total wellbeing and personal adjustment of their involve in sports psychologist are concerned with personal behaviour understanding explaining and even predicting it. The psychologic aspect of sports is going attention among sports administration. personality and psychometric has traditionally being more closely associated with clinical work, coaches showed recognised the role of personality in performance and understand the importance of give and take in communication. Coaches who can communicate effectively with athletes can provide an environment is conducive to motivated performances and the development of favourable self concept.

As a negative motivator anxiety may interfere with performance as well as constructive thinking. Athlete may attempt to handle anxiety by denying there need to work habit or athletes techniques. Their often need to fatigue and in turn lack of confidence and increase anxiety. Similarly Howard K. Hall Illstair Illstair Wikers and Julie Methers conducted study high school runners in cross-country meet to examine links between par perfectionism achievement goal and temporal patterning of multidimensional state anxiety they found that fun all perfectionism was a consistent significant predictor of cognitive predictor of confidence and ego and task goes contribute to all prediction cognitive anxiety and confidence respectively.

Jones swain and Cole conducted study university athlete and found that in case of cognitive anxiety male showed no changes across time though females showed a progressive increase the competition is near males and females should the same patterning in somatic anxiety with increase accruing only the day of competition. self confidence sources reviled a reduction in self confidence scores retiled a reduction in self confidence near in both gender but there was greater decrees in female then men.

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Questionnaire research has its own limitation there for any bias that might will come into the subject response on this account would be considered as limitation of the study.

### **HYPOTHESIS**

On the basis of available literature, comprehensive understanding of literature of problem it was hypothesised that there is no significant difference in somatic tension, cognitive worry and self confidence among sprinter and jumper.

### **SIGNIFICANCE OF STUDY**

The study will be significant for following reasons

1. The study will be use full to ascertain the level of somatic tension and cognitive worry and self confidence of the track and field athletes.
2. Result may indicate competitive anxiety of sports person belonging to selected track and field athletes by comparing these dimensions i.e. somatic tension cognitive worry and self confidence of sports person of above.
3. It will add valuable literature in the field of physical education.

### **PROCEDURE**

#### **Selection of subjects**

The subjects for the study were 100 meters and 200 meters sprinters and long jumpers and triple jumpers reached in the final of all India inter university athletic meet for the year 2004 -05 .In total 16 sprinters and 16 jumpers were selected as subjects .the subjects were under graduate and post graduate male students belonging to different states and union territories of India. The age group was between 18 to 25 years .

The competitive state anxiety inventory-2(CSAI-2) by Rainer Marties selected for the study because it is sports specific anxiety test. Further it assesses competitive anxiety on the basis of three dimension anxiety i.e. cognitive worry, somatic tension and self confidence.

#### **Procedure for administration**

The test was administered to the subjects at Inter University competition .The subjects were assembled in different groups. Clear instructions were specifically given to the subjects that all the items in the questionnaire must be attempted.

## Scoring

The CSAI-2 is scored by computing a separate total for each of the three sub scales with score ranging from a low of 9 to a high of 36. The higher the score the greater the cognitive worry or somatic tension and self confidence. Number of total score for the inventory is computed.

The CSAI-2 consists of 27 items. Each item is keyed with following response option and score

Not at all =4

Somewhat =3

Moderately = 2

Very much =1

The various state anxiety subscale namely somatic tension, cognitive worry and self confidence is attained by summing up 9 scores each separately for all the sub scales. The state cognitive sub scale was scored by totalling the responses for the following 9 items 1,4,7,10,13,16,19,22,and 25 adding the responses of the following items 2,5,8 ,11,14,17,20,23,and26 scored the scale somatic sub scale is scored .

The state of self confidence subscale is scored by adding the following items 3,6,9,12,15, 18, 21, 24 and 27. Inventories that are missing not more than one response per sub scale can still be scored but any inventory in which two or more items any one subscale are omitted should be invalidated. to obtain sub scale scores when an item has been omitted and computed the mean item score for the right answer items , multiplying this value by 9 and then round the product to the nearest whole number.

## Statistical procedure

In order to determine the significance of difference between select and field athlete on somatic tension. Cognitive worry and self confidence the T- ratio was applied, the level of significance was set at 0.05 levels.

## RESULTS

The data containing to somatic tension, cognitive worry and self confidence were collected from 27 items of the questionnaire as per the standard procedure laid down in the normal sports competition anxiety test.

### Findings

#### Table-1

### SIGNIFICANCE OF DIFFERENCE OF SOMATIC TENSION AMONG SPRINTERS AND JUMPERS

Groups	Mean	D M	$\partial D_m$	t-ratio
Sprinters	24.93			
Jumpers	25.75			

$t_{0.05}(30) = 2.042$

The data presented in table-1, clearly revealed that mean scores of somatic tension of sprinters and jumpers is not significant. This indicated that sprinters and jumpers are more or less same in the somatic tension since the obtained t- value was lesser than the value required to be significant.

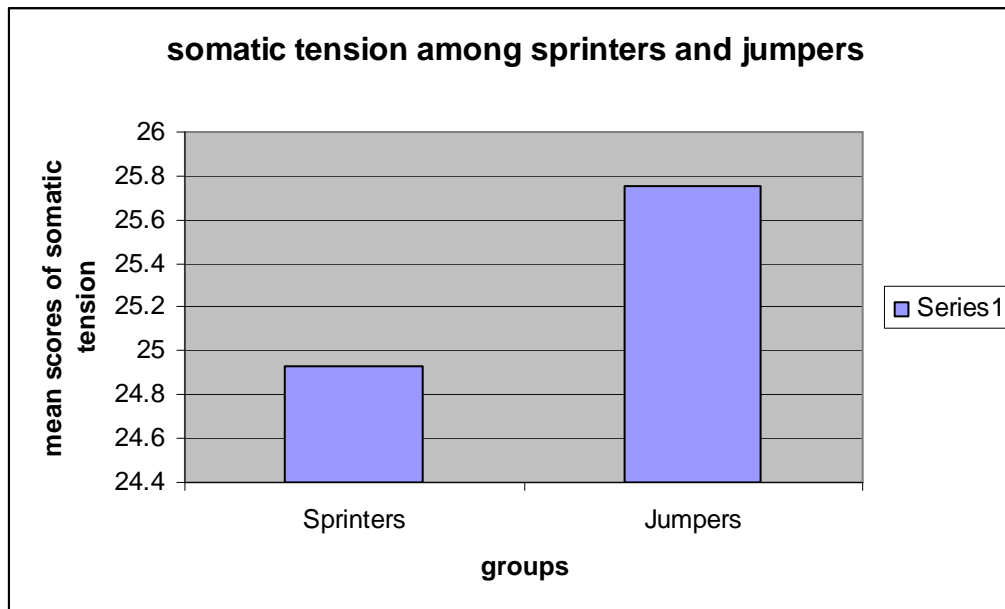


Table-2

### SIGNIFICANCE OF DIFFERENCE OF COGNITIVE WORRY AMONG SPRINTERS AND JUMPERS

Groups	Mean	D M	$\partial D_m$	t-ratio
Sprinters	24.5			
Jumpers	25.56			

$t_{0.05}(30) = 2.042$

the data presented in the table-2 clearly reveals that the mean scores of cognitive worry of sprinters and jumpers do not differs significantly as the obtained value of t was lesser than the required value

to be significant. This indicates that sprinters and jumpers were having more or less same cognitive worry.

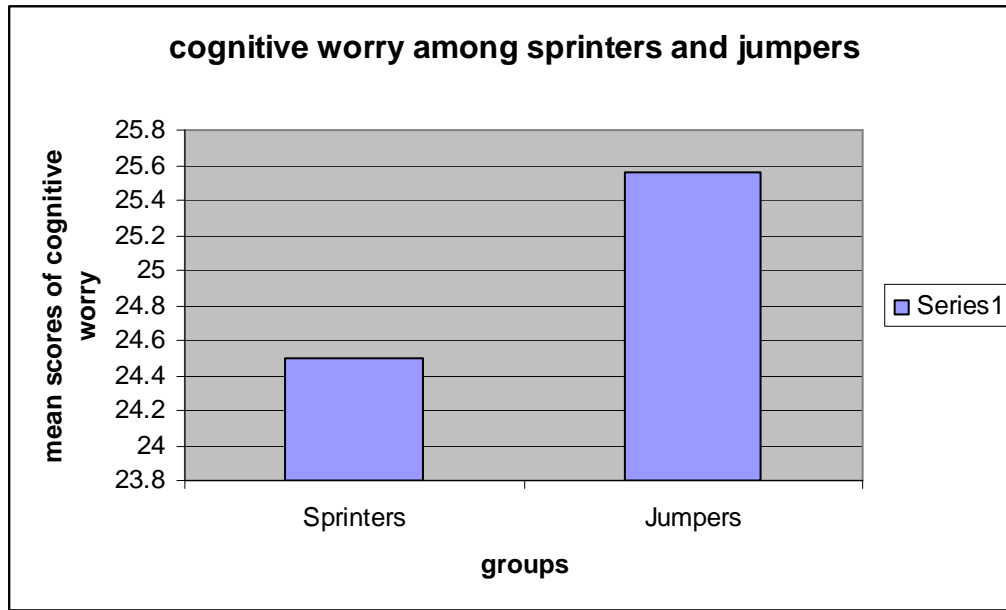


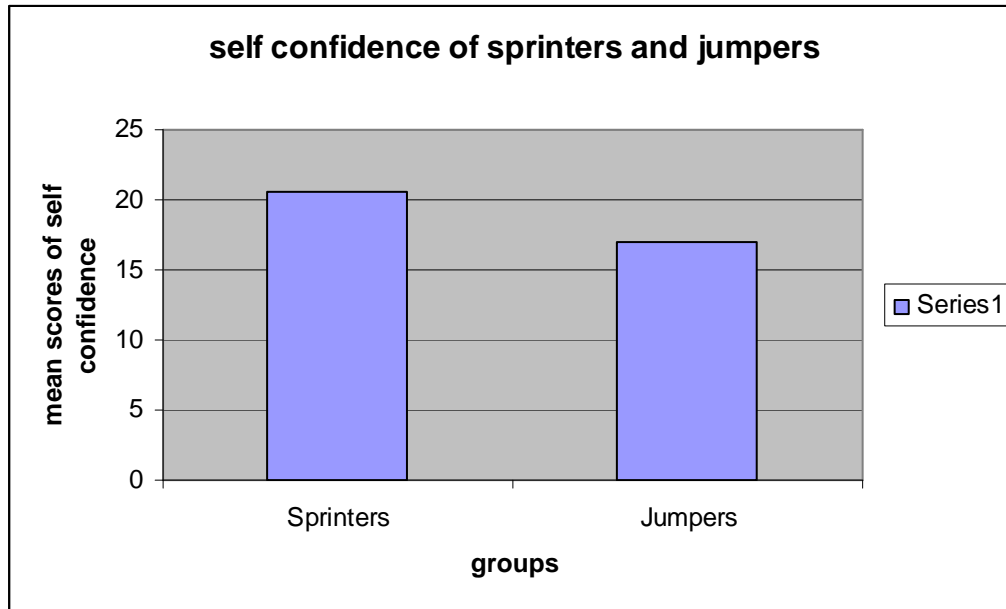
Table-3

#### SIGNIFICANCE OF DIFFERENCE OF SELF CONFIDENCE AMONG SPRINTERS AND JUMPERS

Groups	Mean	D M	$\partial Dm$	t-ratio
Sprinters	20.62			
Jumpers	17			

$$t_{0.05}(30)=2.042$$

the data presented in the table-3 clearly reveals that the mean scores of self confidence of sprinters and jumpers do not differs significantly as the obtained value of t was lesser than the required value to be significant. This indicates that sprinters and jumpers were having more or less same self confidence.



### DISCUSSION OF FINDINGS

The findings of study showed that sprinters and jumpers didn't differ significantly with respect to competition anxiety viz., its component namely somatic tension, cognitive worry and self confidence. Implying that state competition anxiety level of sprinters and jumpers were not of different level rather is of more or less same.

This finding may be attributed the fact that, competition anxiety state forms situation specific apprehension about uncertainty in probable outcomes of competition since both sprint and jumping are similar event as it of short duration and limited tempest based. And hence the uncertainty of outcome is may be because of limited options of attempt unlike other long duration etc. Record of the similarity in nature the evocation of pre competition state anxiety amount jumpers and sprinters were of similar level.

Hence the findings that the competition anxiety state form assessed viz. somatic tension cognitive worry and self confidence by administering CSAI to is well justified

### DISCUSSION OF HYPOTHESIS

In case of comparison of somatic tension cognitive worry and self confidence between the sprinters and jumpers, the result have shown the in significant difference, there for the hypothesis as stated earlier that there is no significant difference in somatic tension, cognitive worry and self confidence between the sprinters and jumpers is not rejected.

### SUMMARY

It has been observed that somatic tension, cognitive worry and self confidence of male and female weightlifter are not in uniform pattern. Therefore the purpose of study was to compare somatic

tension, cognitive worry and self confidence in sprinters and jumpers from track and field athletics. The standard questionnaire comparing nine questions of each category was use for collecting the data. In each question there were for separate choice, which was numbered consecutively. In this study sixty (60) sprinters and jumpers from track and field athletics were selected who have participated in all India interuniversity competition, 2004-2005 held at Nagarjuna University.

After taking the responses of sports person through the questionnaire of both the sprinters and jumpers the somatic tension, cognitive worry and self confidence were obtained. To find out the difference between sprinters and jumpers from track and field athletics in somatic tension, cognitive worry and self confidence 't' test was used, the level of significance was of 0.05 of confidence. The analysis of data revealed that there was significant difference in somatic tension ( $t=3.43$ ) were sprinters and jumpers from track and field athletics .But there were no significant difference observed in case of cognitive worry ( $t=0.72$ ) and in self-confidence ( $t=1.97$ ).

### CONCLUSION

Within the limitation of present study the following conclusion may be drawn:

1. There was no significant difference in self-confidence between sprinters and jumpers from track and field athletics.
2. Cognitive worry of sprinters and jumpers were not significantly different
3. Sprinters and jumpers competition anxiety is of same level.
4. Cognitive worry, somatic tension and self confidence of inter university level sprinters and jumpers are of similar level.

### REFERENCES

1. Bell Keith F., "Championship of thinking the athlete guide to winning performance in all sports (London Prentice Hall Inc.1983).p152.
2. Cratty Bryant J., "Psychology and Physical Activity", (Englewood Cliffs, N.J. :Prentice Hall Inc 1986), p.15.
3. Encyclopedia of sports science and medicine 1971 ed. S.V. "Individual adjustment of social practice and characteristics".
4. Gram Jones and Sheldon Hanton, "Interpretation of competitive anxiety symptoms and goal attainment expectations." Journal of sports and exercise psychology, 18(1996) 144.
5. Silva John M. and Swinberg Robert, "Psychology foundation of sports"(USA Human Kinetics Publishers Inc.champaign :1984) p.232



