A COMPARATIVE ANALYSIS OF ANXIETY AND SELF-CONFIDENCE AMONG SPRINTERS, MIDDLE DISTANCE AND LONG DISTANCE RUNNERS

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INTRODUCTION

Psychology as a behavioral science has made its contribution to improving sports performance. It has helped coaches to coach more efficiently, and it helps athletes to perform movement proficiently. Preponderance of scientific evidence obtained from different investigations and revealed that apart from physiological variables; tactics, techniques and high-level performance of sportsmen depends on his psychological makeup, different psychic ability plays a decisive role in achieving performance in track and field events. Winning in international sports competitions highly depends on the psychological determinations. The psychological fitness of an individual is an important factor which helps in achieving outstanding performance.

Self Confidence: Self-Confidence is a state or quality or being certain of one's ability.(Robert.T.Ebol 1969).

Anxiety: Anxiety is a general term for several disorders that cause nervousness, fear, apprehension, and worrying.

These disorders affect how we feel and behave and can cause physical symptoms. Mild anxiety is vague and unsettling, while severe anxiety can seriously affect the performance. (Tack.H.Lewellyn and Judy.A.Bulker 1974).

METHODOLOGY

The purpose of this study was to compare the psychological parameters among sprinters, middle distance and long distance runners. To achieve this purpose the comparative design was formulated. Three groups namely sprinters, middle distance and long distance runners were formulated. Each group consists of 30 subjects.

These (90) Ninety men were chosen from different colleges of Bangalore City and the selected students participated in Bangalore University Inter-Collegiate athletic meet. All the selected students were below 25 in age. The students constantly motivated throughout the period of the investigation to ensure willingness and cooperation.

Based on review of journals and experts' advice, anxiety and Self-Confidence were selected as variables. The collected data were statistically compared by using's' test. In all cases, 0.05 level was fixed to test the hypothesis of the study.

PROCEDURE

The necessary data were collected by administering standard tests to measure the level of variables. The administration of tests and methods of collecting data are explained as follows.

Self-Confidence

Agnihotri's Self-Confidence questionnaire developed by Dr Rekha Agnihotri was used to find the level of self-confidence. All the questions were adopted for this investigation. The inventory was scored by hand. A score of 'one' is awarded for a response indicative of lack of self-confidence. That is for marking (X) to respond to any of item nos 2, 7, 23, 31, 40, 41, 43, 44, 45, 53, 54 and 55. The lower the score, the higher the self-confidence and vice-versa

(Rainer-Martin 1977).

Anxiety

Anxiety: SCAT questionnaire was used to find out the level of anxiety. SCAT (Sport Competition Anxiety Test) questionnaire was given to all subjects. 15 items were adopted for this study. The questionnaire was scored as follows. The items 2, 3, 5,8,9,12,14 and 15 were scored as per the response.

Hardly ever - 01 Points
Sometimes - 02 Points
Often   - 03 Points

Items 6 and 11 were scored as:
Hardly ever - 03 Points
Sometimes - 02 Points
Often   - 01 Points

Items 1, 4,7,10, and 13 were not scored.

STATISTICAL ANALYSIS

The following statistical procedures was followed to compare the self-confidence and anxiety among sprinters, middle distance and long distance runners.

One way ANOVA (Analysis of Variance) as suggested by Clarke.

1. $MSW = \dfrac{SSW}{K(N-1)} = \dfrac{EX^2}{(K-1)}[df = (N-k)or(K-1)]$

2. Between the sets

$$MSW = \dfrac{SSW}{(K-1)} = \dfrac{(N-1)^2}{(K-1)} = df = K - 2$$

3. $F = \dfrac{MSB}{MSW}$

Scheffci's post hoc was further used to find out which group is better in anthropometric and psychological variables(Harrison and Clarke 1970).

RESULTS AND DISCUSSIONS

For the purpose of the study, totally 90 men athletes who have participated in the Inter-Collegiate athletic meet in sprinting, middle distance and long distance events were chosen as subjects. The subjects were selected on random basis. They were divided into 3 groups namely sprinters, middle distance and long distance runners, and each group consist of 30 subjects. A questionnaire was used to find out the level of anxiety and self-confidence in order to compare the variables among the 3 groups. ANOVA was applied separately for each variable. Since, the obtained 'F' ratio was more than the table value then the Scheffe's post hoc test was used to determine the significant difference among the paired mean 0.05 level of confidence.

Mean difference for self-confidence among the Sprinters, Middle Distance and Long Distance Runners.

	Sprinters	Middle Distance Runner	Long Distance Runners
Means	30.9	27.96	29.86

Table 1

One way ANOVA of variable Self-Confidence among sprinters, middle distance and long distance runners.

Source of Variance	Sum of Squares	df	Mean Squares	'F' ratio
Total SST	1692	89	-	-
Treatment SSB	132	2	65.98	3.68
Error SSW	1560	87	17.93	-

Table 2

$$F = \frac{Treatment\,Variance}{Error\,Variance}$$
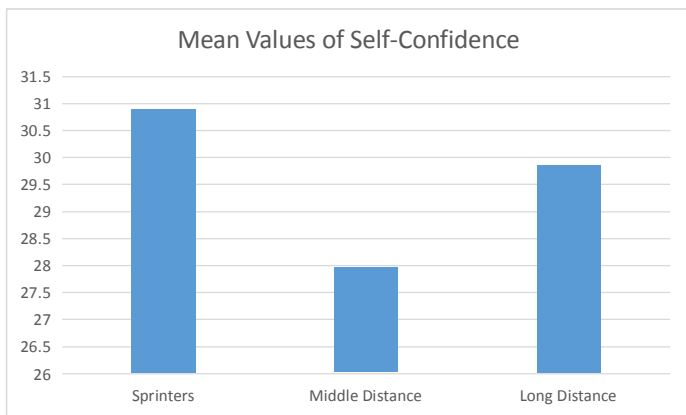
$$F = \frac{65.98}{17.93} = 3.68$$

$$F = 3.68$$

$$df = 2,87$$

Table value at 0.05 Level = 3.10

Post hoc test for Self-Confidence among SP mid and long distance runners.

Sprinters	Middle Distance Runners	Long Distance Runners	MD	CI
30.9	-	29.86	1.04	-
30.9	27.96	-	2.94	2.78
-	27.96	29.86	1.9	-

Table 3

GRAPH 1 Self Confidence Mean

Mean Difference for anxiety among Sprinters, Middle Distance and Long Distance Runners.

	Sprinters	Middle Distance Runners	Long Distance Runners
Mean	20.26	16.86	19.4

Table 4

Source of Variance	Sum of Squares	df	Mean Squares	'F' ratio
Total SST	740	8	-	-

		9		
Treatment SSB	187	2	93.41	14.70
Error SSW	553	87	6.36	-

Table 5

$$F = \frac{Treatment\,Variance}{Error\,Variance}$$

$$F = \frac{93.41}{6.36} = 14.69$$

$$F = 14.69$$
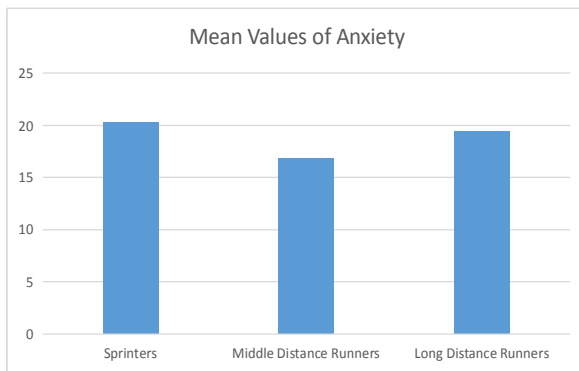
$$df = 2,87$$

Table value at 0.05 Level = 3.10

Post hoc Test for Anxiety among Sprinters, Middle distance and Long Distance Runners.

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Sprinters	Middle Distance Runners	Long Distance Runners	MD	CI
20.26	-	19.4	0.86	-
20.26	16.86	-	3.4	1.66
-	16.86	19.4	2.54	-

Table 6

GRAPH 2 Anxiety Mean

CONCLUSION

Table 1 showed the mean difference for self-confidence level among sprinters, middle distance and long distance runners. The mean of the level of self-confidence were 30.90,27.96 and 29.86.

Table 2 showed the analysis of variance (ANOVA) for self-confidence among sprinters, middle distance and long distance runners.

The obtained 'F' ratio significance and 0.5 level of confidence was 3.10.For the degree of freedom 2 and 87.Since the obtained 'F' ratio is higher than the postulated value at 0.05 level, Scheffies post hoc test was used to determine the difference among sprinters, middle distance runner and long distance runners.

REFERENCES

[1] Ravi, *"A Comparitive study of selected psychological charatristics of hockey players at different levels"*,1993

[2] Ramesh *"Comparison of anxiety and self confidence among qualified football,volleyball,and basketball referees in Tamil Nadu".1994*

[3] Thomas Mathew and Geeta Mathew, *"Comaprison of personality traits of women players of indigenous games".*

[4] Johnes J.G *"Pre-competition temporal patterning of anxiety and self-confidence in male and female".*

[5] Kalpana Debanath and Gurdial Singh Bawa *"A study of sports competions of anxiety among junior and senior female cyclists and gymnasts of national coaching camp"*, 1986.