



ANALYSIS OF SPORTS COMPETITION ANXIETY OF WEIGHTLIFTERS AT DIFFERENT LEVELS OF PARTICIPATION

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ABSTRACT

The purpose of the study was to assess the anxiety of Weightlifters of different levels of participation. Hundred (60 male and 40 female) Weightlifters of Senior International, Junior International, Senior National and Junior National Indian Weightlifters were selected as subject for this study. The subjects were administered with standard questionnaire of sports competition anxiety test (SCAT) prepared by Rainer Martens criterion measures were adopted for study. Data was analyzed by use of Descriptive Statistics and Two Way Analysis of Variance was used at 0.05 level of significance. The significant difference has been found among the means of different levels of participation, male & female and interaction at different levels of participation.

Keywords: Sports competition anxiety, Weightlifters, Senior and Junior.

INTRODUCTION

Anxiety is emotionally disturbed state of human mind which is impractical and horrible and creates feeling of dread, apprehension, fear, nervousness and high arousal. In Medical Dictionary, it is defined as “apprehension of danger accompanied by restlessness and a feeling of oppression in the epigastria”. In sportsperson, this can be clearly understood by the description using features, language and conditional behavioural observations during competition. To identify the level of anxiety of competitive sports anxiety is based on self report, and these may be divided into features that characterize the person's temperament called trait anxiety and describe a current emotional state called state anxiety.

Competitive Anxiety is generally generated by sportsperson in situation of sports competition is a “specific form of anxiety that occurs through the reaction of various function of the competitive situation”. Anxiety mostly rises within the sportsmen and affects the performance of competition and it can be seen of “feels” many hours before the competitions especially during the peak time of pre competition. It can be categorise on the bases of feeling generated by sportsmen such as increased physiological activation, fear of failure, feeling of inadequacy, loss of control, and feeling of guilt depend on individuals non reactive ability and experience of management. Anxiety has both psychological and physiological implications in sport performance as it raises adequate amount, it help or if its rises more or below general arousal level which decrease the ability to concentrate therefore athletes finds it difficult to monitor and judge situations correctly and their information-processing mechanism gets over-stressed resulting in wrong or slow response to external situations both routine and growing.

METHODOLOGY

The purpose of the study was to assess the anxiety of Weightlifters of different levels of participations. Hundred male and female Indian Weightlifters were selected as subjects for the purpose of study. The Weightlifters were categorized into four groups i.e. Senior International (15 male and 10 female), Junior International (15 male and 10 female), Senior National (15 male and 10 female) and Junior National (15 male and 10 female) for data collection. The International Weightlifters comprised of those who had represented India at least once in Senior and Junior International weight lifting competitions held in India or abroad and National Weightlifters were those who had represented in Senior National and Junior National weightlifting competitions held in India only were selected as subjects.

To find out the level of anxiety of Senior and Junior International and National weight lifters, the scores from questionnaire of Sports Competition Anxiety Test (SCAT) prepared by Rainer Martens were adopted as criterion measures for the study. The questionnaire consists of fifteen items. The subjects were asked to indicate how they generally felt in competitive sports situations, and responded to each item using a three point ordinal scale (hardly ever, sometime, or often). Out of fifteen items, only ten items use for scoring purpose and the remaining five test items are the spurious items, which are added to the questionnaire to diminish response bias towards the actual test items. Necessary instructions were given to the subjects before the administration of test. Subjects were ensured that the responses given by them on the questionnaire will be kept strictly confidential and would not be exposed to anyone in any circumstances. There was no time limit for the completion of the questionnaire but the subjects were instructed not to think too long on any statement and respond all the statements in the questionnaire independently. Responses obtained from the subjects on statement of sports competition anxiety questionnaire were recorded for the analysis of data. The total score of SCAT is from ranging from 10 to 30. The subjects assigned to low anxiety, moderate anxiety and high anxiety category according to the scores obtained, less than 17, 17 to 24 and more than 24



respectively. The responses given by the weight lifters in the questionnaire were separated as tabulated alternatives and thus the table was prepared for the analysis of data. In order to find out significance difference of anxiety in male and female descriptive statistics and two way analysis of variance was used at .05 level of significance.

ANALYSIS OF SPORTS COMPETITION ANXIETY DATA

The psychological tests results of Sports Competition Anxiety of International & National level Senior & Junior category male & female Weightlifters are presented in the following tables i.e., from Table 1 to 7.

TABLE 1
DESCRIPTIVE STATISTICS OF MALE AND FEMALE WEIGHTLIFTERS IN THE FACTOR OF ANXIETY

Level of Participation	Sex		Minimum		Maximum		Mean		S D	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Senior International N=25	N=15	N=10	15	16	24	20	18.40	18.30	2.64	1.33
Junior International N=25	N=15	N=10	13	16	26	20	18.73	17.70	3.59	2.11
Senior National N=25	N=15	N=10	21	14	27	21	22.60	18.20	1.72	2.15
Junior National N=25	N=15	N=10	15	14	24	20	21.26	16.80	2.40	2.29
Total N=100	N=60	N=40	13	14	27	21	20.25	17.75	3.14	2.02

Table 1 depicts the descriptive statistics in terms of Means, Standard Deviation, Minimum & Maximum scores of Weightlifters, where in the category of Senior International Male (18.40 ± 2.64) & Female (18.30 ± 1.33), Junior International Male (18.73 ± 3.59) & Female (17.70 ± 2.11), Senior National Male (22.60 ± 1.72) & Female (18.20 ± 2.15), Junior National Male (21.26 ± 2.40) & Female (16.80 ± 2.29) & combination of all four level Male (20.25 ± 3.14) & Female (17.75 ± 2.02) respectively.

Comparison of Sports Competition Anxiety at Different Levels of Participation among International and National Level Senior and Junior Weightlifters are analysis with the help of Two Way ANOVA has been presented in table 2

TABLE 2
TWO WAY ANALYSIS OF VARIANCE ON SPORTS COMPETITION ANXIETY OF MALE AND FEMALE WEIGHTLIFTERS AT DIFFERENT LEVELS OF PARTICIPATION

Source of Variance	DF	SS	MSS	F – VALUE
Level of participation	3	71.93	23.97	4.03*
Sex (Male & female)	1	150.00	150.00	25.25*
Interaction	3	92.33	30.77	5.18*
Error	92	546.46	5.94	

*Significant at 0.05 level

Table 2 reveals that significant difference has been found between the means of different Levels of Participation in relation to Sports Competition Anxiety as the calculated F value (4.03) was found greater than the required value (2.70) at 3, 92 degree of freedom at 0.05 level of significance.

On the other hand significant difference was seen between male & female in relation to Sports Competition Anxiety as calculated F-value (25.25) which was greater than the required value (3.92) at 1, 92 degree of freedom at 0.05 level of significance.

Significant difference was also found in interaction between Levels of Participation in relation to Sports Competition Anxiety as calculated F-value (5.18) was greater than the required value (2.70) at 3, 92 degree of freedom at 0.05 level of significance.



As the F-ratio was found significant for various level of participation, sex & interaction in relation to Sports Competition Anxiety, Post-Hoc comparisons i.e., Least Significance Difference (L.S.D.) & Scheffe's test was applied to find out the significance difference among different level of participation of male & female Weightlifters which are presented in Table 3 to 7. To find out the significance difference among different level of participation of male & female Weightlifters Post-Hoc comparisons i.e. Least Significance Difference test was applied which are presented in Table 3.

TABLE 3
POST HOC (LSD) TESTS OF SPORTS COMPETITION ANXIETY OF MALE AND FEMALE WEIGHTLIFTERS AT DIFFERENT LEVEL OF PARTICIPATION

Group Mean				MD	CD
Senior International (N=25)	Junior International (N=25)	Senior National (N=25)	Junior National (N=25)		
18.36	18.32			0.04	1.36
18.36		20.85		2.49*	
18.36			19.48	1.12	
	18.32	20.85		2.53*	
	18.32		19.48	1.16	
		20.85	19.48	1.37*	

*Significant at 0.05 level

Table 3 shows the analysis of results for all the categories combining both Male & Female Weightlifters. It can be concluded that significant difference has been found between Senior International & National (2.49), Junior International & Senior National (2.53) & Senior & Junior National (1.37) level Weightlifters as the obtained mean difference (1.36) was greater than the critical difference at 0.05 level of significance. Whereas no significant difference was seen in Senior & Junior International (0.04), Senior International & Junior National (1.12) & Junior International & National (1.16) level Weightlifters as the obtained mean difference was found less than the critical difference (1.36) at 0.05 level of significance.

To find out the significance difference between male & female Weightlifters Post-Hoc comparisons i.e. Scheffe's test was applied which are presented in Table 4.

TABLE 4
POST HOC (SCHEFFE'S) COMPARISON OF SPORTS COMPETITION ANXIETY BETWEEN MALE AND FEMALE WEIGHTLIFTERS AT DIFFERENT LEVELS OF PARTICIPATION

Group Mean		MD	CD
Male (N=60)	Female (N=40)		
20.25	17.75	2.5*	0.98

*Significant at 0.05 level

Table 4 reveals that mean differences between Male & Female Weightlifters (2.5) for Sports Competition Anxiety was greater than the critical value (0.98). Therefore significant difference was found at 0.05 level of significance.

To find out the significance difference among different level of participation of male Weightlifters Post-Hoc comparisons i.e. Least Significance Difference test was applied which are presented in Table 5.



TABLE 5
POST HOC (LSD) TESTS OF SPORTS COMPETITION ANXIETY OF MALE WEIGHTLIFTERS
AT DIFFERENT LEVELS OF PARTICIPATION

Group Mean				MD	CD
Senior International (N=15)	Junior International (N=15)	Senior National (N=15)	Junior National (N=15)		
18.40	18.73			0.33	1.76
18.40		22.60		4.20*	
18.40			21.26	2.86*	
	18.73	22.60		3.87*	
	18.73		21.26	2.53*	
		22.60	21.26	1.34	

*Significant at 0.05 level

Table 5 displays the analysis of result for all the categories of Male Weightlifters. It can be concluded that significant difference has been found between Senior International & National (4.20), Senior International & Junior National (2.86), Junior International & Senior National (3.87) & Junior International & National (2.53) level of Weightlifters as the obtained mean difference was greater than the critical difference (1.76) at 0.05 level of significance. Whereas no significant difference was seen in Senior & Junior International (0.33), & Senior & Junior (1.34) National level of Weightlifters as the obtained mean difference was less than the critical difference (1.76) at 0.05 level of significance.

TABLE 6
POST HOC (LSD) TESTS OF SPORTS COMPETITION ANXIETY OF FEMALE WEIGHTLIFTERS
AT DIFFERENT LEVELS OF PARTICIPATION

Group Mean Female				MD	CD
Senior International (N=10)	Junior International (N=10)	Senior National (N=10)	Junior National (N=10)		
18.30	17.70			0.60	2.16
18.30		18.20		0.10	
18.30			16.80	1.50	
	17.70	18.20		0.50	
	17.70		16.80	0.90	
		18.20	16.80	1.40	

*Significant at 0.05 level

Table 6 displays the result of all the categories of Female Weightlifter. It can be concluded that no significant difference was found between Weightlifters of any level of participation as the obtained mean difference was less than the critical difference at 0.05 level of significance.

To find out the significance difference among different level of participation of male & female Weightlifters Post-Hoc comparisons i.e. Scheffe's test was applied which are presented in Table 3.



TABLE 7
POST HOC (SCHEFFE'S) TESTS OF SPORTS COMPETITION ANXIETY FOR INTERACTION BETWEEN MALE AND FEMALE WEIGHTLIFTERS AT DIFFERENT LEVELS OF PARTICIPATION

Mean	Male (N=15)	Female (N=10)	M.D.	C.D.
Senior International	18.40	18.30	0.10	2.83
Junior International	18.73	17.70	1.03	
Senior National	22.60	18.20	4.40*	
Junior National	21.26	16.80	4.46*	

*Significant at 0.05 level

Table 7 depicts the interaction result for all the categories of Male & Female Weightlifters. It was observed that significant difference has been found interaction between Senior National (4.40) & Junior National (4.46) male and female Weightlifters as the obtained mean difference was greater than the critical difference (2.83) at 0.05 level of significance. Whereas no significant difference was found interaction between male & female at Senior International (0.10) & Junior International (1.03) male and female Weightlifters as the obtained mean difference was less than the critical difference (2.83) at 0.05 level of significance.

CONCLUSION AND DISCUSSION OF FINDING

Perusals of mean score of Senior and Junior International and National male & female Weightlifters in level of anxiety were standing in interval of 17 to 24 that characterized moderate level of anxiety. Therefore Weightlifters of different level of participation i.e. Senior International, Junior International, Senior National and Junior National male & female in anxiety are moderate which indicate that, all Weightlifters are neither relaxed nor over-anxious, at the time of competition.

The significant difference has been found in levels of participation, sex (male and female) and interaction between male and female among various level of participation.

On the basis of level of participation, it was found that Senior National Weightlifters having higher level of anxiety followed by Junior National, Senior International and Junior International whereas no significant difference was found between senior and Junior International, Senior International and Junior National, and Junior International and Junior National.

When the weightlifting group of males and females were examined on the basis of sex (male and female) it was found that males have higher level of anxiety in comparison to female.

In comparison amongst males only, at different level of participation, the senior and Junior National Weightlifters had equal and high level of anxiety as compared to senior and Junior International Weightlifters who also have equal level of anxiety and no significance difference was found between them. But significant difference was found between national and international level of Weightlifters.

In comparison amongst females only, at different level of participation no significant difference was found.

An analysis was done between males and females at different levels of participation, Senior National male and Junior National male had higher anxiety level than Senior National female and Junior National female respectively whereas no significant level of anxiety has found between international male and female Weightlifters.

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