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REVIEW ARTICLE

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A Study of Anxiety Level of Athletes of Different Games

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INTRODUCTION:-

Anxiety is considered as a block to sports activities. A person who suffers from anxiety may not be able to devote his full energy in the performance of sports. It is, therefore, considered by many scholars that anxiety interferes in sports performance. This notion is however, based on an erroneous understanding of the role of anxiety. In fact, anxiety might deter learning or performance or might also stimulate it.

No doubt that a certain amount of anxiety is needed for peak performance. But excessive anxiety may lower the performance. A number of researchers have reported that anticipation of involvement by athletes in competition leads to elevate state of anxiety level. This manifests itself in both experienced and inexperienced competitors. Some other researchers have also shown that skilled athletes are less anxious immediately before and during competition than athletes of lower skill.(Sharon Huddleston and Diana , 1970).

Games and Sports are becoming important day by day. Now-a-days, these are taking the shape of a profession. So, it has become necessary to investigate the factors that affect the sports performance. There are many factors which enhance the learning in the field of sports and there are many other such factors which slow down the process of learning. These factors are generally involved in the physiological or mental conditions of the individuals like anxiety , time of day, temperature, effect of drugs etc. If these factors are not properly controlled , these can affect the performance in a negative way. But , if these are properly managed then they become helpful elements in learning. So, it is necessary to understand their effect on the sports performance and learning process.

Anxiety has been defined in a variety of ways, such as “A disturbed state of the body” (Johnson, 1981) ; “Emotional reactivity” (Hardman and Johnson, 1966) ; “Unrealistic and unpleasant state of body and mind” (Pikunar , 1969) ; “Nervousness” (Ekegami, 1970).

In medical terminology, anxiety is defined as “apprehension of danger accompanied by restlessness and a family of oppression in the epigastrium”.

Some physiological reactions such as sweating, drying of the mouth , rapid shallow breathing and dizziness , increased heart- beat and mental tension are associated with anxiety.

Pre-competitive anxiety consists of a particular intense anxious reaction immediately preceding an event resulting insufficiency or incapacity. This is naturally more frequent in sports where every event ends with an immediate result. The player may have lowered mental elasticity, incapacity for greater concentration, involuntary reduction in analytical capacity in addition to variation in heart – rate, respiration, blood pressure. Thus, higher level of pre-start anxiety may make the players rigid, inputs and reduce their analytical capacity in taking the decision of the game. This study is therefore, undertaken to find out if the pre-competition anxiety level-differ in team games and individual games. The result of the study would help the coaches in taking appropriate measures to reduce the anxiety so that the players can perform better in the field.

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1. To study the pre-competitive anxiety level of individual games and team games.
2. To compare the pre-competitive anxiety level between Handball players and Swimmers.
3. To compare the pre-competitive anxiety level between Handball players and Cyclists.
4. To compare the pre-competitive anxiety level between Softball players and Swimmers.

5. To compare the pre-competitive anxiety level between Softball players and Cyclists.

6. To compare the pre-competitive anxiety level between Handball players and Softball players.

7. To compare the pre-competitive anxiety level between Swimmers and Cyclists.

RESEARCH METHODOLOGY

To make comparative study of anxiety level of sportsmen of individual and team games who participated in inter-college tournaments held at K.U.K. dated – 03.09.2012 to 21.11.2012, 60 players under 25 years age-group were taken as sample. This sample consists of players of two team games, namely Softball (15 players) and Handball (15 players) and two individual games, namely Swimming (15 players) and Cyclists (15 players) for the collection of the primary data. The investigator used the Sports Competition Anxiety Test (adult form) of Rainer Martens (1977) to measure pre-competition anxiety level. This test consists of 15 statements which ask players to respond how usually they feel when they are competing in sports and games. The inventory has no time- limit, normally , 5 minutes is required for its completion. Primary data was collected 1 hour before each competition. They were asked to sit for 3 minutes to cool down.

Then necessary instructions were given before presenting the questionnaire to subjects. Same procedure was followed every time. The schedule of competition is as follows:

Schedule

Inter- College Competition

Games	Date	Place
Swimming	03.9.12 to 05.9.12	K.U. Kurukshetra
Cycling	05.10.12 to 06.10.12	K.U. Kurukshetra
Handball	06.10.12 to 10.10.12	K.U. Kurukshetra
Softball	30.10.12 to 31.10.12	K.U. Kurukshetra

Scoring:

In A form of SCAT , all the 15 test items are rated on 3 points scale by the subjects , viz 1. Never 2. Sometimes 3. Always.

The 10 test items (2,3,5,6,8,9,11,12,14,15) are scored according to the following directions, whereas the spurious items (1,4,7,10,13) are not scored. I point for never, 2 points for sometimes, 3 points for always. Scoring for items 6 and 11 is reversed according to the following keys I point for always; 2 points for sometimes, 3 points for never.

Thus, the range of possible SCAT score extends from 10 to 30.

SCAT – A Norms

SCORES	GROUPING
25 – 30	Highly Anxious
18 – 24	Above Average
12 - 17	Average
Less Than 12	Less than Normal

STATISTICAL TECHNIQUES USED:

The obtained data was analyzed by applying the statistical techniques mean, standard deviation and t-ratio.

RESULTS AND FINDINGS OF ANXIETY DIFFERENCES

Table - 1

Highlight of the Level of Anxiety of the Players of different Individual and Team Games

Name of games	mean anxiety	SD
Swimming	17.33	2.41
Cycling	18.60	3.18
Handball	16.87	2.28
Softball	19.27	3.02

It can be observed from the Table-1, mean pre-competition anxiety score of Swimming (individual event) is 17.33 and SD is 2.41 which generally shows the anxiety level is average in swimmers of individual games. Mean score of cycling (individual event) is 18.60 with SD 3.18. In general, players of this individual event have little above to average anxiety level.

In case of Handball (team games) mean score of anxiety is 16.87 with the SD of 2.28 , which again shows that level of anxiety is average . Mean anxiety of Softball (team games) is 19.27 with SD of

3.02 ; which shows that these players have above average anxiety level.

In general, it can be concluded that players of Cycling and Softball have above average anxiety level and the players of Swimming and Handball have average anxiety level. But, the mean value of anxiety level in the case of Softball and Cycling is very little above average.

Table-2

Means , SD and t-ratio between Handball Players and Swimming Players

GAMES	MEAN	SD	NO	SE_D	t-ratio
Swimming	17.33	2.41	15		
				0.856	0.521
Handball	16.87	2.28	15		

It is clear from the Table-2 that mean scores of Swimming (individual event) and Handball (team game) players are found to be 17.33 and 16.87 respectively with standard deviations of 2.41 and 2.28. The SE_D and t-ratio for the Swimming and Handball players come out to be 0.856 and 0.521 respectively. Since the t- ratio is less than the table value against 0.98 degrees of freedom at 0.5 level of significance. The difference between mean scores is not significant.

So the hypothesis that there does not exist a significant difference between mean scores of Swimming and Handball players in respect of pre-competition anxiety level is retained.

Table-3

Means; SD and t-ratio between Handball Players and Cycling Players.

GAMES	MEAN	SD	NO.	SE_D	t-ratio
Handball	16.87	2.28	15		
				1.009	1.72
Cycling	18.60	3.18	15		

It can be observed from the Table-3 that mean scores of Handball (team game) and Cycling (individual games) are 16.87 and 18.60 with standard deviations of 2.28 and 3.18 respectively. The SE_D and t-ratio come out to be 1.009 and 1.72 respectively.

Since the t-ratio is less than the table value against 0.98 degree of freedom at 0.5 level of significance , the difference between mean scores is not significant. Hence, the hypothesis that there does not exist a significant difference between mean scores of Handball players and Cycling players in respect of pre-competition anxiety level is again accepted.

Table-4

Means ; SD and t-ratio between Softball Players and Cycling Players

GAMES	MEAN	SD	NO.	SE_D	t-ratio
Cycling	18.60	3.18	15		
				1.33	0.59
Softball	19.27	3.02	15		

From the Table-4, it can be seen that the mean scores of Cycling (individual game) and Softball (team game) players are 18.60 and 19.27 with standard deviations of 3.18 and 3.02 respectively. It has SE_D of 1.33 and t-ratio come out to be 0.59 respectively.

As the t-ratio is less than the table value at 0.5 level of significance, the difference between mean scores of Cycling and Softball players is not significant.

Hence, the hypothesis that there does not exist a significant difference between mean scores of Softball players and Cycling players in respect of pre-competition anxiety level is retained.

Table-5

Means; SD and t-ratio between Softball Players and Swimming Players.

GAMES	MEAN	SD	NO.	SE_D	t-ratio
Softball	19.27	3.02	15		
				0.998	1.94
Swimming	17.33	2.41	15		

It can be observed from the Table-5 that mean scores of pre-competition of Softball (team game) and Swimming (individual game) players came out to be 19.27 and 17.33 with standard deviations of 3.02 and 2.41 respectively. The SE_D and t-value come out to be 0.998 and 1.94 respectively.

Since the t-ratio is less than the table value at 0.05 level of significance, the difference in the mean scores of anxiety level is not significant. So the hypothesis that there does not exist a significant difference between Softball players and Swimming players in respect of pre-competition anxiety level is retained.

Table-6

Means ; SD and t-ratio between Handball Players and Softball Players

GAMES	MEAN	SD	NO.	SE_D	t-ratio
Handball	16.87	2.28	15		
				0.97	2.47
Softball	19.27	3.02	15		

It can be found from the Table-6 that the mean scores of pre-competition anxiety of Handball (team game) and Softball (team game) players are 16.87 and 19.27 with standard deviations of 2.28 and 3.02 respectively.

The t-ratio for Handball and Softball players comes out to be 2.47. Since t-value is more than the table value at 0.5 level of significance. The difference between the mean scores is significant. Hence the hypothesis that there does not exist a significant difference between mean scores of Handball and Softball players in respect of pre-competition anxiety level is rejected.

Table-7

Means ; SD and t-ratio between Swimming Players and Cycling Players.

GAMES	MEAN	SD	NO.	SE_D	t-ratio
Cycling	18.60	3.18	15		
				1.03	1.23
Swimming	17.33	2.41	15		

It can be seen from the Table-7 that mean scores of Cycling (individual game) and Swimming (individual game) players are 18.60 and 17.33 with standard deviations of 3.18 and 2.41 respectively. The SE_D and t-ratio come out to be 1.03 and 1.23 respectively.

Since the t-ratio is less than the table value at 0.05 level of significance, the difference in the mean scores is not significant. Hence, the hypothesis that there does not exist a significant difference between mean scores of Cycling and Swimming players in respect of pre-competition anxiety level is retained.

FINDINGS OF THE STUDY

1. In general, players of different individual and team games do not differ in pre-competition anxiety level.
2. There is no significant difference in the pre-competition anxiety level between Handball and Swimming players.
3. Handball and Cycling players do not differ significantly in pre-competition anxiety level.
4. There does not exist significant difference in pre-competition anxiety level between Softball and Swimming players.
5. Softball players and Cycling players do not differ significantly in pre-competition anxiety level.
6. Handball and Softball players differ significantly in pre-competition anxiety level.
7. Cycling players and Swimmers of individual games also do not differ significantly in pre-competition anxiety level.

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