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REVIEW ARTICLE

A STUDY OF ANXIETY LEVEL OF SPORTSMEN

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A Study of Anxiety Level of Sportsmen

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INTRODUCTION:-

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 performance and learning process.

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 means 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.

Anxiety has been defined in a variety of ways, such as “A distributed state of the body” (Johnson, 1951) ; “Emotional reactivity” (Hardman and Johnson, 1952) ; “Unrealistic and unpleasant state of body and mind” (Pikunar , 1969) ; “Nervousness” (Ekegami, 1970).

In medical terminology, anxiety is defined as “appreciation of danger accompanied by restlessness and a family of appression 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 .

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.

REVIEW OF RELATED LITERATURE:

The anxiety response is a complex emotion that produces physiological changes to prepare us for fight or flight to defend ourselves from the threat or flee from it was quoted by Walter-Cannon (1932). Keeley and Harcourt (2001) in their study “Occupational Anxiety: A Study of the New Zealand and Reserve Bank” revealed that stress is caused by heavy work demands in the job itself, which the unskilled employee with little control over how the work is done, cannot adapt to or modify.

Kulkarni G.K. (2006) in an article “Burnout” published in Indian Journal of Occupational and Environmental Medicine 2006 said that rapid change of the modern working life is associated with increasing demands of learning new skills, need to adopt to new types of work, pressure of higher productivity and quality of work, time pressure and hectic jobs are increasing stress among the workforce. Further he added that privatization and globalization has ignited mergers, acquisitions, and precarious employment has critically affected the domestic industry. Stress that an employee encounters affects the productivity of organization (Bhattacharjee, 2009)

RESEARCH METHODOLOGY:

To make comparative study of anxiety level of sportsmen of individual who participated in inter-college and team games 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 of (adult form) of Rainer martens (1977) to measure trait anxiety. 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. The 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 Competitions

Games	Date	Place
Handball	06.10.12 to 10.10.12	K.U. Kurukshetra
Softball	30.10.12 to 31.10.12	K.U. Kurukshetra
Cycling	5.10.12 to 6.10.12	K.U. Kurukshetra
Swimming	3.9.12 to 5.9.12	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. 1 point for never, 2 points for sometimes, 3 points for always. Scoring for items 6 and 11 is reversed according to the following keys 1 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 were analyzed by applying the statistical techniques mean standard deviation and T-ratio.

RESULTS AND FINDINGS OF ANXIETY DIFFERENCES

Table

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	19.28	3.02

It can be observed from Table mean pre- competition anxiety scores 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 19.28 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

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	17.87	2.28	15		

It is clear from the table that mean scores of swimming (individual event) and Handball (Team Game) players are found to be 17.33 and 16.87 respectively with SD of 2.41 and 2.28.

So , we can say that swimming and handball players do not differ significantly in their level of anxiety. So the hypothesis that there does it.

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.

Table

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	18.6	3.18	15		

It can be observed from the table that mean scores of handball (team game) and cycling (individual games) are 16.87 and 18.6 with standard deviation of 2.28 and 3.18 respectively. The t-ratio comes out to be 1.72.

Since the t-ratio is less than the table value at 0.5 level of significance , the difference between mean scores is insignificant. Hence, the hypothesis that there does not exist a significance difference. Handball players and

cycling players in the level of pre- competition anxiety is again selected.

Table

Means ; SD and t-ratio between Softball Players and cycling players

GAMES	MEAN	SD	NO.	SE _D	t-ratio
Cycling	18.6	3.18	15		
				1.33	0.59
Softball	19.27	3.02	15		

From the table , it can be seen that the mean scores of cycling (team game) and handball (individual games) are 18.6 and 19.27 with standard deviation of 3.18 and 3.02 respectively. It has standard error value of 1.33 and t-ratio comes out to be 0.59.

As the t-ratio is less than the table value at 0.5 level of significance (1.96) , the difference in mean scores of cycling and softball players are not significant or it cannot be said that cycling and softball players do not differ in respect of their pre-competition anxiety level .

Hence, the hypothesis that there does not exist a significance difference in anxiety level of softball players and cycling players is retained. The players irrespective of their different games have same level of anxiety level.

Table

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 that mean scores of anxiety of softball (team game) and swimming (individual games) players came out to be 19.27 and 17.33 with standard deviation of 3.02 and 2.41 respectively. The t-value came out to be 1.94.

Since the t-value is less than the table value at 0.05 level of significance (1.96), the difference in the mean anxiety is not significant. The hypothesis that Softball players and swimming players do not differ from the level of their mean anxiety is retained.

Table

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		
				1.009	1.72
Cycling	18.6	3.18	15		

It can be found from the table that the mean scores of pre-competition anxiety of handball (team game) and Softball (individual games) players are 16.87 and 19.27 with standard deviation 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 of significance at 0.5 level of significance. The difference between the mean scores is significant. In other words, we can say that handball and softball players differ in respect of their pre-competition anxiety level. Hence our hypothesis that the players of both the team games do not differ in respect of their anxiety is rejected.

Table

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

GAMES	MEAN	SD	NO.	SE _D	t-ratio
Cycling	18.6	3.18	15		
				1.33	0.59
Softball	19.27	3.02	15		

It can be seen from the table that mean scores of cycling (individual game) and swimming (individual games) players are 18.6 and 17.33 with standard deviation of 3.18 and 2.41 respectively. The t-value is 1.23.

Since the t-value is less than the table value at 0.05 level of significance, the difference in the mean scores is insignificant. Hence, the hypothesis that there does

not exist a significance difference between cycling and softball players in the level of their pre-competition anxiety is retained.

CONCLUSION:

It is crystal clear that there is a positive and significant relationship between anxiety and the practices of yoga & meditation. It is moral responsibility of the organizations to implement upon such practices that would surely build right attitude and outlook of the problems at the work place to the employees. Anxiety can be minimized if companies take the right initiatives at right time in right direction. Anxiety-free employees perform better, work harder, happier and are more committed to the organization as compared to their counterparts.

ANALYSIS:

These can be summed up as under:-

1. In general, players of different games do not differ in the level of pre-competition anxiety.
2. There is not found significant difference in the level of pre-competition anxiety level between Handball and Swimming Players.
3. Handball and Cycling players do not differ in the level of their pre-competition anxiety.
4. There does not exist significant difference in level of the pre-competition anxiety between softball and swimming players.
5. Softball players and cycling players do not differ in the level of their pre-competition anxiety.
6. Handball and softball Players differ significantly in the level of pre-competition anxiety.
7. Cycling Players and swimmers of individual games also do not differ in the level of pre-competition anxiety undertaken.

BIBLIOGRAPHY

- ANDERSON, F.H. AND ASHTON, M.K., "Analysis of Anxiety levels before and After Badminton Competition", International Journal of Sports Psychology, Vol. 12, N-1, 1981, Page-23.
- C. D. Spielberger (Ed.) Anxiety and Behaviour, New York, 1966.

- CRATTY , J. BRYANT , "Movement Behaviour and Motor Learning" , by Lea and Fiberger 1973, Page 288.
- CRATTY , J. BRYANT , "Psychology in Contemporary Sports" , by Lea and Fiberger 1979.
- DALE , HOLLINGS WORTH BARBARS , "The effects of Performing Goals and Anxiety on Learning A Gross Motor Task" Dissertation Abstract International , Vol. 35, 1974 No. 1 , Page 245 – A.
- GRAFTON , TOMMY DOYLE , "The Relationship of General Anxiety to the Performance of selected motor task". Dissertation Abstract International, Vol. 31, 1971, No. 10, Page 5177 – A.
- GRIFFIN, MARRY ROLAND, "An analysis of state and trait Anxiety experience in sports competition by women at different age levels," Dissertation Abstract International, Vol. 32, 1971, No. 12, 1972, Page 3758 – A.
- GRIFFIT, T.J. STEEL , D.H. VACCARO, P AND KARPMAN, "The Effects of Relaxation techniques on Anxiety and Underwater performance", International Journal of Sports Psychology, Vol. 12, No. 2, 1981, Page 176.
- GRINKER, R.R. & Spiegel, J.P. Men Under Stress "Philadelphia " Blakiston , 1995".
- GUPTA , S.P. (2010) "Principles of Statistics" , Susltan Chand and Sons , P.42 – 7.29.
- HAMMER Master Jhon and Burton (2001) "Stress , Apprehension and copying revised examing the anticident of competitive state anxiety with endurance athlete." The sports psychologist volume 15.1, Page No. 66 to 89.
- HOOCH , P.H. & ZUBIN , J. (Eds.) "Anxiety" New York : Grune HOOCH, P.H. & ZUBIN, J.(Eds.) "Anxiety" New York : Grune & Stratton, 1990.
- KAMLESH, M.L. (2009)" Methodology of Research in Physical Education " Education Metropolition Book Co., New Delhi.
- KAMLESH, M. L. (2008) "Psychology in Physical Education and Sports", Metropolition Book Co. Netaji Subhash Marg , New Delhi.
- MARTENS, R : ANXIETY AND MOTOR BEHAVIOUR" A review Journal : Motor Behaviour , 1977.
- MARTIN , BRACLAY , "Anxiety and Neurotic Disorder" by John Villy and Sons, Inc. 1971, Page 7.
- MARTIN, THOMAS, ROBERT, "A comparison of the effect of trate Anxiety levels on the performance of a complex motor response time task as a function of pre-stimulus delay "Dissertation abstract international , Vol. 38, No. 12, 1978, Page 72.
- SINGER, R.N. "Coaching, Athletes and Psychology". New York : McGraw Hill Book Co., 1972.
- SINGH, A.J. "Sports Psychology and Physical fitness" Reports & Papers, Pub. By L.N.C.P.E: Gwalior , Oct. 7 to 11, 1983.

APPENDIX – I

SPORTS COMPETITION ANXIETY TEST

Name _____
 Age _____ Sex _____
 (Male/Female) _____
 _____ Game _____
 _____ State to which you belong _____
 _____ Date _____
 _____ Level of participation _____

 Experience _____ of _____ participation _____ in
 game/sport _____

DIRECTIONS:- Below are some statements about how persons feel when they compete in sports and games. Read each statement and decide if you had these feelings never or always when you compete in sports and Games. If your choice is never cross "A" if your choice is sometimes cross "B" and if your choice is "C". There are no right or wrong answers. Do not spend too much time on any statement. Remember to choose the word that describes how you usually feel when competing in Sports and Game.

Now Start

		Never	Some time	Always
1.	Competing against others is socially enjoyable.	A	B	C
2.	Before I compete, I worry about not performing well.	A	B	C
3.	Before I compete, I feel uneasy.	A	B	C
4.	I am a good sportsman, when I compete.	A	B	C
5.	When I compete, I worry about making mistakes.	A	B	C
6.	Before I compete, I am calm.	A	B	C
7.	Setting a goal is important, when competing	A	B	C
8.	Before I compete, I get.	A	B	C
9.	Just before competing, I notice my heart beating faster than usual.	A	B	C
10.	I like to compete in games that demand considerable physical energy.	A	B	C
11.	Before I compete, I feel relaxed.	A	B	C
12.	Before I compete, I am nervous.	A	B	C
13.	Team sports are more exciting than individual sports.	A	B	C
14.	I get nervous waiting to start the game.	A	B	C
15.	Before I compete, I usually get up tight.	A	B	C