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A COMPARATIVE STUDY ANXIETY OF NATIONAL LEVEL MALE THROWERS OF DIFFERENT THROWING EVENTS

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ABSTRACT

The study was only applied for sports competition anxiety questionnaire prepared by RAINER MARTENS (1977) and subjects available for the test especially for the national & All India inter university athletes who represent the level of groups. Male Throwers: National, All India Inter-universities players aged between 18-25 years. Psychological variable i.e. anxiety did not show significant difference with different throwing events.

KEY WORDS: anxiety, national level, male throwers

INTRODUCTION

Throws (Shot-put, Discus, Javelin, Hammer) are field events in athletics. They measure explosive strength (power) in a human being. The throws were included in the Olympic Games at different times as Short put and Discus throws were included in the 1896 Athens Olympic Games. The Javelin and Hammer throws were included in the 1900 London Olympic. The throwers of Discus, shot put, Javelin and Hammer differ greatly in physique from the other athletes. As a group, they are taller and heavier, with longer arms in relation to their legs. They have broader shoulders and broader hips. Even their trunk size is somewhat fatter than the track athletes. Their proportion of legs to the trunk is similar to that of middle distance runners. The Discus throwers are the largest of all the athletes. Their arms in particular are



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Exceptionally larger, being not only broader in both muscle and bone, relative to the muscle and bone in the legs but also longer than the legs.

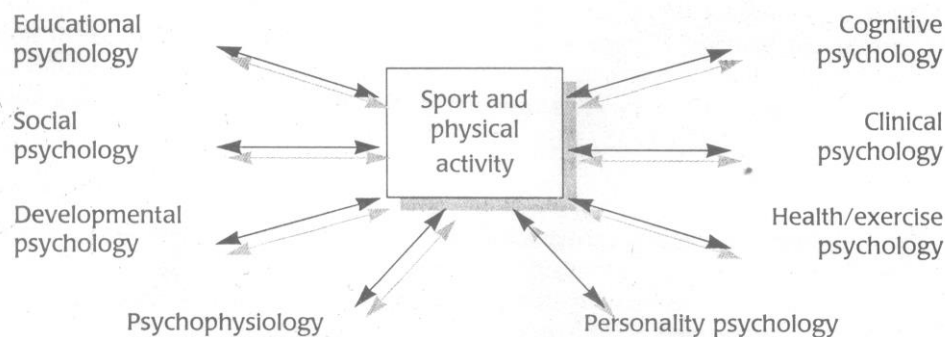
Sports Psychology: Sport psychology involves properly selecting and motivating athletes so, that each participant competes at his or her capacity. To do this, the athletes must use strategies to "psych out" opponents, reduce or cope with extraordinary levels of stress, prevent drug abuse, develop successful team strategies, and teach and learn skills. Clearly, psychology is a central component of sport competition. Studying and using psychology in a sport situation gives one the ability to describe behavior ("athletes on teams that win consistently are more friendly toward one another than athletes on teams that consistently lose"), to explain behavior ("the upset may have occurred because the favored team was under aroused; the underdogs were up for the game and ready to prove that they could beat a worthy opponent"), and to predict behavior ("if a coach teaches in an angry manner, the athlete will not retain the information because of anxiety and inability to concentrate on the information")

The late U.S. Senator Adlai Stevenson said, "We can chart our future clearly and wisely only when we know the path which has led to the present." Indeed, understanding the foundations and future directions of sport psychology requires information about its history, which is far older than most students and scholars in the sport sciences realize. As early as 1897, Norman Triplett, a psychologist at Indiana University, published (in the American Journal of Psychology) what is believed to be the first experiment directly related to sport psychology. Triplett investigated a phenomenon that we now call social facilitation, the favorable effect of observers on one's performance. He noticed that cyclists performed faster when competing against other cyclists, and faster with other cyclists on a tandem bicycle than when cycling alone. Triplett explained that the presence of others (competitors, co-actors, audience members) results in the release of energy and incentive for increased effort. In another study (published in Popular Science Monthly in 1899) E. W. Scripture, a psychologist at Yale University, concluded that participating in sport could lead to desirable personality traits. The contemporary view that



Competitive athletics builds character has its roots in Scripture's research. But the recognized pioneer of sport psychology, at least in the United States, is Coleman Roberts Griffith. Referred to as the "father of sport psychology in America," Griffith is acknowledged as the first person to conduct systematic and frequent sport psychology experimentation over a period of several years (Kroll & Lewis 1970; Wiggins 1984).

Griffith developed the first sport psychology laboratory-the Athletic Research Laboratory-



at the University of Illinois in 1925, but his research on the psychological factors that affect sport performance began as early as 1918 (Gould & Pick 1995).

ANXIETY: Spielberger (1972) was probably the first to categorize anxiety as having either state or trait qualities. State anxiety (A-state) is transitory in that it fluctuates over time. Martens et al. (1990) define competitive state anxiety as conscious feelings of apprehension and tension due mainly to the individual's perception of the present or upcoming situation as threatening. Often, though not always, anxiety is accompanied by activation of the autonomic nervous system, which is why it is confused with arousal. Still, researchers commonly measure state anxiety by its somatic (physiological) and cognitive (psychological) properties.

Trait anxiety (A-trait), on the other hand, is a relatively stable and acquired behavioral disposition, often depicted as a personality trait. A-trait predisposes an individual to perceive a wide range of non-dangerous circumstances as threatening or dangerous. Further, the individual



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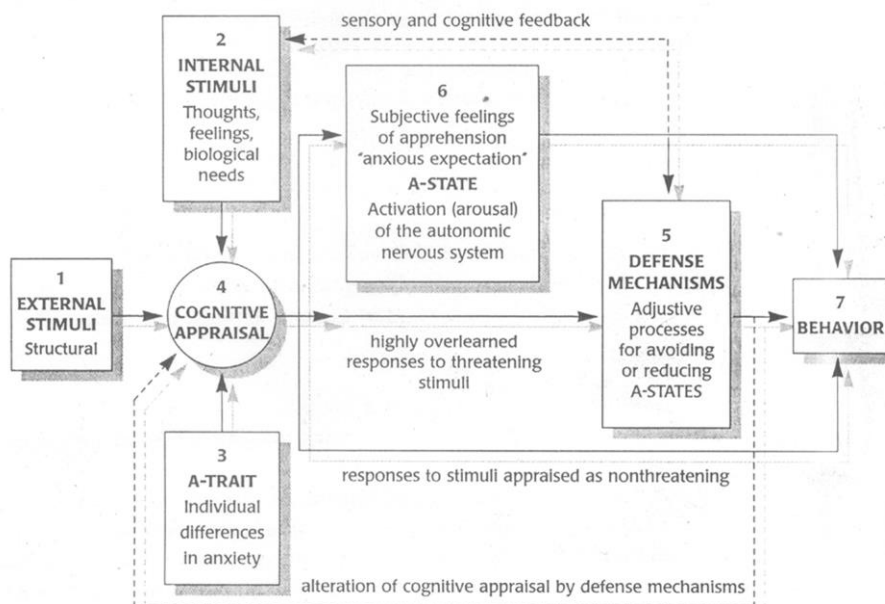
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With high A-trait tends to demonstrate A-state reactions beyond what is necessary, given the present sense of danger. Thus, high A-trait athletes will likely become more anxious before a competitive event than low A-trait performers.

It is often reported in the sports media that some athletes become literally sick to their stomachs before every game (so much for the value of a proper pregame meal). It is likely that athletes who experience acute illness before a contest, a sign of extreme state anxiety, have high A-trait. Pregame nausea or vomiting is an example of why high A-state is not desirable. In addition to negative emotional and physiological ramifications, anxiety has also been shown to have a deleterious effect on motor performance. Weinberg and Hunt (1976) and Anshel et al. coordination in skilled movements decreases with high A-state.





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Sports psychology is a recent but extremely important branch of the modern science of sports. In fact the role of psychology has given birth to a new branch of psychology, which is called 'Sports Psychology' or 'Psychology of Sports'.

Anxiety plays a very important role in our day to day life as well as in competitive situations: Anxiety is of four types:

1. **Somatic Anxiety:** This is reflected in physical symptoms i.e. heart rate, blood pressure etc.
2. **Cognitive Anxiety:** It is related to psychological systems like irritability, lack of concentration, lowering of confidence etc.
3. **Trait Anxiety:** Relates to basic personality trait involving anxiety. The person here is temperamentally of the anxious type.
4. **State Anxiety:** It takes place in specific situation otherwise the individual is emotionally quite stable.

TOOLS USED

RAINER MARTENS Comprehensive Anxiety Test has been taken to assess the anxiety this questionnaire.

PROCEDURE AND METHODOLOGY

The study was only applied for sports competition anxiety questionnaire prepared by RAINER MARTENS (1977) and it may not give cent percent accuracy in its results. The limitation was the number of subjects available for the test especially for the national & All India inter university athletes who represent the level of groups.

For the purpose of the study four groups of subject were formed Each group comprises of 15 male throwers and each throwing event selected from the total samples for the present study which were collected from National Camp, National tournament, All India Inter Varsities Championship. All the selected samples re-presented their tournaments.



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Table - 1

Analysis & Variance on Dependent Variables of Competitive Anxiety in Different Throwing Event

	Sum of Square	Df	Mean Square	F	Sig.
Explained	492.533	3	163.511	2.384	0.072
Residual	7871.933	116	67.729		
Total	8365.467	119	70.318		

Since the calculated F value is lesser than tabulated F value. The insignificant difference was found in the Competitive Anxiety of shot-put, discus and javelin throwers.

Table - 2

Analysis & Variance on Dependent Variables of Trait Anxiety in Different Throwing Event

	Sum of Square	Df	Mean Square	F	Sig.
Explained	7.750	3	22.822	2.48	0.063
Residual	1110.296	116	9.560		
Total	1175.977	119	9.139		

Since the calculated F value is lesser than tabulated F value. The insignificant difference is existing in the mean trait anxiety of different throwing events. The mean square of trait anxiety is 22.822 and 9.560 for both explained and residual groups respectively.



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RESULTS AND CONCLUSION

The subjects for the study were fifteen male athletes selected randomly, from a population of all the athletic players who participated at the inter-university tournament of India. The age of the subjects ranged between 18-25 years. For purpose of validation of data the validation of the tests was assumed as they have been extensively employed for evaluation and research purposes, which was evident from literature. The investigator collected data on the selected parameters with the help of expert colleagues; especially in recording anthropometric parameter help of local coaches and other qualified teachers were also sought at different places wherever the data was collected. All the subjects were explained the purpose of the investigation. The principals of the respective colleges were informed of the investigator's intent to collect data or various athlete Coaches and physical education teachers were requested to make the subjects available. All the concerned coaches and physical education coaches not only made the subjects available, but also actively cooperated and assisted in the collection of data. They were instrumental in motivating the athletes to participate whole heartily in the project. The players were explained the testing procedure which were unfamiliar to them and gave practical demonstration in most of the measurement and testing techniques. If they finished they were given a chance to try out once or twice the tests study and the need to collect data on them. The descriptive analysis was carried out in order to present a general trend of the traits revealed by the data. Sum of square, mean square and F test was computed in order to determine the cumulative effect of selected variables with the dependent variables of different throwing events.

Different throwers (i.e. shot-putter, discus throwers, hammer thrower, javelin thrower) were compared on competition anxiety, for high physical fitness fit. Low physically fit as well as for the combined group, the results shows that no significant difference between both explained



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And residual group was found with regard to competition anxiety, whereas explained and residual group inter-university players did not differ in competition anxiety level.

It is often reported in sports that some athletes become literally sick to their stomachs before every game. It is likely that athletes who experience acute illness before a contest, show a sign of extreme state anxiety. In addition to negative emotional and physiological ramifications, anxiety has also been shown which has a deleterious effect on motor performance. Weinberg and Hunt (1976) and Anshel et al. (1993) have shown through electromyography, a measure of muscle tension, that muscular co-ordination in sallied movements decreases milk high anxiety.

Psychological variable i.e. anxiety did not show significant difference with different throwing events.

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