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## Research Article

### PSYCHO-PHYSICAL STATE AS PREDICTOR OF ROWING PERFORMANCE

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#### ABSTRACT

The purpose of the study was to determine the relationship between psycho-physical state and performance of rowers. Ninety rowers (forty five males and forty five females) were the subjects of this study who had participated in All India Inter University Rowing Championship held at Sukhna Lake, Chandigarh their age ranged between 18 to 25 years. The subjects were administered Psycho-physical state of sportsman scale (2001) for measuring the psychological and physical level of players. The result of present study indicates that there was significant relationship between psycho-physical state and the performance of rowers.

##### Key Words:

Rowing, Psycho-physical state

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## INTRODUCTION

Man is difficult organism to understand what is he and what he is not has always been a living question. Is he soul? Is he mind? Is he body, differently or all put together? A dispute has always been going on between the body and the mind. Do mind and body exit independently? Are they separate identities? Is there any such organ in the body called mind or it is only a myth? The fact however is that body and mind are two facts of the same being called man. Rowing is a strength-endurance type of sport and competition performance depends on factors such as aerobic and anaerobic power, psychological variables, motor abilities, rowing technique and tactics many other variables. In rowing, rowers need physical strength to achieve high power per stroke, endurance to sustain this power, as well as psychological skills (Secher 1993; Steinacker *et al.* 1986). The true challenge in rowing is the competition between rower and the race course, rower and the clock, but *primarily* between rower and their mind. Success in rowing is all about rowers physical as well as psychological ability to handle the pain and fatigue of oxygen debt in competition pressure. (Castaneda, B., & Gray, R., 2007). The mental process and physical expressions are beautifully inter-woven in the mechanism of the “whole man” and “wholeness of man. The close body-mind relationship can easily be deduced from the interdependence of the mental and the physical activities especially in emotional situations Various studies reveal that for good performance, good psychophysical state is

vital. Williams (1980) stated that, “We do not think with brain alone. The term mind is a name not for separate mental substance, but for a function of the individual”. Hence for the excellence performance and to win the game both mind and body should be in the best state.

#### Objectives of the Study

- To assess the relationship between psycho-physical state & sports performance of male rowers.
- To assess the relationship between psycho-physical state & sports performance of female rowers.

## METHODOLOGY

#### Subjects

Forty five male and forty five female rowers were the subjects of this study who had participated in All India Inter University Rowing Championship held at Sukhna Lake, Chandigarh.

**Tools Employed:** - The subjects were administered a questionnaire of psycho-physical state of sportsman scale developed by Eugene Walker and L.N.Dubey (2001) for measuring the psychological and physical level of rowers.

#### Test administration

#### Psycho-physical state of sportsman scale

There are 40 statements in the scale. Every statement has two alternative answers “yes” and “No”. Read the statement carefully and put the right mark in the box of the alternative

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answers indicating your feelings before you participate in any tournament. Allot one mark for every right marked response. Total the marks statewise and interpret the raw scores in terms of category of state. Use key for scoring.

**Statistical Analyses**

To find out the relationship between psycho-physical state and rowers performance product movement co-relation method was used. The level of Significance was set at 0.01 level ( $p < 0.01$ )

**RESULT AND DISCUSSION**

**Table 1** Relationship between Psycho-physical state and sports performance of male rowers.

Sr. No	Psycho-physical state of sportsman scale	Correlation coefficient	Level of significance
1	Psychological state	0.904	< .01
2	Physical state	0.867	< .01

Table 1 indicated that performance of male rowing players was significantly related to both the variables of Psycho-physical state of sportsman. These variables were Psychological state ( $r = 0.904$ ), Physical state ( $r = 0.867$ ) at .01 level of significance because their calculated values were found greater than the table value.

**Table 2** Relationship between Psycho-physical state and sports performance of female rowers.

Sr. No.	Psycho-physical state of sportsman scale	Correlation coefficient	Level of significance
1	Psychological state	0.889	< .01
2	Physical state	0.707	< .01

Table 2 indicated that performance of female rowing players was significantly related to both the variables of Psycho-physical state of sportsman. These variables were Psychological state ( $r = 0.889$ ), Physical state ( $r = 0.707$ ) at .01 level of significance because their calculated values were found greater than the table value.

**DISCUSSION**

The findings of this study demonstrate that a significant relationship between psycho-physical state and performance of male and female rowers. Male rowers scored significantly higher than female rowers on the basis of psychological and physical state.

It means that male rowers are psychologically more stable and physically more strengthen as compared to female rowers.

The male players performing at competition were more experienced and have shown a long duration involvement in the physical and mental training as compared to the female players. Therefore sports training programmes should be so designed for the competitors so that they would have to undergo physical as well as psychological training. Many studies in literature have investigated the performance capacities and variables which are likely to effect this. The findings of the present study are in line with Eloy A. Villegas have studied the correlation between optical parameters and psychophysical parameters for different values of defocus. Walker’s study which reported that athletes those had anxiety, stress, nervousness, feeling of defeat showed poor performance in sports. He advocated that good psychological and physical state is essential to win the game.

**CONCLUSION**

Thus it is concluded from whole result that male rowers were superior to female rowers in the psychological and physical performance. There was significant relationship between the psycho-physical state and the performance of male and female rowers.

**References**

1. Castaneda, B., & Gray, R. (2007). Effects of Focus of Attention on rowing Performance in Players of Differing Skill Levels: *Journal of Sport & Exercise Psychology* Vol 29(1) Feb 2007, 60-77
2. Steinacker, J. M. & Secher, N. H. (1993). Advances in physiology and biomechanics of rowing. *International Journal of Sports Medicine*, 14, S1-S2.
3. Williams (1980), Reply to Lane on "Mood and emotion in sport." *Perceptual and Motor Skills* Vol 92(3, Pt 2) Jun 2001, 1095-1098
4. Eloy A. Villegas, "Correlation between Optical and Psychophysical Parameters as a Function of Defocus", International, Optique Physiologique, Saint-Maur, France (BB, TB)
5. Walker (1981), "Psychological status and motor performance" Engle wood cliffs, New York

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