# Variorum Multi-Disciplinary e-Research Journal Vol.,-03, Issue-I, August 2012 A Comparative Study of Psycho-Physiological Effects on College Students in Nagpur City

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#### Introduction

Sports and Games are competitive in nature and meant for aseptic age group. The participation is mainly enjoyed by the talented and gifted youngsters. So the process of canalization of athletes into various sports and games should be according to their ability and interest. To reach the international competitive sports standees, one has to be well equipped in all aspects of a particular game. So each sports man has to be physically, physiologically and psychologically fit.

Psychology as behavioral science has made its contributions for improving sports performance. It has helped coaches to coach more efficiently and athletics to perform more efficiently.

#### ANXIETY

Anxiety is one of the greatest problems of modern trends scientific knowledge. Cultural, conflicts, economics and industrialization add to the problem of man, thus increasing the anxiety levee. Anxiety refers to that emotional state of mind where a fear of danger or loss of suffering a prominent feature. It generally arises as a result of fear for something unknown which creates tension and disturbance.

Physiological change takes place from participation in vigorous muscular fitness activities. As the Individual progression a conditioning programmer. The training effect on the individual's heart will be to show. The heart rates various with the activity the individuals are performing. An increased heart rate in accompanied by an increase in the amount of blood pump per beat and the magnitude of the stroke volumes depends on the functioned strength of the heart.

Blood pressure is the pressure inside the vessels of the body caused by the pumping action of the heart.

#### **Statement/Objectives of the Problem**

The purpose of the study "A Comparative Study of Psycho-Physiological Effects on College Students in Nagpur City."

#### **Delimitations**

- The study was confined to 40 students who participated in sport and other physical activities
  The study was restricted to the 20 Male students & 20 Female students. The study was restricted to one psychological variable like anxiety.
- 3. Rainer marten's questionnaire was used to assess the anxiety.
- 4. The study was delimited to two Physiological variables like. Blood Pressure and Pulse Rate

#### Limitations

1. The life style and family factors could not be controlled.

# **ISSN 976-9714**

# Variorum Multi-Disciplinary e-Research Journal Vol.,-03, Issue-I, August 2012

- 2. The response of the subjects to the questionnaire might not be longest in all cases and this was recognized as a limitations.
- 3. Hereditary and environmental factors which contribute to mental efficiency could not be controlled.

### Hypothesis

It was hypothesized that there might not be any significant difference in anxiety, pulse rate & blood pressure between male and female students.

## **Definition & Explanation of the Terms**

## Anxiety:

Anxiety is a state of emotional and physical disturbance included in a person by real or imagined threat.

# Heart Rate:

Heart Rate is pressure change transmitted as a wave through the arterial wall and blood column to be periphery while the person is at rest.

# **Blood Pressure**:

Blood pressure is the lateral pressure exerted by the blood on the vessel walls while flowing through it.

**Objective of the Study** 

- 1. To develop Psycho-Physiological bent of mind among the students to reach the high level of skill and excellence in physical education field.
- 2. The result of the study and the quantum of knowledge in Physical Education especially in the area of sports psychology.

# Methodology

In this chapter the selection of subjects administration of questionaire, selection of variables.

# Selection of Subjects:

Forty students were selected as subject at random from Shivaji Science College, Nagpur.

# Selection of Variables:

# **Psychological Variables:**

Only one Psychological variables was selected for this study as

# 1. Anxiety.

# **Physiological Variables:**

Only two Physiological variables were selected for this study as

### 1. Blood Pressure

2. Pulse Rate

# ISSN 976-9714

#### Anxiety:

Tool: Rainer Martens sports competition Anxiety Test.

#### **Statistical Analysis of Data**

The purpose of this study was to compare the level of psychological variable anxiety and physiological variables systolic blood pressure, diastolic blood pressure and pulse rate between male and female students in Shivaji Science College, Nagpur.

#### Level of Significance

### The level of significance fixed at 0.05 levels

#### **Statistical Procedure**

This was a comparative study of two group of students for fencing out difference in criterion measures. The mean difference of these groups were tested for significant by 't' ratio.

#### **Conclusions:**

There was no significant difference found in the selected Psycho-Physiological variables i.e. anxiety, blood pressure & pulse rate amongst male & female students, thus hypothesis is proved.

#### **Recommendation:**

This study may be taken for all age group & also other group.

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