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**EFFECTS OF YOGIC PRACTICES, PHYSICAL EXERCISES AND COMBINATION  
OF YOGIC PRACTICES AND PYHYSICAL EXERCISES ON SELECTED MOTOR  
ABILITY COMPONENTS, PHYSIOLOGICAL AND PSYCHOLOGICAL VARIABLES  
OF UNIVERSITY MEN PLAYERS**



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**Abstract**

*The purpose of the study was to find out the effect of yogic practices, physical exercises and combination of yogic practices and physical exercises on selected motor ability components, physiological variables, and psychological variables of Alagasppa University men Students. In this experimental study, the performance of yoga group, physical exercises group, combination of yogic practices and physical exercise groups and control group were selected as the another independent categorical variables, and flexibility, cardio respiratory endurance, resting pulse rate, breath holding time, mental concentration and anxiety was selected as dependable variables. In this study ANCOVA statistical technique was used to find out the adjusted mean significant difference. When found significant, the Scheffe's post hoc test was used to find out the paired mean significant difference.*

**Keywords:** *yogic practices, physical exercises, physiological and psychological variables,*

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**Introduction**

The practice of Yoga not only develops the body but also enhances the mental faculties. Yogic practices and Physical Exercises lay an important role in the development of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body, Yoga acts both as curative and preventive therapy. The very essence of yoga lies in attaining mental peace, improved concentration powers, a relaxed state of living and harmony in relationships. Swami Vivekananda proclaimed each soul is potentially divine. Yoga by Shri Aurobindo. Physical fitness is based upon a solid foundation of the good health. Healthy living implies free from disease, sufficient strength, endurance, skill, capacity to meet the daily demands and sufficient reserves to meet the daily demands and

sufficient reserves to meet extraordinary stresses without undue fatigue besides mental development and emotional balance according to the maturity level of the individual. Iyengar, B.K.S. (1983)

**Methodology**

To execute the study, the investigator employed random sampling method. In this study, 160 players were selected as subjects at random from Alagappa University and their age was between 19 to 25 years. They were divided into four groups namely Yoga group, physical exercises group, combination of yogic practices and physical exercises group and Controlee group. The first, second and third groups did yoga asana, Prayanama, Dhayana and physical exercise respectively for six weeks. The pre and posttest were taken for all the subjects before and after the training respectively. The Resting Pulse Rate was measured in beats/per minute by pulse monitor. Getchell, Bud. (1997)

**Results and Intrepretation**

**Table I: Computation of Analysis of Covariance of Pre-Test, Post-Test and Adjusted Post-Test on Resting Pulse Rate of Four Experimental Groups (Scores in Seconds)**

Test	Ex I	Ex II	Ex III	Ex IV	Source of Variance	Sum of Squares	df	Mean Squares	F-value
Pre-test Mean	71.92	71.54	72.24	73.59	Between within	24.17 511.75	3 156	8.06 3.28	2.56
Post-test Mean	71.41	71.51	70.91	73.00	Between Within	102.04 182.48	3 156	34.03 1.17	29.09*
Adjusted Post-test	71.44	71.73	70.90	72.98	Between Within	192.93 167.62	3 155	30.97 1.06	28.67*
Mean gain	0.41	0.03	1.18	0.59					

F (3, 16) = 2.67 and F (3, 15) =2.67. \* Significant

**Results of Resting Pulse Rate**

Table I shows the analyzed data on Resting pulse rate. The pre-test means of Resting pulse rate were 71.93 for Yogic practices group, 71.55 for Physical exercises group, 72.25 for combined (Yogic practices and Physical exercises) group and 72.60 for Control group. As the obtained F-ratio 2.56 was lesser than the table F-ratio 2.66, the pre test was significant at 0.05 level of confidence for the degrees of freedom 3 and 156. The post-test means were 71.40 for Yogic practices group, 71.72 for Physical exercises group, 70.87 for combined (Yogic practices and Physical exercises) group and 72.96 for control group. As the obtained F-ratio 29.07 was greater than the table F-ratio 2.66, the post-test was significant at 0.05 level of confidence for the degrees of freedom 3 and 156.

The adjusted post-test means were 71.43 for Yogic practices group, 71.72 for Physical exercises group, 70.87 for combined (Yogic practices and Physical exercises) group and 72.96 for control group. As the obtained F-ratio 28.63 was greater than the

table F-ratio 2.66, the post-test was significant at 0.05 level of confidence for the degrees of freedom 3 and 155.

The mean gain of yogic practices, physical exercises, combined (yogic practices & physical exercises) group and control group were 0.53, 0.08, 1.35, and 0.45 respectively.

Scheffe's post hoc test was therefore resorted – to find out the significance of ordered adjusted final mean differences among the groups Table I (A). The Table I (A) shows the Scheffe's post-hoc test results. The ordered adjusted final mean differences for pulse rate of experimental groups I, II, III and IV were tested for significance against Schaffer's post – hoc F-ratio.

**Table – I (A): Adjusted Final Mean Difference On Resting Pulse Rate of Four Experimental Groups in Analysis of Covariance and Scheffe's Post – Hoc Test**

\* Significant

Ex – I	Ex – II	Ex – III	Ex –IV	M.D.	CI
71.92	71.54	-	-	0.38	0.66
71.43	-	70.87	-	0.56	0.66
71.43	-	-	72.96	1.54	0.66*
-	71.73	70.87	-	0.85	0.66*
-	71.74		70.96	1.25	0.66*
-	-	70.87	72.96	2.09	0.66*

The mean difference between experimental group I and II, I and III, I and IV, II and III, II and IV, III and IV were 0.38, 0.56, 1.54, 0.85, 1.25 and 2.09 respectively. The mean difference 0.29, 0.56, was seen to be less than the confident interval value of 0.66 in the

following comparisons I and II, I and III. Hence the above comparisons were not significant. The mean difference 0.67, 0.68 1.18 and 0.69 were seen to be higher than the confident interval value of 0.66 in the following comparison I and III, II and III, II and IV, III and IV. Hence the above comparisons were significant. Hence the paired mean difference was not significant at 0.05 level of confidence with degrees of freedom 3 and 155.

### Conclusion

It is concluded from the results that the level of Resting pulse rate was increased significantly due to six weeks training of yogic practices, physical exercises and combination of both (yogic practices and physical exercises). It is concluded from the results that the level of Resting pulse rate is decreased by yogic practices and physical exercises activities which is greater than the yogic practices. It is concluded from the results that the level of Resting pulse rate was decreased by combined activities which was greater than the both yogic practices and physical exercises. The results were a clear indication that the level of Resting pulse rate was decreased by combined activities which was greater than both yogic practices and physical exercises. The finding was however in conformity with previous studies reported by Gibbon (1976) and Udupa and others (1974) on effects of training on Resting pulse rate.

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