

## **Effect of Selected Yogic Practices on Bio-Motor Variables among University Men Students**

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**ABSTRACT:** *The purpose of the study was to find out the effect of physical activity on selected bio-motor variables among university men students. To achieve this purpose of the study, thirty men students were selected as subjects who were from the various departments, Nagaland University, Lumami. The selected subjects were aged between 18 to 25 years. They were divided into two equal groups of fifteen each, Group I underwent yogic exercise programme and Group II acted as control that did not participate in any special training apart from their regular curricular activities. The subjects were tested on selected criterion variables such as agility, strength and endurance prior to any immediately after the training period. The selected criterion variables such as agility was measuring by shuttle run, strength was measured by bent knee sit-ups and endurance was measuring by 12 min run and walk test. The analysis of covariance (ANCOVA) was used to find out the significant differences if any, between the experimental group and control group on selected criterion variables separately. In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as an appropriate. The result of the present study has revealed that there was a significant difference among the experimental and control group on agility, strength and endurance.*

**KEYWORDS:** *Yoga Practice – Bio-motor Variable.*

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### **I. INTRODUCTION**

Yoga exercises and techniques derived from yoga indirectly affect technical and tactical preparation. Yoga exercises and techniques also have significant, direct effects on the physical, psychological, theoretical preparation and on the regeneration of the strength process. Yoga asanas can be used for warm-up, cool-down, regeneration, compensation of muscle dysbalances, synthesis of mind and body, activation or deactivation of the body and as supplemental exercises. Yogic techniques, which aim at physical and mental self-culture, have convincing scientific bases and produce consistent physiological changes. It has been reported that yogis are capable of achieving remarkable feats of endurance and controlling their autonomic functions. There is evidence that the practice of yoga improves cardio-respiratory efficiency and performance quotient. There is a need to have yoga better recognized by the health care community as a complement to conventional medical care. Over the last 10 years, a growing number of research studies have shown that the practice of Hatha Yoga can improve strength and flexibility, and may help control such physiological variables as blood pressure, respiration and heart rate, and metabolic rate to improve overall exercise capacity. Exponents of yoga believe that other exercise systems only have a physical beneficial effect on the body whereas yogasanas result in the development of the physical, mental, spiritual well-being. Physical exercise performed vigorously are helpful in develop in muscles and flexibility in healthy people. In view of the fact that the heart, lungs and respiratory system have to work much harder in other forms of physical exercises, exponents of yoga believe that this is an unnecessary release of vital energy. According to them asanas are different from physical exercise, since they are performed slowly with relaxation and concentration. This results in the nervous system, endocrine system, muscular system and the internal organs being benefited. The term exercise is often applied to asanas but asanas should never be confused with an exercise. The word exercise gives us an idea of quick and forceful movements of the body or its parts and repeated action which leads to exertion, tension and fatigue. Asanas, on the other hand are practiced slowly and steadily which bring about physical and mental relaxation.

### **II. METHODOLOGY**

The purpose of the study was to find out the effect of physical activity on selected bio-motor variables among university men students. To achieve this purpose of the study, thirty men students were selected as subjects who were from the various departments, Nagaland University, Lumami various departments, Nagaland University, Lumami. The selected subjects were aged between 18 to 25 years. They were divided into two equal groups of fifteen each, Group I underwent yogic exercise programme and Group II acted as control that

did not participate in any special training apart from their regular curricular activities. The experimental group underwent the training programme for three days per week for eight weeks. Among the bio-motor variables such as agility was measuring by shuttle run, strength was measured by bent knee sit-ups and endurance was measuring by 12 min run and walk test.

The data were collected at prior and immediately after the training programme for each criterion variables. Analysis of covariance (ANCOVA) was applied for analyze the data. In all the cases, 0.05 level was used to test this significance.

### III. RESULTS

**Findings:** The mean and standard deviation scores of pretest, posttest and adjusted posttest of agility, strength and endurance on yogic exercise and control group are given in table.

**Table: MEAN STANDARD DEVIATION AND 'F' RATIO OF YOGIC EXERCISE AND CONTROL GROUP ON AGILITY STRENGTH AND ENDURANCE**

Variables		Yogic Exercise		Control		'F' ratio
		Mean	S D	Mean	S D	
Agility	Pretest	10.20	0.52	10.29	0.51	0.78
	Posttest	9.57	0.51	10.22	0.77	7.71*
	Adjusted posttest	9.52		10.27		12.73*
Strength	Pretest	17.47	5.05	17.67	6.03	3.29
	Posttest	23.67	7.78	17.82	4.84	10.12*
	Adjusted posttest	22.87		17.85		22.45*
Endurance	Pretest	2345.33	112.9	2362.02	134.51	2.04
	Posttest	2464.77	102.68	2325.67	145.45	9.47*
	Adjusted posttest	2500.58		2351.10		14.71*

'F' ratio test computed in regards to the agility, strength and endurance on yogic exercise and control group in the pretest, posttest and adjusted post test are also presented in table.

### IV. DISCUSSION/CONCLUSIONS

The findings of the study showed that there was no significant difference between the pretest of agility, strength and endurance. The findings of the study showed that there was a significant difference between the posttest and adjusted posttest of agility, strength and endurance. The results of the study have shown there was a significant difference among yogic exercise group and control group on agility, strength and endurance reference to the past studies on selected psychological variables such as anxiety, aggression and self depression in accordance with Morehouse and Miller, Aslan and Livanelioglu and Tran.

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