



Investigation of Changes on Auditory Reaction Time in Respect of Selected Yogic Practices among Women Handball Players

Dr.S.Manikandan

Assistant Professor, Department of Physical Education and Sports Sciences, Annamalai University, Chidambaram, Tamilnadu, India.

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Abstract

The purpose of this study was to investigate of changes on auditory reaction time due to selected yogic practices among women handball players . For these purpose 30 handball players aged 18 to 22 years from the various faculties of Annamalai University, took part in the study. Selected subjects were randomly assigned to either selected yogic practices (n=15) or control (n=15) group. The training regimen lasted for eight weeks. Prior to and after eight weeks of selected yogic practices the subjects were tested on selected criterion variables using standard tests and procedures. Analysis of covariance was used to determine the significant difference existing between pretest and posttest on selected criterion variables. The analysis of data revealed that eight weeks of yogic practices had significant impact on auditory reaction time of women handball players.

Keywords: Yogic practices, Psychomotor, Auditory Reaction Time and Handball.

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Introduction

Yoga is an ancient scientific method which deals man how to lead one's own life in unity within him and with those surrounded him. It is believed as one of the most vital and important culture of India. More than 2000 years ago our forerunners developed it to bind the body, mind and spirit, as a harmonious whole. Nowadays, the whole world is looking towards yoga for answers to the various problems of the human beings. Yoga means the experience of oneness or unity with inner being. It is not a religion but a good method by which one obtain control of one's latent power and to reach a complete self- realization and a re education of one's mental processes, along with the physical. In the age of modern science and information technology, and changing world scenario with Global warming, our lifestyle becomes fast and also becoming stiff and complicate to live and lead with natural and normal life. The present condition of the environment is unfit, noisome, dirty, and congestive. So, it creates tension to the human beings and making them always strain. When we are suffering from the above mentioned the environmental condition, we may suffer from stress, anxiety, and indigestion. and also serious ailments like Asthma and Spondylitis etc. Yoga acts to save the human beings from the serious and dangerous ailments.

Though yogic exercises develop most of the components of fitness, it is expected that it will have an

effect on the psychomotor parameters. Some modern texts seem to indicate that yogic exercises will strength all organs and all physiological functions of the body. Research work on the development and maintenance of physical fitness, psychomotor abilities and physiological functions is an important area which requires a lot of investigation.

Methodology

The purpose of this study was to investigate of changes on auditory reaction time due to selected yogic practices among women handball players . For these purpose 30 handball players aged 18 to 22 years from the various faculties of Annamalai University, took part in the study. Selected subjects were randomly assigned to either selected yogic practices (n=15) or control (n=15) group. The selected criterion variable auditory reaction time was assessed by Chronoscope with reaction timer respectively before and after the yogic practices. The experimental group underwent the yogic practices five days a week for for eight weeks. The yogic exercises included in this training programme was Suryanamaskar, Vrksasana, Trikonasana, Padmasana, Vakrasana, Bhujangasana, Salabhasana, Paschimottasana, Matiyasana, Halasana. The training programme was conducted during the morning sessions between 5.30 -6.30 am. The subjects performed each asanas four to six times and the duration of each repetition is one to three minutes. The experimental design used for the present investigation was random group design involving thirty subjects. Analysis of covariance (ANCOVA) was used as a statistical technique to determine the significant difference, if any,

Correspondence

Dr.S.Manikandan,
E-mail:dr.v.s.manikandan@gmail.com, Ph. +9176019 22933

existing between pretest and posttest data on selected dependent variables. The level of significance was accepted at 0.05 level.

Results

The Analysis of Covariance on auditory reaction time before and after eight weeks of yogic practices is presented in table I.

Table I. Analysis of covariance on auditory reaction time of experimental and control groups

Test		Control Group	Yogic Practices group	SOV	Sum of squares	df	Mean Squares	'F' Ratio
Pre-test	M	0.23	0.21	Between	37.58	1	37.58	1.85
	SD		0.05	Within	569.84	28	20.35	
Post-test	M	0.22	0.19	Between	142.73	1	142.73	8.48*
	SD	0.05	0.04	Within	471.36	28	16.83	
Adjusted Post Test	M	0.23	0.19	Between	29.52	1	29.52	24.40*
				Within	32.64	27	1.21	

* Significant at .05 level of confidence.

(Table value required for significance at 0.05 level of confidence with df at 1 and 28 is 4.20 and df of 1 and 27 is 4.21)

The adjusted post test mean value of auditory reaction time of control and experimental groups are 0.23 and 0.19 respectively. The obtained 'F' ratio value of 24.40 for adjusted post test means of control and experimental groups are greater than the required table value of 4.21 for significance at 0.05 level of confidence. The result of the study reveals that there was a significant difference exists between control and experimental group on auditory reaction time. Hence it is concluded that auditory reaction time of the handball players can be improved by undergoing eight weeks of yogic practices.

Discussion

Based on statistical analysis of data it was concluded that eight weeks of yogic practices caused significant improvement in auditory reaction time of women handball players. The result are in agreement with the result of the previous research findings. Harinath and others (2004) determined the effect of hatha yoga and omkar meditation on cardiorespiratory performance, psychologic profile, and melatonin secretion. Thirty healthy men in the age group of 25-35 years volunteered for the study. These observations suggest that yogic practices can be used as psychophysiological stimuli to increase endogenous secretion of melatonin, which, in turn, might be responsible for improved sense of well-being.

Yogic practices are supposed to improve the functions of all systems of the human organism, especially of the central nervous system. The investigation, undertaken by Sahu and Gharote (1985) to study the overall effects of yogic training revealed

significant improvement ($P < .01$) in the perception of the third dimension in 20 healthy experimental subjects as compared to 20 control subjects. The rationale behind the improvement in the above parameter has been broadly discussed from the psycho-psychological point of view.

Conclusions

The result of this study demonstrated that, selected yogic practices have significant impact on auditory reaction time of women handball players. Hence it is suggested that, it is more essential to know that the optimum level of psychomotor skills differ widely from game to game.

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