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IMPACT OF YOGIC PRACTICES ON SELECTED PHYSIOLOGICAL VARIABLES AMONG SCHOOL STUDENTS OF SLUM Darwin Engels R* and Dr. J. Paul Jeeva Singh** *Part Time Research scholar, Madurai Kamaraj University, Madurai ****** Director of Physical Education, Ayya Nadar Janaki Ammal College (Autonomous) Sivakasi

Abstract

The purpose of the study was to find out the Impact of yogic practices on selected physiological factors among school students of slum. To achieve this, forty school boys from slum within the Good Samaritan School, New Delhi, India were randomly selected as subjects and their age ranged between 12 and 15 years. The subjects were categorized into two groups namely control group, experimental group with each 20 subjects. The experimental group underwent the yogic practices for 3 days a week, one session per day and for 12 weeks each session endured 60 minutes and control group was not uncovered to any preparing other than their everyday schedules exercises. The collected information were analyzed measurably through examination of covariance (ANCOVA) to discover out the noteworthiness contrast, on the off chance that any between the groups. The 0.05 level of certainty was settled to test the level of centrality contrast, in the event that any between groups. The result revealed that Yogic practices group shows significant improvement in resting heart rate and vital capacity.

Keywords: Resting heart rate, Vital capacity, Yogic practices

INTRODUCTION

Yoga may be a science that has been practiced for thousands of a long time. It comprises of ancient speculations, perceptions and standards around the intellect and body association which is presently being demonstrated by cutting edge medication. Considerable inquire about has been conducted to see at the health benefits of yoga from breathing (pranayam) and contemplation. Besides, researchers have laid these comes about against benefits of standard work out. Yoga may be a way of life, which can be practiced by any human being in any case of age, sex and condition of health, hence it is based on common physical and other worldly laws which work all mankind alike. Yogic work out could be a kind of substantial development with mental concentration. Yoga work out can help a person to create his wellbeing in conjunction with control at different feelings like desire, love, outrage, eagerness and give firm control over body and intellect, particularly to overcome most of perilous infections. For this reason at display situation the significance of yoga is felt by a expansive number of people in most of the countries.

Saravanan (2012) found that Cooperation in yoga and high-impact work out come about in a critical rise in vital capacity for exploratory bunches when compared with control bunch. Amalesh Adhikari and Deba Prasad Sahu found that concluded that yogic works out makes a difference to play down both the resting heart rate, amid educating as well as coaching, teacher and coaches ought to be beyond any doubt approximately such physiological realities which offer assistance the understudies and competitors for way better instructive accomplishment as well as sports exhibitions. Morehouse et all 1986 opined that Physiology is the think about of ordinary work in human body, It may be a sub-section of science, covering a run of subjects that

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incorporate organs, life systems, cells, biological compounds, and how they all associated to form life conceivable. Among them, resting heart rate and blood weight are exceptionally vital useful variable.

Methodology

To attain the reason of the study forty school boys from slum within the Good Samaritan School, New Delhi, India. The age of the subjects were extended from 12 to 15 years. The subjects were arbitrarily separated into two break even with group of twenty each (n=20) such as experimental group and control group. The experimental group taken part within the yogic practices for 3 days a week, one session per day and for 12 weeks each session endured 60 minutes, and control group was not uncovered to any preparing other than their everyday schedules exercises. The collected information were analyzed measurably through examination of covariance (ANCOVA) to discover out the noteworthiness contrast, on the off chance that any between the group. The 0.05 level of certainty was settled to test the level of centrality contrast, in the event that any between groups.

Training Schedule

1.	Suryanamaskar	- 2 Minutes
2.	Ardhachakrasana	- 2 Minutes
3.	Sarvangasana	- 2 minutes
4.	Dhanurasana	- 2 minutes
5.	Bhujangasana	- 2 minutes
6.	Pachimotanasana	- 2 minutes
7.	Salapasana	- 2 minutes
8.	Kapalbhati Pranayama	- 2 minutes
9.	Nadisodhana Pranayama	- 2 minutes
10.	Savasana	- 2 minutes

TABLE-I CRITERION MEASURE

S.No	Variables	Test/Equipment used	Measuring unit
1	Resting heart rate	Stop watch	Beats per minute
2	Vital capacity	Spirometer	In liters

TABLE – II

DESCRIPTIVE ANALYSIS OF RESTING HEART RATE AND VITAL CAPACITY AMONG EXPERIMENTAL AND CONTROL GROUP

S.No	Variables	Group	Pre-Test Mean	SD (±)	Post – Test Mean	SD (±)	Adjusted Mean
1	Resting heart rate	YPG	76.03	0.58	73.54	0.77	73.57
1		CG	76.12	0.61	75.93	0.97	75.90
2	Vital capacity	YPG	3.71	0.08	4.04	0.08	4.051
Z		CG	3.72	0.08	3.82	0.17	3.82

YPG = Yogic practices group

CG= Control group

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The tables-II the pre, post-test means, standard deviations and adjusted means on resting heart rate and vital capacity of school understudies of slum were numerical displayed. The analysis of covariance on chosen factors of yogic practice bunch and control gather is displayed in table – III.

TABLE – III COMPUTATION OF ANALYSIS OF COVARIANCE ON SELECTED PHYSIOLOGICAL VARIABLES AMONG SCHOOL STUDENTS OF SLUM

S.No	Variables	Test	Sum of variance	Sum of squares	Df	Mean square	F ratio
1	Resting Heart Rate	Pre-test	B.G.	0.08	1	0.08	0.22
			W.G	13.69	38	0.36	
		Post-test	B.G	56.94	1	56.94	73.49*
			W.G	29.44	38	0.77	
		Adjusted means	B.S.	54.05	1	54.05	82.04*
			W.S.	24.37	37	0.65	
2	Vital capacity	Pre-test	B.G.	0.002	1	0.002	0.29 27.46*
			W.G	0.28	38	0.007	
		Post-test	B.G	0.51	1	0.51	
			W.G	0.70	38	0.01	
		Adjusted means	B.S.	0.52	1	0.52	29.07*
			W.S.	0.67	37	0.01	

*Significant at 0.05level of confidences

(The table values required for significance at 0.05 level of confidence for 1 &38 and 1 & 37 are 4.10 and 4.11 respectively).

In the table the results of analysis of covariance on resting heart rate and vital capacity. The obtained 'F' ratio of 0.22 and 0.29 for Pre-test means was less than the table value of 4.10 for df 1 and 38 required for significance at 0.05 level of confidence on resting heart rate and vital capacity. The obtained 'F' ratio of 73.49 and 27.46 for post-test means was greater than the table value of 4.10 for df 1 and 38 required for significance at 0.05 level of confidence on resting heart rate and vital capacity. The obtained 'F' ratio of 82.04 and 29.07 for adjusted post-test means was greater than the table value of 4.11 for df 1 and 37 required for significance at 0.05 level of confidence at 0.05 level of the study indicated that there was a significant difference among the adjusted post test means of yogic practices group and control group on resting heart rate and vital capacity. And also yogic practices group showed significant improvement on resting heart rate and vital capacity compared to control group.

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Figure-I The pre, post and adjusted mean values of resting heart rate and vital capacity of both experimental and control group are graphically represented in the figure-I.

Discussion of findings

The after effects of the examination demonstrate that the experimental gather which experienced yogic practices gather had appeared note worthy advancement on resting heart rate and vital capacity compared to control gather. The control group did not appear critical change on resting heart rate and vital capacity. The past thinks about on chosen breath holding time and vital capacity reveals of Chandrasekaran and Duraisami (2016), Amalesh Adhikari and Deba Prasad Sahu (2016), Mukesh Kumar et al (2016), Sunil Rayat (2015) and Saravanan (2012),

Conclusions

From the investigation of information, the following conclusions were drawn.

- 1. It was concluded that twelve weeks yogic practices group significant improvement on resting heart rate and vital capacity.
- 2. The control group did not appear significant advancement on resting heart rate and vital capacity.

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