Research Paper
Impact Factor: 7.352
Peer Reviewed Monthly Journal
www.ijmdrr.com

IJMDRR
E- ISSN –2395-1885
ISSN -2395-1877

EFFECT OF CALISTHENICS EXERCISES ON RESTING PULSE RATE OF UNIVERSITY ATHLETIC PLAYERS

Dr. Parvati Tambake
Physical Education Director, UG (NEP) Department, Karnataka State Akkamahadevi Women University, Vijayapura.

Abstract
The purpose of the study was to find out the Effect of Calisthenics Exercises on Resting Pulse Rate of University Athletic Players. It was hypothesized that there would be significant differences on Physiological variable due to the effect of Calisthenics Exercises among University Athletic Players. For the present study the 40 University Athletic Players from Karnataka State Akkamahadevi Women University, Vijayapura, District of Karnataka State was selected at random and their age ranged from 19 to 25 years. Criterion measures for this study were test items for Resting Pulse Rate. To measure Redial Pulse rate (in Beats/Minute) about the University Athletic Players, manual method was used. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of twenty each and named as Group I and Group II Group I underwent Calisthenics Exercises and Group II has not undergone any training. The data was collected before and after Eight weeks of training. The data was analyzed by applying dependent ,,t" test. The level of significance was set at 0.05. The Calisthenics Exercises had positive Effect on Resting Pulse Rate among University Athletic Players.

Key Words: Calisthenics Exercises, Resting Pulse Rate, University Athletic Players.

Introduction

In essential terms, calisthenics is a type of preparing and physical exercise that comprises of a wide range of developments and activities that by and large don't 8 depend on any mechanical assembly or hardware. So essentially, bodyweight activities intended to build center and body quality, adaptability, coordination, stamina, wellness, and perseverance. Calisthenics will utilize the body's very own load for obstruction, as opposed to free weights, machines, or cast iron weight plates. Individuals who imagine that you can't fabricate a fit, amazing, and strong body without loads and free weights basically don't think enough about exercises, which have been utilized for a considerable length of time upon hundreds of years by an entire wide range of races

The word calisthenics originates as of the antiquated Greek words kallos, which signifies "beauty" or "wonderful" (to underscore the tasteful delight that gets from the flawlessness of the human body), and sthenos, signifying "quality" (extraordinary mental quality, fearlessness, quality and assurance). It is the specialty of utilizing one's bodyweight as obstruction so as to create constitution gymnastic activities to accomplish real wellness and effortlessness of development. Comprising of an assortment of gross engine developments— running, standing, getting a handle on, pushing, and so forth — regularly performed musically and with insignificant hardware, so basically, bodyweight works out. They are proposed to expand body quality, body wellness, and adaptability, through developments, for example, pulling or propelling oneself up, twisting, hopping, or swinging, utilizing just one's body weight for opposition; for the most part led working together with extends. Many consider workout as "development through space", which means you can move uninhibitedly with no confinement hindering your full quality. When performed overwhelmingly and with assortment, workout can give the advantages of strong and vigorous molding, notwithstanding improving psychomotor abilities, for

example, equalization, aptitude and the executives. Normally called free hand practices for eg. Pushups, wide grip pushups , close grip pushups, pull ups, static holds, box plunge, triceps dip , wall spotted hand stand ,planks, crunch, sit ups, hanging knee raise, squat without weight, lunge, bridge, calf raise squat push, plyometrics and so forth. Calisthenics has been an unequivocal preferred standpoint that has demonstrated to build human mental and physical execution for a great many years. Their execution has just been enhanced and keeps on conveying quicker exercise outcomes than any machine or hardware. The main thing you have to expand your psychological and physical execution is yourself.

Statement of the Problem: The purpose of the present investigation is to find out Effect of Calisthenics Exercises on Resting Pulse Rate of University Athletic Players.

Objective of the Study: To find out the significant difference in Resting Pulse Rate of the subjects by Calisthenics Exercises among experimental group.

Hypotheses: It was hypothesized that there would be a significant difference in Resting Pulse Rate of the subjects by Calisthenics Exercises among experimental group.

Methodology

The purpose of the study was to find out the out Effect of Calisthenics Exercises on Resting Pulse Rate of University Athletic Players. It was hypothesized that there would be significant differences on Physiological variable due to the Effect of Calisthenics Exercises among University Athletic Players. For the present study the 40 University Athletic Players from Smt. Bangaramma Sajjan Arts, Commerce and Science College for Women Vijayapura District of Karnataka State was selected at random and their age ranged from 19 to 25 years. Criterion measures for this study were test items for Resting Pulse Rate. To measure Redial Pulse rate (in Beats/Minute) about the University Athletic Players, manual method was used. For the present study pre test - post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of twenty each and named as Group „A" and Group „B". Group "A" underwent Calisthenics Exercises and Group „B" has not undergone any training. The data was collected before and after Eight weeks of training. The data was analyzed by applying dependent „t" test. The level of significance was set at 0.05.

Results and Discussions: After the six weeks Calisthenics Exercises there would be significant decreases in Resting Pulse Rate.

The data on shoulder strength before and after the Calisthenics Exercises of experimental and control groups are analyzed and presented in Table-1.

Hypothesis: It was hypothesized that there would be a significant difference in Calisthenics Exercises of the subjects by Calisthenics Exercises among experimental group.

Table No.1 Showing the Pre-test and Post–test for Calisthenics Exercises Experimental Group on Resting Pulse Rate

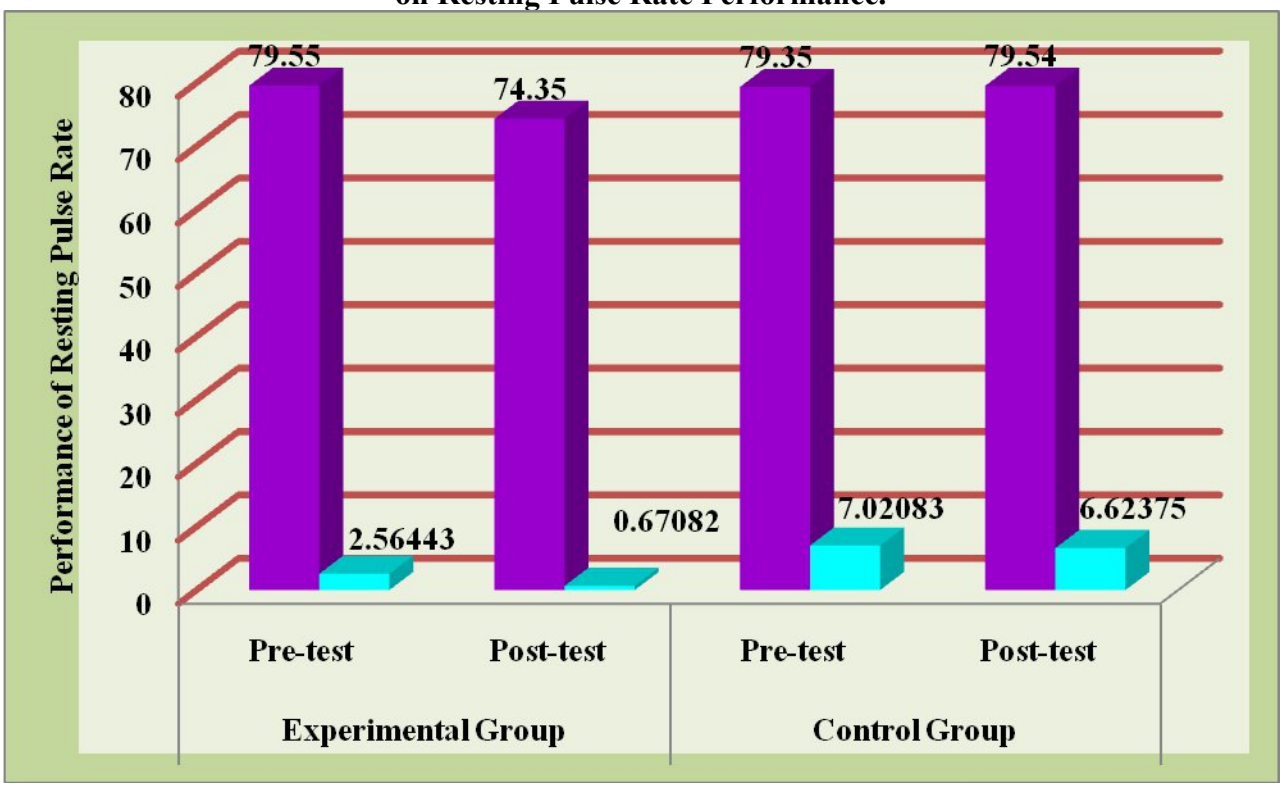
Variable	Group	Test	Mean	SD	t- Value
Resting Pulse Rate	Experimental Group	Pre-test	79.5500	2.56443	**8.137***
		Post-test	74.3500	.67082	
	Control Group	Pre-test	79.3500	7.02083	**-1.670**
		Post-test	79.5400	6.62375	

***Significant at 0.05 level**
(Table value required for significance at 0.05 level for't'-test is 1.684)

It is evident from table-1 that significant difference was found in Calisthenics Exercises effect between pre and post Resting Pulse Rate of University Athletic Players in the experimental group as the t-value was found 8.137. This was a higher value than the required value at.05 level of significance, but an insignificant difference was found between pre and post Resting Pulse Rate of University Athletic Players in the control group as the t-value was found -1.670. This was a lower value than the required value at.05 level of significance. The scores are also illustrated in the figure-1.

The comparison of Resting Pulse Rate mean scores of pre and post tests among groups is shown in graphical representation in Fig.1

Figure No.1 Showing the Pre-test and Post–test for Calisthenics Exercises Experimental Group on Resting Pulse Rate Performance.



The above figure 1.Indicates that the post test values of Experimental group significantly improved the performance of Resting Pulse Rate and also the post test values of Resting Pulse Rate were less than the pre test values due to Eight weeks of Calisthenics Exercises. The Control group pre- test and post- test performance of Resting Pulse Rate no improvement.

Discussion

The raw data was computed and analysis of data showed that the Calisthenics Exercises improved significantly in the Resting Pulse Rate of experimental group. The reason for better performance in experimental group may be continues participation in training and the load which was experienced by the subjects in the training programme was adequate to produce significant development in the Resting

Pulse Rate. In case of control group it may be due to their non-participation in the training programme. Weight training is used as the latest methodology for developing the Resting Pulse Rate. The activities which activate the stretch reflex mechanism affect the body power and come under the category Calisthenics Exercises.

Discussion of Hypothesis

On the basis of the above findings, it is obvious that the treatment contributed to the development of Resting Pulse Rate. Hence, the hypothesis framed for the study is accepted.

Conclusion

Eight weeks of Calisthenics Exercises has shown significant improvement on Resting Pulse Rate among University Athletic Players.

References

1. Deborah Wuest and Charles A. Bucher, Foundations of Physical Education and Sport, (St. Louis: C.V. Mosby Published, 1991), p.18-25.
2. Ajmer Singh et.al, Essentials of Physical Education (New Delhi: Kalyani Publishers,2003), p.517.
3. Braxton, Wilks Barbara Lee, Effects of Calisthenics on Heart Rate of College Women, Dissertation Abstract International 35 (April 1975): 6500-A.
4. Guzel N., Pinar L., Colakoglu F., Karacan S. & Ozer C., Long-term Callisthenic Exercise-related Changes in Blood Lipids, Homocysteine, Nitric-oxide Levels and Body Composition in Middle-aged Healthy Sedentary Women, Chin J Physiology, 55(3), (2012) 202-9.
5. Helen Fabricius, Effect of Added Calisthenics on the Physical Fitness of Fourth Grade Boys and Girls, Research Quarterly. American Association for Health, Physical Education and Recreation, Vol. 35 (2), (1964), pp. 135-140.
6. Kewal Krishan and S. K. Sharma, Effects of Yogic Practices and Callisthenic Exercises on Resting Pulse Rate Variable of Secondary School Boys, 2009
7. Manual of Callisthenic Exercises, The War Department, United States Army, Washington, Government Printing Office, 1892.
8. Mathew S., Mahadevan V. (2018), Effect of Yoga Asana, Pilates and Calisthenics Training on Selected Biochemical and Morphological Variables Among Metabolic Syndrome Diagnosed Women, International Journal of Physiology, Nutrition and Physical Education 2018; 3(1): 201-203.

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E- ISSN –2395-1885
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