

INFLUENCE OF SHEETALI AND SITKARI PRANAYAMA PACKAGE ON SYSTOLIC BLOOD PRESSURE AMONG MIDDLE AGED PERSON IN BANGALORE CITY

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Abstract

The purpose of the present study was to investigate the influence of sheetali and sitkari pranayama package on systolic blood pressure among middle aged person in Bangalore. To achieve the purpose of the study middle aged people were selected from Bangalore, Karnataka, India during the year 2020. The subject's age ranges from 35 to 45 years. The selected students were divided into two equal groups consists of 15 middle aged men each namely experimental group and control group. The experimental group underwent a sheetali and sitkari pranayama package programme for six weeks. The control group was not taking part in any training during the course of the study. Systolic blood pressure was taken as criterion variable in this study. The selected subjects were tested on Systolic blood pressure was measured through sphygmomanometer. Pre-test was taken before the training period and post-test was measured immediately after the six week training period. Statistical technique 't' ratio was used to analyse the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to sheetali and sitkari pranayama package given to the experimental group on Systolic blood pressure when compared to control group.

Keywords: Sheetali and Sitkari Pranayama Package, Systolic blood pressure and 't' ratio.

INTRODUCTION

Today, sports have become a part and parcel of our culture. It is being influenced and does influence all our social institutions including education, economics, arts, politics, law, mass communication and even international diplomacy (Alaguraja, K. et.al, 2019)⁴. Yoga is universally benefiting all people of all ages. The study of Yoga is fascinating to those with a philosophical mind and is defined as the silencing of the mind's activities which lead to complete realization of the intrinsic nature of the Supreme Being (Alaguraja, K. et.al., 2017)¹. In the sports world, physical education is the most

essential aspect due to the fact physical schooling increases the performance and the effectiveness of the sports (Alaguraja, K. et.al., 2018)².

Yoga is a system of exercises which helps the mind and body in order to achieve tranquillity and spiritual insight (Alaguraja, K. et.al, 2019)⁵. Make sure that when you practice yoga asanas, you don't just stretch the body because the mind has to be with the body. (Alaguraja, K. et.al, 2019)⁸. One can start practicing Yoga at any given moment of time and you may start with meditation or directly with pranayama without even doing the asanas (postures). (Alaguraja, K. et.al, 2019)³. Today's there is an escalating emphasis on appearing smarter, feeling better and living longer. In order to achieve these ideals as, scientific evidence tells us that one of the keys is high fitness and exercises (Alaguraja, K. et.al, 2019)⁷. When consciousness is operating with the intellect and with all the senses, by making an individual think that he or she is awake and aware, but the mind is actually less receptive and more critical (Yoga, P. et. al., 2019)¹⁰. Yoga is a practical aid, not a religion and its techniques may be practiced by Buddhist, Jews, Christians, Muslims, Hindus and Atheist alike. Yoga is union for all (Selvakumar, K. et.al, 2019)⁹.

RESEARCH METHODOLOGY

Selection of subjects

The purpose of the study was to find out the effect of sheetal and sitkari pranayama package on Systolic blood pressure among middle aged people. To achieve this purpose of the study, thirty middle aged people were selected as subjects at random. The age of the subjects were ranged from 35 to 45 years.

Selection of variable

Independent variable

- Sheetal and sitkari pranayama Practice

Dependent variable

- Systolic blood pressure

EXPERIMENTAL DESIGN AND IMPLEMENTATION

The selected subjects were divided into two equal groups of fifteen subjects each, such as a sheetal and sitkari pranayama practices group (Experimental Group) and control group. The experimental group underwent Pranayama practice for six days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physiological variable namely systolic blood pressure was selected as criterion

variable. All the subjects of two groups were tested on selected criterion variable Systolic blood pressure was measured through sphygmomanometer at prior to and immediately after the training programme.

Statistical technique

The 't' test was used to analysis the significant differences, if any, difference between the groups respectively.

Level of significance

The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was found out by pre-test. The data were analysed and dependent 't' test was used with 0.05 levels as confidence.

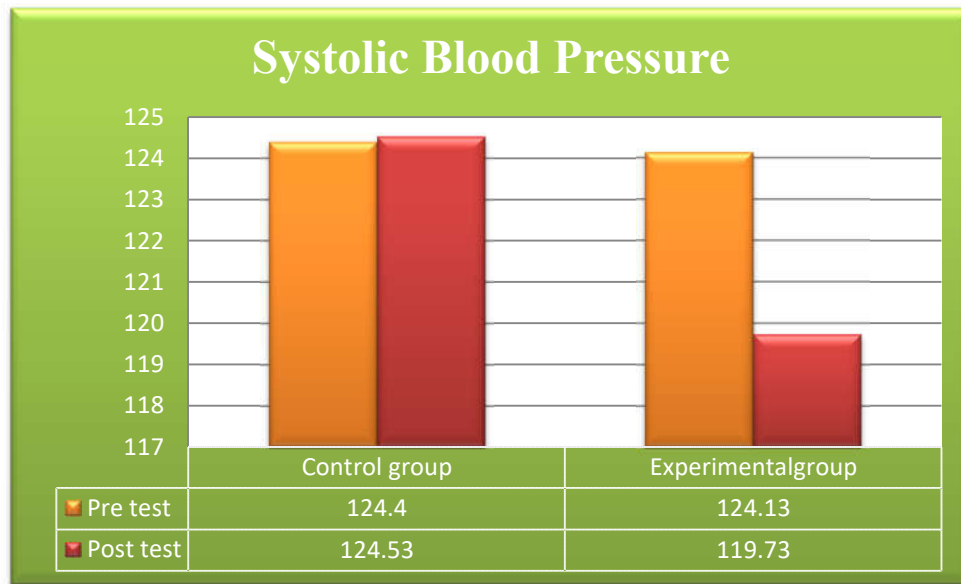
TABLE I
Analysis of t-ratio for the pre and post tests of experimental and control group on
Systolic blood pressure
(Scores mmHg)

Variables	Group	Mean		SD		df	't' ratio
		Pre	Post	Pre	Post		
Systolic blood pressure	Control	124.40	124.53	2.29	1.68	14	0.45
	Experimental	124.13	119.73	2.74	2.12		10.68*

**Significance at .05 level of confidence.*

The Table-I shows that the mean values of pre-test and post-test of the control group on Systolic blood pressure were 124.40 and 124.53 respectively. The obtained 't' ratio was 0.45, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on Systolic blood pressure were 124.13 and 119.73 respectively. The obtained 't' ratio was 10.68* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in Systolic blood pressure. It may be concluded from the result of the study that experimental group improved in Systolic blood pressure due to six weeks of sheetal and sitkari pranayama practices.

Figure-1
Bar Diagram Showing the Pre and Post Mean Values of
Experimental and Control Group on Systolic blood pressure



DISCUSSIONS ON FINDINGS

The result of the study indicates that the experimental group, namely sheetali and sitkari pranayama practices group had significantly improved the selected dependent variable, namely systolic blood pressure, when compared to the control group. It is also found that the improvement caused by sheetali and sitkari pranayama practices when compared to the control group.

CONCLUSION

On the basis of the results obtained the following conclusions are drawn,

1. There was a significant difference between experimental and control group on Systolic blood pressure after the training period.
2. There was a significant improvement in Systolic blood pressure. However the improvement was in favor of experimental group due to six weeks of sheetali and sitkari pranayama practices.

Acknowledgement

The research article was supported by RUSA Phase – II Alagappa University for providing financial support for this research work.

REFERENCES

1. Alaguraja, K. Analyze of combined asanas pranayama practices on psychosocial parameter among sports people. *Indian Journal of Applied Research*. 2019; 9, (10), pp. 73-74.
2. Alaguraja, K., & Yoga, P. Influence of yogasana practice on flexibility among obese adolescent school boys. *International Journal of Yoga, Physiotherapy and Physical Education*. 2017; 2(7), pp.70-71.
3. Alaguraja, K., & Yoga, P. Effect of yogic practice on resting pulse rate among school students. *Indian Journal of Applied Research*, 2019; 9, (7), pp. 43-44.
4. Yoga, P., Balamuralikrishnan, R., & Alaguraja, K. Influence of cyclic meditation on selected physiological parameter. *International Journal of Advanced Education and Research*, 2019; 4 (1), pp. 17-18.
5. Alaguraja, K. Analyze of combined asanas pranayama practices on psychosocial parameter among sports people. *Indian Journal of Applied Research*, 2019; 9, (10), pp. 73-74.
6. Alaguraja, K., & Yoga, P. Effect of core stability training on dynamic strength among college male students. *International Journal of Yogic, Human Movement and Sports Sciences*, 2018; 3 (2), pp. 436-437.
7. Alaguraja, K., Yoga, P., Balamuralikrishnan, R., & Selvakumar, K. A scientific study on efficacy of yogic package on resting pulse rate among obese school students. *Journal of Information and Computational Science*, 2019; 9(8), pp. 483-487.
8. Alaguraja, K. Analyze of combined asanas pranayama practices on psychosocial parameter among sports people. *Indian Journal of Applied Research*, 2019; 9 (10), pp. 73-74.
9. Alaguraja, K., & Yoga, P. Analyze of pranayama technique on physiological parameter among rural school students. *Journal of Information and Computational Science*, 2019; 9(8), pp.545-550.
10. Alaguraja, K., Yoga, P., James Rathinaraj, S., R., & Selvakumar, K. A study on yoga intervention on maximal oxygen uptake among stress patient. *Indian Journal of Applied Research*, 2019; 9 (9), pp. 38-39.
11. Alaguraja, K. Analyze of combined asanas pranayama practices on psychosocial parameter among sports people. *Indian Journal of Applied Research*, 20019; 9(10), pp. 73-74.
12. Selvakumar, K., & Yoga, P. (2019). Influence of yogic practice on flexibility among college students. *Indian Journal of Applied Research*, 2019; 9, (7), pp. 45-46.
13. Parthasarathy., & Dhanaraj. A scientific study on combined effect of yogasana and shambhavi mahamudra practice on systolic blood pressure. *Indian Journal of Applied Research*, 2019; 9(11), pp. 45-46.
14. Balasubramanian K, and Yogaraj P., (2009). Effect of Weight Training and Physical Exercises on Bio-Chemical Variables among College Football Players. *International journal of Physical Education*. 2 (1 &2) pp. 1-4.
15. Selvalakshmi S, and Yogaraj P., (2009). Effect of Varied Yogic Practices on Haemoglobin and Blood Sugar among Obese Women. *Asian Journal of Physical Education & Computer Science in Sports*, 1(1), pp. 262-264.
16. Yogaraj P, Ramaraj P, and Elangovan R., (2010). *Effects of Selected Asanas on Serum Cholesterol and Functions of Adrenal Gland in College Women*. *Asian Journal of Physical Education & Computer Science in Sports*, 2(1), pp. 206-208.
17. Yogaraj P, Ramaraj P, and Elangovan R., (2010). Effect of Selected Yogic Practices Physical Exercises on Bio-Chemical Variables among College Women Students. *Asian Journal of Physical Education & Computer Science in Sports*, 3(1). pp. 27-29.
18. Anandakumar P, Yoga P and Elangovan R., Effect of Selected Asana and Suryanamaskar on Selected Physiological Variables among Diabetic Patients. *Asian Journal of Physical Education & Computer Science in Sports*, 4(1). pp. 130-131.

19. Yogaraj P, and Elangovan R., (2011). Effect of Varied Packages of Yogic Practice on Selected Bio-Chemical Variables of College men Students. *International journal of Physical Education Sports Management and Yogic Sciences*. 1(1). Pp. 35-39.
20. Yoga P., (2013). Effect of Varied Integrated Modules of Yogic Practices on Platelets Count among Women Type II Diabetic Patients. *Asian Journal of Physical Education & Computer Science in Sports*. 9(1). Pp. 47-49.
21. Yoga P., (2014). Effect of Varied Integrated Modules of Yogic Practices on White Blood Cell Count among Women Type II Diabetic Patients. *International journal of Physical Education Sports Management and Yogic Sciences*, 4(1). Pp. 33-36.
22. Yoga P., (2014). Effect of Varied Integrated Modules of Yogic Practices on Red Blood Cell Count among Women of Type II Diabetic Patients. *International journal of Sports Technology, Management and Allied Sciences*. 3(1), pp.70-74.
23. Yoga P., (2014). Effect of Varied Packages of Yogic Practices on White Blood Cell Count among College Men Students. *International Journal of Health, Physical Education & Computer Science in Sports*. 15(1), pp.47-49.
24. P. Yoga p., (2015). Influence of Varied Packages of Yogic Practices on Cardio Vascular Endurance among College Men Students. *International Journal Engineering Research & Sports Science*. 2(2). Pp.33-34
25. Yoga P. and Ranjith VP. Efficacy of Sectional Breathing and Nadi Suddhi Pranayama on White Blood Cell Count among College Men Students. *International Journal of Health, Physical Education & Computer Science in Sports*. 17(2). Pp. 16-18.
26. Yoga P. (2015). Efficacy of Sectional Breathing and Nadi Suddhi Pranayama on Red Blood Cell Count among College Men Students. *International Journal of Information Research and Review*. 2(3). pp.537-539.
27. Alaguraja K. and Yoga P, (2017). Influence of Yogasana Practice on Flexibility among Obese Adolescent School Boys. *International Journal of Yoga Physiotherapy and Physical Education*. 2(4). pp.70-71.
28. Yoga P. (2018). Effect of Circuit Training on Respiratory Frequency among Male Handball Players. *International journal of health, physical education & computer science in sports*. 29(2). Pp.153-155.
29. Balamuralikrishnan R and Yoga P. (2018). Effect of varied intensity of aerobic training on Self Esteem. *International Journal of Physical Education, Sports and Health*. 5(2). pp. 284-285.
30. James Rathinaraj S. and Yoga P. (2018). Structured resistance training on Vo2 Max. *International Journal of Physical Education Sports and Health*. 5(2). pp. 286-287.
31. Yoga P and James Rathinaraj S. (2018). Yogic Practices on Heart Rate. *International Journal of Yogic Human Movement and Sports Sciences*. 3(2), pp. 349-350.
32. Alaguraja K. and Yoga P. (2018). Effect of core stability training on dynamic strength among college male students. *International Journal of Yogic Human Movement and Sports Sciences*. 3(2), pp. 436-437.
33. Selvakumar K. and Yoga P. (2018). Changes of vertical jump through maximal power training among college men handball players. *International Journal of Yogic Human Movement and Sports Sciences*. 3(2), pp.438-439.
34. Yoga P. and Balamuralikrishnan R. (2018). Effects of yoga on psychological variable among school boys. *International Journal of Yogic Human Movement and Sports Sciences*. 3(2), pp. 473-474.
35. Yoga P, Balamuralikrishnan R and Alaguraja K., (2018). Influence of cyclic meditation on selected physiological parameter. *International Journal of Advanced Education and Research*. 4(1). Pp.17-18.
36. Yoga P. James Rathinaraj S and K. Selvakumar., (2018). Influence of intensive interval training on flexibility among college students. *International Journal of Advanced Education and Research*. 3(6). pp. 72-73.

37. James Rathinaraj S and Yoga P. (2019). Effect of physical exercise on resting pulse rate among school students. *International Journal of Advanced Education and Research*. 4(1) pp. 21-22.
38. Balamuralikrishnan R and Yoga P. (2019). Influence of Tibetan yoga on cardiovascular endurance among obese men students. *International Journal of Advanced Education and Research*. 4(1) pp. 19-20.
39. Ranjith VP and Yoga P. (2019). Effect of yogic practice on resting pulse rate among college men handball players. *Indian journal of Applied Research*. 9(4). pp.59-60.
40. Alaguraja K and Yoga P. (2019). Effect of yogic practice on resting pulse rate among school students. *Indian journal of Applied Research*. 9(7) pp. 43-44.
41. Selvakumar K. and Yoga P. (2019). Influence of yogic practice on flexibility among college students. *Indian journal of Applied Research*. 9(7). pp. 45-46
42. Alaguraja K, Yoga, Balamuralikrishnan R. and Selvakumar K. (2019). A of yogic package on resting pulse rate among obese school scientific study on efficacy students” *Journal of Information and Computational Science*, 9(8), pp.483-487.
43. Alaguraja K, and Yoga P, (2019). Analyze of pranayama technique on physiological parameter among rural school students. *Journal of Information and Computational Science*, 9(8), pp.545-550.
44. Sumitra Das and Yoga P, (2019). Effect of yogic package on body mass index among rural school girls. *Journal of Information and Computational Science*, 9(8), pp.462-467.
45. Sumitra Das and Yoga P, (2019). A study on effect of combined yoga and naturopathy on triglycerides among high school girls. *Journal of Information and Computational Science*, 9(8), pp.450-454.
46. Marinarai, and Yoga P,(2019). A scientific effect of yogic package on body mass index among class I obese. *Journal of Information and Computational Science*, 9(10), pp.468-473.
47. Marinarai, and Yoga P (2019). Efficacy of yogic therapy on high density lipoprotein among high school girls. *Journal of Information and Computational Science*, 9(10), pp.455-459.
48. Alaguraja K and Yoga P. (2019). A study on yogic package on body mass index among rural school boys. *International Journal of Physical Education, Exercise and Sports*.1 (2). pp. 07-09.
49. Alaguraja K and Yoga P. (2019). Impact of yogic package on body mass index among obese people. *International Journal of Physical Education, Exercise and Sports*.1 (2). pp. 04-06.
50. Alaguraja K and Yoga P. (2019). Combined pranayama and meditation practices on Self Esteem. *International Journal of Physical Education, Exercise and Sports*.1 (2). pp. 01-03.
51. Alaguraja K and Yoga P. (2019). Mindfulness meditation on stress among working men. *International Journal of Physiology, Sports and Physical Education*.1 (1). pp. 09-11.
52. Alaguraja K and Yoga P. (2019). Yogic therapy treatment on high density lipoprotein among high school boys. *International Journal of Physiology, Exercise and Physical Education*. 1(1). pp. 09-11.
53. Alaguraja K and Yoga P. (2019). A study effect of combined yoga and naturopathy on triglycerides among stressed people. *International Journal of Physiology, Exercise and Physical Education*. 1(1). pp. 09-11.
54. Alaguraja K and Yoga P. (2019). Analysis the effect of yogic package on low density lipoprotein among trained handball players. *International Journal of Physiology, Exercise and Physical Education*. 1(1). pp. 09-11.
55. Alaguraja K and Yoga P. (2019). A sequence of combined effect of SAQ training and yogic package on Self Esteem among handball players. *International Journal of Sports, Exercise and Physical Education*. 1(1). pp. 15-17.
56. Alaguraja K and Yoga P. (2019). Pranayama package on systolic blood pressure among middle ages unemployed women. *International Journal of Sports, Exercise and Physical Education*. 1(1). pp. 18-20.
57. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

58. Yoga P. (2020). Scientific Technological Evaluation of Isolated and Companied Practices of Yogic Practices And Meditation on Psychological Conditions of College Students. International journal of scientific & technology research. 9(2). pp. 6257-6258.