



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

EFFECT OF YOGIC PRACTICES AND PHYSICAL EXERCISES TRAINING ON FLEXIBILITY OF INTER – COLLEGIATE KABADDI PLAYERS IN JNTU UNIVERSITY

GEDDAYI SARIKA¹, Assistant Professor (P.D), S.R.K.R Engineering College (Autonomous), Bhimavaram, Andhra Pradesh.

OM PHANI NICHENAKOLLA², Research Scholar, Department of Physical Education And Sports Sciences, Andhra University, Visakhapatnam

ABSTRACT

The purpose of the study is to find out the effects of yogic practices and physical exercises on flexibility of Inter-Collegiate Kabaddi Players In JNTU University. 90 healthy, Kabaddi players were selected from Inter Collegiate Kabaddi tournament participation players in JNTU University, Kakinada. The subject's age ranged from 17 to 25 years. The selected subjects were divided into three groups with 30 subjects in each group. The training periods of experimental groups were six weeks, three alternative days per week with duration of 60 minutes. Control group did not undergo any training program rather than their routine work. Pre tests were conducted for all the 60 subjects on selected flexibility variable. After the experimental period of six weeks posttest were conducted immediately. To study the effect of yogic practices group and physical exercises training group along with control group and to find out the significant mean differences among them, the analysis of covariance (ANCOVA) technique were used. Scheffe's test was followed as a post hoc test to determine which of the paired means difference was significant. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate. The results of the study were concluded that there was significant improvement in selected variable.

Keywords : Physical Exercises, Yogic Practices, Kabaddi Players.

INTRODUCTION

Involves physical, mental, social and spiritual factors and the capacity for wholesome expressions". The continuous, systematic and regular practices of Yoga and any type physical activities are an effective tool to maintain good health and also helps eliminate all the dreadful diseases from the human body. Yoga is a systematic and methodical process to control and develop the mind and body to attain good health, balance of mind and self-realization. Though yoga has the potential power to make us healthy added to our vigor, still most people lack the knowledge of systematic practice of yoga. Flexibility exercise (stretching) has frequently been recommended as a means of increasing range of motion and hopefully reducing risk of injury.

METHODOLOGY

The purpose of the study is to find out the effects of yogic practices and physical exercises training on flexibility of Kabaddi Inter Collegiate students. The selected subjects were divided into three groups with 30 subjects in each group selected randomly, with two experimental groups and one control group. Experimental Group I underwent the yogic training selected asanas and pranayama. Experimental Group II underwent the selected physical exercise training in selected running, aerobic exercises, skipping and stretching. The training periods of experimental groups were six weeks, three alternative days per week with duration of 60 minutes. Control group did not undergo any training program rather than their routine work. All the groups were tested on selected criterion variable such as flexibility prior to and immediately after the training programme. Flexibility was assumed by sit and reach. The analysis of covariance (ANCOVA) were used to find the significant difference if any, among the experimental groups and control group on selected criterion variable.

RESULTS AND DISCUSSION

Table-I

Analysis of Covariance for the Pre, Post and Adjusted Post Test Means Values for Control Group, Yogic Practices Group and Physical exercises Group on Flexibility

TEST	Control Group	Group Yogic Practice	Group Physiel Exercises Training Group	SV	SS	Df	MS	F Ratio	Table Value
Pre Test Mean	24.8	24.45	24.25	BM	2.43	4	1.47	0.804	6.26
				WN	203.8	114	3.14		
Post Test Mean	24.45	24.7	26.7	BM	100.83	4	51.06	24.6	6.26
				WN	234.35	114	4.12		
Adjusted Post Test Mean	24.37	28.83	26.65	BM	118.9	4	59.14	40.06	6.25
				WN	163.28	114	2.98		

*Significant at 0.05 level of confidence

The table-1 shows that the pre-test mean values on flexibility of control group, yogic practices group and physical exercises training group were 24.8, 24.45 and 24.37 respectively. The obtained 'F' ratio 0.804 for pre-test mean was less than the table value 6.26 for df 4 and 114 required for significance at 0.05 level of confidence on flexibility. Hence it was insignificant. The post-test mean values on flexibility of control group, yogic practices group, physical exercises training group were 24.45, 24.7 and 28.83 respectively. The obtained F' ratio 24.6 for post-test mean was greater than the table value 6.26 for df 4 and 114 required for significance at 0.05 level of confidence on flexibility. Hence it was significant. The adjusted post-test means of control group, yogic practices group and physical exercises training group were 24.25, 26.7 and 26.65 respectively. The obtained 'F' ratio 40.06 for adjusted post-test mean was greater than the table value 6.25 for df 4 and 114 required for significance at 0.05 level of confidence flexibility. Since the obtained 'F' ratio value was significant further to find out the paired mean difference, the Scheffe's post hoc test was employed and presented in table- II

Table-II
The Scheffe's Test for the Difference between Paired Means on Flexibility
(Scores in Centimeters)

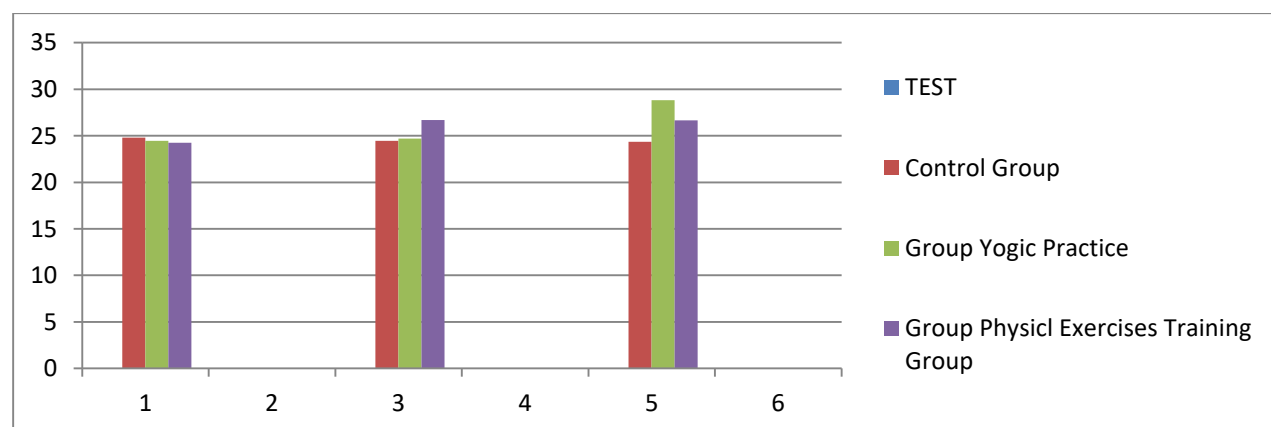
Mean			Mean Differences	Required CI
Control Group	Yogic Practice Group	Physical Exercise Training Group		
24.74	29.66		4.92*	1.94*
24.74		27.2	2.56*	
	29.66	27.2	2.36*	

*Significant at 0.05 level of confidence

Table-II shows the significant difference of paired adjusted post test means of control group, yogic practices group, and physical exercises training group on flexibility. The obtained mean differences between control group, yogic practices group and physical exercises training group were 4.92, 2.56 and 2.36 respectively. The required confidence interval value was 1.94.

Since the obtained mean differences between Control group and experimental groups were greater than the obtained confidence interval value flexibility, it was concluded that yogic practices group and physical exercises training group improved the flexibility better than the control group. Further it was concluded that the yogic practices group improved the flexibility better than physical exercises group.

Figure -III
Bar Diagram Showing the Pre, Post and Adjusted Post Test Mean Values of Control Group, Yogic Practices Group and Physical Exercises Group on Flexibility



CONCLUSIONS

1. It was concluded from the results of the study that the yogic practices and physical exercises groups showed significant improvement in flexibility when compared with a control group.

2. Yogic practices training was a suitable training system to improve the flexibility among the Inter Collegiate Kabaddi Players.

Conflict of Interest: Nil

Ethical Clearance: Nil

REFERENCES

1. Dr.R.SenthilKumaranDr.T.ArunPrasanna,Dr.M.Sundar,R.MEERAK.GOVINDASAMY,Dr.T.YOKESH,EFFECT OF CORE STRENGTH TRAINING AND YOGASANA PRACTICES ON SELECTED HEALTH RELATED PHYSICAL FITNESS COMPONENTS AMONG FEMALE ATHLETES, Journal JOURNAL OF XI AN UNIVERSITY OF ARCHITECTURE & TECHNOLOGY, Volume-14,Issue-5,P.No:1619-1624.
1. Jerin, C. M., Prasanna, T. A., Chandrasekhar, J. A., & Senthikumaran, M. S. D. R. AN INFLUENCE OF YOGIC PRACTICES ON SELECTED MOTORF ITNESS VARIABLE AMONG MEN KHO-KHO PLAYER.
2. Aladar Kagler . (2001)Yoga for Every Athlete- Secrets of an Olympic Coach, Jaico Publishing House, Mumbai.
3. Anne Marrie Bird and Bervetke K.Cripe (1991). Psychology and sports behaviour, Philadelphia, W.B. Saunders company P – 22.
4. McCall T. The Scientific Basis of Yoga Therapy. [Accessed Jun 16, 2012]. at http://www.yogajournal.com/for_teachers/2016 .
5. Manjunatha S, Vempati RP, Ghosh D, Bijlani RL. An investigation into the acute and long-term effects of selected yogic postures on fasting and postprandial glycemia and insulinemia in healthy young subjects. *Indian J Physiol Pharmacol*. 2005;49:319–24. [PubMed] [Google Scholar]
6. Sarang SP, Telles S. Changes in p300 following two yoga-based relaxation techniques. *Int J Neurosci*. 2006;116:1419–30. [PubMed] [Google Scholar].
7. Sarang SP, Telles S. Immediate effect of two yoga-based relaxation techniques on performance in a letter cancellation task. *Percept Mot Skills*. 2007;105:379–85. [PubMed] [Google Scholar].
8. Singh V, Wisniewski A, Briton J, Tattersfield A. Effects of yoga breathing exercises on airway reactivity in subjects with asthma. *Lancet*. 1990;335:1381–3. [PubMed] [Google Scholar].
9. Sivasankaran S, Pollard-Quintner S, Sachdeva R, Pugeda J, Hoq SM, Zarich SW. The effect of a six-week program of yoga and meditation on brachial artery reactivity: Do psychosocial interventions affect vascular tone? *Clin Cardiol*. 2006;29:393–8. [PMC free article] [PubMed] [Google Scholar].
- 10.Mody BS. Acute effects of Surya Namaskar on the cardiovascular & metabolic system. *J Bodyw Mov Ther*. 2011;15:343–7. [PubMed] [Google Scholar].
- 11.Balaji PA, Varne SR, Sadat-ali S. Effects of yoga - pranayama practices on metabolic parameters and anthropometry in type 2 diabetes. *International Multidisciplinary Research Journal*. 2011;1:1–4. [Google Scholar].
- 12.Tulpule TH, Shah HM, Shah SJ, Haveliwala HK. Yogic exercises in the management of ischaemic heart disease. *Indian Heart J*. 1971;23:259–64. [PubMed] [Google Scholar]
- 13.Telles S, Nagarathna R, Vani PR, Nagendra HR. A combination of focusing and defocusing through yoga reduces optical illusion more than focusing alone. *Indian J Physiol Pharmacol*. 1997;41:179–82. [PubMed] [Google Scholar]
14. Ulger O, Yağlı NV. Effects of yoga on balance and gait properties in women with musculoskeletal problems: A pilot study. *Complement Ther Clin Pract*. 2011;17:13–5. [PubMed] [Google Scholar]