Effect of Yogic Exercises on the Physical Fitness Components of Handball Players

Dr.BalasahebDattarao Paul

Shri.TulshiramjiJadhao Arts and Science College, Washim

Abstract:

Yogic exercises not only increase the general strength but also tone up the muscles because these exercises stretch outthe muscles and due to their slow stretch and hold nature along with breathing mechanism improves the muscular tone and strength of the muscles. To achieve the purpose of the study Ten weeks yoga training was administered and AAPHER fitness testis framed to find out the minimum physical fitness required to participate in the training programme and also to find out theimprovement in Physical fitness after the training programme. The 40 handball players (Boys) who is regularly playing handballin evening at Shri.TulshiramjiJadhao Arts and Science College, WashimTheir age ranged between 17-25years. Students were given the treatment of selected. The purpose of the study is to assess the selected yogic exercises on Physical fitness components of the handball players. To study the effect of yogic exercises on the Physical fitness of the handball players. Yogic asana & pranayama for 10 weeks Result shows that the regular practice of yoga improved Physical fitness significantly.

Key words: Yogic Exercises, Physical fitness.

Introduction

The most important benefit of yoga is physical and mental therapyIndians have given great importance to "yoga" and physical exercises" not only to prevent or cure the physical ailments/diseases but to keep fit also. Yoga is an ancient science of physical, mental and spiritual development. Yoga has become increasingly popular in Western cultures as a means of exercise and fitness training. Yoga is ultimate for developing harmony among body, mind and spirit. Yoga asana are ways of moving and/or holding the body in different position. Yoga asana has several exercises or postures that work wonders on fitness and health. Varying widely in application and style, these exercises (postures) gently stretch and explore all parts of body. Yoga asana boost physical strength, stamina and flexibility, improve blood circulation, enhance posture and muscle tone and bestow greater powers of concentration and self-control. The person who is physical fit will be able to carry out the essential of his job

without undue fatigue. Fitness is characterized by man's ability to function efficiently with in his potentialities. Fitness implies notonly the acquisition of certain physical skills but also the ability to withstand the emergency demands training and competitions. High level of strength is essential to good performance in all-athletic games and in some events strength is of almost important. Yogic exercises increase the general strength and tone up the muscles becausethese exercises stretch the muscles, due to their slow movement and held position with breathing mechanism improves the muscletone. Training the word "Training' has been a part of human language since ancient times. It denotes the process of preparation forsome task. This process invariably extends to a number of days and even months and years.

Purpose of the Study:

The purpose of the study is to assess the selected yogic exercises on Physical fitness components of thehandball players. To study the effect of yogic exercises on the Physical fitness of the handball players.

Email id's:- aiirjpramod@gmail.com,aayushijournal@gmail.com | Mob.08999250451 website :- www.aiirjournal.com

Vol - VI Issue - V MAY 2019 Peer Review e-Journal Impact Factor 5.707 ISSN 2349-638

Methodology

The AAPHER youth fitness test consists of six tests the first five tests were used to find out the Physical fitness and the last one toindicate the endurance. All the six tests, namely Pull Ups, Bent Knee Sit ups for Sixty Seconds, 4X10 m shuttle run, broad jump,50m dash, 600 yard run are modified and were used to test 40 handball players. The modified AAPHER youth fitness were conducted on the handball players, the pre training performance of handball players is recorded. After the training again the AAPHER youth fitness test was administered to find out the improvement in the Physical fitness of the handball players. TestAdministration In order to assess the Physical fitness of the subjects the modified AAPHER youth fitness tests were administeredare given below. Tests Pull Ups, Bent Knee Sit ups for Sixty Seconds, 4X10 m shuttle run, broad jump, 50m dash, 600 yard run

The yogic training consists of the following selected yogic exercises

S.N.	ASANA Position	ASANA			
1	Standing	Suriyanamaskar			
		Tadasana			
		Trikonasana Trikonasana			
		Utkatansana			
		Cakra <mark>sa</mark> na			
2	Sitting	Yoga Mudra			
		Paschimottanasana			
		ArdhaMatsyendrasana			
3	Kneeling	Vajrasana			
4	Prone	Bhujangasana			
		Shalabhasana			
		Dhanurasana			
5	Supine	Naukasana			
		Sarvangasana			
		Halasana			
		Savasana			

Procedure:

The modified AAPHER youth fitness Tests were administered to the handball players. The each test item is demonstrated correctly to the handball players and then asked them to do the same. The yogic exercises are also demonstrated correctly and askedthem to do the same.

Training Schedule

Wee	Asana	Repetitio	Rest	Frequency	
k	Position	n sets	betwee	/ week	
			n		
			Asanas		
	Standin	1 (10	05 Sec.		
	g	Min.)			
	Seating	1 (10	05 Sec.	5 Day/	
		Min.)		Week	
10	Kneelin	1 (10	05 Sec.]	
Week	g	Min.)			
	Prone	1 (10	05 Sec.]	
		Min.)			
	Supin	1 (10	05 Sec.]	
		Min.)			

Statistical Technique: Mean, Standard deviation and t-value were used to compute the data.

Results and Discussions From the data obtained the flowing are tabulated for analysis.

Table-1 Pre and Post-training performance of handball players.

Training		Pu	Ben	4X1	bro	50	600
		11	t	0 m	ad	m	m
		Up	Kn	shutt	jum	das	run
		S	ee	le	p	h	min
		No	Sit	run	cm	Sec	
			Ups	Sec.	2		
			No.				
Pre-	M	20	24	15	155	7.3	1.2
Training	S	2.1	3.1	2.3	2.1	2.1	2.1
	D				20 1	1.2	
PostTrai	M	25	30	12	165	7.0	1.0
ning				£ 3			
	S	3.1	3.6	2.6	2.8	3.0	3.1
	D				7		
t- Value		7.7	8.9	5.20	4.0	3.1	3.9
	-	*1	8*	*	0*	0*	0*

Significance at 0.05 level

As per the Table-1 and graph it is rivalled that the mean scores of pre and post training performance in modified AAPHER youth fitness test. It clearlyshows the significance difference in the performance of the handball players in two conditions. It means that the yogic asanasintroduced to the handball players are responsible for bringing improvement in the Physical fitness components.

Conclusions

The selected yogic exercises intervention improved the fitness (Physical fitness) of the handball players. The positive and significant effect of yogic exercises on the Physical fitness of the handball players. The selected yogic exercises because of theirslow

Email id's:- aiirjpramod@gmail.com,aayushijournal@gmail.com | Mob.08999250451 website:- www.aiirjournal.com

movement and held position improve the muscular tone. This improved muscle tone of the abdominal, lower back, upper backand back & hamstrings is responsible for the improvement of Physical fitness of the handball players. Ten weeks Yoga training isbeneficial for improvement in Physical fitness endurance of handball players.Recommendations The results of the survey taken of the muscular fitness of the handball players should be great concern to thecoaches and trainers in the welfare of the handball players. The results bring out the weakness of the handball players and also suggest the importance of including suitable yogic exercises for the improvement of muscular fitness. A larger sale of study may national beconducted state. international handball players and also on different genders for longer periods.

References

- Abramowitz, Milton & Irene A. Stegun, eds.(1972). Handbook of Mathematical Functions, with Formulas, Graphs, and Mathematical Tables. Washington, D.C.: U.S. Government Printing Office.
- 2. Anjali Joglekar (1999), "A Study of the Effect of Yogic Exercises for the promotion of Physical Fitness and Badminton skill s of College Girls of Age between18 to 20 Years." Masters' Dissertation in Physical Education, BPCA's College of Physical Education, University of Mumbai, pp.1-138.
- 3. B K Acharya, et. al. (2010), "Effect of Pranayama(voluntary regulated breathing) and Yogasana (yoga postures) on lipid profile in normal healthy juniorfootballersInternational Journal of Yoga, 3(2): P 70.
- 4. B. Donohue, et.al. (2006), "Effects of brief yoga exercises and motivational preparatory interventions in distance runners: results of a controlled trial"

- BritishJournal of Sports Medicine.January; 40(1): Pp 60–63.
- 5. Bandelow S, et.al. (2010) "The effects of exercise, heat, cooling and rehydration strategies on cognitive function in football players." Scandinavian Journal of Medicine and science in Sport Oct; 3: Pp 148-60.
- 6. Box ,George E.P.; William, G. Hunter & J. Stuart Haunter (1978).Statistics for Experimenters: An Introduction to Design, Data Analysis, and Model Building.New York: John Wiley and Sons.
- 7. Brechue W.F and Mayhew J L. Upper -body work capacity and 1RM prediction are unaltered by increasing Physical fitness in college football players. Journalof Strength and Conditioning Research. 2009; 23(9): Pp 2477 86.
- 8. Cowen , V.&Admas t.(2005). "Physical and perceptual benefits of yoga asana practice: results of a pilot study".Journal of Bodywork and MovementTherapies.9:3:211-219.
- 9. Cowen , V.&AdmasT.(2005). "Physical and perceptual benefits of yoga asana practice: results of a pilot study". Journal of Bodywork and Movement Therapies. 9:3:211-219.
- 10. Garret, Henry E.(1981). Statistics in Psychology and Education.Bombay: Feffer and Simons Ltd.
- 11. Harinath, K.et.al.(2004)."Effects of hatha yoga and omkarmeditation on cardiorespiratory performance, psychologic profile, and melatonin secretion". The Journal of Alternative and Complementary Medicine. 10:2:261-268.
- 12. Harshika, (Nov,2010), "Advantages of Yoga -Why Yoga Exercise is Best For You", www.google.co.in.
- 13. Joshi, L.N.; Joshi, V.D. &Gokhale, L.V.(1992)." Effect of short term

Email id's:- aiirjpramod@gmail.com,aayushijournal@gmail.com | Mob.08999250451 website :- www.aiirjournal.com

Vol - VI Issue - V MAY 2019 Peer Review e-Journal Impact Factor 5.707 ISSN 2349-6383

- "pranayama" practice on brethinh rate and ventilatory function of lung".Indian Jl. PhysiolPharmacol.36:2:105-108.
- 14. Kansal,D.K.(1996).Test and Measurement in Sports and Physical Education.New Delhi :D.V.S.Publication..
- 15. Ledoux, M. et al., (1997), "A Comparative Analysis of Weight to Height and Waist to Hip Circumference Indices as Indicators of the Presence of cardiovascular Disease Risk Factors", Canadian Medical Association Journal, 157(S-1), pp.32-38.
- 16. Petrofsky JS., et al., (2005), "Muscle Activity during Yoga Breathing Exercise Compared to Abdominal Crunches", The Journal of Applied Research, 5(3),pp.501-507.229
- 17. Raub, J.A.(2002)."

 Psychophysiological effects of hatha yoga on musculoskeletal and cardiopulmonary function: A Literature Review". The Journal of Alternative and Complementary Medicine. 8:6:797-812.
- 18. Ray, U.S.;Mukhopadhyaya, S.;
 Purkyastha,S.S.; Asnani, V.;Tomer,
 O.S.;Prashad, R.;Thakur, L.
 &Selvamurthy, W.(2001)." Effect of
 yogic exercises on physical and
 mental health of young fellowship
 course trainees".Indian Jl.
 PhysiolPharamacol. 45:1:37-53.
- 19. Tran, M.D., Holly, R.G., Lashbrook, J. et al, Effects of Hatha yoga practice on the health-related aspects of physical fitness. Preventive Cardiology.2001;4:165–170.
- 20. Uppal ,A.K. &Gautam, G.P.(2006).

 Physical Education and
 Health.NewDelhi : Friends
 Publication.

- 21. Verma ,J.Prakash.(2000).Sports Statistics.Gwalior: Venus Publications.
- 22. www.abc-of-yoga.com/pranayama Yadav,R.K. & Das, S.(2001)." Effect of yogic practice on pulmonary functions in young females".Indian Jl. PhysiolPharamacol. 45:4:493-496.

