



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2019; 4(1): 91-92

© 2019 Yoga

[www.theyogicjournal.com](http://www.theyogicjournal.com)

Received: 18-11-2018

Accepted: 22-12-2018

#### R Ramakrishnan

Research Assistant ICSSR Major Project, Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

#### Dr. S Sethu

Assistant Professor, Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

## Effects of Yogasanas practice on motor skills among school children

**R Ramakrishnan and Dr. S Sethu**

### Abstract

The purpose of the study was to find out the effect of Yogasanas on motor skills among School Children. For this purpose, one hundred ( $n=100$ ) children were selected from Tirunelveli District, Tamil Nadu, India. The Subjects "age ranged between 6 to 8 years. The selected subjects were divided into two groups of fifty subjects each namely experimental and control group. The selected motor skill variables such as bilateral coordination (as jumping in a place – same side synchronized, tapping finger and leg same side synchronized), balance (walking forward on a line and standing one leg on a balancing beam with eye open) and upper-limb coordination (dropping and catching a ball with both hands and dribbling a ball – alternate hands) for this study. The selected dependent variables were assessed by using the Bruininks – Oseretsky test for Motor Proficiency Second Edition- (BOT-2). The collected data on the selected variables were treated with independent “t” test at 0.05 level of significant. The results of the study indicate that there was significant improvement on motor skills due to the effect of 6 weeks Yogasanas practice.

**Keywords:** Yogasanas, motor skills, bilateral coordination, balance

### Introduction

Yoga is one of the great gifts on the planet, and availing yourself of it and bringing mindfulness to your body and mind through the gateways of yoga asanas and the flowing sequences of various postures can be extraordinarily uplifting, rejuvenating, invigorating, transporting, and just plain relaxing (Kabat-Zinn, 2005) [6]. Yoga exercises boost physical health as well as help to cleanse the body, mind, and soul (Chen, He, Hsu, Chou, Lee, S & Lin, 2014) [3]. It comprises of many asanas and each of them denotes the static physical postures (Chen, He, Chou, Lee, Lin, & Yu, 2013) [2].

Yogasana (Yoga Postures) that range from very dynamic, active movements that go from one posture to another (and result in a thorough aerobic workout) to more slow-paced practices that hold postures for several minutes and form an intense strength training and balanced workout (Acharya, Upadhyay, Upadhyay, & Kumar, 2010) [1].

Motor skill is learned, behavior progresses from execution of movements that appear to be separately generated to recruitment of a single entity. Movements come to be executed more quickly, require less attention, and behavior loses flexibility (Shah, & Barto, 2007) [8].

### Purpose of the study

The purpose of the study was to find out the effect of Yogasanas on motor skills among School Children.

### Methodology

For this purpose, one hundred ( $n=100$ ) children were selected from Tirunelveli District, Tamil Nadu, India. The subjects age ranged between 6 to 8 years. The selected subjects were divided into two groups of fifty subjects each namely experimental and control group. Experimental group underwent 6 weeks of Yogasana practice. The training schedule for experimental group was formed on the basis of Ministry of Women and Child Development, Government of India recommendations. The selected motor skill variables such as bilateral coordination (as jumping in a place – same side synchronized, tapping finger and leg same side synchronized),

#### Correspondence

#### R Ramakrishnan

Research Assistant ICSSR Major Project, Department of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

balance (walking forward on a line and standing one leg on a balancing beam with eye open) and upper-limb coordination (dropping and catching a ball with both hands and dribbling a ball – alternate hands) for this study. The selected dependent

variables were assessed by using the Bruininks – Oseretsky test for Motor Proficiency tests (BOT-2). The collected data on the selected variables were treated with independent “t” test and ANCOVA at 0.05 level of significant.

**Table 1:** The summary of mean and dependent t-test and ANCOVA values

Variable	Test	Experimental group		Control group		F Value
		Mean	SD	Mean	SD	
Bilateral Coordination	Pre test	3.25	0.14	3.31	0.10	21.8*
	Post test	6.15	0.11	3.35	0.13	
	T test	3.14*		0.69		
Balance	Pre test	3.45	0.13	3.49	0.16	27.9*
	Post test	7.12	0.10	3.52	0.12	
	T test	3.58*		0.78		
Upper limb Coordination	Pre test	6.38	0.18	6.44	0.16	15.78*
	Post test	10.45	0.12	6.56	0.14	
	T test	6.75*		1.14		

\*Significant at.05 Level. Table value required for significance at.05 levels for ‘t’ with 49 is 2.00 & ‘f’ with 1,97 is 3.94 (Scores are represented in points for the selected variables).

The t-test value of experimental group df 2.00, is 3.14, 3.58 & 6.75, This means that the experimental group had significant improvement on bilateral coordination, balance and upper limb coordination. However, control group had no improvement.

The F ratio value on Bilateral coordination is 21.8, balance is 27.9 and upper limb coordination is 15.78 which is higher than the table value with df 1, 97 is 3.94. This means that there is significance difference between control and experimental groups on selected dependent variables.

## Discussion on findings

The result of the study indicates that the experimental group had significant improvement on selected dependent variable on bilateral coordination, balance and upper limb coordination. However, experimental and control group had significant difference on selected dependent variable. The present findings of the study is confirmed by the studies conducted already related this area such as Donahoe-Fillmore, & Grant, (2019) [4]; Pise, Pradhan, & Gharote, (2018) [7]; Folleto, Pereira, & Valentini, (2016) [5].

## Conclusions

- There was a significant improvement on balance ability due to 6 weeks of Yogasanas practice among school children.
- There was a children had significant improvement on bilateral coordination ability due to 6 weeks of Yogasanas practice among school children.
- There was a children had significant improvement on upper limb coordination due to 6 weeks of Yogasanas practice among school children.
- The control group had no significant improvement on motor skills such as bilateral coordination, balance, upper limb coordination among school children.

## References

- Acharya B, Upadhyay A, Upadhyay RT, Kumar A. Effect of Pranayama (voluntary regulated breathing) and Yogasana (Yoga Postures) on lipid profile in normal healthy junior footballers. International journal of yoga. 2010; 3(2):70.
- Chen HT, He YZ, Chou CL, Lee SY, Lin BSP, Yu JY. Computer-assisted self-training system for sports exercise using kinects. In 2013 IEEE International Conference on Multimedia and Expo Workshops (ICMEW). IEEE, 2013, 1-4.

- Chen HT, He YZ, Hsu CC, Chou CL, Lee SY, Lin BSP. Yoga posture recognition for self-training. In International Conference on Multimedia Modeling Springer, Cham. 2014, 496-505.
- Donahoe-Fillmore B, Grant E. The effects of yoga practice on balance, strength, coordination and flexibility in healthy children aged years. Journal of Bodywork and Movement Therapies. 2019, 10-12
- Folleto JC, Pereira KR, Valentini NC. The effects of yoga practice in school physical education on children's motor abilities and social behavior. International journal of yoga, 2016; 9(2):156.
- Kabat-Zinn J. Guided mindfulness meditation. Stress Reduction Tapes and CDs. 2005.
- Pise V, Pradhan B, Gharote M. Effect of yoga practices on psycho-motor abilities among intellectually disabled children. Journal of exercise rehabilitation. 2018; 14(4):581.
- Shah A, Barto AG. Functional mechanisms of motor skill acquisition. BMC neuroscience. 2007; 8(2):203.