

EFFECT OF ASHTANGA VINYASA SURYA NAMASKAR PRACTICES ON STRENGTH AND BALANCE AMONG ADOLESCENCE MALE

DR.S.SELVALAKSHMI

Assistant Professor & Head i/c, Department of Yoga, Tamil Nadu Physical Education and Sports University, Chennai – 600 127.

ABSTRACT

Today adolescence is in growing age they have lack of physical and mental fitness such as speed, strength, flexibility, balance, stress, anxiety, depression etc. The Ashtanga Vinyasa Surya Namaskar practices (AVSN) is the most popular contemporary style of yoga it helps the adolescence to improve their physical and mental fitness variables. The purpose of the study was to find out the “effect of Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practices on strength and balance among adolescence male”. To achieve the purpose of the present study, forty adolescence male from Chennai district, Tamil Nadu were selected as subjects at random and their ages ranged from 15 to 19 years. The subjects were further classified at random into two equal groups of 20 subjects each such as Experimental Group and Control Group. Experimental Group underwent Ashtanga Vinyasa Surya Namaskar A & B (AVSN) Practices for thrice in a week for 6 weeks. Control Group (CG) did not participate in any special training apart from the regular day programme. The selected variables such as strength and balance were measured by using push up and Stork Balance Stand Test. The collected data were analyzed statistically through analyze of covariance (ANCOVA) to find a significant difference. The results of the study showed that strength and balance were significantly improved due to Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practices among adolescence male.

KEYWORDS: Ashtanga Vinyasa Suryanamaskar.

INTRODUCTION

"Yoga is not an ancient myth buried in oblivion. It is the most valuable inheritance of the present. It is the essential need of today and the culture of tomorrow."

Swami Satyananda Saraswati (2002)

Ashtanga yoga is based on the Antaranga yoga of Patanjali yoga system, it gives a practical and easy approach to reach higher states of consciousness. This is the most systematic method for attaining the highest state of meditation. The one who follows this type of yoga system which brings them into wisdom, control, harmony and equanimity, which embraces the accumulation of knowledge, esoteric, experience, arusing of psychic powers, philosophy and meditation. Ashtanga yoga which is consist of eight fold system such as yama, niyama, asana, pranayama, prathyahara, dharana, dhyana, and samadhi (**krishan kumar suman, 2015**) The word Vinyasa, means flow because of the poses run together in smooth way, and it's a broad classification that encompasses many different types of yoga, including Ashtanga and power yoga (**Anna Pizer, 2019**).

STATEMENT OF THE PROBLEM

The purpose of the study was to find out effect of ashtanga vinyasa surya namaskar practices on strength and balance among adolescence male.

HYPOTHESIS

It was hypothesized that there would be significant improvement on strength and balance due to ashtanga vinyasa surya namaskar practices among adolescence male.

METHODOLOGY

The purpose of the study is to find out the “effect of Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practices on strength and balance among adolescence male”. To achieve the purpose of the present study, forty adolescence male from Chennai district, Tamil Nadu were selected as subjects at random and their ages ranged from 15 to 19 years. The subjects were further classified at random into two equal groups of 20 subjects each for Experimental Group and Control Group. Experimental Group underwent Ashtanga Vinyasa Surya Namaskar A & B (AVSN) Practices for thrice in a week for 6 weeks. Control Group (CG) did not participate in any special training apart from the regular day programme.

TRAINING PROGRAMME

During the training period the experimental group underwent 6 weeks of Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practices. The duration of training programme were planned for 60 minutes that is from 7.00am to 8.00am on Mondays, Wednesdays and Fridays. All the subjects involved in this study were carefully monitored throughout the training programmes, Each session 60 minutes consist of 5 min warm up exercise followed by Starting Prayer (2 Min) Preparatory Practices - Warm up (13 Min) Surya Namaskar – A & B (25 Min) Loosening Exercise (5 Min) Relaxation (13 Min) Closing Prayer (2 Min) After completion of 6 weeks of training period, the participants were retested as the pre test.

Warm Up and Loosening Exercise

Ankle Rolls, Knee Circle, Hip Circles, Sacrum Circles, Pelvic Rotations, Spine Rolls, Spinal Twist

Surya Namaskar (A) - Inhale – URDHVA HASTASANA, Exhale – UTANASANA, Inhale – URDVAH UTANASANA, Exhale – CHATURANGA DANDASANA, Inhale – URDVAH MUKHA SVANASANA, Exhale – ADHO MUKHA SVANASANA, Inhale– URDVAH UTANASANA, Exhale–UTANASANA, Inhale – URDHVA HASTASANA, Exhale – SAMASTHITI

Surya Namaskar (B) - Inhale – UTKATASANA, Exhale – UTANASANA, Inhale – URDVAH UTANASANA, Exhale – CHATURANGA DANDASANA, Inhale – URDVAH MUKHA SVANASANA, Exhale – ADHO MUKHA SVANASANA, Inhale – VIRABHADRASANA I, Exhale – CHATURANGA DANDASANA, Inhale – URDVAH MUKHA SVANASANA, Exhale – ADHO MUKHA SVANASANA, Exhale – ADHO MUKHA SVANASANA, Exhale – CHATURANGA DANDASANA, Inhale – URDVAH MUKHA SVANASANA, Exhale – ADHO MUKHA SVANASANA, Inhale – URDVAH UTANASANA, Exhale – UTANASANA, Inhale – UTKATASANA, Exhale – SAMASTHITI

STATISTICAL TOOL

The collected data were analysed statistically through analyze of covariance (ANCOVA) to find the significance difference.

ANALYSIS OF THE DATA

The data collected prior and after the experimental periods on strength and balance of experimental group (AVSN) and control group (CG) were analysed and presented in table – I & II. The level of significance was fixed at 0.05 level of confidence to test the ‘F’ ratio obtained by analysis of covariance.

TABLE – I
ANALYSIS OF COVARIANCE FOR PRE AND POST DATA ON STRENGTH
(Scores in Numbers)

Test	Experimental Group (AVSN)	Control Group (CG)	Source of variance	Sum of Squares	df	Mean square	F
Pre-test mean	16.00	15.75	Between	0.625	1	0.625	0.13
			Within	177.75	38	4.67	
Post-test mean	20.00	15.85	Between	172.22	1	172.22	40.76
			Within	160.55	38	4.22	
Adjusted mean	19.89	15.95	Between	154.69	1	154.69	162.46
			Within	35.23	37	0.95	

* Significant at 0.05 level of confidence. (The table value required for significance at 0.05 level of confidence with df 1 and 38 and 1 and 37 were 4.09 and 4.10 respectively).

DISCUSSION ON FINDINGS OF STRENGTH

The obtained F value on pre test scores 0.13 was lesser than the required F value of 4.09 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 40.76 was greater than the required F value at 4.09. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 162.46 was greater than the required F value at 4.10. This proved that there was Significant differences among the means due to six weeks of Ashtanga Vinyasa Surya Namaskar practice A & B (AVSN) on strength.

The obtained adjusted mean values were presented through bar diagram in figure 1.

FIGURE-1
BAR DIAGRAM SHOWING THE MEAN VALUES EXPERIMENTAL GROUP AND CONTROL GROUP ON STRENGTH

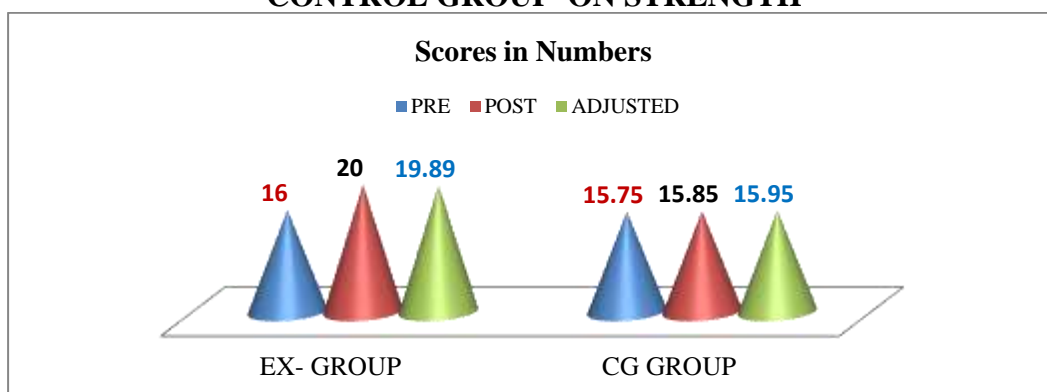


TABLE – II
ANALYSIS OF COVARIANCE FOR PRE AND POST DATA ON BALANCE
(Scores in Seconds)

Test	Experimental Group (AVSN)	Control Group (CG)	Source of variance	Sum of Squares	df	Mean square	F
Pre-test mean	14.35	14.50	Between	0.22	1	0.22	0.05
			Within	161.55	38	4.25	
Post-test mean	18.15	14.55	Between	129.6	1	129.6	25.76
			Within	191.5	38	5.03	
Adjusted mean	18.21	14.48	Between	138.55	1	138.55	64.39
			Within	79.60	37	2.15	

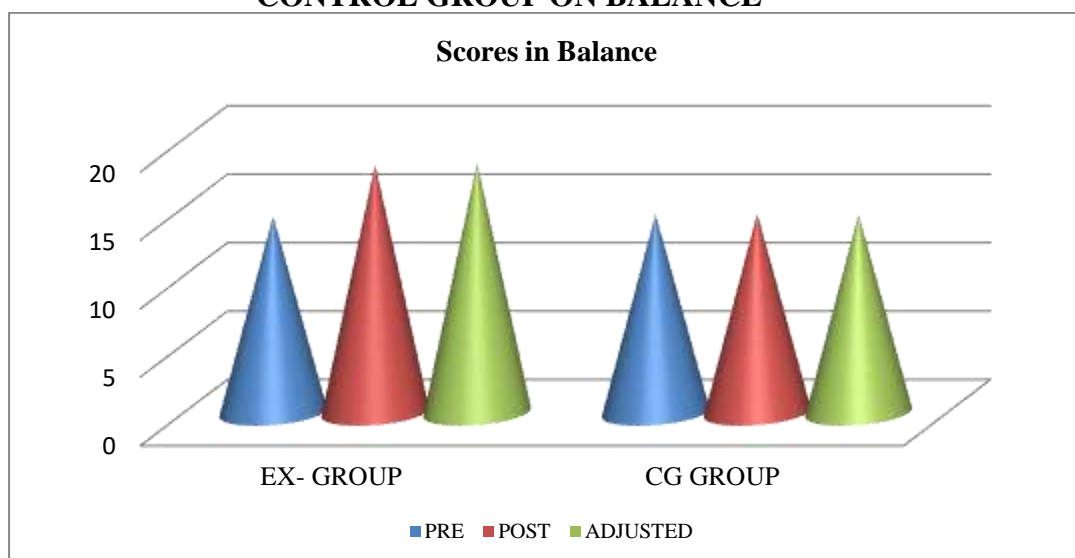
* Significant at 0.05 level of confidence. (The table value required for significance at 0.05 level of confidence with df 1 and 38 and 1 and 37 were 4.09 and 4.10 respectively).

DISCUSSION ON FINDINGS OF BALANCE

The obtained F value on pre test scores 0.05 was lesser than the required F value of 4.09 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 25.76 was greater than the required F value at 4.09. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 64.39 was greater than the required F value at 4.10. This proved that there was Significant differences among the means due to six weeks of Ashtanga Vinyasa Surya Namaskar practice A & B (AVSN) on balance.

The obtained adjusted mean values were presented through bar diagram in figure 2.

FIGURE-2
BAR DIAGRAM SHOWING THE MEAN VALUES EXPERIMENTAL GROUP AND CONTROL GROUP ON BALANCE



CONCLUSIONS

1. It was concluded that selected criterion variables strength was significantly improved due to Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practice among adolescence comparing to the control group.
2. It was concluded that selected criterion variables balance was significantly improved due to Ashtanga Vinyasa Surya Namaskar A & B (AVSN) practice among adolescence comparing to the control group.

REFERENCE

1. Doriel Hall and Jean Hall (2009) The Practical Encyclopedia of Astanga Yoga and Meditation, Joanna Lorenz publication p. 44.
2. Doriel Hall and Jean Hall (2009) The Practical Encyclopedia of Astanga Yoga and Meditation, Joanna Lorenz publication p. 47.
3. Gregor Maehle (2006) ASHTANGA YOGA Practice and Philosophy A Comprehensive Description of the Primary Series of Ashtanga Yoga, Sutra of Patanjali New World Library Novato, California pp. 15-16
4. kr, senthil, "User pattern of Libraries by students of Government colleges in Tamilnadu : A Study" (2019). Library Philosophy and Practice (e-journal). 2788. <https://digitalcommons.unl.edu/libphilprac/2788>
5. Senthil Kumar, K., Recent Trends of ICT Services and the Present Scenario of Some Selected Engineering College Libraries in Coimbatore District, Tamilnadu: A Study (February 2017). Asian Journal of Applied Science and Technology (AJAST), Volume 1, Issue 1, Pages 199-202, February 2017 . Available at SSRN: <https://ssrn.com/abstract=2928955>
6. A Scientometric Study On Nisclair Journal Of Annals Of Library And Information Studies From 1999 To 2013 K Senthilkumar – 2015
7. Gyankosh- The Journal of Library and Information Management Year : 2013, Volume : 4, Issue : 1 First page : (89) Last page : (93) Print ISSN : 2229-4023. Online ISSN : 2249-3182. Free web page: A tool on usage of academic library development Kumar KR. Senthil
8. Dr. Senthilkumar kr 2020 Comparison of E- Resources with their Usage Statistics in Southern Region, Library Philosophy and Practice (e-journal) <https://digitalcommons.unl.edu/libphilprac/3270/>
9. Raj Tater Sohan (2010) yoga therapy p. 1
10. Satyanarayana (2016) Sports Training, Sports Publication p. 53
11. Shri K. Pattabhi Jois, (2013) An Introduction to the Fundamentals of Astanga Yoga, p.4
12. Swami Satyananda Saraswati (2002) Asana Pranayama Mudra Bandha Yoga Publications Trust, Munger, Bihar, India pp. 1 -3.
13. Uppal A.K (2001) principles of Sports Training, Friends Publications p. 38.