

2020-2021

ISSN 2231-6671

International Registered and Recognized
Research Journal Related to Higher Education for all Subjects

Hi-TECH

RESEARCH ANALYSIS



EDITOR IN CHIEF
DR. BALAJI KAMBLE



5

Effect of six week Yogic Exercise on Balance and Flexibility of Females

Dr. Sanjay G. Kadam
Director, Physical Education,
N. S. S. Arts and Science College,
Chausala, Dist. Beed

Research Paper - Physical Education

ABSTRACT

The purpose of the study is to find out "An effect of six week yogic exercise on balance and flexibility of school children's. Therefore, Sixty female students from eighth and ninth standard of High School were selected for the study. Their interest, attitude and dietary habits were different and this limitation was recognized by the researcher. 30 subjects of group A undergone six-week yogic exercise and 30 controlled subject of group B is presented in this study. In groups A the mean gain in both variables were found statistically significant at .05 level of confidence

Keywords : Balance, dynamic, flexibility, static, yoga.

Introduction

Yogasanas are the series of carefully designed positions by great yogis. These scientifically designed postures conserve the energies and transform them to subtle forms of mental energies. Yogasanas help to bring the whole body to the peak of physical perfection and top efficiency. Body acquires enough strength and tolerance to withstand stresses and strains of all types at every step of our life. At every step a mental association is established with the physical actions.



Since the health of the body is primarily and predominantly the health of the inner autonomous, vital and essential organs, yogasanas help to develop their functions to a great extent and hence thereby curing several acute and chronic diseases.

Yogasanas improves blood circulation. Increased blood supply improves the complexion, puts colour in our cheeks, makes the eyes shine, smoothes away wrinkles. Face as well as whole body becomes radiant. Contraction and relaxation through different postures improve neuro-muscular system.

A disease free body is not a healthy body until it possesses maximum efficiency. Yogasanas not only provide maximum efficiency to the basic systems but also help in reaching the ultimate limits of self-purification and yogic realisation.

The spine has a tremendous task, not only in keeping the body upright and mobile but also maintaining proper efficiency of important parts of the body. All major nerves originate from it and its effects are far reaching.

Yogasanas seem designed to stretch the spine in one manner or another. A supple healthy and strong spine makes us confident and energetic. In yoga, it is said -

“You are as healthy as flexible” and also

“ You are as young as flexible”

Flexibility of spine plays the major role. Through yoga, we not only delay the natural ageing process but also we can reverse it to a certain extent. Correct glandular function renews vigour of mind and body. Keeping body parts clean and well lubricated, we can significantly reduce the catabolic process of cell deterioration. Exercises trim excess fat. We feel better and hence look better. Yogasanas develop a beautiful and well proportioned body. Hath Yoga Pridipika describes the benefits of yogasanas beautifully, “Yogasanas make one firm, free from maladies and light of limb.”

Flexibility can be defined as the ability to perform movement with greater range of motion or large amplitude. It is controlled partly by the energy liberation processes of the body and partly by the coordinative processes of central nervous system. Balance is the ability of a sportsperson to maintain equilibrium of the body both in static and dynamic conditions. All types of body movements are affected by this ability but it has a special importance when movements are done in a small area. This ability depends upon the



functional capacity of vestibular apparatus.

Yoga also insists on the primary need of day today good health which is to be achieved through its own system of physical education, which promotes moral and mental discipline. The purity of human nature and of the mind as to be achieved through good health of the body. In the recent past Yoga education has become inevitable for the maintenance of good health which is one of its important objectives.

METHODOLOGY

Sixty male students from Eighth and ninth standard of High School were selected for the study. The age group was between 10 to 14 years. This school was selected as the Principal of the school, agreed to make the subjects available for the purpose of the study. Sixty students were selected for the purpose of the study. The selection was made following random selection procedure. The researcher got the list of the names of the students in grade Eighth and ninth and each name was written on a small chit, of paper. Sixty chits were picked up and names contained in these sixty chits were included for the purpose of the study. These subjects were randomly divided in two groups (Group A & B). Each group consisting of thirty subjects. These subjects belonged to different socio economic groups and their dietary habits were different.

Criterion Measure

The test of balance (static and dynamic) and the test of flexibility were taken as criterion measure for the purpose of study. The test were taken before the completion of experimental period of six-weeks.

Balance

1. Stroke stand Test.
2. Bass stick test (cross-wise) and bass stick test (length- wise) was conducted to test static balance.

Flexibility

1. Test of absolute flexibility split test.
2. Relative flexibility, bridge-up test, shoulder and wrist elevation test, trunk and neck extension test.

Group A practiced the selected yogasanas on the floor of central hall of High



School. The students used to report in their school uniform, they practiced bare feet. The practice session was conducted for a period of 45 minutes in the morning i.e. from 8:15 a.m. to 9 .a.m. on alternate days viz. Mondays Wednesdays and Fridays for a duration of 6 weeks.

TABLE 1. PROGRESSION OF YOGIC EXERCISE OVER A PERIOD OF SIX WEEKS EXPERIMENTAL DESIGN

YOGASANA	DURA		
	1st and 2nd week (sec)	3rd and 4th week (sec)	5th and 6th week (sec)
Shavasana	10	20	30
Sarvangasana	5	10	15
Halasana	3	4	5
Bhujangasana	5	10	15
Ardha Shalabhasana	5	7	10
Dhanurasana	5	7	10
Vakrasna	3	5	10
Pascimatanasana	3	5	7
Chakrasana	3	5	10
Urdhava Mukha Shavasana	5	10	15
Gomukhasana	5	10	15
Purvottan Asana	5	10	15

Sixty subjects were selected randomly, the subjects for each of groups 30, consisting for each were assigned randomly. Scores on Static and Dynamic Balance and flexibility was obtained before and experimental period of six weeks (appendices A1, A2, A3, A4, A5, A6, A7, A8 and A9). Training in yogasanas was administered to group A and Group B worked as control group.

The statistical analysis of data (collected on 30 subjects of group A trained in selected Yogasanas and 30 controlled subject of group B is presented in this chapter. The initial and final scores are presented in the appendix A.

The initial mean value in the case of static balance which was measured with the help of Stroke stand test of group A and B were 7.09 and 7.75 respectively. The final mean value of static balance of group A and B were 8,9 and 7.80 respectively at the conclusion of six weeks of experimental period. Thus the resultant increases in means of group A was 1.9



and group B was 0.05. In case of group A the difference was found statistically significant at T test. The T test value obtained in respect of group A was 3.1 and in respect of group B was 0.08 for the mean difference to be significant at 0.05 level of confidence the 't' value to be obtained should be greater than 2.0016.

Thus this shows that the mean gains in static balance can be increased significantly by the administering the programme of yogasanas. The mean gains in group A and B are presented in table 2

TABLE 2. SHOWING THE SCORES OF STROKE STAND TEST

Group	M1	M2	d	S.E	't' ratio
A	7.09	8.9	1.9	0.6	3.1*
B	7.75	7.80	0.05	0.57	0.08

***Significant at 0.05 level of confidence**

The initial mean value in the case of static balance which was measured with the help of Bass stick test(cross wise) of group A and B were 72.4 and 67.9 respectively. The final mean value of static balance of group A and B were 78.1 and 67.8 respectively at the conclusion of 6 weeks of experimental period. Thus the resultant increases in means of group A and group B were 5.7 and 0.1 respectively. In case of group A the difference was found statistically significant at T test. The T test value obtained in respect of group A was 2.5 and in respect of group B was 0.03 for the mean difference to be significant at 0.05 level of confidence. The T value to be obtained should be greater than 2.0016.

TABLE 3. SHOWING THE SCORES OF BASS STICK TEST.

Group	M1	M2	d	S.E.	't' ratio
A	72.4	78.1	5.7	2.2	2.5*
B	67.9	67.8	0.1	2.7	0.03

***Significant at 0.05 level of confidence**

The initial mean value in the case of static balance which was measured with the help of Modified dynamic balance of group A and B were 60.5 and 61 respectively. The final mean value of static balance of group A and B were 64.6 and 62 respectively at the conclusion of 6 weeks of experimental period. Thus the resultant increase in means of

group A and Group B were 4 and 1 respectively. In case of group A the difference was found statistically significant at T test. The 't' test value obtained in respect of group A was 2 for and group B was 0.3. the mean difference to be significant at 0.05 level of confidence the T value to be obtained should greater than 2.0016

Thus this shows that the mean gains in static balance can be increased significantly by the administering the programme of yogasanas for six weeks. The mean gains in group A and B are presented in table 4

**TABLE 4. SHOWING THE SCORES OF MODIFIED DYNAMIC
BALANCE TEST**

Group	M1	M2	d	S.E	't' ratio
A	60.5	64.6	4	2.0	2*
B	61	62	1	2.8	0.3

*** Significant at 0.5 level of confidence**

The initial mean value in the case of flexibility which was measured with the help of Modified sit and reach test of group A and B were 2, 3 and 3.0 respectively of the final mean value of flexibility of group A and B were 2.9 and 3.18 respectively at the conclusion of six weeks of experimental period. Thus the resultant increases in means of group A and group B were 0.6 and 0.18 respectively. In case of group A the difference was found statistically significant at T test. The T test value obtained in respect of group A was 2.06 and 0.69 respectively and the mean difference to be significant at 0.05 level of confidence the 't' value to be obtained should be greater than 2.0016.

Thus this, shows that the mean gains in flexibility can be increased significantly by administering the programme of yogasana for six weeks. The mean gain in group A and B are presented in table 5.

**TABLE 5 : SHOWING THE SCORES OF MODIFIED SIT AND REACH
TEST**

Group	M1	M2	d	S.E	't' ratio
A	2.3	2.9	0.6	0.29	2.06*
B	3.0	3.18	0.18	0.26	0.69

***Significant at 0.5 level of confidence**



CONCLUSIONS

In the light of result of this study following conclusions can be drawn. Static balance can be increased by training in selected Yogasanas. Flexibility can be increased by training in selected Yogasanas.

RECOMMENDATIONS

- 1) Study may be repeated using subjects belonging to different age groups and sex other than those employed in this study.
- 2) Similar studies may be carried out for longer durations.
- 3) Physical Education teachers may induced Yogasanas in there training programme, in order to bring about the desired benefits in Balance and flexibility.

References:-

- 1) Barrow, Harold M. and Rose Mary, Me Gee (1979). A practical approach to measurement to physical education. Lea and Febiger, Philadelphia, p.13.
- 2) Henry, E. Garrett (1991). Statistics in psychology and education. Kalyani publisher, LUDHIANA, PUNJAB (India),
- 3) Pandit; Shabhu Nath (1998). Speaking of Yoga a practical guide to better living. Sterling Publication, NewDelhi, pp. 93-95.
- 4) Prakash, J. Verma(2000), A text book of sports statistics. Venus publication, Gwalior, p. 276.
- 5) Uppal, A. K. (2001), Principles of Sports Training, Friends Publications (India). pp. 82, 93.
- 6) Yadav, Y. P., Yadav Rachana (2003), Art of Yoga. Friends Publications (INDIA). pp. 25-26

Peer reviewed Journal

Impact Factor: 7.265

ISSN-2230-9578

Journal of Research and Development

A Multidisciplinary International Level Referred Journal

April-2021 Volume-11 Issue-8

Recent Trends in Social Sciences

Chief Editor

Dr. R. V. Bhole

'Ravichandram' Survey No-101/1, Plot
No-23, Mundada Nagar, Jalgaon (M.S.)

Guest Editor

Dr. R. B. Chougule

I/C Principal,
Kankavli College, Kankavli,
(Maharashtra)

Executive Editors

Dr. S. N. Patil

Dr. R. A. Mumbarkar

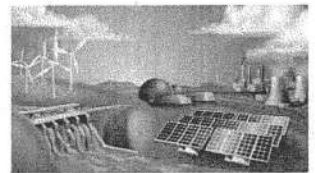
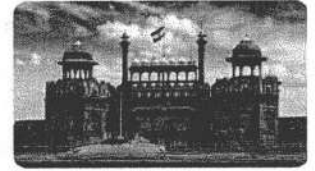
Mr. Y. V. Mahalinge

Co- Editors

Dr. S. D. Kadam

Lt. (Dr.) B. L. Rathod

Mr. T. N. Jaykar



Address

'Ravichandram' Survey No-101/1, Plot, No-23,
Mundada Nagar, Jalgaon (M.S.) 425102

62	Agricultural Productivity	Dr. P. B. Achole	195-19
63	Awareness and Effectiveness of Development Programme For Scheduled Caste In Maharashtra,	Dr. Mohan Bhimrao Kamble	197-20
64	Challenges in Agriculture	Dr. Rupwate Raju Lahanu	204-20
65	Online Marketing: Trends and Issues	Mr. Dayanand Vishwanath Thakur	207-20
✓66	A Comparative Study of Aggression in Athletes & Non-Athletes School Students of Beed District	Dr. Sanjay G. Kadam	210-21

A Comparative Study of Aggression in Athletes & Non-Athletes School Students of Beed District

Dr. Sanjay G. Kadam

Head & Director, Dept. of Physical Education & Sports, Dr. BAMU University in Aurangabad, MH

Abstract:

The purpose of this study to compare the Aggression behavior of female school student in the light of their athletes and non-athletes intimacy. To conduct the 15 athletes female school student (Ave. age 15 yrs.) as well as 15 non-athletes female school student (Ave. age 15 yrs.) from the Beed district were selected through the simple random technique as sample for the present study. Seven dimensional aggression inventories namely, assault, indirect aggression, irritability, negativism, suspicion, verbal aggression and guilt prepared by Sultania (2006) were administered to subject. Result shown that aggressive behavior in term of negative aggression was not substantially different in athletes and non- athletes female school student.

Keywords: Aggression, Athletes & Non-Athletes School Student. Beed district.

Introduction:

In school student aggression has been viewed as actions that are beyond the rules & regulations of that particular school. The pros & cons of aggression in school have been widely discussed and researched by psychologists. Studies have shown that a certain amount of aggression is required for optional level of performance. In other words controlled aggression is beneficial in school performance (Cox. 2002). On the contrary negative aggression i.e. verbal abuse, physical challenges, resentment to decision by referee are often termed as negative aggression. Studies conducted by researchers such as Grange & Kerr. 2010 concluded that aggressive behavior which is within the framework of school is positively associated with school activity & sports. Hence aggression is a major psychological variable which determines optimum level of activities in school.

In Beed district athletes school students have excelled at school level various competitions. So it would be interesting to know the negative aggression among players on the basis of their athletes & non-athletes intimacy.

Hypothesis:

It was hypothesized that athletes & non-athletes belongingness will be influenced aggressive behavior of female school students.

Material and Method

Sample

To obtain data for this study the researcher was select 15 athletes female school students (Ave. age 15.12 yrs.) as well as 15 non-athletes female school students (Ave. age 15.92 yrs.) from the Beed district were selected as sample for the present study. The simple random sampling technique was used to selection of samples. All the subjects, after has been informed about the objective and protocol of the study was give their consent and volunteered to participate in this study.

Selection of Tools

To evaluate aggression among selected female athletes & non-athletes female school students. Seven dimensional aggression inventories namely, assault, indirect aggression, irritability, negativism, suspicion, verbal aggression and guilt prepared by Sultania (2006) were used. Since the nature of this inventory was to assess negative side of aggression. Higher score on this inventory means hostile aggression & lower scores denotes controlled aggression.

Procedure of Study

Seven dimensional aggression inventory (Sultania 2006) was administered to all 30 subjects in a field like condition and convenience of the subjects. Scoring of data have been carried out according to authors manual, and independent sample 't' test was used to compare aggression between athletes & non-athletes female school students. The result is presented in table no.1.

Results of the study:

The results pertaining to significant difference between athletes & non-athletes female school students were assessed using the Independent sample 't' test & the results are presented in table no. 1.

Table no 1
Comparison of Aggression between Athletes & Non-Athletes
Female School Students

Variable	Athletes Female School Students (N=15)		Non-Athletes Female School Students (N=15)		t-value
	Mean	SD	Mean	SD	
Aggression	32.08	4.83	33.20	5.46	1.08

*Significant at 0.05 level

A Preusal of Table-1 indicates that level of negative aggression of athletes & non-athletes female school students was not found significantly from each other. The reported $t = 1.08$ which was did not met the statistical criterion for significance confirms above the result.

Discussion of the study:

The result of present study was interpreted on this ground that both athletes & non-athletes female school students perform at the same level. So the awareness of rules of game is similar in both the groups. In this study the effect of athletes & non-athletes belongingness was nullified because although aggression tendencies do differ from person to person, players have to abide by the rules of that particular game. Hence the level of aggression was almost same in athletes & non-athletes female school students.

Conclusion of the study:

It was concluded that negative aggression or hostile aggression was not influenced by athletes & non-athletes belongingness female school students.

References:

1. Cox, R.H. (2007). Sports psychology concept and application, (6th ed). New York; McGraw-Hill.
 2. Grange, P. and Kerr, J.H. (2010). Physical aggression in Australian football; A qualitative study of elite athletes psychology of sports & exercise, 11. 36-43.
 3. Kerr, J.H., & Pos, E.H. (1994). Psychological mood in competitive gymnastic; An exploratory field study. Journal of Human movement student, 26, 175-185.
 4. Russell, G.W. (2008). Aggression in the sports world; A social psychological perspective. New Yourk; Oxford university press.
- Sultania, M.K. (2006), Aggression inventory, National psychological corporation.