

Yoga Improves Flexibility

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Introduction

The heavy educational burden all most all time students spend more time of a day to complete their school curriculum, homework and tuition classes. Its helps to develop the student's academic ability but it's not help to develop the student's physical fitness. So The students of schools are to day facing lot of problems related to their health and fitness, To day, in our country ample of ways are available to prepare fit to students. Yoga is one of them; it is an ancient Indian activity. The literature reveals that regular and proper yogic practices help to solve many health problems not only yoga improve academic achievement but also improves muscular ability. Yoga is that system which is directly related with the human psycho physiology and Anatomy, yoga means the experience of oneness or unity with inner being. Yoga integrates physical poses and breathing techniques to stretch the body, breath and mind to improve endurance, strength, balance and flexibility.

So this is the best way to enhance or improve health related fitness of the students through yoga practice. Flexibility is an important component of health-related fitness, because lack of flexibility can cause functional problems and disorders, yoga be an acceptable form of physical activity for enhancing health related fitness. There is a need for further research that is interventional and controlled with the supervised yoga exercise. Therefore, the researcher has undertaken this study entitled "*Development of Flexibility through Yoga of college girls aged 18 to 20 years*" with the objective, to measure the flexibility through yoga of college girls aged to 18 to 20 years.

Selected reviews

In another study Bhole (1977)¹ examined that sports, games and physical exercises require active involvement and participation by the motor cortex for developing skill, co-ordination, efficiency, alertness and top performance. On the other hand, more importance seems to have been given on sensory – tonic activity rather than motor activity in yogasanas which can lead to the indirect training and education of the visceral organs and neuro-vegetative system rather than the extremities. The essential features of meditative asanas are broad triangular base provided by the two knees and buttocks and straight and balances condition of the spine. Relaxative asanas are claimed to give rise to Chitta vishranti i.e. tranquility and peace. Corrective asanas are supposed to develop stability, steadiness and

¹ Bhole, M.V. (1977). *Some neuro-physiological correlates of yogasanas. Yoga Mimamsa, 19, 1, pp. 53-61.*

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Vol.-01, Issue-III, February 2011

Gharote (1977)² found that skinfold measures were reduced significantly in 46 male than in 38 female patients, while estimated body fat percentage showed significant reduction in all the patients after 2 months of yoga training. Weight was reduced and grip strength was increased. No change was observed in BMR but score in Hypertention showed significant change

Somani, Bhat, Bera and Hollinger (1996)³ reviewed the physiological, pharmacological and clinical findings to deduce whether yoga indeed contributes to better health. The report concludes that yoga seems to provide benefits in prevention or correction if the disease process such as hypertension, sthma, diabetes, cognitive and motor deficits, visual and auditory function and psychiatric disorders. The findings also propose the usefulness of yoga to release stress and most common stress-reduction techniques are derived from yoga. Reports of numerous scientific studies on yoga with controlled experiments carried out have been synthesized critically to prove the usefulness of yoga in conjunction with or without the use of drugs and meditation. Reports revealed that yoga helps also to reduce the drug dosages.

Methodology

Sixty College girls (n=60) from Oriental Junior College of Education, Sector-2 Sanpada, Navi Mumbai were selected randomly for this study. The subject's age group was ranging from 18 to 20 years. All the selected college girls were then again randomly assigned into two equal groups, viz., one experimental group (Group A; n₁= 30) and one control group (Group B; n₂ = 30). The researcher made sure that the entire subjects were ready to go through the experimental requirements of this research project. The investigator herself expounded in details and significance of this project to the participating college girls. Experimental Design is adapted to this investigation. Group A received daily in morning one hour 'Yoga training, while Group B was treated as control. The design of the experiment has been planned in three phases. Phase – I: Pretest, Phase – II: Training or Treatment, and Phase – III: Post test. In pre and post test, Flexibility is measured by sit and rich test. After reviews of various literature of Yoga, the following independent variables were select for this investigation, which is presented in table No. 1.

Table No. 1 Independent variables

Dhanursana	Pashchimatana
Halasana	Ardha-matsyendrasana

² Gharote, M. L. (1977). An evaluation of the effects of yogic treatment on obesity: A report. *Yoga Mimamsa*, **19**, 1, pp. 13-37.

³ Somani, S. M., Bhat, S. G., Bera, T. K. and Hollinger, M. A. (1996). *Pharmacological aspects of yoga*, In S.M. Somani (Ed.), *Pharmacology in Exercise and Sports*, New York: CRC Press, pp.329-346.

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Sarvangasana	Yog-mudraasan
Vakrasana	

Statistical Procedure

As per the research design the collected data is analyzed by employing with standard statistical technique 't' test. Further the result have been interpreted and discussed logically to conclude this investigation by Table and graph.

Table 2 (Independent Sample 't' Test) Group viz., N, Mean, Standard Deviation, Mean deference and 't' value of Flexibility.

	Group	N	Mean	Std. Deviation	Mean deference	't'	Sig.	Remarks
Flexibility pre	'B'	30	9.8000	4.62676	3.6000	2.588	.621	p>0.05
	'A'	30	6.2000	6.05378				
Flexibility post	'B'	30	9.5000	4.02364	-5.0333	-2.074	.009*	p<0.05
	'A'	30	14.5333	12.67017				

* Significant at 0.05 level

'B' = Control group

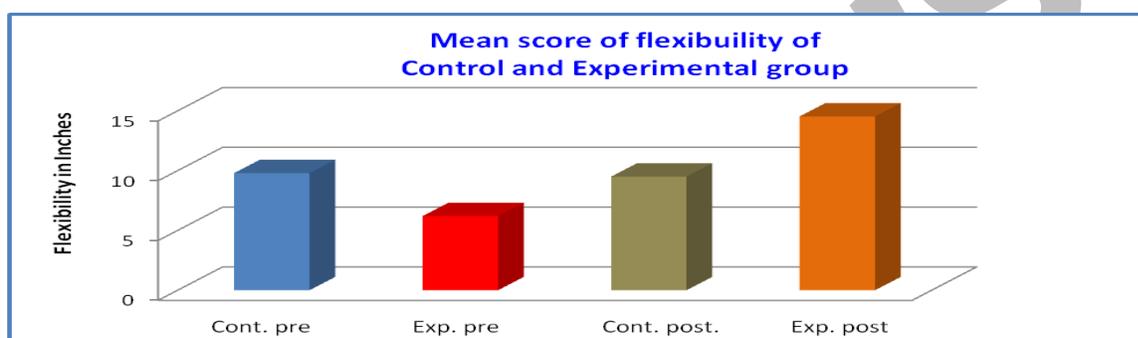
'A' = Experimental group

Result of Flexibility

It is seen from the table-2, in case of pre test of Flexibility, (sit and rich test) the mean scores of control and experimental group were 9.8000 (SD 4.62676) and 6.2000 (SD 6.05378) respectively, whereas, the mean difference was 3.6000 and the 't' values of pre test was 2.588 which were not significant (p>0.05). It reflects that the mean score of pre test of Flexibility of

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control group and experimental group was do not differ significantly. This result indicates that the pre-test means of yoga training group and Control group in Flexibility were more or less similar. But in case of post test of Flexibility, the mean scores of control and experimental group of post test were 9.5000 (SD 4.02364) and 14.5333 (SD 12.67017) respectively, whereas, the mean difference is -5.0333 and the 't' values of post test was -2.074 which is significant ($p < 0.05$). It reflects that the mean score of post test of Flexibility of control group and experimental group was differ significantly. This result helps to interpret that the Yoga practice were effective in improving Flexibility of the school girls in Navi Mumbai. In this context the null hypothesis H_0 . 1 that "There is no significant difference in mean score of Flexibility of control and experimental group" is rejected. This same result is also presented in following graph.



Discussion

In case, pre test of Flexibility, the mean difference was 3.6000 and the 't' values of pre test was 2.588 which were not significant ($p > 0.05$). It reflects that the mean score of pre test of Flexibility of control group and experimental group was do not differ significantly. But in case of post test of Flexibility the mean difference is . -5.0333 and the 't' values of post test was -2.074 which is significant ($p < 0.05$). It reflects that the mean score of post test of Flexibility of control group and experimental group was differ significantly. The result reveals that, the subject of Experimental group (Yogic practices group) could show higher score in Flexibility as measured by modifies sit ups performance in 60 Sec., than the control group. Thus, the mean gain in Flexibility has increased significantly in experimental group as compared to control group. so Yogic practices warrants a statistically significant effect to increase the Flexibility of Junior College girls which rejects the null hypothesis There was no significant difference in mean gain score of Flexibility as measured by Sit and rich test of control and experimental groups due to specific Yogic Practices has been rejected.

Conclusion

This experimental study suggests that, daily Yoga practice helps to improve Flexibility of Junior College girls.

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