



Effect of selected Yogic program on Selected Postural Deformities among school going children in Haryana

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Abstract:

The goal of the study was to examine the therapeutic benefits of yoga asanas on postural abnormalities in school-age children. A total of 30 students with postural deformities (15 with kyphosis and 15 with flat feet) were purposefully chosen to serve as study subjects. The subjects were chosen from several Haryana schools, and the school's data would be used to determine each subject's date of birth. Spondylometers were used to measure kyphosis, while pedographs were used to assess flat feet. When yoga training was provided for six months, the pre and post-test designs were utilized. Following descriptive analysis, a paired sample 't-test' was used to assess the acquired data. The results showed that there was a significant difference between the pre and post-test values for the postural deformity Flat Foot, with the value being found to be 5.562, which is significant at the 0.05 level. The mean and standard deviation of the pre and post-test for flat foot postural deformity were found to be 42.462.06 and 44.152.33 respectively. A significant difference has been detected between the before and post-test values of the postural deformity Kyphosis, as the value is found to be 4.459, which is significant at the 0.05 level. The mean and standard deviation of the pre and post-test are found to be 44.093.39 and 42.813.61 respectively. Yoga is a useful tool for correcting postural irregularities in school-age children since it supports overall flexibility and alignment.

Keywords: Kyphosis, Flat Foot, Yoga

Introduction:

All body parts should be correctly aligned in posture. I can't make broad statements on posture because everyone's posture varies. Actors, artists, and sportsmen all have different ideas about posture. It is impossible to maintain a single posture when engaging in various activities for various objectives in various positions in a multi-component and complex system like the human body. The placement of various body components varies, as do the postures brought on by mechanical motions such as sitting, lying down, standing up, walking, jogging, throwing, jumping,

and climbing. In other words, the body must adopt a variety of postures depending on what it is doing to achieve each movement's corresponding ability.

The natural curvature of the upper back (thoracic) area of the spine is known as kyphosis (ki-fo-sis). The spine appears to have a "hump" due to its extreme curvature. Some unnaturally curvy traits can be passed down from parents. Some are brought on by slouching, while others are the result of diseases that alter the size, shape, or bone mass of the vertebrae, which are the building blocks of the spine.

Flat, rigid feet can hurt and make it difficult to maintain balance due to ongoing leg and foot discomfort. Even back discomfort may result from it. Flat, rigid feet are linked to weight gain and inactivity. Painful imbalances between the bones, muscles, and ligaments of the foot can result from wearing shoes that do not fit the arch of the foot or do not support and protect the arch of the foot. It could hurt to walk or stand.

The systems of the human body are significantly impacted by yoga asana. The daily practice of yoga asana has significant positive effects on the human body's bones, muscles, nervous system, respiratory, circulatory, and digestive systems. After practicing asana, the body becomes more adaptable and better able to cope with external changes, and asana helps to regulate the sympathetic nervous system.

With a dynamically changing way of life that is becoming more sedentary, developing technologies, insane work hours, demands, deadlines, competitiveness, responsibilities, and ultimately escalating stress, physical and pathological problems are on the rise in the twenty-first century. Additionally, this is what leads to early pathological diseases. A lack of exercise, an unsuitable work environment, and a boring schedule all contribute to bad posture.

Although we are concerned about our health and adhere to certain fitness regimens and diets, understanding the body and its structure is also crucial. We are aware of how often appear on the outside, yet we overlook how beautiful our bodies are on the inside. It is important to maintain the harmony between our energy and the environment-created orderly body. Yoga plays a significant part in fostering this consciousness; practicing good postures keeps us physically and mentally well, and raj yoga allows us to have the insight to understand that "peace" is the ultimate purpose of our soul. (Conway, 2006).

Aim:

In this study, we aim to evaluate the effect of a yoga intervention carried out over 6 months 4 days a week on postural deformities of school-going children.

Procedure and Methodology

The purpose of the study was to study the remedial effects of Yoga asanas on the postural deformities in school-going children, a total of 30 students suffering from postural deformities (i.e. 15 Kyphosis and 15 Flat Foot) were purposively selected to act as subjects for the study. The subjects were selected from different schools in Haryana and the date of birth of each subject will be recorded from the school records. Kyphosis was measured by

Spondylometer and Flat Foot was measured by Pedograph. The pre and post-test designs were used, where the training of yoga was given for 6 months. The collected data was analyzed by computing Descriptive analysis followed by Paired sample 't' test.

Results and Discussions

Kyphosis: This section of the analysis depicts the results of the descriptive analysis and Paired sample 't' test of pre and post-data of the selected postural deformity.

Table No. 1: Descriptive analysis of pre and post-test for the postural deformity Kyphosis

Variable		Mean	N	Std. Deviation	Std. Error Mean
Kyphosis	Pre	44.09	15	3.39	0.876
	Post	42.81	15	3.61	0.933

Table no. 1 depicts the values for descriptive analysis of the pre and post-test for the postural deformity Kyphosis, which shows that the mean and standard deviation of Pre and post-test are found to be 44.09 ± 3.39 and 42.81 ± 3.61 respectively. The graphical representation has been shown in Fig no. 1.

Fig No. 1: Graphical representation for Descriptive analysis of pre and post-test for the postural deformity Kyphosis

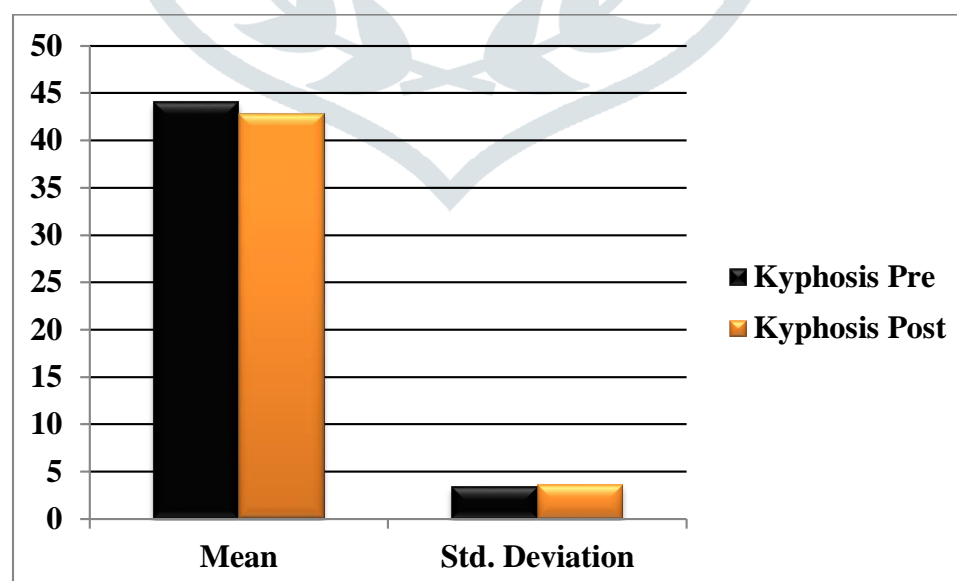


Table No. 2: Paired sample test of pre and post-test for postural deformity Kyphosis

		Paired Differences							
		Mean	Standard Deviation	Standard Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Kyphosis	Pre - Post	1.279	1.111	0.287	0.664	1.894	4.459	14	0.001

Table No. 2 depicts the values for Paired sample 't' test of pre and post-test for postural deformity Kyphosis, which shows that a significant difference has been found in the pre and post-test values of the postural deformity Kyphosis, as the value is found to be 4.459 against the tabulated value 2.145, which is significant at 0.05 level.

Flat Foot: This section of the analysis depicts the results of the descriptive analysis and Paired sample 't' test of pre and post-data of the selected postural deformity.

Table No. 3: Descriptive analysis of pre and post-test for the postural deformity of Flat Foot

Variable		Mean	N	Std. Deviation	Std. Error Mean
Flat Foot	Pre	42.46	15	2.06	0.651
	Post	44.15	15	2.33	0.683

Table no. 3 depicts the values for descriptive analysis of the pre and post-test for the postural deformity Flat Foot, which shows that the mean and standard deviation of Pre and post-test are found to be 42.46 ± 2.06 and 44.15 ± 2.33 respectively. The graphical representation has been shown in Fig no. 2.

Fig No. 2: Graphical representation for Descriptive analysis of pre and post-test for the postural deformity Flat Foot

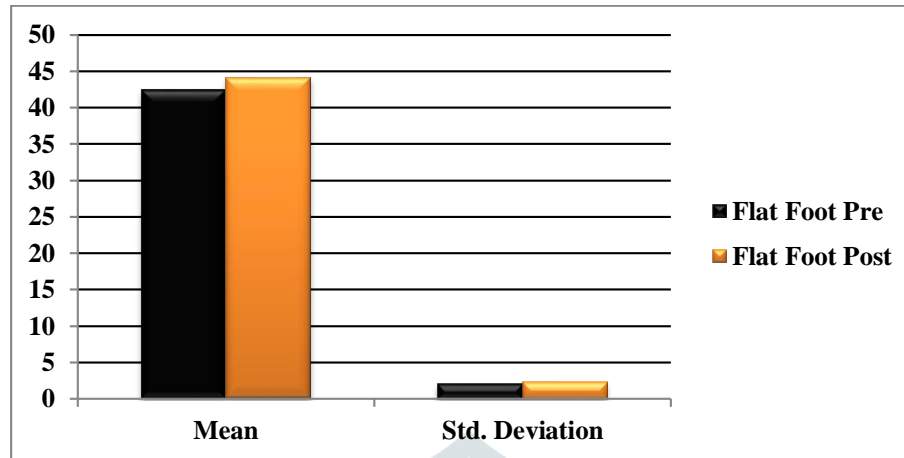


Table No. 4: Paired sample test of pre and post-test for postural deformity Flat Foot

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Standard Deviation	Standard Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Flat Foot	Pre - Post	1.298	1.006	0.261	0.724	1.347	5.562	14	0.000

Table No. 4 depicts the values for Paired sample 't' test of the pre and post-test for postural deformity Flat Foot, which shows that a significant difference has been found in the pre and post-test values of the postural deformity Flat Foot, as the value is found to be 5.562 against the tabulated value 2.145, which is significant at 0.05 level.

Conclusions:

The following conclusions have been drawn based on the results:

- The mean and standard deviation of Pre and post-test for flat foot postural deformity are found to be 42.46 ± 2.06 and 44.15 ± 2.33 respectively, also a significant difference has been found in the pre and post-test values of the postural deformity Flat Foot, as the value is found to be 5.562, which is significant at 0.05 level.

- The mean and standard deviation of Pre and post-test are found to be 44.09 ± 3.39 and 42.81 ± 3.61 respectively, also a significant difference has been found in the pre and post-test values of the postural deformity Kyphosis, as the value is found to be 4.459, which is significant at 0.05 level
- Yoga helps promote overall flexibility and alignment; as a result, is an effective measure for the correction of postural deformities in school-going children.

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