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Inclusion of Brisk walking and Asanas on Body Mass Index and Speed Endurance of Secondary School students

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Abstract: Today, sports have become a part and parcel of our culture. It is being influenced and does influence all our social institutions including education, economics, arts, politics, law, mass communication and even international diplomacy. The Yoga word has been used thousands of times in Indian Ancient literature. "Yoga means union, an integration of oneself, and oneness with nature, all of creation and with the absolute. The very word Yoga defines the goal of life understood by the great Yogic sages of our country. The purpose of the study was to find out the effect of combined Yoga asanas and walking practices on body mass index among high school boys. To achieve this purpose of the study, thirty high school boys were selected as subjects at random. The age of the subjects was ranged from 14 to 18 years. The 't' test was used to analysis the significant differences, if any, difference between the groups respectively. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate. On the basis of the results obtained the following conclusions are drawn that a significant difference between experimental and control group on Body mass index after the training period and also significant improvement in Body mass index.

Keywords: Brisk walking, Asanas, Body Mass Index and Speed Endurance

Introduction

Today, sports have become a part and parcel of our culture. It is being influenced and does influence all our social institutions including education, economics, arts, politics, law, mass communication and even international diplomacy. The Yoga word has been used thousands of times in Indian Ancient literature. "Yoga means union, an integration of oneself, and oneness with

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nature, all of creation and with the absolute. The very word Yoga defines the goal of life understood by the great Yogic sages of our country. The practice of the various system of yoga is the means by which the realization of union can be attained." Most of the asanas in the procedure themselves have documented in old literature. Sastangdandvat" which is the central asana of the Suryanamaskar was followed from time immemorial in india as a form of showing respect and complete surrender to God. "Bhujangasana" was described as one of the 32 important asnas in "Gheranda Samhita", an old text of yoga, which describes yoga prevalent in north east india. The "Adhomukh Swanasna" was described in the old wrestling text of "Mallapurana". "Sarpasana", "Gajasana", "Uttanasana" and series of asana or poatures done in tandem, similar to Suryanamaskar are all described in Sritattvanidhi which was written by the order of KrishnarajaWodeyar III(1799-1868) to capture the Hindu knowledge of his time. The use of Suryanamaskar for physical exercise is also not modern. Bhagavat Simhagi "A Short History of Aryan Medical Science" published in 1896 says, "there are various exercise indoors and outdoors. Historically it is widely believed in the state of Maharashtra that Shivaji Maharaj, Sage Samarath Ramdas and the Marathas have performed Suryanamaskar as a physical exercise to develop able bodies. This is not surprising since 'vyayama' (physical exercise in Sanskrit) traditionally has been influenced by spirituality. Many physical practices have ingrained spiritual values in them. In addition, spiritual training is considered as a part of physical training from ancient times of India. Today's there is an escalating emphasis on appearing smarter, feeling bett Most of the asanas in the procedure themselves have documented in old literature. "Sastangdandvat" which is the central asana of the Suryanamaskar was followed from time immemorial in india as a form of showing respect and complete surrender to God. "Bhujangasana" was described as one of the 32 important asnas in "Gheranda Samhita", an old text of yoga, which describes yoga prevalent in north east india. The "Adhomukh Swanasna" was described in the old wrestling text of "Mallapurana". "Sarpasana", "Gajasana", "Uttanasana" and series of asana or poatures done in tandem, similar to Suryanamaskar are all described in Sritattvanidhi which was written by the order of KrishnarajaWodeyar III (1799-1868) to capture the Hindu knowledge of his time. The use of Suryanamaskar for physical exercise is also not modern. Bhagavat Simhagi "A Short History of Aryan Medical Science" published. In order to achieve these ideals as, scientific evidence tells us

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that one of the keys is high fitness and exercises. When consciousness is operating with the intellect and with all the senses, by making an individual think that he or she is awake and aware, but the mind is actually less receptive and more critical. Yoga is a practical aid, not a religion and its techniques may be practiced by Buddhist, Jews, Christians, Muslims, Hindus and Atheist alike. Yoga is union for all.

Methodology

Selection of Subjects

The purpose of the study was to find out the effect of combined Yoga asanas and walking practices on body mass index among high school boys. To achieve this purpose of the study, thirty high school boys were selected as from Lucknow metropolitan city as subjects randomly. The age of the subjects were ranged from 14 to 18 years.

Selection of variable: Following variables are selected for study

Table-1

S. No.	Variables type	
1	Dependent Variables	Body Mass Index and Speed Endurance
2	Independent Variables	Brisk Walking and Yoga Asanas

Methods and Procedure:

The selected subjects were divided into two equal groups of fifteen subjects each, such as a Yogic training group (Experimental Group) and control group. The experimental group underwent Yogic training for six days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physical variable namely Body mass index was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable Body mass index was measured through body mass index analyzer method at prior to and immediately after the training programme.

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Statistical technique: The 't' test was used to analysis the significant differences, if any, difference between the groups respectively. **T**he 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

Result and Analysis of the Data

The significance of the difference among the means of then experimental group was found out by pre-test. The data were analysed and dependent 't' test was used with 0.05 levels as confidence.

Table-1 Statistical Analysis of Without Treatment and Treatment on Body mass index

S.NO.	Groups	Pre Test	Post Test	Pre Test	Post Test	df	't' ratio
		Mean		SD			
1	Without Treatment	28.66	28.75	2.86	2.73	12	0.40
2	With Treatment	24.46	23.67	1.85	1.72		8.00*

*Significance at. 05 level of confidence.

The Table-I shows that the mean values of pre-test and post- test of the control group on Body mass index were 27.86 and 27.46 respectively. The obtained 't' ratio was 0.45, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on Body mass index were 27.73 and 25.66 respectively. The obtained 't' ratio was 9.00* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in Body mass index. It may be concluded from the result of the study that experimental group improved in Body mass index due to six weeks of yoga asana and walking practices.

Fig 1:

Graph Showing the Pre and Post Mean Values of Experimental and Control Group on Body Mass Index

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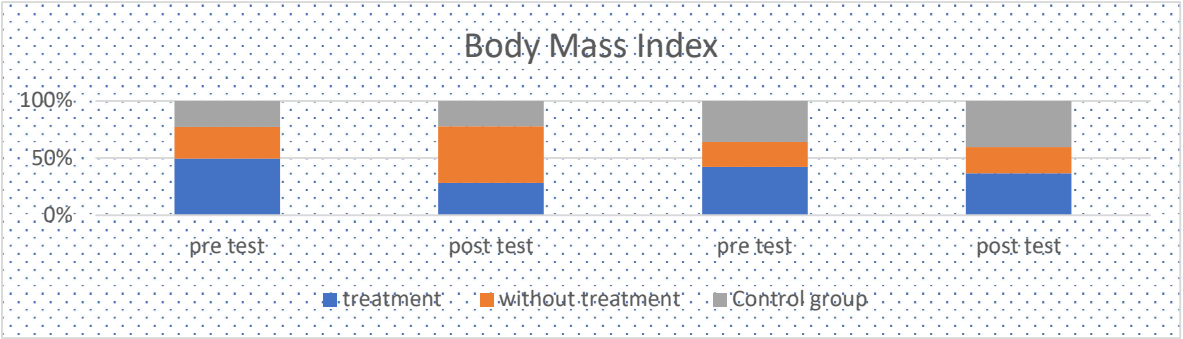

Table 2: Statistical Analysis of Without Treatment and Treatment on Speed Endurance

S.NO.	Groups	Pre Test	Post Test	Pre Test	Post Test	df	't' ratio
		Mean		SD			
1	Without Treatment	6.66	8.75	0.86	1.73	1.16	0.40
2	Treatment	8.46	6.67	0.85	0.72		096*

Table -2 revealed that the mean values of pre-test and post- test of the control group on speed endurance were 6.66 and 8.75 respectively. The obtained 't' ratio was 0.40, since the obtained 't' ratio was less than the required table value of 0.96 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on Body mass index were 8.46 and 6.67 respectively. The obtained 't' ratio was 0.96* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in Body mass index. It may be concluded from the result of the study that experimental group improved in Body mass index due to six weeks of yoga asana and walking practices.

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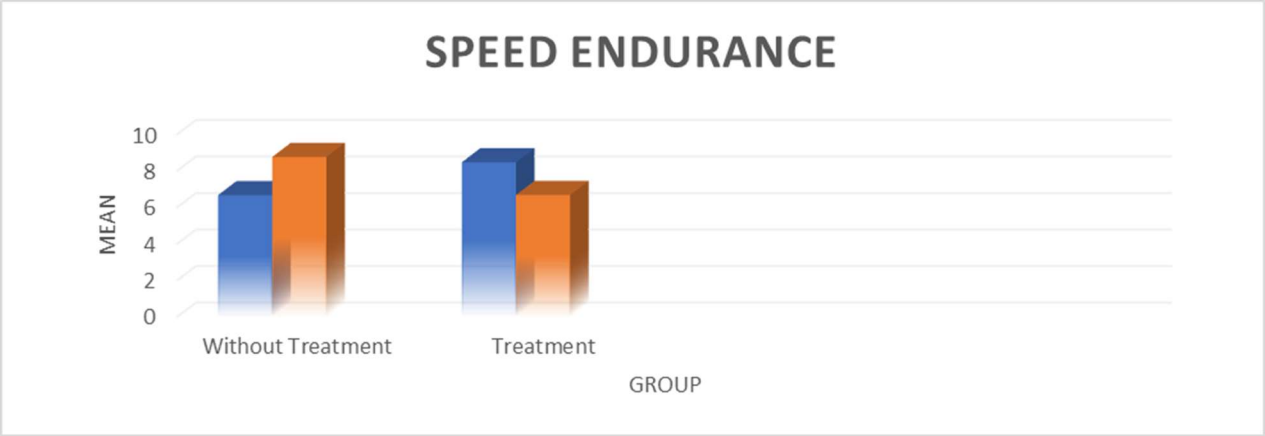

Fig 2: Graph Showing the Pre and Post Mean Values of Without Treatment and Treatments Group on Speed Endurance

Discussions on Findings

The result of the study indicates that the experimental group, namely yogasana and walking practices group had significantly improved the selected dependent variable, namely Body mass index, when compared to the control group. It is also found that the improvement caused by yogasana and walking practices when compared to the control group.

Conclusion

On the basis of the results obtained the following conclusions are drawn,

1. There was a significant difference between experimental and control group on Body mass index after the training period.
2. There was a significant improvement in Body mass index. However, the improvement was in favour of experimental

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