

# Effect of participation in physical education and conditioning programme on flexibility

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## ■ ABSTRACT

The purpose of the present study was to determine the effect of participation in physical education and conditioning programme on flexibility. To obtain data for the present study, thirty (N=30) male subjects has been selected from Govt. College of Physical Education, Ganderbal, Kashmir, J&K, India. The subjects were enrolled in B.P.Ed (one year course). Random sampling technique was used to select the subjects. All the subjects were resided in the hostel of college. The age of the subjects ranged between 21-25 years. Shoulder flexibility test, sit and reach test and spine flexibility test were used to collect the data. Pre-test and post test were conducted. "T" test was applied to determine the significant difference among the subjects. The level of significance was set at 0.05. The results were found statistically significant between pre-test and post test of the subjects.

■ **KEY WORDS** : Shoulder flexibility, Spine flexibility, Sit and reach, Fitness, Conditioning

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**F**itness plays a very important role in a normal individual as well as in an individual who is there participating in some kind of sports events. There are different kinds of sports and games which are performed all over world some are related to each other but some are entirely different. So to perform different kind of sports event physical fitness is an essential component which should be possessed by a player, individual has lacked his physical fitness due many new inventions and now is totally dependent upon various machines for his daily works, yes it is true that it saves time but at last these has some sort of adverse effects on physical fitness and wellbeing of an individual. To improve physical fitness of a player training plays a very

important role, as the techniques which are given in training to a player improves the players performance give positive effects to his performance in events. Flexibility is one of the major fitness components of overall physical fitness.

Flexibility is the range of motion in a joint or group of joints, or, the ability to move joints effectively or it can be defined as the ability of the human being to carry out movement with a large amplitude and it depends to a high degree upon the various exterior influences and upon the state of one's organism (Brown and Joseph, 1968 and Parks, 1980). The flexibility of the human being for instance is rather low immediately after having got up from the bed, after tiresome work and after psychic depression. It

**Table 1 : Statistical analysis of data**

Tests	Mean	Mean difference	MD	"t" ratio
Shoulder flexibility test	16.19	16.56	0.37	3.06
Spine flexibility test	17.71	16.25	0.34	2.32
Sit and reach test	6.38	6.82	0.44	2.62

\* indicate significance of value at P=0.05

can be increased after having proper worked up (Bridell, 1970).

For the present study thirty male students of sports background were selected from Govt. College of Physical Education, Ganderbal, Kashmir, J&K. The subjects were enrolled in B.P.Ed (one year course). Their age ranged between 21 to 25 years. All the subjects were resided in the hostels of the college. They had regular schedule of training in physical education and conditioning as per the programme of the college and this was same for all the subjects. The programme consisted of 45 minute conditioning in the morning which involved endurance, running, free hand exercises and general strengthening exercises and regular practical instruction classes in Kabbadi, Basket ball, Volley ball, Hand ball, and track and field events. Subjects participated in the above mentioned programme five days a week, *i.e.*, from Monday to Friday. On Saturdays the subjects participated in the games of their own choice and Sunday was holiday for all.

The subjects were administered the following flexibility tests.

- Sit and reach test.
- Shoulder flexibility test.
- Spine flexibility test.

The tests were administered to the students after they were admitted to the B.P.Ed degree and before they had not started participating in the regular programme of physical education and conditioning. Before collecting pre-test scores the subjects were proper oriented to the correct procedure of performing the tests. After twelve weeks of regular participation in physical education and conditioning programme, the same tests were again repeated on all the subjects to collect post-test scores. For determining the significant differences between pre-test and post test. 't' test was employed. The level of significance was set at 0.05 level of confidence.

The statistical analysis of data collected on selected flexibility tests is shown in Table 1.

The analysis of data in the table above reveals that

there exists a significant difference between the mean scores of pre-test and the post-test scores of the subjects in the selected flexibility tests. Perez (1978) and Stone (1969) also worked on the related topic.

### Conclusion :

The purpose of the present study was to find out the effect of regular physical education programme and condition on flexibility. After analyzing the data it was concluded that regular participation in a programme of physical education and conditioning of twelve weeks duration effectively improves flexibility of the trunk, shoulder and spine as measured by sit and reach test standing, shoulder flexibility test and spine flexibility test, respectively.

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