SUMMARY

To get the best possible performance of an athlete at the right time is a very complex process. The results in most sports events are achieved by an acceleration of the body, which means that speed per unit of time is constantly increased. Sprint has varied application in the field of games and sports, particularly in short distance races, horizontal and vertical jumps. Only those trained with proper requisites for enhancement of performance will withstand the wear and tear of competition and put in their best efforts accordingly. Jumping by either or both feet is an essential element demanded by majority or games and sports in the universe.

In the present study the investigator felt the need to investigate the effectiveness of different types of training programme i.e., stair training and Plyometric training programme on speed, Jump and endurance.

The subjects were 192 boys and girls students from Air Force School, Gorakhpur.

The subjects were randomly divided into three groups namely, group A (Stair training group), group B (Plyometric training group) and group C (control group).
The subjects belonging to the two experimental groups under – went training three
times a week that is on Mondays, Wednesdays and Fridays for a period of twelve
weeks. No specific training was imparted to the control group.

Tests in speed (50 meters dash), leg strength (vertical jump) and cardio-
vascular endurance (copper’s 12 minutes R&W test) were administered to the subjects
of all the three groups before and after the experimental period of 12 weeks.
Performance in 50 meters dash speed was recorded to the barest 1/10th of a second.
Vertical jump performance as recorded in centimeters and cardio-vascular Endurance
performance was recorded up to one meter.

The data was analysed using paired-t test , the level of significance was set the
.05 level of confidence. The statistical analysis of data revealed that all the two
experimental groups improved in speed performance (MD = 0.6397 for group A and
MD = 0.2929 for group B). Group A proved to be superior to groups B in speed
performance.

The (MD = 23.19 for group A and MD = 39.83 for group B) revealed that the
gain in mean performance for the experimental groups in leg strength (vertical jump)
performance were significant and for control group it was insignificant. The analysis
of data indicated that group B had a highest significant gain in leg strength (V.J.) performance.

We observe the mean of difference between pre and post test data of the statistical analysis of data revealed that all the two experimental groups improve in cardio-vascular endurance performance (MD =540.63 for group A and MD = 328.52 for group B). Group A was superior than the group B in Cardio-Vascular Endurance performance.

* MD = mean of difference between pre and post test data.