Chapter V

Summary, Conclusions and Recommendations
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SUMMARY

Regular activity, fitness and exercise, are critical for the health and well being of people of all ages. Research shows that everyone, young or old can benefit from regular exercise, either vigorous or moderate. Physical activity is widely accepted as a beneficial factor to health. Regular physical activity also preserves optimum structure and function of muscles, bones, joints and the cardiovascular system, thus enhancing quality of life.

The purpose of the study was to find out the comparative effect of Kalaripayattu, Plyometric exercise and Weight training on selected motor abilities among college males. To achieve these purpose 120 college males were selected as subjects. The selected subjects were randomly assigned to four groups namely, group A, B, C and D. Consisting of 30 each (n=30). Group A, B and C was experimental group and group D acted as control group. The three experimental groups A, B, and C were assigned Kalaripayattu, Plyometric training and Weight training respectively for the duration of twelve weeks. Group D served as control group, and was not given any specific training programme. The training was given three sessions in a week. Group A was given Kalarippayattu exercises with the help of
expert on Monday, Wednesday and Friday morning. Group B was given
Plyometric training exercises consisting of power drop, diagonal cone hops,
depth jump over barrier and hurdle jump, on Monday, Wednesday and Friday
evening. Group C was given Weight training exercises consisting of bench
press, half squats with leg raise, leg curl and reverse leg curl, on Monday,
Wednesday and Friday evening. The subjects were requested not to involve in
any specific strength training other than this training programme.

The following variables were selected for assessment in this
experimental study were Speed, Leg explosive strength, (vertical jump
performance and horizontal jump performance), Arm and shoulder strength
endurance, Flexibility and Agility. The selected criterion variables were
measured by using 50 M dash, Vertical jump, Standing broad jump, Pull-ups,
Sit and reach test and Shuttle run respectively. Analysis of Covariance was
used to find out the significant difference if any, among the groups on selected
criterion variables separately. The Scheffe’s post hoc test was employed
wherever the F-value was found significant. The level of significance chosen
was 0.05.
CONCLUSIONS

On the basis of the results of the study the following conclusions were drawn

1. The results of the study indicate significant improvement in all the selected variables namely, speed (50 M dash) agility (shuttle run) explosive strength (standing broad jump, vertical jump) arm and shoulder strength endurance (pull-ups) and flexibility (sit and reach) for the Weight training, Kalaripayattu and Plyometric training programs conducted for a period of twelve weeks. Since the experimental training programmes (Weight training, Kalaripayattu and Plyometric) were conducted with utmost care in terms of progression, intensity, volume and time for adaptation of load, it was evident that the training programmes had brought about a beneficial effect on the selected variables. The subjects were exposed to a highly systematic and scientifically designed training programme.

2. In case of 50M dash it was found that, significant differences exist between experimental and control groups on speed. It reveals that all the experimental treatments namely Weight training, Kalaripayattu and Plyometric training have a significant contribution in improving speed, as compared to control group. However, there is no considerable variation among experimental groups in its efficiency towards the
improvement of speed, as insignificant difference has been observed among experimental groups.

3. In case of shuttle run the Plyometric training was significantly better than Weight training and control groups. The experimental treatments namely Weight training, Kalaripayattu and Plyometric training have a significant contribution in improving agility, as compared to control group. There is no considerable variation among Weight training and Kalaripayattu, Kalaripayattu and Plyometric group in its efficiency towards the improvement of agility.

4. In case of leg explosive strength, it was found that, the experimental treatments namely, Weight training, Kalaripayattu and Plyometric training have a significant contribution in improving standing broad jump, as compared to control group. However, there is no considerable variation among experimental groups in its efficiency towards the improvement of horizontal range, as insignificant difference has been observed among experimental groups.

5. It was also found that significant difference exists between experimental and control groups on vertical jump test. Further it reveals that Kalaripayattu and Plyometric training groups were significantly better than Weight training and control group, and Weight
training group showed significantly better performance as compared to control group.

6. In case of arm and shoulder strength endurance, it was found that, significant difference exists between experimental and control groups on pull-ups test. It reveals that all the experimental treatments namely Weight training, Kalaripayattu and Plyometric training have a significant contribution in improving arm and shoulder strength endurance, as compared to control group. However, there is no considerable variation among experimental groups in its efficiency towards the improvement of arm and shoulder strength endurance as insignificant difference has been observed among experimental groups.

7. In case of flexibility, it was found that significant difference exists between experimental and control groups on sit and reach test. It reveals that all the experimental treatments namely Weight training, Kalaripayattu and Plyometric have a significant contribution in improving flexibility as compared to control group. However there is no considerable variation among experimental groups in its efficiency towards the improvement of flexibility, as insignificant difference has been observed among experimental groups.

8. The overall results indicate that Weight training group was significantly better than control group in all the selected variables.
9. The overall results indicate that Kalaripayattu group significantly better than Weight training and control group in case of vertical jump performance.

10. The overall results indicate the Plyometric training group significantly better than Weight training group in case of shuttle run and vertical jump performance.

RECOMMENDATIONS

On the basis of the results of the study, and the conclusions drawn the following recommendations are made:

1) It is recommended that coaches and physical education teachers/trainers employ different types of training such as Plyometric and Kalaripayattu training along with weight training programme for better results in improving power, flexibility, speed, agility etc.

2) Plyometric training programme is more effective in improving vertical jump, standing broad jump and other explosive strength programme.

3) Kalaripayattu training is natural and does not require any equipment. It is easy to include in a training methods for improving power and flexibility.

4) Similar studies may be conducted to find out the effect of such training programmes on other physiological and muscular parameters.
5) Studies may be conducted on different games/sport, with different levels and ages of subjects other than those involved in the present study.

6) Similar study may also be conducted on women subjects to observe gender differences if any in the selected variables.

7) A detailed study can be conducted on selected other motor fitness variables which are not included in the present study.