Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was undertaken to compare the effects of aerobics dance, circuit training and calisthenics on selected psychomotor variables of secondary school girls.

Sixty secondary school girls studying in IX to X classes of Vasant Valley School, New Delhi, were selected as the subjects of this study. All the subjects were randomly divided into three experimental groups, namely, aerobics dance group, circuit training group, calisthenics group, and one control group. Each group consisted fifteen students. All the three experimental groups were imparted training twice a week for twelve weeks.

The data on the selected psychomotor variables namely, kinesthetic obstacle test, bass kinesthetic stick test and speed of movement of hands, were collected before and after the twelve weeks experimental training programme. The pre-test and post-test scores of the three experimental groups and the control group were analysed by employing the t-test and the analysis of covariance. To find out the significance of difference between the pre-test and post-test scores of the three experimental groups and the control group were analysed by employing that t-test and the analysis of covariance. To find out the significance
of difference between the pre-test and post-test scores of the three experimental groups and the control group separately, the t-test was employed. To compare the significance of difference from the pre to post test scores among the three experimental groups and the control group, analysis of covariance was applied. The level of significance chosen was .05.

The findings pertaining to the t-ratio and analysis of covariance for kinesthetic obstacle test revealed significant t-values of 4.91, 2.74, and 2.89 respectively for the three experimental groups namely, aerobics dance group, circuit training group, calisthenics group, whereas the t-values for the control group showed non-significant values of 0.93. The results of the analysis of covariance indicated significant difference in the paired adjusted final means of the three experimental groups as compared to the control group. However, no significant differences were found when the experimental means were paired for comparison among themselves.

In the case of bass kinesthetic stick test, the t-values for the pre to post tests scores of the three experimental groups indicated significant values of 3.60, 4.40, and 2.36 respectively, whereas, the t-value for the control group showed a value of 1.43 which was not significant at .05 level. The results of analysis of covariance revealed significant. F-ratio of 9.749, for the adjusted post means which indicated significant differences among
the groups from pre to post scores. The differences in the paired adjusted final means revealed significant differences for all the three experimental groups when compared with the control group. However, the differences among the three experimental groups were not found to be significant.

The findings pertaining to the speed of movement of hands revealed significant t-values of 3.125, 4.21, and 3.64 respectively for the pre to post scores of the three experimental groups namely, aerobics dance group, circuit training group and calisthenics group. The t-ratio of the control group showed no significant differences from the pre to post scores. The results of the analysis of covariance revealed significant differences in the paired adjusted final means for all the three experimental groups when compared with the control group. However, when the experimental groups compared among themselves, the difference were not found to be significant.

Conclusions

Within the limitations of the present study and on the basis of the findings, the following conclusions were drawn:

1. The 12-weeks experimental training programmes (aerobics dance, circuit training and calisthenics) were effective in improving the performance of the subjects in the kinesthetic obstacle test.

2. All the three methods employed namely, aerobic dance, circuit training, and calisthenics, were equally effective and no
method indicated superiority over the other method in improving performance among the selected subjects.

3. All the three experimental training programmes (aerobics dance, circuit training and calisthenics) were effective in improving the performance of the subjects in the basic kinesthetic stick test.

4. No significant differences were found in the improvement of balance relating among the three experimental training programmes.

5. The 12-weeks experimental training programmes (aerobic dance, circuit training and calisthenics) were effective in improving the performance of the subjects in the speed of movement test.

6. The comparative effects of the three experimental groups revealed no significant differences among the groups in speed of movement test.

**Recommendations**

In the light of the conclusions drawn, the following recommendations were made:

1. Since all the three experimental training programmes were effective, it may be recommended that any or all training programmes as employed in this study be incorporated in the physical education curriculum in all the schools.
2. Similar studies may be replicated in subjects varied ages and sexes other than that employed in the present study.

3. Studies may also be carried out to find out relevance of other means of training in order to provide a wide variety of programmes of physical education in school curriculum.

4. Similar studies may be carried out on sportspersons belonging to different sports groups with varying levels of performances.
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