

Summary, Conclusion And Recommendations.

5.1. Summary :

We are in a very exciting and challenging period of athletics for women. Never before has the female been so free from cultural restraints and taboos as she is today. Woman's new role in our society is opening up uncountable opportunities for her to engage in play activities without the restrictions and discouragements she once had to face.

Sports programmes for women in the future will depend greatly on the leadership of the qualified teachers and coaches. Yet today there is a lack of experienced women coaches. One reason for this is the fact that the competitive programme for girls has in the past been limited. A second reason is that the programme for training women coaches at present is limited.

Women vary greatly among themselves in their traits and structure. Therefore in guiding a programme for junior high school, high school and college has led to great gains in athletics for women. If skilled athletes are to receive the full benefits from interscholastic and inter-collegiate programmes these programmes must be guided, and this is made possible only by the instruction, interest and actions of qualified people.

Researchers have shown that regular exercise can make crucial difference in various physiological system in comparison to inactive person. For achieving a positive beneficial effect one has to perform exercise regularly, that is to follow a well planned schedule. This participation in organised programme for a considerable period of time may result changes in physiological, physical and psychophysiological potentialities.

Strength, power and endurance are essential elements in physical performance. Depending on the specific type of activity the requirements for strength and power are also specific.

Training programme with overload principles has long been considered as the most effective method for strength development. Consequently exercise and training has lasting effects on the physiological and psychological variables also. Physical activity elicits neurophysiologic responses and it is expected that there would be potential changes in the behavioural aspects, level of arousal, anxiety, attention, motivation etc.

Studies have claimed a beneficial effect of organised physical training on psychological well-being in terms of decreased feeling of anxiety and achievement motivation. This training programme for young boys and girls, adults and women have shown to improve certain motor performances, cognitive function and circulorespiratory functions.

In the present study the researchers attempted to measure such physical fitness and psychophysiological variables which have established linkage on both physiological and psychological profile.

Details of related literature as far as the researcher could collect have been reviewed from the available resources and are presented in the chapter II of this thesis.

The details of the methodology adopted in this study have been described in chapter III.

The subjects of the present study were 18 female students aged 22 through 24 years. They were undergoing physical education training course (1994-95) in the Department of Physical Education, Kalyani University, Kalyani, Nadia, West Bengal. Most of the subjects had past experience in sports and games at college level. They were the habitants of seven districts of West Bengal state.

For the purpose of understanding the influence of organised physical education programme, performance in selected activities, physical fitness, physiological, psychological and psycho-physiological variables were considered as criteria. Selected activities were formal, rhythmical, individual, and group activities. For fitness dimension all the six AAHPER test components were measured. For physiological parameters resting heart rate, exercise heart rate, Physical Efficiency Index and Vo_2 max were measured. For psychological parameters tests for sports achievement motivation, anxiety and leadership were conducted and for psycho-physiological reactivity reaction

time and skin conductance were considered as parameters. All the tests and measurements were conducted before on set of specific training course (pre test) and after completion of the specific programme (Post test). Tests and measurements were conducted adopting standard procedures.

Analysing the data it appears that performance in selected activities have improved significantly following organised programme. The physical fitness parameters i.e. strength, endurance, agility, speed, power and cardiovascular endurance all have improved significantly. The physiological variables i.e. resting heart rate, exercise heart rate were significantly reduced but the Physical Efficiency Index and predicted maximum O₂ uptake were significantly increased.

Among the psychological parameters anxiety shown a significant reduction and sports achievement motivation was observed significant improvement following organised programme. Leadership quality was improved but not significantly.

Influence of organised programme on psychophysiological reactivity parameters i.e, reaction time and skin conductance also found significantly reduced following organised training programme. From the correlation studies it was difficult to draw a definite conclusion, however only a few statistically significant relationship was observed.

The detail analysis and discussion on the findings have systematically been presented in chapter IV. The specific conclusion that have been drawn from the findings are presented latter in this chapter (5-2).

5.2. Conclusion :

The present study has its own limitations, however accepting these limitations following specific conclusion may be drawn and are presented dimensionwise.

5.2.1. On Fitness Dimension

i) Physical fitness in general, of the trainee females was improved significantly following participation in the organised physical education training programme.

ii) Performance in all the six tests of physical fitness showed significant improvement during post test than that of pre test.

iii) The magnitude of improvement was maximum in the sit up test (38.50%) followed by flexed arm hang test (29.20%) 50 yard dash (26.36%), shuttle run (11.40%) 600 yard Run and Walk (10.97%) and was minimum in standing Broad jump (4.06%).

5.2.2. On Performance Dimension :

Formal

i) Performance of the trainee females in formal activities improved significantly during post test in comparison to pre test .

ii) Following six weeks participation in the formal activity programme of the organised physical education training course, the performance in callisthenics, marching and dumb-bell activities improved significantly. The magnitude of improvement was maximum in dumbbell (133.33%) followed by marching (36.07) and callisthenics (7.86%).

Rhythmical

iii) Performance in both the rhythmical activities also improved significantly during post test than that of pre test.

iv) Of the two rhythmical activities performance improvement in LAZIUM was in higher order than in BRATACHARI activity.

Individual

v) Performance of the trainee females in all the four individual activities participated by them during training course were improved significantly at post test than that of pre test.

vi) Of the four individual activities magnitude of improvement was maximum in track and field events followed by gymnastics, badminton and tenikoit.

Group

vii) Performance of the trainee females in all the four group activities (small area games) improved significantly during post test than that of pre test, following participation in training course.

viii) Of the four group activities magnitude of improvement was maximum in Netball followed by KABBADI, KHO-KHO and volleyball.

5.2.3. On Physiological Dimension.

Heart Rate

i) Resting heart rate of the trainee females decreased significantly following participation in organised physical education training programme for about ten months. Heart rate response against the submaximal work load decreased following training. Post test exercise heart rate was significantly lower than that of pre test exercise heart rate.

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ii) Physical Efficiency Index at the post test was improved significantly following training in comparison to pre test score. The cardiorespiratory endurance capacity of the trainee females was improved following participation in organised physical education training course.

Vo₂ max.

iii) The maximum oxygen uptake capacity of the trainee females improved significantly at the post test in comparison to the pre test score.

iv) The magnitude of improvement of Vo₂ max was about 29.74% and this improvement may be postulated as a clear indication of physiological adaptation due to chronic exercise programme.

5.2.4. On Psychological Dimension :

Sports Achievement Motivation

i) The subjects of the study may be considered as "moderate" in sports achievement motivation, evident from post test score and were "low" during pre test.

ii) Following eight months participation in organised physical education training course the sports achievement motivation of the subjects improved significantly.

Anxiety

iii) Significant reduction in state anxiety score was observed following eight months training in comparison to the pre test score among the trainee females.

iv) Similarly trait anxiety score during post test was significantly reduced following training than that of pre test score.

Leadership

v) The mean leadership score at post test was higher than that of pre test but the improvement was not statistically significant.

vi) The organised physical education training has definite role in improving leadership quality and in developing an individual as a professional leader. However very many factors which could not be controlled in this study, may have played a crucial role for insignificant improvement.

5.2.5. On Psycho-physiological Reactivity :

Reaction Time

i) Following participation in organised physical education training simple reaction time significantly reduced. The post test mean score was found significantly lower than that of mean pre test score.

ii) Similarly mean choice reaction time was also found significantly reduced following participation in organised physical education training course among the trainee females.

Skin Conductance

iii) The skin conductivity of the trainee females was reduced significantly following training and thereby lowered the autonomic arousal level.

5.2.6. General Concluding Remarks :

i) The organised physical education training programme in which the female subjects participated for about nine months have definitely improved their physical fitness status, performance in selected skill oriented physical activities and physiological potentialities.

ii) Improvement in motivation, in all probability, has influenced the positive change in physical and physiological qualities and there by reduced the anxiety level.

iii) The direction of change in psychological aspects also influenced the psycho-physiological reactivity which indicates a lowered arousal level following training.

iv) However the training programme, designed was possibly not sufficient to elicit a significant change in leadership quality among trainee females.

5.3. Recommendations

An interested researcher may find enough scope to study further on the following aspects :

- (1) The present investigation was delimited only to female subjects, the same type of study may be made with male subjects also.
- (2) The study may be conducted on a large samples.
- (3) This study may be extended among the females of different training institute of West Bengal.
- (4) The same study also be conducted to different age groups.
- (5) Interested researcher, in addition, may include some other programme schedule to compare and to develop leadership qualities of subjects.
- (6) Some more standard psychological testing may be conducted.
- (7) More physiological parameters may be considered with sophisticated instrumentation.
- (8) Some more psychophysiological reactivity may be considered.