CHAPTER - V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of the study was to develop a physical fitness test for boys of higher secondary level of Assam State.

"Quality of Life" has become one of the major aims of contemporary societies. Society is constantly changing and this is mirrored within the profession of physical education and exercise sciences. One of the most important goal of the school physical education programme is to develop physical fitness. Physical fitness is considered as a pre-requisite to healthful and recreational living and is not an end unto itself. Assessment as measurement of individual performance is needed to determine status of physical fitness and activities which meet the unique needs of the developing individual. Evaluation will help to understand the present levels of educational performance in physical and motor fitness domains.

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The data and information collected for the study was rich, both in content and magnitude. It was perhaps not possible to carry out an exhaustive analysis in the time frame available. The findings presented in the preceding chapters, therefore, cover only those crucial aspects which were in accordance with the scope and objectives of the study.

Due consideration have been given to the diversified characteristics of the state in regards to location, community, socio-economic structure, etc. in order to select the subject as true representative of all segments of the society. All sections of the society have been accommodated and the subjects for the study have been selected randomly with the help of random groups design.

By reviewing the standard test batteries available, the most prominent test variables which have been used by well known physical fitness test batteries, 12 test variables, which were predicted to measure the different components of physical fitness of higher secondary level boys were selected from a wide variety of components of test items.
The selected 12 test variables were administered to 100 Boys of Higher Secondary Level of Assam State with fullest care and serious attention. The data so collected was subjected to factor analysis in IBM PC AT, Computer having SPSS package, at Computer Centre, Department of Psychology, Aligarh Muslim University, Aligarh. Since factor analysis starts with the correlation matrix, correlation matrix was initially obtained. Then Principal Components Analysis method was used to extract factors, which generated four factors. Then factor matrix was extracted to have rotated factor loading. Multiple regression analysis were obtained through step method, as provided for in SP SS package which provides all the essentials of the statistical calculation from the basic to the advanced levels.

By considering the administrative feasibility, logistic interpretation with respect to the pertinent field of application, rotated factor loadings, communality and significant T-values a test battery of 4 items was developed to measure the Physical Fitness of Higher Secondary Level Boys of Assam State. Test items
for Physical Fitness Test Batteries are :-

1. 60 Meter Dash
2. Standing Broad Jump
3. Pull ups
4. 9 Minutes Run/Walk

Further these tests have been administered to those selected higher secondary schools and the norms have been developed.

Within the constraints of this study following conclusions were deduced.

1. Factor analysis of 12 variables generated four factor which amount for 71.6 of the total variance in data set. Speed factor emerged as a principal component (vide 29.1 percent of the variance) of physical fitness. Factors identified were Speed, Muscular Strength, Power and Cardio-respiratory endurance.

2. The test developed measures four different components of physical fitness namely speed, strength, power and cardio-respiratory endurance.
Four test items of the physical fitness test battery showed significant rotated factor loadings and significant T-values with respect to physical fitness.

3. Standing broad jump has greater affinity towards execulsive strength, whereas vertical jump does not show much higher measure to execulsive strength.

4. 60 Meter dash, 50 meter dash and 4 x 10 meter shuttle runs have a combination of factor, any one of which can measure the speed factor.

5. 4 x 10 Meter Shuttle Run and squat thrust have a combination of factor not exactly the predicted agility factor as both of these show a significant loading on speed factor and show a negative significant correlation between them.

6. The test developed stood the criterion of a significant authenticity, administration feasibility and educational application in the field of physical education and will help in assessing the physical fitness of higher secondary level boys of Assam State.
RECOMMENDATIONS

In the light of conclusions drawn, following recommendations are made.

1. Due to constraint of time framed for this study, only major components of physical fitness and a small number of test variables were included. Therefore, it is recommended that a same study may be conducted considering all the physical fitness components and a large number of variables.

2. Same study may be conducted in regards to students belonging to other sex of higher secondary levels.

3. Similar study may be conducted in regards to students of both sexes, belonging to below and above higher secondary level, so as to understand their physical fitness level.

4. A study may be taken up considering the students of all segments of society. Further, the study may be conducted in particular to a segment so that comparison may be done among the segments of society.
5. The study may also be taken up in other cultural and geographical contest.

6. The area which has not been covered may be taken up in further study.

7. In order to bring improvement in identification process of physical fitness of Assam State pupils more similar studies may be conducted, which will enable the physical educationist with much wide vision to place individual’s in correct sports and games.