#### 4.10 DISCUSSION ON HYPOTHESIS

The hypothesis I says that the newly constructed tests for service placement skill and underarm placement skill and underarm pass skill in volleyball may be reliable.

The statistical analysis of the data for the newly constructed tests of the service placement and underarm pass skills revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.01 level hence the first hypothesis was accepted and the test was reliable.

The statistical analysis of the data for the newly constructed tests of the service placement and underarm pass skills revealed that the obtained coefficient correlations value of each test was found to be significant at 0.01 level. Hence the second hypothesis was accepted and test was valid.

The hypothesis third says that the newly constructed tests assessing the service placement skill and underarm passing volleyball may be objective.

The statistical analysis of the data for the newly constructed tests of the service placement and underarm pass skills revealed that the obtained coefficient correlation value of two tests was found to be significant at 0.01 levels. Hence the third hypothesis was accepted and the tests were objective.

# CHAPTER - V

# **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

## **5.1 BRIEF RESUME**

The purpose of this study was to construct skill tests to measure the service placement skills, underarm pass skill and there after to compute norms for the said skills for college women volleyball players in Andhra Pradesh State. So far no effort has been made to construct the skill tests and norms for the volleyball skills under the Indian conditions for selecting the Volleyball players. Hence, the investigator felt the necessity of the skill tests and norms for the above said fundamental skills namely Service placement skills and underarm pass skill and hence took up this study.

To achieve this purpose, Five hundred Volleyball women players were selected as subjects for this study. For the purpose of this study, two standardized Skills in volleyball were chosen from Brumbach Wall Volley test and Gladys Scott and Eastern French's Service placement test. Three trials on the two newly constructed the service placement skills and underarm pass skill and three trials on the two criterion tests were given on consecutive days under similar conditions.

To establish the reliability of the most appropriate newly constructed tests, two way Intra class correlation techniques was employed. The obtained reliability coefficient for the most appropriate newly constructed tests were compared with the table value at 0.01 level of significance.

To establish the validity of the newly constructed test among the three trial scores, the best of the criterion test score and the best of the newly constructed test score were compared, using Pearson's product moment correlation statistical technique. The obtained validity co-efficient for the newly constructed tests were compared with the table value at 0.01 level for significance.

The objectivity of the newly constructed test was established by correlating the collected scores by the different raters. The scores were collected on the two different occasions under identical conditions. Three trials were conducted by these three testers. The best of the three (testers) scores were taken as the scores to find out the correlation between the three testers scores. The scores thus collected were correlated by using Pearson's product moment correlation.

For the construction of the norm, the test scores of the newly constructed skill test on service placement and underarm pass skill were subjected to the statistical analysis for computing the mean, standard deviation and hull scale values. Thus, the norms were constructed for the assessment of service placement and underarm pass skill in volleyball.

## 5.2. FINDINGS

The following are the findings of the present study:

- By using the 'r' value of 0.999 and above on arbitrary test items, the test items such as service placement test I and underarm pass test II were selected as appropriate tests.
- Form the result of the arbitrary test items, the tests showing higher coefficient correlation were selected for the final analysis.
- It was found out that, the reliability coefficient on most appropriate test items 'r' value ranged from 0.952 to 0.999.
- It was also found out that, the validity between the criterion test and newly constructed test, 'r' value ranged form 0.8156 to 0.8473.
- The objectivity coefficient on most appropriate test 'r' value range from 0.968 to 0.987.
- Further, the norms were constructed to the newly constructed skills tests namely service placement skill underarm pass skills by using Hull scale norms.

#### 5.3. CONCLUSIONS

In the light of the findings and within the limitations of the present study, the following conclusions were drawn. (Service placement and underarm pass skill)

- The consistency of the constructed test was reliable, valid and objective.
- Service placement and underarm pass skill in volleyball were evolved as the Final tests Battery to find out the ability of the skill test of inter collegiate Women volleyball players.
- The Hull Scale Norms were compiled and presented as the Final test Battery for the most appropriate tests.

# **5.4 RECOMMENDATIONS**

Based on the findings and conclusions made in the present study, the following recommendations are made.

- The Physical Education Teachers and Coaches can use the newly constructed skill tests in volleyball (service skill and under pass skill) to evolve and improve the fundamental skills in volleyball.
- The coaches and Physical Education Teachers can use the Final test Battery to predict the playing ability of the inter collegiate volleyball women players.
- The norms evolved in this study can be used to find out the performance of players in the fundamental skills and to spot out the talented volleyball players at the inter collegiate level.
- In the training period, the physical education teachers and coaches can use the norms of the Final test Battery to know the level of learning in the fundamental skills.
- The norms constructed in this study would help to select the players in Physical Education Colleges, Sports Schools, and Sports Academies in India.