Chapter V
Summary, Conclusion and Recommendations

5.1 Summary
The present study was undertaken to development of norms for selection of senior volleyball players in Maharashtra. Since the objective was to develop standard “Norms” for selection, evaluation, and assessment of performance variables of Volleyball players in Maharashtra state, the normative study was conducted under descriptive research. Standard procedures were followed to conduct this research project. The researcher followed step-wise methods of developing and establishing standard norms for senior level, 18-25 years, male Volleyball players of Maharashtra state. Since the purpose of the study is to develop norms for the male senior volleyball players so for this study the male Senior Volleyball players, aged between 18 to 25 years from various districts of Maharashtra would be considered as the total population of the study. The purposive sampling method\(^1\)\(^2\) was used to select the sample for the current study. For this study the male Senior Volleyball players, aged 18 to 25 years from various districts of Maharashtra participating at the State Level Volleyball Competition conducted by the Maharashtra State Volleyball Association (MSVA), are the sample for the current study. Considering the last three years around thirty teams participate in the competitions organised by MSVA participate in the state level competition conducted by the Maharashtra State Volleyball Association. Every district team, representing each district, consists of twelve players. The approximate population of Senior Volleyball players is 1188. The data collection was done for three consecutive years. The data was collected from total of 756 samples.

To understand the research topic in depth the researcher made every effort to review literature related to the problem in the game of volleyball. After going through various reviews and related literatures the performance variables were selected and further classified into three major dimensions, which included the performance variables Standing Height, Muscular Endurance of Shoulder, Muscular strength of forearm,

Flexibility of back and hamstring, Speed, Agility, Explosive leg strength, Under Hand Pass ability, Upper Hand Pass ability, Serving ability, Ball passing ability, Setting ability, Smashing ability for which Height, Push ups, Grip strength test, Sit and Reach test, 50 meter Dash, Shuttle run, Vertical jump, Under Hand Pass test Upper Hand Pass, Serving test, Ball Passing test, Set up test, Smash test respectively were selected to measure them. The test selected were feasible, standard and best suited to measure the performance variables. The tests selected in this list were included, after a deep study of various related literature, Internet and related study and after taking opinions of various experts in the area of Physical Education and Sports and considering the long-standing professional experience of the present investigator. ‘First try-out’ of these new test-items was conducted on twenty four (n=24) male Senior Volleyball players of Kolhapur and Sangli district. The limitations, if any, in administering each test-item were recorded for further improvement of the test battery. Final data from 756 samples was collected.

The data on selected test items were collected from the male Senior Volleyball players, aged 18 to 25 years from various districts of Maharashtra participating at the State Level Volleyball Competition conducted by the Maharashtra State Volleyball Association (MSVA). The data was collected at three senior volleyball championships. The reliability of data was ensured by establishing the instruments reliability, tester’s competency, reliability of test and subject reliability. Although the study has been restricted for senior level volleyball player the same norms with possible modification could be applied for selecting players of other levels, as the results are promising. After the data was collected the statistical analysis of data was done in accordance with the purpose of the study. Firstly the data obtained from 756 volleyball players participating at the State Level Volleyball Competition conducted by the Maharashtra State Volleyball Association (MSVA) was subjected to descriptive analysis. The mean and Standard Deviation was calculated. To find out the normality of the scores the skewness and the kurtosis were found out. Some of the scores from the data were removed as they were outliers. The outliers were found with the help of Box plots through SPSS. Normative scale namely percentile scale for the purpose of preparation of norms volley players. The percentile norms provided a basis for interpreting an individual’s score in terms of the standing in group. Percentile scale was considered as appropriate scale. The Percentile method was
used to create norms. Keeping the drawbacks of percentile scale in mind, it was thought appropriate to construct a grading scale appropriate to categories players into four categories i.e. very good, good, average and poor.

5.2 Conclusions
Within limitation, the results of the present study helped to warrant the following conclusion.

- The performance variable for volleyball players are identified under the major head morphological, physical fitness and skill.
- The selected performance variables for volley ball are measurable and can help to differentiate between players.
- The performance norms in each of the selected variables for assessment, evaluation and selection of the Volleyball players are developed.
- The norms developed can measure various variable related to Volleyball players.
- The norms developed in this study have adequate objectivity with statistical acceptability.
- The norms can be used as criteria for selection of senior level Volleyball player to form a State level Volleyball team for the state of Maharashtra.
- The Norms can be successfully used to distinguish between Volleyball player. This will help to compose a standard state level Volleyball team.

5.3 Recommendations
The researcher gives following recommendations for further study and to other fellow researcher with similar interests.

- The norms can provide volleyball coaches and physical education teachers criteria for testing and evaluating their players and getting information for improvements.
- Feedback from testing and evaluation can help coaches to know the weakness and strength of the player, thus help them to change strategies and helping programme.
- The ‘Norms’ can be successfully used to distinguish talented Volleyball player.
- The score received using Norms will help of the coaches to know the shortcoming of players in specific area and bring improvement.
• The norms can be used as assessment tool and will help to adopt new strategies in training, coaching, and teaching so as to enhance the efficiency of players or Volleyball team.

• The present study may prove beneficial for the selection committee members for objective assessment and evaluation of performance ability of volleyball players.

• This study may help the players to know where they stand the criterion they have to achieve for selection and improvement.

• This study may provide an opportunity and encouragement the sports talents in volleyball, with a hope that their efficiency will be accurately judged by developed test and norms.

• The study may provide objective data and information about players at the senior level volleyball players.

• The selection process could become more clear and transparent.

Hence researcher recommends the use of the prepared norms.