Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
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SUMMARY

The majority of the published tests in Physical Education are the products of twentieth century. Indeed, most of the tests in Physical Education have publishing dates later than 1930. In soccer the earliest skill test was constructed by Heath and Roodgers (1932) for fifth and sixth-grade boys and girls based on the teacher’s analysis of the game. The test items included dribble, throw, place kick for goal, kicking and rolling ball. Subsequently many studies were conducted to construct soccer skill test items to measure various skills in soccer. Nelson and Cozens (1934), Shaufele (1940), Bontz (1942), Warner (1950), McDonald (1951), Annarino (1962), Crawford (1963), Crew (1968), Garry (1968), Mackenzie (1969), eagley, Kovas (1973), Furness (1973) and Christian (1974) had also developed soccer skill test items.

Though many other similar studies have also been done in India, no skill battery has been constructed for varsity soccer players. Hence the research scholar felt the need to develop, construct and evaluate a battery of soccer skill tests for Indian standard varsity soccer players.

The purpose of this study was to develop and evaluate a battery of soccer skill tests for varsity soccer players in the age group of 17-19 years.
250 varsity soccer players in the age group of 17-19 years who were studying in the colleges in Tamilnadu were taken as the subjects for the study.

Involving the important skills in soccer, thirty two test items were constructed initially for the study. A trial run was conducted with 20 soccer players from Bishop Heber College soccer team. After critical analysis and opinions from game experts who were present at the trial run, the test items for the study was reduced to the following twelve test items.

**Passing**

1. Passing with the inside of the foot
2. Passing with the outside of the foot

**Dribbling**

3. Zigzag dribbling
4. Dribbling for speed

**Shooting**

5. Penalty kick
6. Shooting from 25 meters

**Heading**

7. Heading for accuracy
8. Heading for distance
Trapping

9. Chest trapping
10. Instep trapping

Chipping

11. Chipping for accuracy

Throw-in

12. Throw-in for distance

250 varsity soccer players from fifteen college teams in Tamilnadu were the subjects for the study. Since the inter-collegiate tournaments start from the month of September the data were collected during the month of August just before the inter-collegiate tournaments. All the test items were administered at their respective colleges on consecutive days on both the sessions. The data collected from the 250 varsity soccer players by administering the twelve test items were taken as the data for the study.

For the establishment of validity, on the recommendation of experts and coaches of soccer, all the 12 test items were selected on the basis of their face validity.

The analysis of data for the establishment of reliability, the test retest scores obtained by the same tester on the same subject were found highly correlated. Heading for distance had the highest correlation (0.982)
followed by throw-in for distance (0.965), Zig-Zag dribbling (0.935),
Passing with the outside of the foot (0.934), Chest trapping (0.914), Instep
trapping (0.876), Passing with the inside of the foot (0.786), Chipping for
accuracy (0.755), Heading for accuracy (0.674), Dribbling for speed (0.657),
Penalty kick (0.644), and the least correlation being Shooting from 25 mts
(0.589).

In factor analysis, the significant factors responsible for variance and
dominant were extracted through Principle Component Analysis and
Varimax method. Since the number of test items were only twelve, the
factors were restricted to two. After applying Varimax Solution, only five
test items emerged significant from the two factors. The Battery of soccer
skill tests were constituted with these test items. Depending upon the test
items it contained, the factors were named accordingly. The factors and the
test items are given below.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Test Item</th>
<th>Name of the Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heading for distance</td>
<td>Playing ability by body</td>
</tr>
<tr>
<td>2</td>
<td>Throw-in for distance</td>
<td>Playing ability by body</td>
</tr>
<tr>
<td>3</td>
<td>Passing with the outside of the foot</td>
<td>Ball playing ability</td>
</tr>
<tr>
<td>4</td>
<td>Zigzag Dribbling</td>
<td>Ball playing ability</td>
</tr>
<tr>
<td>5</td>
<td>Chest trapping</td>
<td>Ball playing ability</td>
</tr>
</tbody>
</table>
For interpreting playing ability, a norm was developed for all the five test items selected for the test battery. All the raw scores of the selected five test items for the 250 players were converted into norm scores and added together separately for each player. These overall performance scores were interpreted by developing a grading scale based on the 6 Sigma scale.

<table>
<thead>
<tr>
<th>Scores</th>
<th>Alphabetical Grade</th>
<th>Interpretive Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 424</td>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>364 – 424</td>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>242- 363</td>
<td>C</td>
<td>Average</td>
</tr>
<tr>
<td>180 - 241</td>
<td>D</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Below 180</td>
<td>E</td>
<td>Poor</td>
</tr>
</tbody>
</table>
CONCLUSIONS

Within the constraints and limitations of the present study, the following conclusions were drawn.

1. All the test items included in this study were highly correlated.

2. The factor analysis yielded two factors which were named as ‘playing ability by body’ and ‘ball playing ability’.

3. Test item factors with higher loadings were taken to constitute the Battery of soccer skill tests for the varsity soccer players in the age group of 17-19 years. The test items are

**Playing ability by body**

1. Heading for distance
2. Throw-in for distance

**Ball playing ability**

1. Passing with the outside of the foot
2. Zigzag dribbling
3. Chest trapping

4. The playing ability of the players was interpreted by using a scale on the basis of a 6-Sigma scale as A, B, C, D, & E or Excellent, Good, Average, Satisfactory & Poor respectively according to their overall score based on the percentile scale which was developed for all the five test items.
RECOMMENDATIONS

On the basis of the findings and conclusions made in this study the following recommendations are made

1. The Final Test Battery, a five test module evolved by this researcher may be used by selectors and coaches for evaluating the performance of the Varsity Soccer players.

2. Coaches and trainers could systematize and modify their training programme from the findings of this study.

3. The present study was employed on Varsity level subjects. Similar study may be undertaken for National level subjects and National norms may be evolved.

4. The present study could be repeated for Women Varsity players.

5. It is recommended that such Test Batteries may be constructed for Varsity level players of other games also.