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Original article

KICKINGABILITY SKILLS: CONSTRUCTION OF NORMS ON KUHN'S SOCCER TEST

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Abstract

Aim: The purpose of the study was to construct Norms for University level soccer players for the selected variables of Kuhn's soccer test based on their performance.

Method: To serve the purpose, 720 soccer players who represented their concerned university were taken as the subjects. Goal kicking for accuracy with preferred foot and Non Preferred foot were the chosen variables. The data for the variables to construct norms were collected by administering the appropriate standard tests. The variables of Kuhn's soccer test battery was used for the collection of data. In addition to the norms, the Mean and Standard Deviation of the raw scores were computed. To obtain the Hull Scale norm, SPSS statistical package was used.

Results: The Mean for Goal Kicking for Accuracy for preferred foot was 12.71 and Standard Deviation (SD) was 2.13 whereas the Mean for Goal Kicking for Accuracy with Non Preferred Foot was 12.77 and Standard Deviation score was 2.14.

Conclusions: The kicking accuracy of University level students are excellent with both preferred foot and Non preferred foot and there is no significant difference in between.

Key words: Soccer, Norms, Goal kicking for accuracy, Kuhn's soccer test battery

Introduction

Football or soccer is the most popular in the world. Nowadays, soccer at university level has been getting greater importance and recognition over the globe. The most important thing in the sport is the right selection of players depending upon the quality of the individual. Even though there is no dearth of talent in universities, there is no set standard or objectivity in assessing the quality of players. This has adversely affected the selection procedures as it has given room for favoritism, regionalism and several other such inhibiting factors. Hence, objectivity in the selection of players is of utmost important to ensure optimum performance. The present system very much demands the construction of norms for the evaluation and selection of university players. There were many such attempts for different areas based on different test batteries.

Prayoko Susthi (2014) conducted a study to construct a soccer skill test norm for male and female students for higher education and university level in Thailand to be used by teachers and coaches as a guideline in measuring and evaluating soccer skill techniques based on Mc Donald standard soccer test. For the combined elements including skill related

variables and anthropometric variables, Varghese (2010) conducted a study to construct norms for the predicted skills, physical and anthropometrical variables for college and university men soccer players in Kerala. Chellappa (2003) conducted a study on the construction of norms for soccer goal keepers on selected skill physical psychological and anthropometrical variables. Sixty goal keepers were taken for the study from the various districts of Tamil Nadu. In kicking test, as per the qualitative grading for constructed norms it was evident that the norms were quite useful to assess the standard of the game. The attempts of Gupta (2007) was useful in many a ways for the purpose and same was the case of Vernon and Crew(1988) who devised a skill test battery for soccer players at university level. Anbarasu (2013) constructed norms for field hockey skills for the age group of 18 years to 28 years based on the performance of players. The constructed norms has been using for many selection trials and to assess the standard of the game in a precise and objective way for different purposes and to give a very consistent and accurate outputs and results which keeps the transparency in the selection of

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subjects and players.

Methods

The study was designed to construct percentile norms on the variables of Kuhn's soccer test for university soccer players who participated in Inter-University football competitions. To achieve the purpose of the study, as many as seven hundred and twenty university players from various university teams of south India were selected as the subjects. The chosen subjects were between eighteen and twenty five years of age. The data collected for the corresponding variables of Kuhn's soccer test were statistically analyzed. Mean, Standard Deviation and Hull Scale were computed. The raw scores were converted into Hull Scale and thus norm was constructed for each item. The percentile scale was calculated from 0 to 100th percentile. For all

variables (goal kicking with preferred foot and non-preferred foot, the scaling is done in the usual way.

Results

The proposed study was to construct norms for soccer skill techniques of university players for the selected variables of Kuhn's soccer test. The variables were kicking for accuracy with preferred foot and with non-preferred foot,

Goal Kicking For Accuracy with Preferred Foot

In the study, the kicking ability of players was shown to be consistent with a good standard. For the variable, the mean score was 12.71 and Standard Deviation was 2.12. The calculated S D is multiplied by 0.07 to get the Hull Scale value. The Hull Scale value is serially added and subtracted to the Mean score to get the Percentile Scale.

Table 2 - Descriptive score of goal kicking for accuracy – preferred foot

No. of subjects	Mean	SD
720	12.71	2.13

Table 3 - Hull scale norm for goal kicking for accuracy with preferred foot

Hull Scale	0	1	2	3	4	5	6	7	8	9
00		9	9	9	9	9	9	9	9	9
10	9	9	9	9	9	9	9	12	12	12
20	12	12	12	12	12	12	12	12	12	12
30	12	12	12	12	12	12	12	12	12	12
40	12	12	12	12	12	12	12	12	12	12
50	12	12	12	12	12	12	12	12	12	12
60	15	15	15	15	15	15	15	15	15	15
70	15	15	15	15	15	15	15	15	15	15
80	15	15	15	15	15	15	15	15	15	15
90	15	15	15	15	15	15	15	15	15	15
100										

Out of the seven hundred and twenty players, 216 players have scored full marks by

scoring 15 points for the five kicks (3 points for one successful kick). 324 players scored 80 % marks by



scoring 12 points by converting four successful kicks out of the five kicks given and 180 players scored 60% marks by converting 3 successful kicks out of the five kicks given.

On the basis of the above constructed table, the subjects were given qualitative grading as follows.

Table 4 - Qualitative grading of the constructed norm for the performance of goal kicking for accuracy with preferred foot

Score	Qualitative grading	No.of subjects in each grade
0 TO 20	VERY POOR	NIL
21 TO 40	POOR	NIL
41 TO 60	AVERAGE	180
61 TO 80	GOOD	324
81 TO 100	EXCELLENT	216

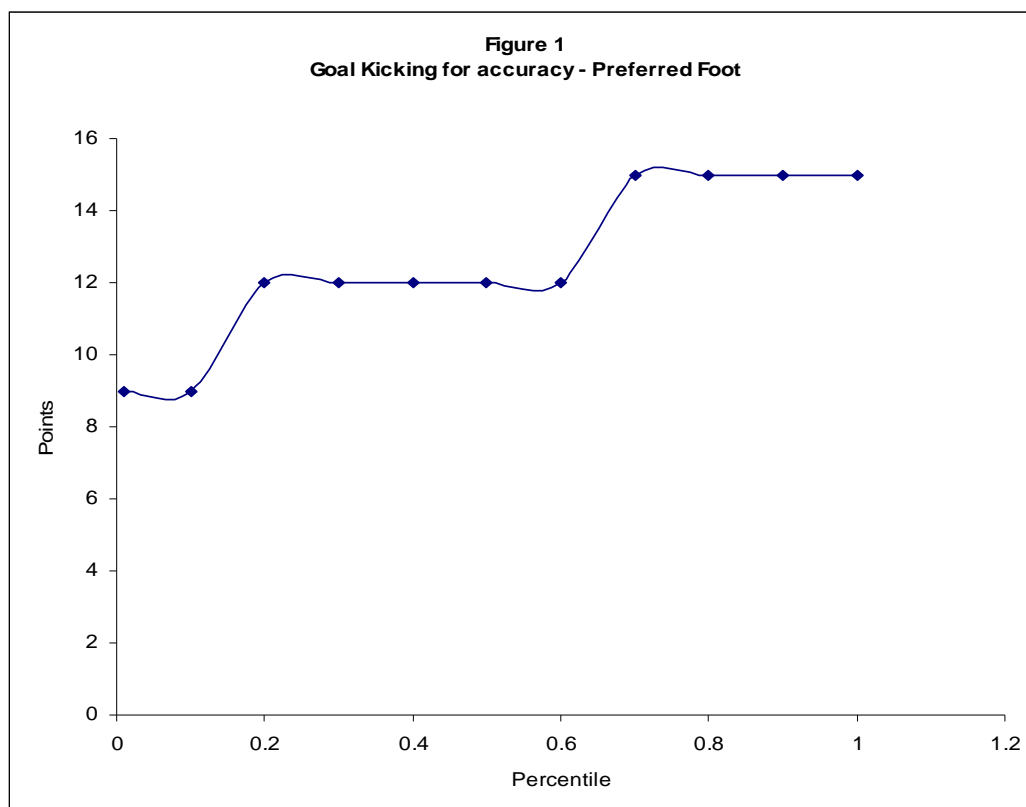


Figure 1. Graph showing percentile scores of goal kicking for accuracy with preferred foot

Goal Kicking for Accuracy with Non Preferred Foot

For the variable, the mean value was 12.78 and a score of 2.14 was obtained as Standard Deviation. The calculated S D is multiplied by 0.07



to get the Hull Scale value. The Hull Scale value is serially added and subtracted to the Mean score to get the Percentile Scale.

Table 5 - Descriptive score of goal kicking for accuracy – non preferred foot

No. of subjects	Mean	SD
720	12.77	2.14

Table 6 - hull scale norm for goal kicking for accuracy with non preferred foot

Hull Scale	0	1	2	3	4	5	6	7	8	9
00		9	9	9	9	9	9	9	9	9
10	9	9	9	9	12	12	12	12	12	12
20	12	12	12	12	12	12	12	12	12	12
30	12	12	12	12	12	12	12	12	12	12
40	12	12	12	12	12	12	12	12	12	12
50	12	12	12	12	12	12	12	12	12	12
60	15	15	15	15	15	15	15	15	15	15
70	15	15	15	15	15	15	15	15	15	15
80	15	15	15	15	15	15	15	15	15	15
90	15	15	15	15	15	15	15	15	15	15
100	15	15	15	15	15	15	15	15	15	15

In this test, out of the seven hundred and twenty players, 287 players scored full by scoring 15 marks for five successful kicks, 339 players scored 80% marks by converting four kicks out of five kicks given, and 94 players scored 60% marks by converting 3 successful kicks out of five given.

On the basis of the above constructed table, the subjects were given qualitative grading as follows.

Table 7 - Qualitative grading of the constructed norm for the performance of goal kicking for accuracy with non preferred foot

Score	Qualitative Grading	No.of subjects in each Grade
0 to 20	Very poor	Nil
21 to 40	Poor	Nil
41 to 60	Average	94
61 to 80	Good	339
81 to100	Excellent	287

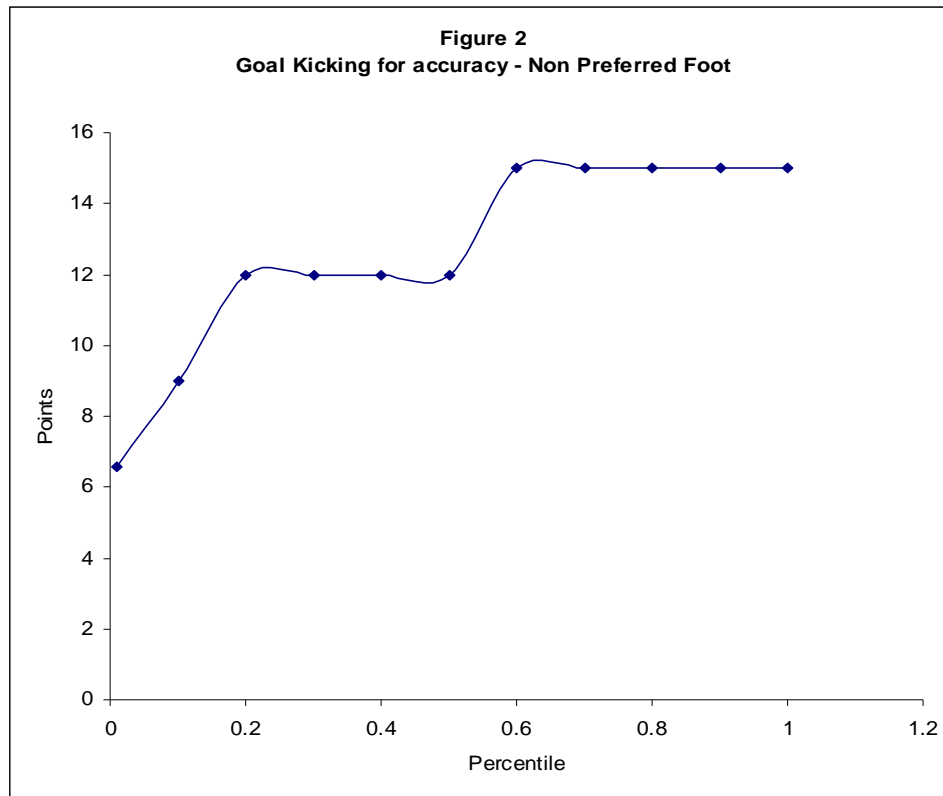


Figure 3 - Graph showing percentile scores of goal kicking for accuracy with non-preferred foot

Discussion

Findings of this study show that our university players are showing excellent performance in goal kicking for accuracy with preferred foot and non-preferred foot. The findings of Varghese (2010) to create Norms for selected skill related variables and anthropometric variables were supportive on the findings of this study. The findings of this study is in accordance with the AAHPER skill test manual and also parallel to the findings of AAHPER Youth Fitness Test Manual. The studies of Seculic (2006) and Fonseca (2007) on professional soccer players are of the same nature.

The normative values are very closer to the maximum scores and hence the performances of both variables can be considered as excellent in the category on the chosen variables of Kuhn's soccer test.

Conclusions

1) The results of the study may be helpful for the selectors of different universities for selecting

the university level soccer players on the basis of constructed norms.

- 2) The results of the present study may be used to evaluate the university level soccer players to be groomed for higher level of competitions based on the constructed norms.
- 3) The results of the present study may help the coaches and physical educationists to compare and evaluate the performance of their players and thus to schedule their training plan giving emphasis to the variables in which their players are lacking.
- 4) Individualized training program may be developed for players who scores below 25th Percentile.
- 6) A similar study may be conducted to construct norms on the other regions of the country.
- 7) The constructed norms may be used for the purpose of classification of soccer players in the age group of 18 to 25 years.
- 8) More research studies may be conducted which measures the other variables of the game.



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