

A Comparative Study of Soccer performance on Grassy and Non-Grassy Playfield

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Abstract: *The aim of the present study was to determine the soccer performance on the grassy and non-grassy playfield. For the purpose total 30 male soccer players age 16-19 years from Baksa district of Assam were selected randomly as the subjects. The data were collected by conducting the L. Heath and E. G. Rodgers soccer skill test items viz. dribbling test, place kick for accuracy and kicking a rolling ball in both type surface of playfield. The data were analyzed by employing the student's t-test statistical technique and the result was compared at 0.05 level of confidence. It was found that, there was significant difference in the soccer performance ($t_{(0.05, 29)} = 3.17 > 2.04$) in the grassy playfield than non-grassy playfield. It was also observed that the performance is better in grassy playfield than the non-grassy playfield ($m = 158.86 > 142.11$).*

Keywords: Soccer, Performance, grassy, non-grassy, playfield

1. Introduction

Sports and play have deep roots in the culture and in the humanities simply because they provide like enrichment and fulfillment of opportunities. Basically all sports are competitive in nature either competing with one's own previous performance or competing with the performance of rival competitions. Fitness as well as proper playing surface is a pre-requisite for exhibiting better performance in all games and sports. In proper surface a player or athlete can delay the onset of fatigue during a match or competition. The more tired player is the more prone to making errors, and a player who makes a lot of errors will often shape his confidence, which all players need to perform well. Proper ground will aid them in the proper execution of various techniques as well as playing.

In the present days, the playing surface plays vital role in the performance. Recently the artificial turf surface is being introduced. Moreover most of the competition are used to organize in such type of surface. But unfortunately most of football playing places don't have such kind of latest facility. Moreover few also don't have normal natural grassy ground. Most of the players use to play in non-grassy ground too. Proper surface playfield is the most essential part of the football game to execute better performance.

2. Methodology

For this study 30 male soccer players age 16-19 years from Baksa district of Assam were selected as subjects randomly. All the subjects were equally treated on the grassy playfield and after three days the same subjects were examined on the non-grassy playfield. To collect the data L. Heath and E.G. Rodgers skill test items viz. Dribbling test, Place or spot kick and Kicking a rolling ball were employed. The data were analyzed with t-test statistical technique and the result was observed at .05 level of confidence.

3. Result and Discussion

Table 1: Comparison of Mean of Soccer performance on grassy playfield and non-grassy playfield

	Mean	Mean Difference	SD	S.E.	T -ratio
Grassy	158.86	16.75	21.91	5.29	3.17*
Non-grassy	142.11		18.97		

*significant at 0.05 level of confidence tabulated $t_{.05(29)} = 2.04$

The above table reveals that there is significant difference between the means of soccer performance on grassy playfield and non-grassy playfield as the obtained t value of 3.17 is greater than that of tabulated t-value of 2.04 at 0.05 level of confidence. The mean difference is graphically depicted following figure.

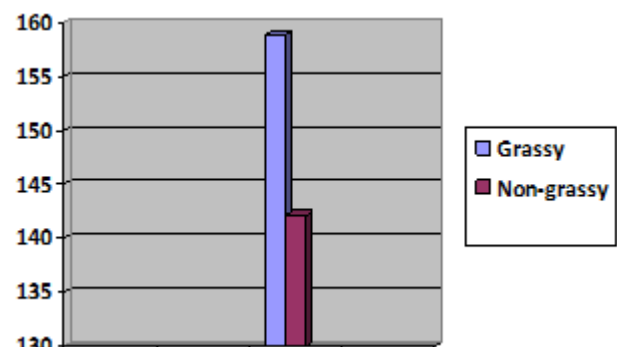


Figure 1: Graphical depiction of means of Soccer performance on grassy playfield and non-grassy playfield

4. Discussion of Findings

The statistical analysis shows significant difference in the soccer performance ($t_{(0.05, 29)} = 3.17 > 2.04$) on the grassy and non-grassy playfield. It was also shown the better soccer performance on grassy field than non-grassy playfield ($158.86 > 142.11$). It can be attributed to fact that the grassy

playfield are the most suitable ideal soccer playing surface than the non-grassy. In the grassy playfield players might achieve the better balance and friction to control and carry the ball. It might be secure and safe for which the player also achieves better confidence. The players might feel comfortable on the grassy playfield than non-grassy playfield. Players enjoy playing a game over this surface. Being the author also a soccer player he also personally feels comfortable to play on the grassy playfield rather than the non-grassy playfield.

5. Conclusion

On the basis of the findings of the study it was concluded that there was a significant difference in the soccer performance ($t_{(0.05, 29)} = 3.17 > 2.04$) on the grassy and non-grassy playfield. It was also concluded that soccer performance was found to be better on a grassy field than a non-grassy playfield ($158.86 > 142.11$).

References

- [1] Baro M., "Comparative effect of Training in Small Playfield and Regular Official Size Playfield in the Soccer Skill Performance of Soccer Players", *Vyayam Vidnyan*, (2007), Vol. 40, No. 2
- [2] Devi R.T., "Effect of Selected Exercise on Dribbling Ability of Woman Footballers", Unpublished Master Thesis, Amravati University (1995)
- [3] Khan B.A. and Josh Tomy, "Effect of Juggling on Dribbling and Kicking For Accuracy in Soccer" *Vyayam Vidnyan*, (2010)
- [4] Methew Donald K., *Measurement of Physical Education*, Philadelphia: WB Saunders Company, (1973)
- [5] Rodgers G. and Majorie L., "A Study in the Use of Knowledge and Skill Test in Soccer", *Research Quarterly*, Vol.3, (1932)
- [6] Severio William R., "The Effect of Warm UP Upon Accuracy in Football Passing", MS in Physical Education (1960)
- [7] Singh J. "Investigation of Selected Physiological, Psychological, Anthropometric Variables and Functional Assessment as Predictors of Tennis Performance" Doctoral Thesis, Jiwaji University, Gwalior (1987)