Comparison of Maximum Strength of Kicking and Non-Kicking Leg of Football Players at University Level

Dr. Usha Rani*

ABSTRACT

The purpose of the study was to compare the maximum leg strength of kicking and non-kicking leg of Football players at University level tournaments. For collecting the data for the study, 50 female Football players participating at University level tournaments were selected. The required data for the study was obtained by using leg dynamometer for measuring maximum leg strength of kicking and non-kicking leg. To assess the maximum strength of kicking and non-kicking leg 't' test was applied. The result of the study revealed that maximum strength of kicking leg was found greater than non-kicking of Football players

INTRODUCTION

Football is by far the most popular sport in the world. Tens of thousands of fans show up in stadium all over the world to support their favourite teams. The Football players have so much control over the ball it almost seems that it is on string. They have the ability to kick the ball long distances with extreme accuracy whilst the ball in the air. The kicks can be performed from either a stationary position or a distance from the ball.

The best Football players in the world are masters of speed and control. These attributes are directly related to power and strength which greatly requires in kicking. They must have maximum strength in legs and back to improve the kicking performances and prevention of injuries.

Kicking is rapidly explosive movement and strength is most important, on offensive and defensive where primary role of players is to fight for position. The impact of force varies by position in Football. Strength is required for kicking, sprinting and passing on Football ground. Kicking a ball very hard, without strength of legs, is impossible and can move in injury. Normally, Football player uses one leg predominantly in kicking. Does the strength vary in kicking and non-kicking leg needs lots of investigation.

METHODOLOGY

(i) Sample: To accomplish the objectives of the study, 50 female Football players were selected through random sampling. The data was taken

* Associate Professor, Deptt. of Physical Education, Kurukshetra University, Kurukshetra

only from female football players of Universities of Haryana. The data was collected in Guru Jambheshwar University, Hisar, during All India University Football Tournament, in year 2014. Their age range between 18 to 25 years.

(ii) Tools used: To measure the maximum leg strength of kicking and non kicking leg. dynamometer was used. The maximum strength was measured in kilograms.

(ii) Statistical Techniques used: To compare the maximum leg strength of kicking and non-kicking leg of female Football players, at University level, 't' test was used.

RESULTS & DISCUSSION

Significance of difference in maximum leg strength of kicking and non-kicking leg of Football players at University level

N	Variable	leg strength	Mean	S.D.	Mean difference	SED	't'
50	Maximum strength	Kicking leg	16.68	3.12	4.92	0.56	8.79
		Non-Kicking leg	11.76	2.46			
Significant at 0.01 level							

It can be observed from the Table that the obtained 't' value between kicking and non-kicking leg of female Football players is 8.79, which is significant at 0.01 level. Therefore, it is concluded that there is significant difference in maximum leg strength of kicking and non-kicking leg of female Football players participating at University level tournaments.

CONCLUSION

After analysis of data results obtained, it is concluded that maximum leg strength of kicking leg is greater than non-kicking leg of female Football players participating University level tournaments.

REFERENCES

Aagaard, P., Simonsen, E.B, Magnusson, S.P, Larsson, B. & Dyhre-Poulsen, P. (1998). A new concept of kokinetic hamstring: Quadriceps muscle strength ratio: American J-sports Med.

Capranica, L., Cama, G., Fanton, F., Tessitore, A. & Figura F (1992). Force and Power of preferred and non-preferred leg in young soccer players.

Coldwells, A., Atkinson, G. & Reilly, T. (1994). Sources of Variafion in back and leg dynamometry, Ergonomics.

Fowler, N.E. & Reilly, T. (1993). Assessment of Muscle Strength asymmetry in soccer players. In contemporary Ergonomics, E.J. lovesey (Ed) (London: Taylor and Fransis)

Goslin, B.R. & Charteris, J.(1979). Iso-kinetic dynamometry: Normatine data for clinical use in lower extremities (knee) cases. ScandivanianJ. Rehabi. & Med.

-----0-----