



## Relationship Of Height With Leg Strength Of West Zone Inter-University Kabaddi Players Playing At Different Position

**Prof. Ashish Shriram Chahare**  
Dr. Khatri Mahavidyalaya, Tukum  
Chandrapur, Maharashtra

### **Abstract**

The purpose of the study was to find out the relationship between height and leg strength of west zone inter-university kabaddi players playing at different position. For the present study researcher has selected 60 kabaddi players of different playing position in kabaddi: 20 Raider, 20 Third and 20 Corner from West Zone Inter University Kabaddi (Men) Tournament 2022-23. Subjects were selected by purposive sampling method. Height was measured with the help of stadiometer and leg strength was measured with the help of standing broad jump. Collected data was analyzed by Pearson product moment of correlation at 0.05 level of significance. Result of the study shows the correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were 0.584 & 0.452 and the correlation coefficient between them is more than the tabulated value of 0.433 at 0.05 level. This means that the relationship between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were found to be significant. Whereas, correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was 0.294 and the correlation coefficient between them is less than the tabulated value of 0.433 at 0.05 level. This means that the relationship between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was found to be insignificant. Concluding the study it can be stated that the correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were found to be significant. Whereas, correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was found to be insignificant.

**Keyword:** Height, Leg strength, West zone kabaddi players, Raider, Third, Corner.

### **Introduction**

Anthropometry predicts fitness for a particular sport and is useful for achieving peak performance in that sport. Human bodies and shapes vary in many ways and depend on gender, age, race, and geography. One of the goals of physical anthropology and human physiology is to understand and express the true causes and mechanisms of individual variability and variation. The entire field of physiology is applicable to the phenomenon of morphological, physiological, and psychological aspects.

Physical fitness is a positive state of being able to participate in a healthy, active, and fulfilling lifestyle. Physical ability is the ability to perform a variety of physical tasks without excessive fatigue and to maintain a healthy and fit body. Physical ability is a part of total ability. And it can be used interchangeably in motor fitness. Other areas of overall fitness include social competence, emotional competence, and mental competence.

Sometimes physical fitness is measured using measures such as heart rate, endurance, blood pressure, etc. Today, there is increasing emphasis on looking good, feeling good and living a long life and one of the keys to achieving this ideal is physical fitness and exercise. Physiological factors can be defined as those factors. Which are associated with various physiological systems? Such as pulse rate, blood pressure,

respiratory rate, hemoglobin and etc. Physiological factors play an important role in the health and well-being of individuals.

Kabaddi is a team effort or game. In which seven players come together and try to catch the raider of the opposing team. Teamwork is very important for a strong defense. The out and re-entry rules of the game require that each player be able to play in at least two or three places other than their own playing area. The main function of the defensive players is to catch and hold the raider until he scores points. If the raider touches one or more of the defending players and reaches their court, their team can score more points. Then an equal number of players from the defending team will be declared “out” and they will be asked to leave the court. If the team wants to make the player fully alive, they will have to score points by touching the opposing players and this process continues till the end of the match. Therefore, it is very important for the Kabaddi players to study the various offensive and defensive positions and their specific functions. Hence researcher has taken the study ‘relationship of height with leg strength of west zone inter-university kabaddi players playing at different position’.

### Methodology

The purpose of the study was to find out the relationship between height and leg strength of west zone inter-university kabaddi players playing at different position. For the present study researcher has selected 60 kabaddi players of different playing position in kabaddi: 20 Raider, 20 Third and 20 Corner from West Zone Inter University Kabaddi (Men) Tournament 2022-23. Subjects were selected by purposive sampling method. Height was measured with the help of stadiometer and leg strength was measured with the help of standing broad jump.

### Statistical Analysis

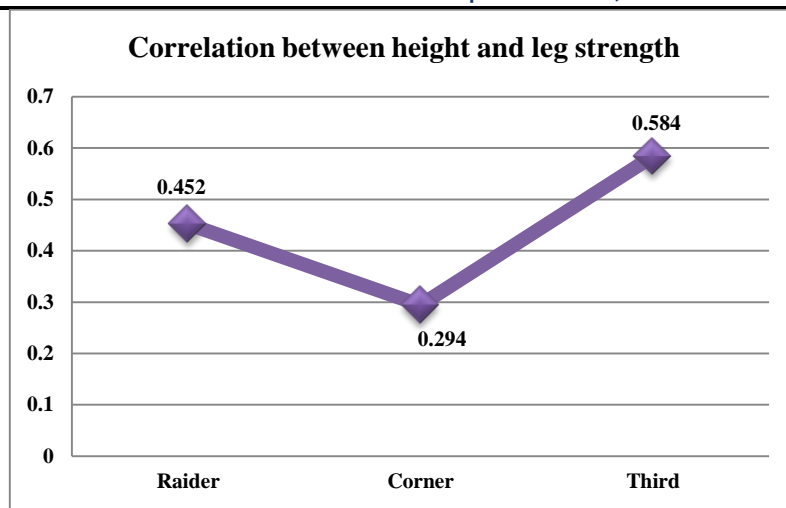
Collected data was analyzed by Pearson product moment of correlation at 0.05 level of significance.

**Table No. 1**  
**Relationship of Height with Leg Strength of Kabaddi players playing at different position**

Height	Leg Strength	Correlation ‘r’
Raider		0.452*
Corner		0.294
Third		0.584*

\*Significant at 0.05 tab ‘r’ is 0.433

Result of the study shows the correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were 0.584 & 0.452 and the correlation coefficient between them is more than the tabulated value of 0.433 at 0.05 level. This means that the relationship between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were found to be significant. Whereas, correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was 0.294 and the correlation coefficient between them is less than the tabulated value of 0.433 at 0.05 level. This means that the relationship between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was found to be insignificant.



Graph showing relationship between height and leg strength

## Conclusion

Concluding the study, it can be stated that the correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of third and raider were found to be significant. Whereas, correlation coefficient between height and leg strength of the west zone inter-university kabaddi players playing in the position of corner was found to be insignificant.

## Reference

1. Dall, S. R. et. al. (2012). An evolutionary ecology of individual differences. *Ecology Letters*: 15.
2. David, F. L. & Harvard, F. H. (2009). *Encyclopaedia Dictionary of Sports Medicine*. 280.
3. Furnham, A. & Mitchell, J. (1991). Personality, needs, social skills and academic achievement: A longitudinal study. *Personality and Individual Differences*. 12, .1067–1073.
4. [https://en.wikipedia.org/wiki/Wikipedia:Be\\_bold](https://en.wikipedia.org/wiki/Wikipedia:Be_bold), 26 Nov. 2024, 06:30 pm.
5. <https://hr.duke.edu/wellness/runwalk/training-education/strengthen-your-legs/>
6. <https://www.sciencedirect.com/topics/social-sciences/anthropometry#:~:text=Anthropometry%20is%20the%20branch%20of,%2C%20strength%2C%20and%20working%20capacity.>
7. King, A. J., et. al. (2009). The origins and evolution of leadership. *Current Biology*: 19.