

# **A Comparative Study of Physical Fitness Component of University Level Athletes and Trekkers of Nagpur University**

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## ***Abstract***

For Athletes and Trekkers, the Physical as well as Motor fitness are the important variables according to the sports sciences. Keeping in view the concept, this study was taken to compare the levels of Agility between University Level Running Athletes and Trekkers of Nagpur University. Total number of 40 University Level Running Athletes and Trekkers (20 Running Athletes and 20 Trekkers) were selected randomly from the University Level Competitions of Nagpur University. The criterion measure adopted for this study was Agility. The data collection tool used in the study was Shuttle Run. Data of Agility between Running Athletes and Trekkers was compared by using independent Sample t test. The level of significance was kept at 0.05 level of significant. It was found that in Agility, there was significant difference between Running Athletes and Trekkers. Mean scores showed that Running Athletes were better in Agility as compare to Trekkers. Based on the results it was concluded that Running Athletes are good in Agility as compare to Trekkers.

***Keywords:*** *Agility, Running Athletes and Trekkers.*

## **Introduction**

Agility is the ability to change the direction of body or its parts rapidly' is dependent on strength, reaction time, speed of movement and muscular coordination. Quick start and stops and quick changes in direction are fundamental to good performance in Football and Hockey (Nabhendra Singh, 2010). For Athletes and Swimmers Agility, is the important variables according to the sports sciences. Keeping in view the concept, this study was taken to compare the levels of Agility between University Level Running Athletes and Trekkers of Nagpur University.

## **Materials and Methods**

For the study, a total number of 40 University Level Running Athletes and Trekkers (20 Running Athletes and 20 Trekkers) were selected randomly from the University Level Competitions of

Nagpur University. The criterion measure adopted for this study was Agility. The data collection tool used in the study was Shuttle Run. Data of Agility between Running Athletes and Trekkers was compared by using independent Sample t test. The level of significance was kept at 0.05 level of significant.

## Results

**Table No. 1**  
**Descriptive statistical of Speed and Agility between Running Athletes and Trekkers**

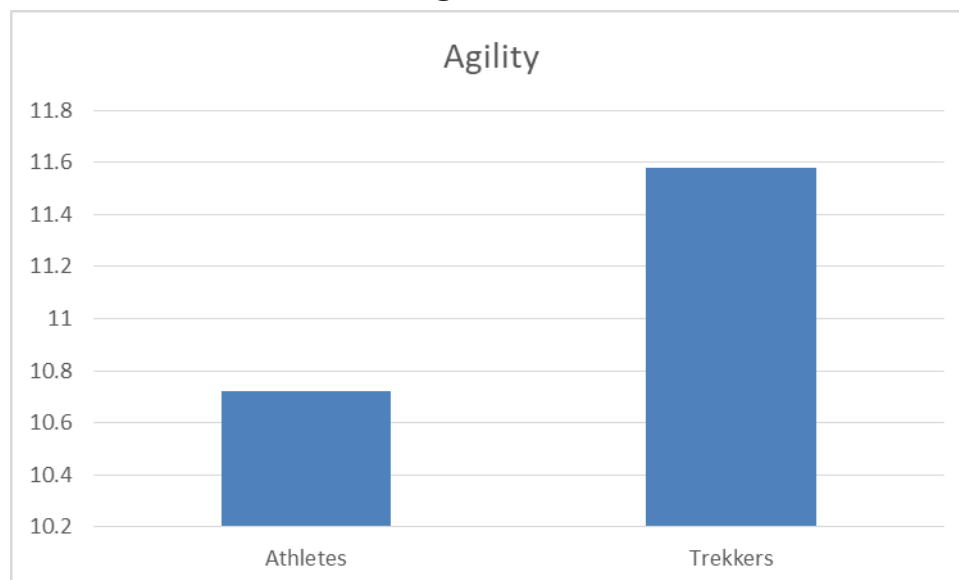
Agility	Groups	Total Samples	Mean	Standard Deviation	St. Error Mean
	Running Athletes	20	10.72	0.61	0.112
	Trekkers	20	11.58	0.6	0.205

**Table No. 2**

**Independent sample 't' test of Speed and Agility between Running Athletes and Trekkers**

Component	't' value	df	Sig. (2-tailed)	Mean Difference
Agility	3.17	38	0.042	0.86

**Figure No. 1**



**Figure No. 1, Showing Comparison of Mean of Agility between Athletes and Trekkers**

## Discussion of Findings

It was found that in Agility, there was significant difference between Running Athletes and Trekkers. Mean scores showed that Running Athletes were better in Agility as compare to Trekkers. Based on the results it was concluded that Running Athletes are good in Agility as compare to Trekkers.

## **Conclusion**

Based on the results it was concluded that Running Athletes are good in Agility as compare to Trekkers.

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