

## Comparison and construction of norms for girls on speed: at different geographical region

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### ABSTRACT

The purpose of the study was to compare the speed among coastal, plain and altitude area school girls of Tamilnadu. To achieve this purpose, 9000 girl students from various schools of coastal area (Cuddalore, Nagapatnam, Pudukottai, Villupuram, Chennai and Thottukudi districts). plain area (Vellore, Villupuram, Salem, Tiruvannamalai and Kangipuram districts) and altitude area (Udhagamandalam, Dindukkal, Vellore, Pollachi districts) of Tamilnadu, South India were selected as subjects at random. Their age ranged from 11 to 13 years (Studying 6<sup>th</sup> to 8<sup>th</sup> standard). Speed (50 m run) were selected as criterion variable and tested. The collected data were statistically examined by using ANOVA to find the significant difference if any. If the obtained 'F' ratio was found significant, scheffe's post hoc test was apply to know the paired mean difference. The level of confidence was fixed at .05. To construct the norms of the Hull scale value of respected classes was continuously added to and subtracted from the respected means for determining the values from zero to hundred in the scale. The result showed that coastal area girls were better in speed performance compared to plain and altitude area girls.

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Fitness remains paramount to health and well-being. Now a day's people are aware of physical fitness and they know the importance of fitness. Physical fitness of an individual depends on body composition, age, sex, training, nutritional status and environmental factors (Anonymous, 1989 and Hasalkar *et al.*, 2005). 15 per cent of the total coastal length of India is the country's third longest coastline (Ray and Ray, 2004). Altitude is a distance measurement, usually in the vertical or "up" direction. For endurance athletes altitude training within their year-round training plan, believing that it will improve performance (Wilbert, 2004). Speed is the quickness of movement of a limb. It is an integral part of every sport and influenced by the athlete's mobility, special strength, strength endurance and technique (Cratty and Hution, 1969). Every person has a different level of physical fitness which may change with time, place of work, situation and there is also an interaction between the daily activities and the fitness of an individual, the point of where to put the level of optimum fitness.

Norms are derived scores that are determined from the raw score obtained by a specific test (Safrit, 1981). The system of physical education programme prevailed in schools are irrelevant to the need of the physical capacities of their students. After the advent of the national

education policy 1986, these defects of existing system could be removed after fixing the standard norms for physical fitness for the students. According to the national education policy norms of physical fitness, it may be common to all the students in India. But the students in the state on different geographical regions (coastal, plain and altitude) have different environment and the lifestyle. So that, the norms of national level have not been attained by the students in the different regions. Hence, there is a need to fix the norms for region wise that may be able to find the capacity and give special attention to the students in physical education programme. The present study has to compare and construct norms for the speed of adolescent girls at different geographical regions.

### METHODOLOGY

The aim of the study was to compare the speed among coastal, plain and altitude areas of school girls of Tamilnadu. To achieve this purpose, (n= 9000) boy students from various schools of coastal area [n=3000 (6<sup>th</sup> 1000, 7<sup>th</sup> 1000 and 8<sup>th</sup> 1000) students] Cuddalore, Nagapatnam, Pudukottai, Villupuram, Chennai and Thoothukudi districts, plain area [n=3000 (6<sup>th</sup> 1000, 7<sup>th</sup> 1000 and 8<sup>th</sup> 1000) students] Vellore, Villupuram, Salem, Tiruvannamalai and Kanchipuram districts, and altitude