

Study Of The Various Physical Fitness Variable Of Long Race's Athlete Of Bikaner Region

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Introduction-

Physical Education and Sports is a keen area which needs many kinds of training means and methods to improve the overall performance of the sports person. A mission for perfection is often confronted with numerous difficulties. An athlete's contribution of determination, commitment and long periods of training can lead to the accomplishment of the most extreme execution. To improve the sports performance the athlete needs to take part in systematic training by the way of scientific method of training. Therefore athletes or players need proper systematic training to improve their performance through different kinds of training.

Physical education and Sports, being an integral part of education, have also experienced the impact of scientific advancements. Now the sports persons have been able to give outstanding performance because of involvement of new, scientifically substantiated training methods and means of execution of sports exercises such as sports techniques and tactics, improvement of sports gear and equipment, as well as other components and conditions of the system of sports training.

Physical Fitness-

Physical fitness is not a static factor varies from individual to individual and in the same person from time to time depending upon variable factors (Clark 1971).

The improvement of physical fitness is the application and systematic utilization of principles of exercise and developing one's capacity to meet successfully life's physical challenges. Competitive sports and athletics provide the participants with a variety of challenges that must be met successfully if the athlete is to win his satisfactory share of competition. The basic

physical fitness components are muscle strength, muscle endurance, and cardio-respiratory endurance. In addition, muscle power, agility, speed and flexibility compose total fitness.

Physical fitness is a positive quality, extending on a scale from intense to well-growth adult full of life. But it varies from individual to individual and in the same individual from time to time. Therefore physical fitness is a basic as well as a part of total fitness and it is a combination of physical qualities, social adaptability, emotional stability and mental efficiency.

Top performances in long distance runners mainly depend on the development level of various forms of endurance. Consistent with the race distance good performance in the competition depends on a high level of physical condition and of coordinating abilities such as speed, explosive strength, strength endurance, flexibility, agility, and capacity to relax. Finally anatomical, physiological and morphological factors may favourably influence performance in middle and long distance runners.

Fitness variables-

- Strength
- Power
- Speed
- Flexibility
- Agility
- Endurance

Methodology -

Researcher has used survey method to get the information of the present circumstances.

Sample-

For the study researcher has selected three hundred (N=300) boys and girls of schools and colleges athletes from Bikaner region in Rajasthan state and subject aged between 15 to 20 were selected as subjects for the study.

Data Collection -

The data will be collected with various fitness exercise of athlete's questionnaire. The data will be collected from athletes who were study in schools and colleges. Researcher collects data from various schools and colleges of Bikaner region for raw score.

Tool

The researchers have used self-made test '**Physical Fitness Test**' with the help of various exercises for this study.

Objective-

To study of the various physical fitness variable of long race's athlete of Bikaner Region.

Analysis of Data-

Table showing the significant difference in the various physical fitness variable of long race's athlete of Bikaner Region -

Table – 1

Variables	N	Mean	S.D.
Strength	300	2.36	1.02
Power	300	4.85	1.57
Speed	300	9.62	1.53
Flexibility	300	8.47	1.34

Agility	300	11.85	1.93
Endurance	300	3.51	1.07

*Significant at 0.01& 0.05 levels

Table 1-Significant difference in the various physical fitness variable of long race's athlete of Bikaner Regions-

Description – In order to find out the significant difference in the various physical fitness variable of long race's athlete of Bikaner Region independent t-test was applied. To determine the significant dissimilarity among means score of Boys & Girls athletes, the level of significance was set at (0.01 & 0.05).

Table 1 shows that Mean and Standard Deviation score of athlete's Strength are 2.36 and 1.02 respectively. Strength variable's t-value of Boys & Girls was found of **3.34**, to be significant at **0.01 & 0.05** significant level.

Mean and Standard Deviation score of athlete's Power are 4.85 and 1.57 respectively. Power variable's t-value of Boys & Girls was found of **0.44**, to be not significant at **0.01 & 0.05** significant level.

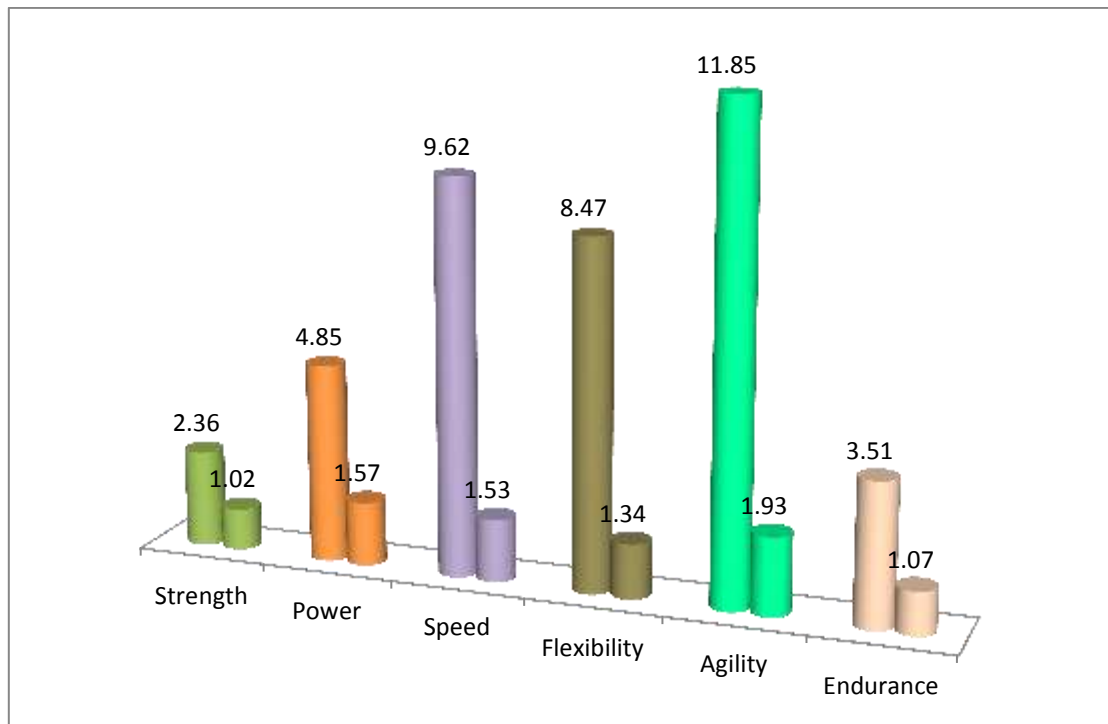
Mean and Standard Deviation score of athlete's Speed are 9.62 and 1.53 respectively. Speed variable's t-value of Boys & Girls was found of **0.79**, to be not significant at **0.01 & 0.05** significant level.

Mean and Standard Deviation score of athlete's Flexibility are 8.47 and 1.34 respectively. Flexibility variable's t-value of Boys & Girls was found of **0.52**, to be not significant at **0.01 & 0.05** significant level.

Mean and Standard Deviation score of athlete's Agility are 11.85 and 1.93 respectively. Agility variable's t-value of Boys & Girls was found of **1.03**, to be not significant at **0.01 & 0.05** significant level.

Mean and Standard Deviation score of athlete's Endurance are 3.51 and 1.07 respectively. Endurance variable's t-value of Boys & Girls was found of **3.72**, to be significant at **0.01 & 0.05** significant level.

Hence the null hypothesis is not rejected which means that “**there is no significant difference in the various physical fitness variable of long race’s athlete of Bikaner region.**”



Result-

There is no significant difference in the various physical fitness variable of long race’s athlete of Bikaner Region.

Conclusion-

The current research work was undertaken in various physical fitness variable & psychological variable of long race’s athlete study in schools and colleges of Bikaner region of Rajasthan State. Therefore it now becomes essential at this stage of the research work to see whether the hypothesis were rejected or accepted on the basis of data analyzed.

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