



Speed Component Differentials between National and State Level Gymnast: A Descriptive Study

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Abstract

The aim of the present study was to analyse the difference between state and national level gymnast on the variable speed. Subjects for this study were taken from different colleges of Punjab. Forty (40) female gymnasts between the age group of 20-25 were selected through purposive sampling technique (non probability sampling technique). Among forty gymnast twenty were state level and twenty were national level players. Youth physical fitness test were used to measure speed difference. One way ANOVA as statistical technique was used to analyse data as there were more than two groups in the whole study. The results of the investigation showed highly significant on variables of speed and endurance which were tested on 0.01 level of confidence.

Keywords: Speed, Endurance, Gymnast.

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Introduction

Gymnastics is one of the most popular and oldest sports. It is known as the mother of all games. It has been a part of "the games" since ancient times. The Greeks used gymnastics as training for war. Activities like jumping, running, discus throwing, wrestling, and boxing helped develop the muscles needed for hand-to-hand combat. It is been 2000 years old but as a competitive sport it is 100 years old. As the Roman Empire ascended, Greek gymnastics was less turned into military training. In 393 AD the Emperor Theodosius abolished the Olympic Games completely. The games had become corrupt, and gymnastics, along with other sports declined. The last Olympiad held in 776 BC and gymnastics was also been part of the last ancient Olympic games. Gymnastics was developed from fitness and beauty practices used by the ancient Greeks, which also included skills for mounting and dismounting a horse, and circus performance skills. Then the term implied exercise taken by men in a gymnasium, a venue for intellectual and physical education.

The sport of gymnastics requires physical fitness for an athlete to successfully complete required skills on all apparatus. Technique, precision and grace are incorporated in each gymnastic skill. A combination of gymnastic skills makes up a routine that is often performed during competition events or exhibitions. To master required skills and perform routines, a gymnast must possess specific physical fitness components. Five components of fitness for gymnastics include body

composition, flexibility, muscular strength, muscular endurance and cardiorespiratory endurance. In artistic or rhythmic gymnastics all components of physical fitness are used. Every component develops according to the need/demand of the particular skill.

American Alliance for Health, Physical Education and Recreation youth physical fitness test (1965) Physical fitness is the ability to carry out daily tasks with vigour and alertness without undue fatigue and with ample energy to enjoy leisure time pursuit and meet unforeseen emergencies with components of strength, endurance ability and speed- endurance. Judokas' and Karatekas' performance can predict on the basis of physical fitness. These all can improve with regular exercise.

Significance of the Study

The present world is modern world which is technically very much advanced as day by day developmental process increases. This advance technology helps to achieve better performance in shortest time period. Today's world needs the information about the individual's need and characteristics to get the surprising and convincing results, because each individual have deferent requirement. This study will explore the knowledge about the difference among the state and national level female gymnasts so that the finding of this research problem may help to contribute the promotion of gymnasts.

Objective of the Study

To compare speed difference between state and national level female gymnasts of Punjab.

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Methodology

The study comprises the list of state and national level female gymnasts of the Punjab state. Forty female gymnasts selected through the purposive sampling technique (non probability sampling technique) and further divided into two groups known as state level female gymnast and national level female gymnasts each group have twenty state levels gymnasts and twenty national level gymnasts. The criteria of the national and state level female gymnasts were based upon their national and state level certificates, which certified the criteria of both groups. On these base two groups of national and state level female gymnasts have been taken for this research problem. Youth physical fitness test: 50 Meter Run test. This test was used to check the physical fitness of the state and national level female gymnasts.

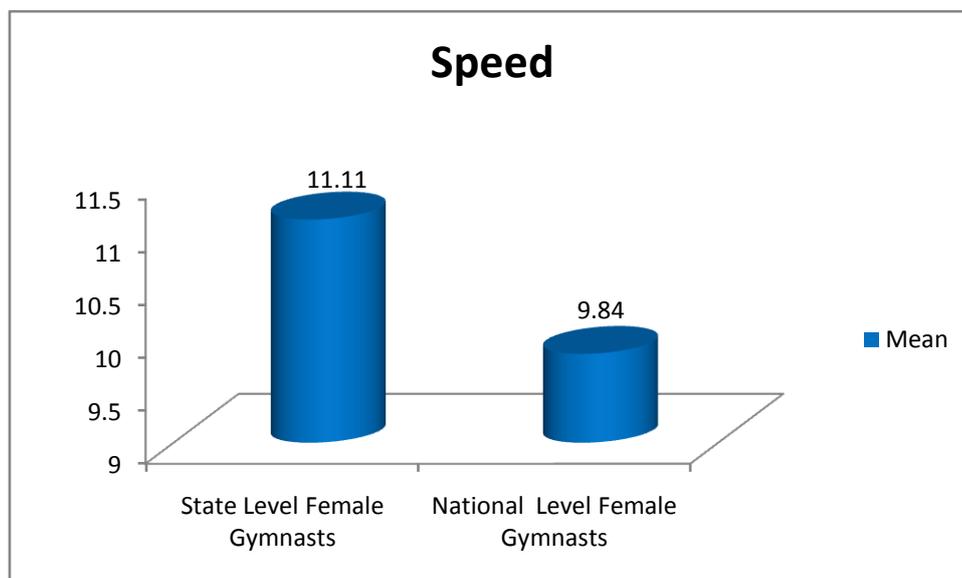
There are two AAHPER youth fitness test one is from America which was constructed for the American youth and another is constructed by Lakshmi Bai National University of Gwalior for the youth of India. 50 Meter Run test was used to measure the speed component. The statistical techniques is an evaluation process which is use to analyse the data and find out the results. In this research problem there were two independent groups one were national level gymnasts another were state level gymnasts and researcher was compared them in respect to their speed and endurance to check which group have more and less speed and endurance, so researcher was used one way ANOVA (analysis of variance) with descriptive analysis statistical technique.

Table I. Showing comparison of National and State level female gymnasts in relation to speed

Female Gymnast	N	Mean	SD	df1	df2	F	P Value
State Level	20	11.11	.90				
National Level	20	9.84	.58	1	38	28.36**	P<.01

**Significant at 0.01 levels

Figure I. Showing comparison of National and State level female gymnasts in relation to speed



The table I shows that there is highly significant difference (df =1, 38, F= 28.36, P>0.01) between state and national level female gymnasts in relation to speed (sec). Whereas the national level gymnasts were found speediest (M=9.84) than state level female gymnast (M=11.11).

Conclusion

Conclusion is as essential step as investigation because it provides the brief information about the study.

It provides the finishing touch and review to the whole of the critical work. In the present study the investigator has tried to find out the deference between State and National level female gymnasts in relation to their speed. National level female gymnasts were found speediest in compression to State level female gymnasts.

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