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COMPARATIVE ANALYSIS OF DYNAMIC FLEXIBILITY AND MUSCULAR ENDURANCE BETWEEN COLLEGE SPRINTERS AND LONG DISTANCE RUNNERS

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Abstract

The purpose of the study was to find out the differences in dynamic flexibility, muscular endurance between college men sprinters and long distance runners. To achieve the purpose of the study 40 male sprinters and long distance runners players from Chennai city colleges were selected are subjects for the study the age of subjects wear 18 to 25 years. The following variables were selected dynamic flexibility and muscular endurance. The selected variables user tested throw modified sit and reach and minute sit ups respectfully the collected data analysis using analyses variables "t" test. The results of the study show that there was significant difference in dynamic flexibility and muscular endurance between long distance runners and sprinters and sprinters were better in dynamic flexibility and muscular endurance than the long distance runners.

Key words: Dynamic Flexibility, Muscular Endurance, Sprinter and Long Distance Runners

Introduction

Physical Education is a education of and through human movement where many of the educational objectives are achieved by means of big muscle activities involving sport, game, gymnastic, dance and exercise. Physical fitness is defined as being in a general state of health and well-being or specifically the ability to perform aspects of sports or occupations. Dynamic flexibility is generally defined based on a person's range of motion during movements, particularly during fast-paced movements. This is contrasted to static flexibility, which has more to do with a person's ability to hold a stationary stretch. Muscular endurance is the ability of a muscle or group of muscles to sustain repeated contractions against a resistance for an extended period of time.

Statement of the Problem

The purpose of the study was to compare the dynamic flexibility, muscular endurance between college men sprinters and long distance runners.

Hypotheses

It was hypothesized that there was college sprinters have greater dynamic flexibility than long distance runners. It was hypothesized that there was college sprinters have greater muscular endurance than long distance runners.

Methodology

To achieve the purpose of the study 40 male sprinters and long distance runners players from Chennai city colleges were selected are subjects for the study the age of subjects wear 18 to 25 years. The following variables were selected dynamic flexibility and muscular endurance. The selected variables user tested throw modified sit and reach and minute sit ups respectfully the collected data analysis using analyses variables "t" test. The level of significance was significant at 0.05 levels.

Results and Discussion

Table I

MEAN AND INDEPENDENT't' TEST FOR COLLEGE MEN SPRINTERS AND LONG DISTANCE RUNNERS

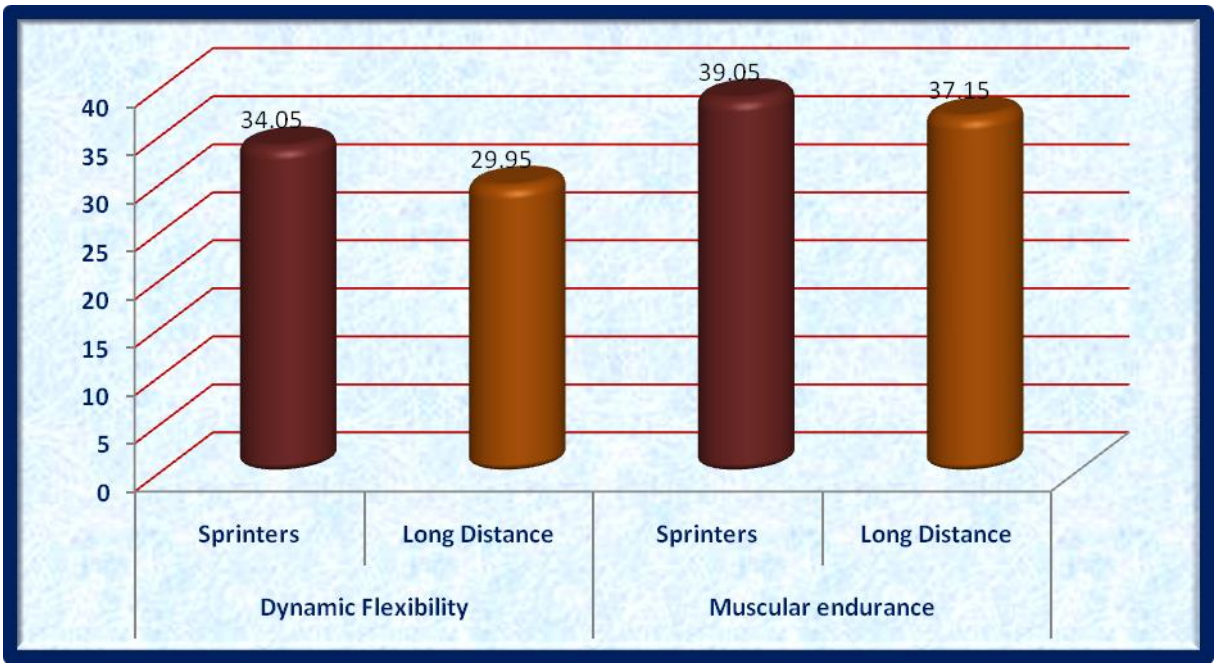
Variables	Groups	Mean	Standard Deviation	't'- Value
Dynamic Flexibility	Sprinters	34.05	2.76	5.39*
	Long Distance	29.95	1.98	
Muscular endurance	Sprinters	39.05	2.03	2.58*
	Long Distance	37.15	2.58	

*Significant

From the above table the mean value obtained for college men sprinters and long distance runners were 34.05 and 29.95 respectively and 't' test value between the 5.39. Since the obtained' test value of 5.39 is greater than the table value of 2.024 with df 38 at 0.05 level of confidence, it was concluded that the college men sprinters and long distance runners had significant difference in the performance of dynamic flexibility and the sprinters were better in dynamic flexibility than the long distance runners. Further the mean value obtained for college men sprinters and long distance runners were 39.05 and 37.15 respectively and't' test value between the 2.58. Since the obtained't' test value of 2.58 is greater than the table value of 2.024 with df 38 at 0.05 level of confidence, it was conclude that the college men sprinters and long distance runners had significant difference in the performance of muscular endurance and the sprinters were better in muscular endurance than the long distance runners. At the beginning of the study the investigator had formulated the hypothesis that there was significant difference on dynamic flexibility and muscular endurance between college men sprinters and long distance runners. The finding of the study was in line with the hypothesis. So the research hypothesis was accepted and null hypothesis was rejected.

Figure 1

Bar diagram showing the mean values of Men Sprinters and Long Distance Runners



Conclusion

There was a significant difference in dynamic flexibility and muscular endurance between long distance runners and sprinters. The sprinters were better in dynamic flexibility than the long distance runners. The sprinters were better in muscular endurance than the long distance runners.

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