



COMPARATIVE STUDY OF SKIN FOLD MEASUREMENT OF VOLLEY BALL AND BASKET BALL MALE PLAYER

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ABSTRACT

In recent years, there has been increasing awareness of the importance of physical activity for reintegrating handicapped individuals into society, as well as the importance of competitive sports activities for such individuals. The purpose of the study was to compare some selected skin fold measurements and body composition of inter-collegiate players of Basketball and volleyball of CDLU, SIRSA. The present study was conducted on 24 subjects of each discipline. The subjects were between the ages of 18-27 years of male. The statistical technique of mean, standard deviation and central tendency were used to analyze the data. In the conclusion of the study it is found that there is no significant difference between volleyball and basketball male players on level of biceps, thigh and level on body density skin fold measurements. It is also found that there is significance difference of skin fold measurement volleyball and basketball male players. Basketball players have more triceps, sub scapular, and calf skin fold measurements than volleyball players. It is also found that volleyball players have more fat percentage, fat weight and lean body mass skin fold measurements than the basketball male players.

Keywords: Skin fold, Volleyball, Basketball and Body Composition

INTRODUCTION

In recent years, there has been increasing awareness of the importance physical activity for reintegrating handicapped individuals into society, as well as the importance of competitive sports activities for such individuals. However, most studies on this topic have highlighted spinal injuries and neglected other populations particularly children and adults. To determine the physical aptitude of each individual for whom physical exercise activities are proposed and to prescribe individualized and safe physical activities, physical evaluation methods are needed. Body composition analysis should be included in such physical evaluations, since it is important that programs be specific for each individual. The term "body composition" has almost always been related to body fat estimates based on a simple division of the body into two components: fat and lean body mass. The relative quantity of fat in the body is, by far, the most common measurement of body composition for adults and children, because of the relationship between obesity and the predisposition to a wide variety of illnesses as well as the relationship between obesity, health and athletic performance. Elite athletes, people seeking to achieve or maintain an ideal body mass and patients in hospital have all benefited from the increased popularity and precision of body composition evaluation. Typically, a simple and reasonably accurate method of assessing changes in body composition has included skin fold



measurements. The seven point skin fold method is used by many exercise consultants who seek a relatively accurate, simple, and inexpensive measurement of body composition. Clients who engage in exercise or dietary manipulation can receive immediate feedback so timely modifications can be made to their program. Dependent upon the expected rate of change in body composition, clients can be measured every month or so. If the rate of change is expected to be rapid, as with dieters, body composition can be sampled more frequently, e.g. weekly. Caution should be exercised in interpreting data when tests are performed frequently, since measurement error, or variability may exceed an actual change in body composition. In which case, the general trend of the results can be noted or additional tests can supplement body composition data, such as a waist circumference measurement or other girths. When performed as recommended, the whole process of the measuring body composition with the seven point skin fold method and calculating the absolute amount of fat and lean body weight can be time consuming, especially with many clients. In this study, in effort to save time and reduce test variability, two other tests that predict body composition where compared with the seven pint skin fold method and are discussed.

METHODOLOGY

To determine difference in the skin fold measurements between Volleyball and Basket Ball players and to determine difference in the body composition between Volleyball and Basket Ball players. In the present study, the investigator used random sampling technique to select the samples. The present study was conduct on 24 subjects of each discipline. the subject were between the age of 18-27 years

of male .After selecting the sample of the study and before conducting the test ,the purpose of testing and technique to be employed in the study of the subjects and all possible doubts were cleared . They were assured that the information obtained through the test would be kept confidential. It would not harm them in any case. Therefore they were urged to feel to participate and reply every question frankly and sincerely.

ANALYSIS OF DATA

TABLE 1
COMPARISON OF SKIN FOLDS MEASUREMENTS BETWEEN THE BASKET BALL AND VOLLEYBALL PLAYERS

Variables	Basketball		Volleyball		SED	t-ratio
	Mean	S.D.	Mean	S.D.		
Biceps Skin fold	3.89	1.29	3.49	1.10	0.37	1.069
Triceps Skin fold	5.16	1.73	4.12	1.19	0.4	2.10
Sub scapula Skin fold	5.52	1.50	4.21	1.20	0.43	2.98
Thigh Skin fold	6.04	1.48	5.20	1.86	0.46	1.80
Calf Skin fold	7.12	1.07	6.29	1.33	0.36	2.28

*Significant at 0.05%

Based on table no 1 following results were drawn:

- There is no significant difference between volleyball and basketball male players on level of biceps skin fold measurements.
- There is significant difference between volleyball and basketball male players. Basketball players have more triceps skin fold measurements then volleyball players.
- There is significant difference between volleyball and basketball male players. Basketball players have more sub scapular skin fold measurements then volleyball male players.



- There is no significant difference between volleyball and basketball male players on level of thigh skin fold measurements.
- There is significant difference between volleyball and basketball male players. Basketball players have more calf skin fold measurements than volleyball male players.
- There is no significant difference between volleyball and basketball male players on level of body density skin fold measurements.
- There is significant difference between volleyball and basketball male players. Volleyball players have more fat percentage skin fold measurements than basketball male players.
- There is significant difference between volleyball and basketball male players. Volleyball players have more fat weight skin fold measurements than basketball male players.
- There is significant difference between volleyball and basketball male players. Volleyball players have more lean body mass skin fold measurements than basketball male players.

CONCLUSION

In the conclusion of the study it is found that there is no significant difference between volleyball and basketball male players on level of biceps, thigh and level on body density skin fold measurements. It is also found that there is significance difference of skin fold measurement volleyball and basketball male players. Basketball players have more triceps, sub scapular, and calf skin fold measurements than volleyball players. It is also found that volleyball players have more fat percentage, fat weight and lean body mass skin fold

measurements than the basketball male players.

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