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REVIEW ARTICLE

COMPARISON OF SKINFOLD MEASUREMENT AND BODY COMPOSITION VARIABLE OF MALE PARTICIPANT OF BADMINTON AND TABLE TENNIS GAME OF DIFFERENT UNIVERSITIES

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Comparison of Skinfold Measurement and Body Composition Variable of Male Participant of Badminton and Table Tennis Game of Different Universities

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SUMMARY

Technology has permeated every aspect of modern life. Sports is no exception. Science applied to sports has enabled modern youth to develop physical capacities beyond anything imagined earlier. Sports has become highly competitive and records are broken with great rapidity.

The time when sports were nothing more than an enjoyable recreation for individual is irrevocable past. The phenomenon of sports today intervenes in almost all fields of human endeavour and very often it even has a central position. Sports, thus, has experienced an enormous extension quantitatively as well as qualitatively, with many positive but also some negative aspects. Apart from health sports with their special meaning a prophylaxis against civilization damage and as many sided therapy, there is high performance sports also.

The world of games and sports has crossed many mile-stones, as a result of different achievement in general and their application in the field of sports in particular. Scientific investigation into performance of sportsman has been playing an increasingly important role in the training of athletes in the scientific way to attend excellence in performance in different spheres or sports. Athlete concentrates on the development of speed, flexibility, strength, agility and endurance, etc, as a part of preparation in their respective sports. Coaches and physical education teacher must strain. This is possible only when coaches and physical education teacher hit most beneficial means of training.

STATEMENT OF THE PROBLEM

The problem is stated as under:-

“COMPARISON OF SKINFOLD MEASUREMENT AND BODY COMPOSITION VARIABLE OF MALE

PARTICIPANT OF BADMINTON AND TABLE TENNIS GAME OF DIFFERENT UNIVERSITIES”.

OBJECTIVES

The following are the objectives of the present study:

- 1 To determine difference in the skinfold measurements between Table Tennis and Badminton players.
- 2 To determine the difference in the Body Composition between Table Tennis and Badminton players.

HYPOTHESIS

It was hypothesised that there would not be any significant differences between the Badminton players and Table Tennis players in selected skinfold measurements and body composition variables.

SIGNIFICANCE OF THE STUDY

- 1 This study would give a knowledge for Physical Education Teachers and coaches to selected individual who are more suited for a Badminton and Table Tennis games, according to their anthropometric measurements and body composition.
- 2 The finding of the study will be helpful to the coaches and Physical Education Teachers to construct their training programme according to the physical and body composition characteristics.
- 3 The finding of the study will be helpful for the self-assessment of physical characteristics and body composition of various games and sports.
- 4 The study may motivate others to take up a similar type of study in other sports or events which

will help us in gathering more and more scientific information in sports.

DELIMITATIONS

1 The study was delimited to the 50 male players of Badminton and Table Tennis (25 subjects of each discipline).

2 The study was delimited to the male players in the age group of 18 to 25 years.

3 The study was confined men Badminton players and Table tennis players of North zone inter University.

4 Estimation of skinfold measurements was delimited to

- A) Biceps skinfold
- B) Triceps skinfold
- C) Subscapular skinfold
- D) Suprailiac skinfold
- E) Mid Axillary skinfold
- F) Thigh skinfold
- G) Calf skinfold

All the measurements were taken with subjects in the standing position and taken on the right of the body.

5 Estimation of the body composition was delimited to skinfold measurements of

- A) Total body weight
- B) Lean body mass
- C) Fat percentage

LIMITATIONS

1 Non availability of the sophisticated instruments for measuring certain anthropometric measurements and body composition variables were accepted as limitation for this study.

2 The effect of uncontrollable factors such as subjects diet and their participation in various activities as a part of their professional preparation which might have had influenced the selected variables was recognised as limitations of the study.

METHOD AND MATERIAL

The investigator explained the selection of subjects. Selection of variables, reliability of measurement, administration of test, collection of data and statistical design job analysis of data.

SELECTION OF SUBJECT

For this study the investigator selected 25 subjects of each discipline i.e. Table Tennis and Badminton held at P.A.U. Ludhiana and M.D. University, during North zone Inter University Championship, for particular games.

SELECTION OF VARIABLES

The following variables were selected for the investigation.

INDEPENDENT VARIABLES

- 1 Age
- 2 Body weigh

SKINFOLD MEASUREMENT

- 1 Biceps skinfold
- 2 Triceps skinfold
- 3 Subscapular skinfold
- 4 Suprailiac skinfold
- 5 Mid Axillary skinfold
- 6 Thigh skinfold
- 7 Calf skinfold

BODY COMPOSITION

- 1. Body Density
- 2. Fat percent
- 3. Fat weight
- 4. Lean body mass

TOOLS AND TECHNIQUES USED

In the present study the investigator would like to Compare the skinfold measurement and body composition among Badminton and Table Tennis Players.

COLLECTION OF DATA

The entire test was administered at the sport complex of, M.D. University, Rohtak and P.A.U. Ludhiana. The

anthropometric measurements were taken on the right side of the individual. Standard technique described by Weiner and Lourie (1969) was followed for measurements. The necessary anatomical landmarks and sites for skinfold were marked with a sketch pen. The body weight was recorded to the nearest of half a Kilogramme and all other measurement were recorded to the nearest of a millimetre.

STATISTICAL DESIGN:

The data has been presented analysed and interpreted by a statistical technique for a comprehensive understanding of the inherent facts. In present study, investigator wanted to compare the skinfold measurements and body composition variables of Badminton and Table Tennis players of North Zone inter University.

The collected data were tabulated and statistically analysed. Mean, Standard Deviation, Standard Error Deviation and 't' ratio were used as statistical technique and tools.

To compare skinfold measurements and body composition of Badminton and Table Tennis players 't' test was used as devised by Garrett (1981). (Independent T-Ratio as two groups is comprising different sets of players).

DISCUSSION OF HYPOTHESIS

On the basis of the finding. The null hypothesis is partially accepted and rejected.

CONCLUSION:-

From the above discussion it is concluded that the Table Tennis players have more fat percentage and fat weight as compared to the Badminton players. Badminton players possess least amount of fat percentage and fat weight which is essential for better performance.

SUGGESTIONS FOR FURTHER RESEARCH:-

Keeping in view the findings of the present study the following suggestions for the further research are being put forward.

- (1) The present study can be replicated on female of different courses and different Levels.
- (2) The present study can be done on a wider field with large sample and under changed cultural and environment set ups to get better results.
- (3) Skinfold measurement and other factors can be under taken in further research for complete

knowledge of the anthropometric characteristics of the players.

- (4) This study can be taken on different age and sex groups.