

Relationship of selected physiological variables with Kabaddi playing ability among secondary school female Kabaddi players

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Abstract

The purpose of the study was to know the Relationship of selected physiological variables with kabaddi playing ability among secondary school female kabaddi players. Methodology- In order to achieve the purpose of the study forty (40) secondary school female kabaddi players were selected as the subjects. During district level competition of mysore district from the data pertaining to the four selected physiological variables such as vital capacity was assessed with the help of dry spirometer, pulse rate, systolic blood pressure and diastolic blood pressure was assessed with the help of Omron automatic blood pressure monitor MX3. Kabaddi playing ability was assessed through subjective rating, by three experts, during the district level tournament and the average was taken as criterion score. Statistical Analysis-the collected data was tested with coefficient of correlation statistical technique to test the Relationship of selected physiological variables with Kabaddi playing ability among secondary school female kabaddi players. Results-The statistical analysis shows coefficient of correlation in the Relationship of selected physiological variables with Kabaddi playing ability among secondary school female kabaddi players. Conclusion-The analysis of the study revealed that there was a significant Relationship of selected physiological variables such as diastolic blood pressure and there was no significant relationship between selected physiological variables such as vital capacity, pulse rate, and systolic blood pressure with Kabaddi playing ability among secondary school female kabaddi players.

Keywords: kabaddi, playing ability, physiological

1. Introduction

One of the goals of scientific research is to predict future events or results from present or past data. There are different types of prediction that we come across in our daily life, such as wealth- forecast, market-forecast, share market-forecast, election trends etcetera. These are based upon some known fact and so they are reliable prediction. Research in the field of sports and games had proved that the future performance of an individual or team could be predicted through the analysis of certain variables, which are found to be the basis for total performance. Among many factors the following variables such as anthropometrical, physical, physiological and skill performance that decide the playing ability of an individual are more important. Unlike many competitive team sports, volleyball doesn't feature any physical contact between opponents. Volleyball players remain on their own respective sides of the court with a tall net serving as a barrier between the two teams. This basic setup makes volleyball a unique game and influences the necessary traits required to be a good Kabaddi player.

The measurement of player's physiological characteristics has high lightened position specific attributes. The physiological efficiency of various organs is helpful in doing the activity with vigor and more enthusiasm. More and more training is helpful to be stronger physiological efficiency. The most important muscle that adapts to training is the heart. During exercise, it pumps blood containing oxygen, fluids and nutrients to the active muscles. Blood flow then drains the metabolic waste products away. The more blood pumped, the more oxygen is available to the exercising muscles. More and more the muscles train, they're better able to extract and use

the oxygen to produce more work. The heart adapts to aerobic exercise over time so it can pump more blood per stroke. Physiological efficiency of various organs plays a vital role in the performance Kabaddi.

The Sports Skill is a unit. When it combines with other units into a pattern along with certain rules, the result is a sport or athletic game. These motor patterns have their fundamental skills or racial skills such as running, walking, hanging etc. Efficient performance in these motor patterns depends on the underlying basic factors of movement such as strength, speed, power, agility, hand-eye-foot-eye-coordination, balance etc. When these fundamental skills are combined into various patterns and sequences along with the underlying basic elements, sports skills result. These are unique and specific for each game or physical activity.

Playing abilities or specific skills are very important aspect in every game and sports and play a vital role in the performance of individual. Skill is often defined as “knowledge or expertise, but in physical education it is the ability to perform certain activities or movements with control and consistency, to bring about a desired results.” It takes a long time to acquire a skill because it involves a high level co-ordination and control. The game of Kabaddi comprises manifold of quick actions and re- actions such as toe touch, hand charge, blocking, pushing, kicking and defending in the playing situation.

Kabaddi game is an excellent all-around team sports, has been widely accepted as a highly competitive as well as recreational game all over the world. Now, it is a game of power and tactics and is played at a faster pace and this calls sharper thinking, high standard of skills and technical application

So, this present study was undertaken to measure the playing ability with physiological variables like, resting heart rate, peak expiratory flow, systolic blood pressure and diastolic blood pressure.

The purpose of the study was to know the Relationship of selected physiological variables with kabaddi playing ability among secondary school female kabaddi players.

2. Methodology

2.1 Selections of subjects: In order to achieve the purpose of the study forty (40) secondary school female kabaddi players were selected as the subjects. During District level tournament of Mysore district.

2.2 Administration of Tests: vital capacity was assessed with the help of dry spirometer, peak expiratory flow was assessed with the peak flow meter , systolic blood pressure and diastolic blood pressure was assessed with the help of omran automatic blood pressure monitor MX3. Kabaddi playing ability was assessed through subjective rating, by three experts, during district level tournament and the average was taken as criterion score.

2.3 statistical analysis: The collected data was tested with coefficient of correlation statistical technique to test the Relationship of selected physiological variables with Kabaddi playing ability among secondary school female Kabaddi players.

3. Results

To establish the Relationship of selected physiological variables with Kabaddi playing ability among secondary school female Kabaddi players. Pearson moment correlation(r) was computed and data pertaining to this has been presented in

Table-1.

S. No	Variables	Correlation co-efficient
1	kabaddi playing ability and vital capacity	.89
2	Kabaddi playing ability and peak expiratory flow	.050
3	Kabaddi playing ability and systolic blood pressure	0.51
4	Kabaddi playing ability and diastolic blood pressure	.230

The above table shows the Relationship of selected physiological variables with Kabaddi playing ability among secondary school female kabaddi players. There is a significant relationship between diastolic blood pressure ($r=.230$) Kabaddi playing ability among secondary school female kabaddi players. There is no significant

relationship between vital capacity ($r=.089$), peak expiratory flow ($r=.050$) and systolic blood pressure ($r=.051$) on kabaddi playing ability among secondary school female kabaddi players.

4. Conclusion

On the basis of findings of the present study, the following conclusions wear drawn;

1. There was a significant relationship found between the physiological variables such as diastolic blood pressure with Kabaddi playing ability among secondary school female kabaddi players.
2. There was no significant relationship found between the physiological variables such as vital capacity, peak expiratory flow and systolic blood pressure with Kabaddi playing ability among secondary school female kabaddi players.

5. References

1. Diwarka (1991) "Selected physical, physiological and motor skill determinants of performance in female inter-college level volleyball players of Himachal state."
2. Cavala M, Rogulj N, Srhoj V, Srhoj L, Katic R. Biomotor structures in elite female Volleyball players according to performance. *Collegium Antropologicum*. 2008; 32(1):231-9.
3. Chaouachi A, Brughelli M, Levin G, Boudhina NBB, Cronin J, Chamari K, *et al.* Anthropometric, physiological and performance characteristics of elite team- Volleyballplayers. *Journal of sports sciences*. 2009; 27(2):151-157.
5. Jeyaraj N, Gopinathan P. relationship of selected anthropometric And physiological variables to Kabaddi Playing ability, *Academic Sports Scholar*, 2014; 3:6.
6. Sharkey. *Coaches Guide to Sports Physiology*, Englewood Cliff, New Jersey: Prentice Hall, Inc., 1975.