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Correlation of Pulse Rate with Motor Fitness among Field Hockey Players

Vileep K S*, N D Virupaksha**

*Guest Faculty, DoS in Physical Education, Kuvempu University, Shankaraghatta 577 451, Shivamogga, Karnataka, India. Email: vileegowda[at]gmail.com Phone no: 9483587857
**Coordinator, Department of Physical Education, Kuvempu University, Shankaraghatta 577 451, Shivamogga, Karnataka, India. Email: vsporty[at]gmail.com Phone no: 9481877431

Abstract: ***Introduction:*** ***Sports reflects values found in our everyday lives and even in our entire society. Women have been excluded from certain areas of significant participation in various aspects of living and this is also true for her involvement in sports and other motor activities. There is perhaps no domain where myths, attitudes and beliefs remain. So persistent as in the world of sports. There are myths related to the female motor and psychological females monthly cycle, pregnancy, the female's motor and psychological limits of performance capacity etcetera. Most of these beliefs are rooted in long socio-cultural attitudes; however, their validity has not been demonstrated scientifically, social approval is relative. There are nations which activity opposite any competitive efforts for women. Other nations urge their women to enter the Olympics, while still others merely permit them to do so. However, even today some forms of competitions are officially unacceptable for women as indicated by their exclusion from Olympic level competition.*** ***Purpose:*** ***The purpose of the study was to find out the relationship of pulse rate with selected motor fitness variable among field hockey players.*** ***Methodology:*** ***The purpose of the present investigation was to find out the relationship of vital capacity with motor fitness of 60 field hockey players in the age group of 19 to 28 years, of different universities were measured for pulse rate by using heart rate monitor and the raw score of pulse rate of subjects measured would represent the data for the investigation and motor fitness variable strength, endurance, speed, agility, flexibility measured the test.*** ***Results:*** ***The statistical analysis shows coefficient of correlation in relationship of pulse with selected motor fitness variable among field hockey players.*** ***Conclusion:*** ***In view of the finding and limitation of the study, motor fitness variable strength, endurance, speed, agility and flexibility are correlated with pulse rate.***

Key words: strength, endurance, speed, agility, flexibility.

1. Introduction

Sport reflects values found in our everyday lives and even in our entire society. Women have been excluded from certain areas of significant participation in various aspects of living and this is also true for her involvement in sports and other motor activities. There is perhaps no domain where myths, attitudes and beliefs remain. Sopersistent as in the world of sports. There are myths related to the female motor and psychological females monthly cycle, pregnancy, the female's motor and psychological limits of performance capacity etcetera. Most of these beliefs are rooted in long socio-cultural attitudes; however, their validity has not been demonstrated scientifically, social approval is relative. It is different from era to era and culture to culture within a given era. There are nations which activity opposite any competitive efforts for women. Other nations urge their women to enter the Olympics, while still others merely permit them to do so. However, even today some forms of competitions are officially unacceptable for women as indicated by their exclusion from Olympic level competition.
Perhaps an explanation for these attitudes could be found in the history of sports, coloured by male orientation and domination. such a domination resulted from cultural patterns and perceptions with determined not only who have participated in sports but how the sports was to be conducted and experienced. However, today sport is seen as human activity, not just an activity more suitable for men than for woman.

Modern day endeavour by national governing sports bodies to improve the health of their societies have focused on highlighting the most common behaviour – related causes of chronic, life threatening diseases, thereby enabling individuals the opportunity to adopt more favourable health practices of the many life style factors associated with health, motor activity or exercise has emerged as one being of considerable importance.

2. Methodology

The purpose of the present investigation was to find out the relationship of pulse rate with motor fitness of 60 field hockey players in the age group of 19 to 28 years, of Mangalore University, Karnataka University, Davanagere University, Bangalore University and University of Mysore were measured for pulse rate by using heart rate monitor and the raw score of pulse rate of subjects measured would represent the data for the investigation and motor fitness variable strength, endurance, speed, agility, flexibility measured the test.

3. Statistical Analysis

To investigate the relationship between the pulse rate of students the Karl Pearson's coefficient of correlation has been computed for different test measures motor fitness.

4. Results and Discussion

The above table shows the relationship of selected motor performance on pulse rate of hockey players. There is significant relationship between pulse rate and speed (r = 0.37), it is positive low correlation. There is a significant relationship between pulse rate and endurance (r = 0.28), it is positive low correlation. There is a significant

relationship between pulse rate and flexibility (r = 0.29), it is positive low correlation, There is a significant relationship between pulse rate and agility (r = 0.31), it is positive low correlation, But there is no significant relationship between pulse rate and abdominal strength (r = 0.07).

Table 1: Shows the relationship between selected motor performance and pulse rate

Sl. No.	Variables	Coefficient of correlation
1.	Abdominal strength and pulse rate	0.07
2.	Speed and pulse rate	0.37**
3.	Endurance and pulse rate	0.28*
4.	Flexibility and pulse rate	0.29*
5.	Agility and pulse rate	0.31*

5. Conclusion

In view of findings and limitations of the study, which have been already cited, the following conclusions were drawn.

1. The correlation between pulse rate and strength shows no significant relationships between them with r value0.07.
2. The correlation between pulse rate and endurance shows significant relationships between them with r value 0.28,it is low positive correlation.
3. The correlation between pulse rate and agility shows significant relationships between them r value 0.31, it is a low positive correlation.
4. The correlation between pulse rate and flexibility shows significant relationships between them r value 0.29, it is a low positive correlation.
5. The correlation between pulse rate and speed shows significant relationships between them r value 0.37, it is a low positive correlation.

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