

International Multidisciplinary
Research Journal

*Indian Streams
Research Journal*

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RNI MAHMUL/2011/38595

ISSN No.2230-7850

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INFLUENCE OF PHYSIOLOGICAL VARIABLES IN KHO-KHO PERFORMANCE



Ajay Kumar P. V.¹ and N.D. Virupaksha²

INTRODUCTION :

Sport is not only for sale of sports but for strengthening the power, directed to achieve the high results in selected sports activities. In modern sports the medal tally is the ultimate good stick to protect the image of a country and sports men and women are trained and turned to sweat and slog for more and still more medals.

Inherent potential made wrong choices and because of his wrong selection the individual concerned is not able to reach the top of the ladder. Had there been the right choices, his inherent talent identification has become important and inevitable. Such identification could be made possible only through an analysis of the potentials that are inborn in an individual. Such type of analysis and identification of inherent potential is made through prediction. Sports training have become more efficient and effective as a result of the applied and fundamental research in the area of mechanics, physiology, psychology, nutrition and sports medicine. It also aims at understanding and assessing the athlete in totality. Competition at all levels are so keen that no coach or player can afford to neglect the application of scientific

ABSTRACT

Sport is one of the greatest expressions of the aspirations to excel and to gain recognition and pleasure through skillful performance. Sport is a human activity that involves specific administrative organization and a historical background of rules which define the objective, and limit the pattern of human behavior.

Key Words: Performance, Heart Rate, Respiratory Rate, Systolic Blood Pressure, Diastolic Blood Pressure and Vital Capacity.

SHORT PROFILE

Ajay Kumar P.V is a Faculty Member at Department of Physical Education in Sir M V Govt. Arts and Commerce College, Bhadravathi, Shivamogga District, Karnataka State.

training principles that can give him and advantage over or at least keep him in pace with his opponent.

Physiological systems are highly adaptable to exercise. Each task has major physiological components and fitness for the task require effective functioning of the appropriate system. Involvement in systematic programme of training

brings about desirable changes in the physical and physiological ability which enhances the athlete's performance in his sports.

Objective of the Study

The main objective of the study was to know the influence of Selected physiological variables in Kho-Kho performance.

Methodology

To know the role of physical qualities in Kho-Kho performance one hundred and twenty inter collegiate men players were selected on random sampling technique. The data for the Kho-Kho performance was assessed during the tournament by three experts in chasing, dodging and fundamental skills of Kho-Kho game and physiological variable such as heart

¹Faculty Member, Department of Physical education, Sir. M.V. Arts and Commerce College, Bhadravathi, Shivamogga District, Karnataka.

²Co-ordinator, Department of P.G. studies in Physical education, Kuvempu University, Shankaraghatta, Shivamogga Dist. Karnataka, India.

rate, respiratory rate; systolic blood pressure, diastolic blood pressure and vital capacity were selected by using standard tests.

Statistical Analysis

The collected data were analyzed by using coefficient of correlation to find out the Influence of physiological variables in Kho-Kho players' performance.

Result and Discussion

Table 1. Mean and Standard deviation values of selected variables

Sl. No.	Variables	Minimum	Maximum	Mean	Standard Deviation
1	Performance	40	84	60.87	10.98
2	Heart rate	50	68	57.64	4.07
3	Respiratory rate	8	17	13.74	1.68
4	Systolic blood pressure	114	124	117.92	3.06
5	Diastolic blood pressure	70	82	78.85	3.10
6	Vital capacity	3	5	3.71	0.48

The above table shows that the mean and standard deviation of Performance 60.87 and 10.98 ; heart rate 57.64 and 4.07 ; respiratory rate 13.74 and 1.68 ; Systolic blood pressure 117.92 and 3.06 ; Diastolic blood pressure 78.85 and 3.10 and vital capacity 3.71 and 0.48 respectively.

Table 2. Relationship between performance and physiological variables

Sl. No.	Variables	Coefficient of correlation
1	Performance and heart rate	0.626
2	Performance and Respiratory rate	0.753
3	Performance and Systolic blood pressure	0.164
4	Performance and Diastolic blood pressure	0.173
5	Performance and Vital capacity	0.340

The above table indicates the performance is high correlation to heart rate = 0.626 and respiratory rate = 0.753, negligible, correlation to systolic blood pressure = 0.164 and diastolic blood pressure = 0.173 and low correlation to vital capacity = 0.340.

Analysis of data revealed significant relationship of performance to heart rate = 0.626

respiratory rate = 0.753, systolic blood pressure = 0.164, diastolic blood pressure = 0.173 and low vital capacity = 0.340.

RESULTS:

The result of the study shows that the selected physiological variables help a lot for good performance in Kho-Kho.

CONCLUSION

With the limitation of the study, the physiological variables heart rate, respiratory rate, systolic blood pressure and diastolic blood pressure and vital capacity are positively correlated with Kho-Kho playing ability. The result of the study shows that the selected physiological variables help a lot for good performance in Kho-Kho.

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Ajay Kumar P. V.

Faculty Member, Department of Physical Education,
Sir M V Govt. Arts and Commerce College, Bhadravathi,
Shivamogga District, Karnataka State.

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