

2018

Impact Factor – 6.262

ISSN-2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

Multidisciplinary International E-research Journal

PEER REFEREED & INDEXED JOURNAL

December : 2018

Special Issue – LXXVI (A)

The Journal is indexed in:

Scientific Journal Impact Factor (SJIF)

Cosmos Impact Factor (CIF)

Global Impact Factor (GIF)

Universal Impact Factor (UIF)

International Impact Factor Services (IIFS)

Indian Citation Index (ICI)

Dictionary of Research Journal Index (DRJI)



'RESEARCH JOURNEY' International Multidisciplinary E- Research Journal

Impact Factor - (CIF) - 3.452 (SJIF) - 6.262 (GIF) - 0.676 (2013)

Special Issue 76 (A) : Self Employability Skills Development in
Physical Education and Sports Sciences

UGC Approved No. 40705

2018

ISSN :
2348-7143
December
2018

Impact Factor – 6.262

ISSN – 2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

Multidisciplinary International E-research Journal

PEER REFREED & INDEXED JOURNAL

DECEMBER -2018

SPECIAL ISSUE- LXXVI (A)

For 3rd National Conference
on

Self Employability Skills Development in
Physical Education and Sports Sciences.

Chief Editor :

Dr. Dhanraj T. Dhangar

Guest Editor :

Dr. Tanuja S. Raut

For Details Visit To : www.researchjourney.net

© All rights reserved with the authors & publisher

Website – www.researchjourney.net

Email - researchjourney2014@gmail.com

Editorial Board

Chief Editor -

Dr. Dhanraj T. Dhangar,
 Assist. Prof. (Marathi)
 MGV'S Arts & Commerce College,
 Yeola, Dist - Nashik [M.S.] INDIA

Co-Editors -

- ❖ **Mr. Tufail Ahmed Shaikh** - King Abdul Aziz City for Science & Technology,
 Riyadh Kingdom of Saudi Arabia.
- ❖ **Dr. Anil Dongre** - Head, Deptt. of Management, North Maharashtra University,
 Jalgaon
- ❖ **Dr. Shailendra Lende** - R.T.M. Nagpur University, Nagpur [M.S.] India
- ❖ **Dr. R. R. Kazi** - North Maharashtra University, Jalgaon.
- ❖ **Dr. Sharad Birhade** - D. N. College, Faizpur.
- ❖ **Prof. Munaf Shaikh** - N. M. University, Jalgaon & Visiting Faculty M. J. C. Jalgaon
- ❖ **Prof. Vijay Shirsath** - Nanasaheb Y. N. Chavhan College, Chalisgaon
- ❖ **Dr. P. K. Shewale** - Vice Principal, Arts, Science, Commerce College, Harsul.
- ❖ **Prof. Atul Suryawanshi** - S. S. M. M. College, Pachora.
- ❖ **Prof. B. P. Shewale** - M. S. G. College, Malegaon Camp, Nashik.

Advisory Board -

- ❖ **Dr. Marianna kotic** - Scientific-Cultural Institute, Mandala, Trieste, Italy.
- ❖ **Dr. M.S. Pagare** - Director, School of Languages Studies, North Maharashtra
 University, Jalgaon
- ❖ **Dr. R. P. Singh** - University of Lucknow [U.P.] India
- ❖ **Dr. S. M. Tatkodkar** - Professor & Head, Dept. of Marathi, Goa University, Goa, India.
- ❖ **Dr. N. V. Jayaraman** - Director at SNS group of Technical Institutions, Coimbatore
- ❖ **Dr. Bajarang Korde** - Savitribai Phule Pune University Pune, [M.S.] India
- ❖ **Dr. D. A. Suryawanshi** - Principal, R. C. Patel College of Education, Shirpur, Dhule.
- ❖ **Dr. Sandip D. Mundhe** - Head, Lib. Science, Sambhajirao Kendre College, Jalkot, Latur
- ❖ **Dr. Y. H. Saner** - Principal, Abhay College of Education, Dhule
- ❖ **Dr. D. D. Patil** - Principal, Arts, Science and Commerce College, Chopda,
 Jalgaon

Review Committee -

- ❖ **Dr. Uttam V. Nile** - P. S. G. V. P. Mandals Arts, Commerce, Science College,
 Shahada
- ❖ **Dr. Sanjay Dhondare** - Abhay Womens College, Dhule
- ❖ **Dr. Rekha Gajare** - Head, Dept. of Hindi, P.O. Nahata College, Bhusawal
- ❖ **Dr. Ramesh Sambhaji Kure** - Head, N. W. College, Akhala Balapura Dist-Hingoli
- ❖ **Dr. S. K. Wadekar** - M. S. G. College, Malegaon Camp, Dist- Nashik

Our Editors have reviewed paper with experts' committee, and they have checked the papers on their level best to stop furtive literature. Except it, the respective authors of the papers are responsible for originality of the papers and intensive thoughts in the papers.

- Executive Editor

Published by -

❖ **Mrs. Swati Dhanraj Sonawane, Director, Swatidhan International Publication, Nashik**
 Email : swatidhanrajs@gmail.com Website : www.researchjourney.net Mobile : 9665398258

52	Dr. Pravin C. Dabre Dr. G. N. Badhe	Traditional approach to indian sports culture is the right path of living	201
53	Dr. Radha R. Sawjiyani	Health & food management of pregnant women	206
54	Dr. Rahul Thakur Snajay S. Bhausar	The incentive marks for inter-collegiate sports in public universities of maharashtra state	210
55	Dr. Ravijeet O. Gawande	Effect of yogasanas and pranayama on physiological parameters of male students	213
56	Rahul Makdum Dr. Rajeshwar Deshmukh	Comparative study on aerobic fitness among kabaddi and football players	217
57	Dr. Sanghpal W Narnaware	Comparative study of selected physiological variables of sprinters	220
58	Dr. Sanjay D. Kokate	Importance of sports physiotherapist in management of sport team	224
59	Dr. Sanjay Kumar Prajapati	Positive consequences of yoga for field hockey performers	228
60	Dr. Sanjeev S Patil	Fitness for all	230
61	Dr. Seema V. Deshmukh	Psychological analysis of self-concept And adjustment	236
62	Dr. Shashank G. Nikam	Nutrition and dietetics	238
63	Dr. Shirish V. Topare	Career in sports media and journalism	244
64	Dr. Subhasb Gawande	Effect of harness training on vital capacity and heart rate of athlete	246
65	Dr. Subhash S. Dadhe	Health and nutrition management for sport person	250
66	Dr. Suhas K. Khandwe	Effect of swimming training on strength index on school going children	254
67	Dr. Tanuja S Raut	Analysis of physical education students' attitudes toward self-employment	258
68	Dr. Uday N. Manjre Dr. Vijay V. Pande	Importance factors of sports journalism in today's world	262
69	Dr. Virendra Shivsing Jadhav	First aid in sports injuries	265
70	Dr. Vishwambhar V. Jadhav Mr. Mr. Vishal Madavi	Yoga and modern life	269

Comparative Study On Aerobic Fitness Among Kabaddi And Football Players

Rahul Makdum

Research Scholar, Shivaji University, Kolhapur

Dr. Rajeshwar Deshmukh

Research Guide, Shivaji University, Kolhapur (MS)

ABSTRACT:

The main purpose of the study was to find out the aerobic fitness among kabaddi and football players. 25 kabaddi players and 25 football players' total 50 players from Maharashtra state were selected. The age group of the subjects ranged between 18-25 years and all the samples selected from random basis. To find out the aerobic fitness of selected players, 12 min run & walk, Cooper test was used. This test is highly reliable and valid to assess the aerobic fitness of selected players. The 't' test was used to find out the significance difference among kabaddi and football players. The results of the study found that football players having better aerobic fitness as compared to kabaddi players.

KEY WORDS: Aerobic fitness, Kabaddi Players, Football Players etc.

INTRODUCTION:

Aerobic fitness is one of the most important components of physical fitness. The other components of physical fitness are muscular strength and endurance, and flexibility and low-back function. Aerobic fitness is measured as the amount of oxygen transported in the blood and pumped by the heart to the working muscles and as the efficiency of the muscles to use that oxygen. Increasing cardiovascular fitness means increasing the capability of the heart and the rest of the cardiovascular system in their most important task, to supply oxygen and energy to your body. Having good cardiovascular fitness has many health benefits. For example, it decreases your risk of cardiovascular diseases, stroke, and high blood pressure, diabetes.

Aerobic fitness is best improved by activities, which employ large muscle groups working dynamically. Such activities include walking, jogging, running, swimming, skating, cycling, stair climbing and cross-country skiing. The cardiac muscle is like any other muscle - it becomes stronger and more efficient after practice. Heart rate is a quantitative measure of heart's work. At rest a healthy heart of an average individual beats approximately 70 beats per minute. A conditioned heart beats much less at rest, only 40 to 50 beats per minute or even less. Heart rate variability is a quality measure of heart's function. The lower the resting heart rate the higher the heart rate variability, and thus the better the quality of heart's functions. Aerobic fitness is related to age, gender, exercise habits, heredity and cardiovascular clinical status. Maximum values occur between ages 15 and 30 years, decreasing progressively with age. At the age of 60, the mean maximal aerobic capacity in men is approximately three fourths of that at the age of 20. With sedentary lifestyle, there is a 10 % reduction in the mean maximal aerobic power per decade, the reduction with an active lifestyle being less than 5 %.

Cooper himself portray high-impact practice as the capacity to use the greatest measure of oxygen amid comprehensive work. Cooper portrays a portion of the real medical advantages of oxygen consuming activity, for example, increasing more productive lungs by boosting breathing limit, along these lines expanding capacity to ventilate more air in a shorter timeframe. As breathing limit expands, one can supply oxygen all the more rapidly into the circulation system, expanding



disposal of carbon dioxide. With vigorous exercise the heart turns out to be more productive in working, and blood volume, hemoglobin and red platelets increment, upgrading the capacity of the body to transport oxygen from the lungs into the blood and muscles. Digestion will change and enhance utilization of more calories without putting on weight. Oxygen consuming activity can postpone osteoporosis as there is an expansion in bulk, lost fat and an increment in bone thickness. With these factors expanding, there is a diminishing in probability of diabetes as muscles utilize sugars superior to fat. One of the significant advantages of high-impact practice is that body weight may diminish gradually; it will just reduction at a quick pace if there is a calorie confinement, in this way decreasing corpulence rates. How much oxygen consuming limit can be enhanced by exercise fluctuates change generally in the human populace: while the normal reaction to preparing is a roughly 17% expansion in VO₂ max, in any populace there are "high responders" who may as much as twofold their ability, and "low responders" who will see practically zero profit by preparing. Studies demonstrate that roughly 10% of generally solid people can't enhance their oxygen consuming limit with exercise by any means. The level of a person's responsiveness is exceedingly heritable, recommending that this characteristic is hereditarily decided.

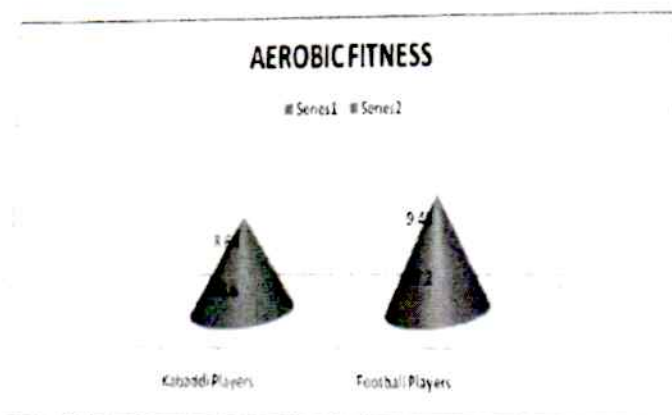
METHODOLOGY:

The sample for this study consists of total 50 players in which 25 kabaddi players and 25 football players. The age group of the subjects ranged between 18-25 years and all the samples selected from random basis. To find the aerobic fitness of selected players, 12 min run & walk, Cooper test was used. This test is highly reliable and valid to assess the aerobic fitness of selected players. The 't' test was used to find out the significance difference among kabaddi and football players. The purpose of this test to assess the aerobic fitness of selected players and this test required such equipments: running track, stop watch, recording sheet and cones etc. First of all measuring the completed distance, participants run for 12 min and the total distance covered is recorded, walking is allowed and to encourage the participants to cover the maximum distance.

ANALYSIS OF DATA:

The collected data from the subjects was analyzed by using statistical technique 't' test and the results are given in the following table:

Table No.1



Showing comparison between kabaddi players and football players on Aerobic Fitness

Group	N	Mean	SD	MD	't' ratio
Kabaddi Players	25	53.6	8.68	13.6	2.87*
Football Players	25	67.2	9.48		

Significant at 0.05 level.

Fig No.1

In table no.1, results show that football players have better aerobic fitness ($M=67.2$, $SD=9.48$) as compare to kabaddi players ($M=53.6$, $SD=8.68$). The calculated 't' value is 2.87, which is greater than the tabulated value, so there is significant difference at 0.05 level.


CONCLUSION

It is concluded that football players having better aerobic fitness as compare to kabaddi players.

REFERENCES:

- 1) Bouchard, Claude; Ping An; Treva Rice; James S. Skinner; Jack H. Wilmore; (1999). "Familial aggregation of VO₂ max) response to exercise training: results from the HERITAGE Family Study". *Journal of Applied Physiology*. 87 (3): 1003-1008.
- 2) Cooper, Kenneth H. (1983) *Aerobics* (revised, reissue ed.). Bantam Books. ISBN 0553274473.
- 3) Hebestreit, Helge; Bar-Or, Oded (2008). *The Young Athlete*. Blackwell Publishing Ltd. p. 443.
- 4) Kenneth H. Cooper (1997). *Can stress heal?*. Thomas Nelson Inc. p. 40. ISBN 978-0-7852-8315-7.
- 5) Matthew J Watt; et al. (2002). "Intramuscular triacylglycerol, glycogen and acetyl group metabolism during 4 h of moderate exercise in man". *J Physiol*: 69-78.
- 6) Sharon A. Plowman; Denise L. Smith (2007). *Exercise Physiology for Health, Fitness, and Performance*. Lippincott Williams & Wilkins. p. 61. ISBN 978-0-7817-8406-1.
- 7) William D. McArdle; Frank I. Katch; Victor L. Katch (2006). *Essentials of exercise physiology*. Lippincott Williams & Wilkins. p. 204. ISBN 978-0-7817-4991-6.

2018

 Routledge
Taylor & Francis Group

Journal of **Sports Sciences**

2018 Volume 12 Issue 07

on behalf of the British Association of Sport
and Exercise Sciences

