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# Effects of Yoga practice on Motor Ability Components among Inter collegiate Cricket and Football players of BITS, Pilani K. K. Birla Goa Campus Deemed University team

**[1] Chandu G. Lamani, [2]Deepa S Rathod**

[1] Physical Education Instructor, In Charge SAC & Sports, BITS, Pilani – K.K.Birla Goa Campus Deemed University Zuarinagar Goa-India, Research Scholar, Karnatak University, Dharwad

[2] Research Scholar KSWU, Bijapur Karnataka India Physical Education Teacher, Government High School, Jamkhandi Karnataka India

**Abstract**
The purpose of the study was to find out the effect of yogic practice on selected Motor Ability components among BITS Pilani-K.K.Birla Goa Campus Deemed University, Cricket, Soccer and Basketball Players. Fifty players from the above games were selected randomly as subjects. The age of the subjects ranged from 20 to 24 years. The selected subjects were divided into two groups namely Group A (yoga practice) and Group B (control without any training). The Group "A" was subjected to yoga training for alternative days every week for Four weeks in the month of April & May 2015.The dependent variables namely cardio respiratory endurance measured by 12 min cooper's Run/ Walk Test, Muscular Endurance Measured by Bent-knee sit ups, and Flexibility Measured by Sit and reach test. The data were collected from each subject before and after the training period and statistically analyzed by using dependent t' test and analysis of covariance (ANOVA), It was found that there was significant improvement on yogic practice on selected motor ability components.

**Keywords:** Motor ability, cardio respiratory endurance, Muscular endurance and Flexibility

## Introduction
Cricket, Basketball, and Football is a sport requiring high levels of physical fitness. These are the games which demands not only speed, agility, strength, power and endurance. These players need a combination of technical, tactical and physical skills in order to succeed. Improving aerobic capacity and overall fitness boosts performance on the Sports field. Physical fitness is not only the most important ways to a healthy body but it is also the basis of dynamic and creative activity. Physical fitness is the combination of strength, speed, flexibility, agility and endurance. It is the ability to enjoy our lives and achieve our goals without un- due fatigue or stress. Physical fitness varies from person to person and different type of fitness and needed for different types of profession.
Yoga is a form of exercise based on the belief that the body and breath intimately connected with the mind. By controlling the breath and holding the body in steady poses, or asana, yoga creates harmony. Yoga is means of balancing and harmonizing the body, mind and emotion and is a tool that allows us to withdraw from the chaos of the world and find a quite space within. Pranayama are the best exercise to increase the capacity of lungs capacity (Namdev, C 2011).

## Purpose of the study
The purpose of the study was find out the effect of yogic practice on selected Motor Ability components among university level Cricket, Football and Basketball Players.

## Significance of the study
It is hoped that the data generated and interpreted in this study will one day help the sports fraternity, and the information collected can be used for monitoring the training programme and for counseling purpose for the development of sports.

## Methodology
To achieve the purpose, fifty (50) BITS Pilani-K.K.Birla Goa Campus Deemed University, players of Cricket, Soccer and basketball team were selected randomly as subjects. All the 50 players were active sports person who represented the Institute team in the 2014-15 academic years. The experimental group was subjected to the yoga practices during morning hours for alternative days for Four weeks.
The training of Yoga was given to the subject at BITS Goa Campus. The age of the subjects ranged from 20 to 24 years. They were assigned randomly into experimental and control group of 25 each. Control group (n=25) was not given yoga practice, the yoga training was given to them in the month of April and May 2015, necessary permission was taken from BITS Goa Campus Sports Director. The measurements were all recorded in Metric system

| **Variables Tested** | Cardio Respiratory Endurance | Muscular Endurance | Flexibility |
|---|---|---|---|
| | 12 Minutes Run and Walk | Bent-knee sit ups | Seat and Reach |

## Statistical Procedure and Treatment
The data pertaining to the variables in this study were examined by using dependent 't' test to find out the significant

improvement and analysis of covariance (ANOVA) for each variables separately in order to determine the difference and tested at 0.05 level of significance.

**Results and Discussion**

The analysis of dependent 't' test on data obtained for cardio respiratory endurance, muscular endurance and flexibility of the per-test and post- test means of yoga practice and control groups have been analyzed and presented in Table-I.

**Table 1:** Mean and Dependent T Test of experimental and control groups on selected variables

| Variable | Mean | Experimental Group | Control Group |
|---|---|---|---|
| Cardio Respiratory Endurance | Pre–Test mean | 1606.4 | 1568.4 |
| | Post – test mean | 1714.4 | 1532.4 |
| | T test | 2.40* | 0.60* |
| Muscular Endurance | Pre–Test mean | 29.32 | 28.44 |
| | Post – test mean | 32.2 | 27.68 |
| | T test | 1.53* | 0.43* |
| Flexibility | Pre–Test mean | 33.24 | 33.24 |
| | Post – test mean | 36.28 | 36.28 |
| | T test | 1.73* | 1.73* |

*significant at 0.05 level of confidence (24) = 2.064

- The obtained' ratio value of experimental group is higher than the table value and it is understood that yogic practice had significantly improved the performance of cardio respiratory endurance, muscular endurance and flexibility.
- Since the obtained' ratio value of experimental groups are greater than the table value, it is understood that yoga Training group had significantly improved the performance of cardio respiratory endurance, muscular endurance and flexibility.

The analysis of covariance on the data obtained on flexibility and explosive power due to the effect of yogic practice have been analyses and presented in Table II.

**Table 2:** Analysis of covariance of experimental and control Groups on Selected Variables

| Variable | Adjusted post Test means | | Source of Variance | SS | df | Mean Squares | "F" Ratio |
|---|---|---|---|---|---|---|---|
| | Experimental Group | Control Group | | | | | |
| Cardio respiratory Endurance | 169.8 | 154.9 | Between | 276859.19 | 1 | 276859.19 | 75.83* |
| | | | Within | 171606.27 | 47 | 3651.201 | |
| Muscular Endurance | 31.60 | 28.28 | Between | 136.69 | 1 | 136.69 | 58.64* |
| | | | Within | 109.29 | 47 | 2.331 | |
| Flexibility | 36.37 | 33.14 | Between | 130.92 | 1 | 130.920.641 | 204.24* |
| | | | Within | 29.98 | 47 | | |

*Significant at 0.0s level of confidence, df (1, 47) = 4.06

- Table II showed that the adjusted posttest mean values of Cardio Respiratory Endurance, Muscular Endurance and Flexibility of experimental and control group were 169.8 and 154.9 and 31.60 and 28.28 and 36.37 and 33.14 respectively.
- The obtained f-ratio value is 75.83, 58.64 and 204.24 which is higher than the table value 4.06 with df 1 and 47 required for significance at 0.0s level.
- Since the value of f-ratio is higher than table value, it indicates that there is significant difference exist between the adjusted posttest means of experimental group in improving the performance of cardio respiratory endurance, muscular endurance and flexibility when compared control group.

**Conclusion**

- The experimental group namely yoga practice group had achieve significant improvement on cardio respiratory endurance, muscular endurance and flexibility. Significant difference were found among the two groups namely yoga practice (experimental) and control groups.
- Yoga practice group founded better achievement towards improving the selected criterion variables such as cardio respiratory endurance, muscular endurance and flexibility.
- It was found that the improvement caused by yoga practice group was better than control group. The results are supported by the studies conducted by R.Murugesan (2000) and Govindarajulu N (2002).

**Recommendation for Future Research work**

Extensive research have been undertaken in several sports disciplines to identify Yogic relationship with of young players which enables coaches to identify promising talent in their respective sports disciplines. Therefore it is recommended to undertake same research can be done on normal population or other sporting population.

- In the present study sample size of Subjects was very small. Therefore, it is recommended to replicate such an investigation with larger sample size.
- It is recommended to investigate with either longitudinal or mixed longitudinal or cross section study.
- The present investigation involved players at University level. Such study can be done on national and international level may be accentuated for various reasons.

**Recommendation for Coaches and Administrators**

- Therefore it is recommended that either training regime be made demanding or select candidates with greater

efficiency in Motor Fitness profile.

- Based on the research findings involving young children in sports, identify talented players at early age and coach them right.
- It is recommended that coaches based on their knowledge of Motor Fitness and Yogic profile required for various departments of the game.

**References**


1. American college of sports medicine, Guidelines for exercise testing and prescription (6th) Edition Philadelphia, PA: Lea and Fibiger, 2000
2. Apter MJ. The experience of motivation: The theory of psychological reversals. London: Academic Press, 1982.
3. Burton D, Naylor S. Is anxiety really facilitative? Reaction to the myth that cognitive anxiety always impairs sport performance. Journal of Applied Sport Psychology. 1997; 9:295-302:
4. Gould D, Eklund RC, Jackson SA. U.S. Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. The Sport Psychologist, 1988-1992; 6:358-382
5. Gould D, Eklund RC, Jackson SA. U.S. Olympic wrestling excellence: II. Thoughts and affect occurring during competition. The Sport Psychologist, 1988-1992b; 6:383-402.
6. Eysenck MW, Calvo MG. Anxiety and performance: the processing efficiency theory. Cognition and Emotion 1992; 6:409-434
7. Govindara- julu, N. Work capacity of elite school players practicing yoga in Pondicherry region" Yoga- Mimamsa, 2002; 34:2.