A Peer Reviewed (Refereed) International Research Journal Homepage:www.ijless.kypublications.com Vol. 2. Supplementary issue 3.2015 (October)



Category: Women and Sports Psychological aspects



## EFFECT OF SPECIFIC TRAINING ON SELECTED PHYSICAL AND PHYSIOLOGICAL VARIABLES AMONG COLLEGE WOMEN KABADDI PLAYERS

### **G P M R NEELA KUMARI**

Lecturer in physical education Y.A.GOVT DEGREE COLLEGE FOR WOMEN, CHIRALA.

#### INTRODUCTION

The game of Kabaddi is a typical Indian game that involves a lot of agility, endurance, courage and team spirit. In the beginning of the 20<sup>th</sup> century rules of the games were framed by the Deccan gymkhana. The National Kabaddi Federation of India was formed in 1950 and it organized the first national Kabaddi championship in the year 1952. In India among the three forms (i) Sanjeevani (ii) Camino and (iii) Amar the Kabaddi federation of India recognizes the form of Sanjeevani

Sports Specific Training

Have a specific training need to improve your strength, speed, stamina or endurance for a particular sport or event do you keep getting injured or finding you are hitting plateaus with your current training programme. Then I'm here to help you and tweak enhance and improve all of your training needs.

Whether we work on a 1-2-1 basis or finding you a sports specific class, I will ensure that every effort you put into your training will encompass a functional and sports specific package designed to attribute the correct movement patterns and muscle groups that are used within that setting. So whether you are a Boxer, Skier, Runner, Dancer, Weightlifter or Golfer. You all have very specific and different needs, areas of focus and goals to be reached.

Sports Specific Trainers can help improve strength, flexibility and stamina to improve performance in specific sports. Options include increasing arm strength for tennis playing or improve strength and core stability providing better balance playing golf.

Sports specific training is all about developing physical conditions to improve performance and skills at a particular sport. Also understanding the needs of the game training practicing at the correct pace in order to meet sports requirements.

#### Statement of the Problem

The purpose of this study was to find out the effect of specific training on selected physical and physiological variables among college women kabaddi players.

#### Hypothesis

- 1. It is hypothesized that there will be significant difference on the effect of specific training on selected physical variables among college women kabaddi players.
- 2. It is hypothesized that there will be significant difference on the effect of specific training on selected physiological variables among college women kabaddi players.

#### Significance of the Study

- 1. This study will help to identify the suitable training method increase the performance on selected physical variables among college women kabaddi players.
- 2. This study also helpful for physical education teacher and coaches to adapt this training programme to improve the fitness and physiological variables among college women kabaddi players.

Proceedings of UGC Sponsored National Seminar (In Collaboration with YMCA- Guntur) "NWCSP-RSR-2015" Organized by the Department of Physical Education, AC College, Guntur

A Peer Reviewed (Refereed) International Research Journal Homepage:www.ijless.kypublications.com Vol. 2. Supplementary issue 3.2015 (October)



3. The result of this study may be help to the physical fitness educationist to plan suitable programme for weak players.

#### Delimitations

The present study will be delimited into the following aspects.

- 1. This study was confined to30 subjects fromY.A Govt. College for Women in Chirala
- 2. The subjects were restricted to women kabaddi players.
- 3. As per their college records their age 18yrs to 22yrs.
- 4. On a random sampling 30 players were selected.
- 5. The selected players were divided into two experimental group underwent specific training and control group do not given any training.
- 6. The duration of training period will restricted to 8 weeks only.
- 7. The training of this study will be considered as independent variables.
- 8. Physical and physiological variables as dependent variables.
- 9. The selected criterion variables for the study were assessed by the standardized test items.

#### Limitations

The present study will be limited into the following aspects.

- 1. The previous experience of the subjects in the field of sports and games which influence the training is not considered.
- 2. Factors like personal habit, life style, daily routine, diet and climatic condition etcetera on aspect on the results of this study were not taken into consideration.
- 3. No effort was taken to control the food intake, life style, psychological factors etc.
- 4. The weather condition such as atmosphere temperature and humidity during test period are also not considered.

#### Methodology

#### Selection of Subjects

For this purpose of the study 30 subjects were selected fromY.A Government College for women in chirala, were randomly selected as subjects and their age were between 18to 22 years. They were assigned in to two groups.

#### Selection of Experimental Variables

The research scholar reviewed the various significant changes on selected performance variables that selected to specific training a period of 8 weeks, the research scholar reviewed the variable literature from research papers taking in to consideration the following performance variable were selected.

Independent Variables

Specific training

**Dependent Variables** 

**Physical Variables** 

- 1. Speed
- 2. Agility

Physiological Variables

1. Breath Holding Time

A Peer Reviewed (Refereed) International Research Journal Homepage:www.ijless.kypublications.com



Vol. 2. Supplementary issue 3.2015 (October)

# Table-1; Test Administration The physical and physiological variables and test items were follows.

| S.No | Variables           | Test Items       | Units of Measurement |
|------|---------------------|------------------|----------------------|
| 1    | Speed               | 60 yard dash     | Seconds              |
| 2    | Agility             | 5X10 shuttle run | Seconds              |
| 3    | Breath Holding time | Manual           | Seconds              |

#### Table-II; SpecificTraining Programme Duration is 6 Weeks for 3 days/week

|      | Name of the Training<br>(Monday , Wednesday<br>and Friday) | Duration                               |  |  |   |
|------|--|--|--|--|---|
| S.No |  | 1 <sup>st</sup> & 2 <sup>nd</sup> week | 3 <sup>rd</sup> & 4 <sup>th</sup> week | 5 <sup>th</sup> & 6 <sup>th</sup> week | 7 <sup>th</sup> & 8 <sup>th</sup><br>week |
|      |  | 45 Min                                 | 45 Min                                 | 45 Min                                 | 45 Min                                    |
| 1    | Warm up  | 8 Min                                  | 7 Min                                  | 5 Min                                  | 5 Min                                     |
| 2    | Sprinting  | 10Sec                                  | 20Sec                                  | 20Sec                                  | 20Sec                                     |
| 3    | Walking  | 30Sec                                  | 15 Sec                                 | 15 Sec                                 | 15 Sec                                    |
| 4    | Shuttle run  | 20Sec                                  | 25 Sec                                 | 25Sec                                  | 25Sec                                     |
| 5    | Break  | 4 Min                                  | 3 Min                                  | 2 Min                                  | 2 Min                                     |
| 6    | Chain formation  | 4 Min                                  | 4 Min                                  | 4 Min                                  | 4 Min                                     |
| 7    | Chain Breaking   | 5 Min                                  | 6 Min                                  | 7 Min                                  | 7 Min                                     |
| 8    | Defensive skills   | 8 Min                                  | 8 Min                                  | 7 Min                                  | 7 Min                                     |
| 9    | Offensive skills   | 7 Min                                  | 7 Min                                  | 8 Min                                  | 8 Min                                     |
| 10   | Warm down  | 8 Min                                  | 9 Min                                  | 9 Min                                  | 9 Min                                     |

#### **Experimental Group Design**

The purpose of the study students 30 from Y.A Government College for Women Chirala, was randomly selected. They were equally divided into two groups. Each group consists of fifteen subjects. Experimental group I underwent specific training programme for three days in a week. The group II consists of control group. There was no specific training for above said training period.

Statistical Technique

The collected data on physical and physiological variables were statistically examined to test the various hypothesis formulated by the researcher for comparison't' ratio was used.

Table - III; Analysis of t-ratio for the Pre-test and Post-test of Control Group and Experimental Group on Speed

| Variables | Group        | Mean  |       | SD   |      | Cd Error | qt | (t' ratio |
|-----------|--------------|-------|-------|------|------|----------|----|-----------|
|           |              | Pre   | Post  | Pre  | Post | SUEITO   | u  | ιταιο     |
| Speed     | Control      | 17.73 | 17.80 | 1.03 | 0.86 | 0.27     | 14 | 0.25      |
| Speed     | Experimental | 17.67 | 16.60 | 0.90 | 0.9  | 0.28     | 14 | 03.75*    |

\*Significance at 0.05 level of confidence

A Peer Reviewed (Refereed) International Research Journal Homepage:www.ijless.kypublications.com

Vol. 2. Supplementary issue 3.2015 (October)



Figure -1

Cylinder Diagram Shows the Mean Values of Pre and Post Tests of Experimental Group and Control Group on Speed



Table - IV: Analysis of t-ratio for the Pre-test and Post-test of Control Group and Experimental Group on Agility

| Variables | Group        | Mean  |       | SD  |      | Sd    | df   | 't'   |
|-----------|--------------|-------|-------|-----|------|-------|------|-------|
|           |              | Pre   | Post  | Pre | Post | Error | ui   | ratio |
| Agility   | Control      | 31.27 | 31.45 | .70 | .89  | 0.15  | 1/   | 1.24  |
| Aginty    | Experimental | 31.25 | 30.08 | .87 | .75  | 0.28  | - 14 | 4.19* |

\*Significance at 0.05 level of confidence

Figure -2: Cylinder Diagram Shows the Mean Values of Pre and Post Tests of Experimental Group and Control Group on Agility



Table -V: Analysis of t-ratio for the Pre-test and Post-test of Breath Holding Time of Control Group and Experimental Group

| Variables              | Group        | Mean  |       | SD   |      | Sd    | df | (t' ratio |
|------------------------|--------------|-------|-------|------|------|-------|----|-----------|
| variables              |              | Pre   | Post  | Pre  | Post | Error | ui | ι τατισ   |
| Breath Holding<br>Time | Control      | 25.58 | 25.48 | 2.98 | 2.85 | 0.08  |    | 1.14      |
|                        | Experimental | 25.52 | 26.93 | 3.70 | 3.07 | 0.33  | 14 | 4.20*     |

\*Significance at 0.05 level of confidence

Proceedings of UGC Sponsored National Seminar (In Collaboration with YMCA- Guntur) "NWCSP-RSR-2015" Organized by the Department of Physical Education, AC College, Guntur

A Peer Reviewed (Refereed) International Research Journal Homepage:www.ijless.kypublications.com Vol. 2. Supplementary issue 3.2015 (October)



**Breath Holding Time** 26.93 27 26.5 25.58<sub>25.52</sub> 25.48 26 Pre 25.5 Post 25 24.5 Control Group Experimental Group

Figure -3: Cylinder Diagram Shows the Mean Values of Pre and Post Tests of Experimental Group and Control Group Breath Holding Time

#### **Discussion on Findings**

The result of this investigation showed a significant improvement in the subjects of the experimental group regular practice of specific training.

The results of this study with the hypothesis of the investigation. Interest on the part of the subject used in this study to improve their specific training might also account for the result and this inference is supported by the further fact that all previous studies of similar nature were conducted on specific training. The six week period for the experimental seen to be produce valid result.

The results of the study reveal that there was a significant difference found among college women on physical and physiological variables also when comparing the mean values of physicaland physiological variables. Conclusion

With in the limitations and delimitations of this study, the following conclusions were drawn,

1. It was concluded that there was significant improvement in selected physical and physiological variables of speed, agility, muscular strength, resting heart rate and breath holding time among college women kabaddi players due to specific training.

#### REFERANCE

- [1]. Anthony J. Blazevich, David G. Jenkins, Effect of the movement speed of resistance training exercises on sprint and strength performance in concurrently training elite junior sprinters, Journal of Sports Sciences, Volume 20, Issue 12 December 2002, pages 981 – 990.
- [2]. Asai.k. and Rane .Y.V, (2011), "Asanas and lezium Programme on Selected Physical Fitness Variables of School Boys", Entire Research National Quarterly Research Journal, 3(1) p25-31.
- [3]. Barnes KR, Hopkins WG, McGuigan MR, Kilding AE.(2013)Effects of Different Uphill Interval-Training Programs on Running Economy and Performance. J Sports Physiol Perform. 2013 Mar 26.
- [4]. Bames, et al., (2007), "Relationship of jumping and agility performance in female volleyball athletes." J Strength Cond Res. Nov;21(4):1192-6
- [5]. De A.K, DasguptaP. K., B. K. Panda, A. K. Bhattacharya1982., Physical efficiency tests on Indian male "Kabaddi" inter-university players.
- [6]. Devaraju K and A. Needhiraja 2012., Prediction Of Playing Ability In Kabaddi FromSelected Anthropometrical, Physical, Physiological And Psychological Variables Among College Level PlayersInternational Journal of Management (IJM), 3(2), 150 - 157. 103-509-355
- [7]. Dey SK, G L Khanna, M Batra 1993., Morphological and physiological studies on Indian national kabaddi players.27:237-242.
- [8]. Khanna GL, Majumdar P, Malik V, Vrinda T, Mandal M.1996., A study of physiological responses during match play in Indian national kabaddi players.30:232-235

Proceedings of UGC Sponsored National Seminar (In Collaboration with YMCA- Guntur) "NWCSP-RSR-2015" Organized by the Department of Physical Education, AC College, Guntur