REVIEW OF RESEARCH
IMPACT FACTOR : 5.7631(UIF) UGC APPROVED JOURNAL NO. 48514 ISSN: 2249-894X
VOLUME - 8 | ISSUE - 4 | JANUARY - 2019

EFFECT OF CIRCUIT TRAINING AND YOGIC TRAINING GROUPS ON AGILITY AMONG POLYTECHNIC MEN STUDENTS

Dr. D. Devaki
Asst. Professor, Annamalai University, Deputed to Director of Physical Education, GPTC RK Nagar, Chennai.

ABSTRACT :

The study attempted to compare the effects of Circuit training and Yogic training on agility among women players. Healthy young students were selected 45 students n=15 each of three groups, in that one Circuit training group is acted as Experimental group I (CTG), Yogic training group (YTG) is acted as Experimental Group -II, and Group –III acted as Control group (CG), CG were not participated in any training. Their age level 15 – 20 years ,height was 165 ± 3.52 cm and weight 65 ± 10. Kg were participated in this study. Students were selected from GPTC RK Nagar, Chennai -81. 50 meter dash were using to measure the agility level of the subjects Pre and Post data were Collected and tested scored from the subjects..Literature supports the impact of Circuit training and yogic training on agility aspects. The results were reviewed that significantly improved agility comparatively with yogic training, control group -circuit training group has best performance.

KEYWORDS: *Circuit training and Yogic training , Methodology , pilot study.*

INTRODUCTION AND METHODOLOGY

Methodology In this chapter, adopted for the selection of subjects, variables,tests justification of the variables selection, calibration of instruments, reliability of tests, orientation of testers, orientation of subjects, pilot study, circuit weight training regimens, Yogic training experimental protocols, administration of test, experimental design and statistical techniques have been explained. 50 Meter dash was used to asses the Agility of training groups of subjects. Analysis of covariance of data on Agility between pre and post test of Circuit Training,Yogic Training and Control groups.

The exercise circuit should be set up so that you work each body part as follows: Total-body, Upper-body, Lower-body, Core & Trunk, Total-body etc. warm up is important to conduct a at the start of the session and a cool down at the end of the session. in Yogic training : sitting position - padmasana,janu sirshana,suklasana, Pachimothasana.Standing asanas – Natrajasana,Tadasana,thrikonasana,Ardha Chandrasana,Supineposition-Halasana,Matyasana,sethubhndhasana,Bhujangasana,makrasana,Dhanurasana These are the content followed in methodology as experiments for respected groups. control group did not participated in any training.

RESULTS AND DISCUSSION

Sukhdev Singhet.al.,2011 they aimed of the study is to assess the effects of 6-weeks yogasanas training on agility and muscular strength in sportsmen, aged 18 – 24 years, volunteered to participate in the study. Student's test for independent data was used to assess the between-group differences for dependent data to assess the Post-Pre differences. The level of p≤0.01 was considered significant. The agility and

muscular strength significantly improved in Group Y compared with the control one. Due to yoga asana training may be recommended to improve agility and muscular strength and may contribute to enhance sports performance.

Singh kanwaljeet2009 study was conducted to determine the effects of selected asanas in hatha yoga on agility and flexibility level. The results have shown the significant improvement in flexibility, since cal. t (= 8.122) > tab t .05 (14) (= 2.145). The treatment of six week yogasanas training programme also shown significant improvement in case of agility, since cal. t (= 7.376) > tab t .05 (14) (= 2.145).

Tarsem Singh 2015was to investigated the effect of yoga training on muscular strength, muscular endurance, flexibility and agility of female hockey players. For this purpose, a sample of forty (N=40) female hockey players of age ranging from 18 to 25 years were selected .Results revealed significant differences between pre and post-tests of experimental group in respect to Muscular strength (t-6.946*), Muscular endurance (t-9.863*), Flexibility (t-11.052*) and Agility (t-14.068*). However, insignificant differences were observed between pre and post-tests of control group.

Chen K.M. et al., done a research on "Silver Yoga Exercises Improved Physical Fitness of Transitional Frail Elders". A convenience sample of 69 elders in assisted living facilities were assigned randomly to the SY group (n = 38) or to the control group (n = 31) on the basis of the facilities where they resided, and 55 of them completed this quasi-experimental pretest and posttest study. Intervention was conducted three times per week, 70 minutes per session, for 24 weeks. Physical fitness were examined at baseline, at 12 weeks, and at the end of the 24th week of the study. At the end of the study, the physical fitness indicators of participants in the SY group had improved significantly in agility.**IvinJabakumar(2007)** conducted a study on comparison of selected physical and physiological parameters between moderate altitude and sea level inhabitants. For the purpose, twenty-five sea level inhabitants from Chennai and twenty five moderate altitude inhabitants from kodaikkanal were selected as subjects. Their age ranged from 18-25 years. The physical fitness variables (speed, agility, endurance) were selected and tested .The results of the study were there was significant difference in agility.

Javaid Ahmad Sheikhwith their team 2017of this investigation was to find out the influence of circuit training on agility among college students. Thirty male college students (n=30) were randomly selected as subjects and their age ranged between 18 and 22 years. The selected subjects were randomly assigned into two equal groups such as circuit training group (CTG) , and control group (CG) with fifteen subjects each (n=15). The result revealed that the circuit training group produced significant improvement ($p \leq 0.05$) on agility as compare to control group .**WiratSonchan2017** this study aimed to examine the effects of a circuit training program on muscle strength, agility, anaerobic performance and cardiovascular endurance. The study involved 24 freshmen (age 18.87+0.68 yr.) male students of the Faculty of Sport Science, Burapha University. The results of this study suggest that the circuit training program improved muscle strength.

TABLE – I

ANALYSIS OF COVARIANCE OF DATA ON AGILITY BETWEEN PRE AND POST TESTS OF CONTROL, YOGIC PRACTICES AND PHYSICAL EXERCISES GROUPS

Test	Control Group	Yogic practices Group	Physical Exercises Group	Source of Variances	Sum of Squares	Df	Mean Squares	Obtained 'F' Ratio
Pre test								
Mean	9.94	10.12	10.01	Between	0.33	2	0.17	0.571
SD	0.60	0.51	0.51	Within	16.52	57	0.29	
Post test								
Mean	10.29	10.05	9.93	Between	1.38	2	0.69	3.578*
SD	0.33	0.51	0.46	Within	10.99	57	0.19	
Adjusted Post test Mean	10.33	10.01	9.93	Between	1.76	2	0.88	6.328*
				Within	1.80	56	0.14	

*Significant at 0.05 level of confidence.

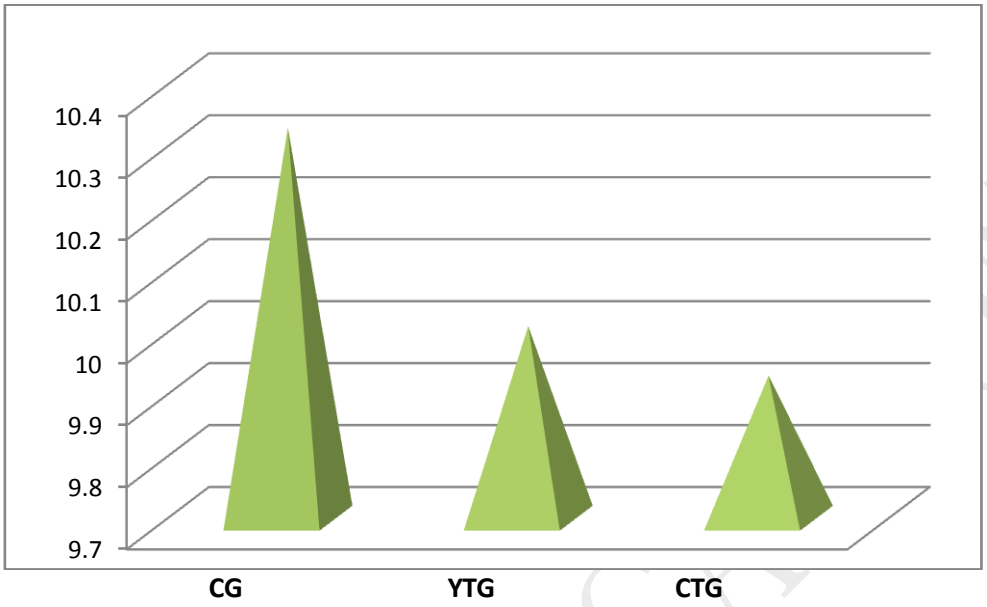
The table value required for significance at 0.05 level with df 2 and 57 & 2 and 56 are 3.159 & 3.162 respectively.

THE ADJUSTED POST TEST MEAN VALUES ON AGILITY FOR CONTROL, YOGIC TRAINING AND CIRCUIT TRAINING GROUPS ON AGILITY

Control	Yogic training Group	Circuit training Group	Mean Differences	Class Interval
10.33	10.01		0.32	0.30
10.33		9.33	0.40	0.30
	10.01	9.33	0.76	0.30

FIGURE I

THE ADJUSTED POST TEST MEAN VALUES ON AGILITY FOR CONTROL, YOGIC AND PHYSICAL EXERCISES GROUPS ON AGILITY IN GRAPH



CONCLUSION

There was significant improvement in Agility among men players of circuit training group when comparatively yogic training group and there was no significant changes in control group.

REFERENCES

AbRaoof Bhat2*, Javaid Ahmad Sheikh1 and M Kalimuthu1 '**Effect of Circuit Training on Agility of College Male Students "**Forensic Science & Addiction Research 1(1).FSAR.000503. 2017.

Rajakumar J (2010), "The Impact of Yogic Practices and Physical Exercises on Selected Physical Variables among Inter-Collegiate Soccer Players". Indian Journal for Research in Physical Education and Sports sciences, 5:1,PP.1-7.

Revanna.C C 1 & Dr. S. Suthakar2 **"Effects of Sprint and Circuit Training on the Development of Agility and Flexibility of the InterCollegiate Male Athlete"**Revanna. International Journal of Recent Research and Applied Studies, Volume 5, Issue 4 (2) April 2018

Singh1, Sukhdev Singh 2 and Vishaw Gaurav3**"Effects of 6-Weeks Yogasanas Training on Agility and Muscular Strength in Sportsmen"**Amandeep * International Journal of Educational Research and Technology Volume 2, Issue 2, December 2011: 72 - 74 ISSN 0976-4089

SINGH KANWALJEET,Gurmej Singh Dhaliwal, BALJINDER SINGH BAL "**EFFECTS OF SELECTED ASANAS IN HATHA YOGA ON AGILITY AND FLEXIBILITY LEVEL"** June 2009 *in* Journal of Physical Education and Sport 23(2) · *with*129 Reads

Tarsem Singh, DrAmandeep Singh, Sandeep Kumar "Effects of 8Week Yoga on Muscular Strength,Muscular Endurance, Flexibility and Agility of Female HockeyPlayersRJSSM: Volume: 05, Number: 7, November 2015

WiratSonchan, PratoomMoungmee, AnekSootmongkol**"The Effects of a Circuit Training Program on Muscle Strength, Agility, Anaerobic Performance and Cardiovascular Endurance"** World Academy of Science, Engineering and Technology International Journal of Sport and Health Sciences Vol:11, No:4, 2017