

IMPACT OF CONTINUOUS BRISK WALKING TRAINING ON AEROBIC ENDURANCE AMONG OLD AGED PERSONS

* D. Nandagopal **A. Vinayagamoorthi ***K.Govindasamy

**Ph.D, Research Scholar Department of Physical Education, Bharathiar University, Coimbatore, India*

**Ph.D, Research Scholar Department of Physical Education, Bharathiar University, Coimbatore, India*

Ph.D, Research Scholar Department of Physical Education, Bharathiar University, Coimbatore, India.

ABSTRSCT

This study was designed to investigate the impact of continuous brisk walking training on aerobic endurance among old aged person in Nilgiris. To achieve the purpose of the study 40 old aged person were selected from katary village the Nilgiris district. The subjects was randomly assigned to two equal groups (n=20). Group- I underwent continuous brisk walking training (CBWT) and Group - II was acted as control group (CG). The respective training was given to the experimental group for 5 days per week for the period of six weeks. The control group was not be given any sort of training except their routine work. The aerobic endurance were measured by 1mile walk/ run test. The data collected from the subjects was statistically analyzed with 't' ratio to find out significant improvement if any at 0.05 level of confidence. The result of the aerobic endurance improved significantly due to impact of continuous brisk walking training with the limitations of (diet, climate, life style) status and previous training the result of the present study coincide findings of the investigation done by different experts in the field of sports sciences. Further the result of the study speculated that continues brisk walking training is the suitable modes to improve aerobic endurance among old aged person.

KEY WORDS:- *Continuous brisk walking training, aerobic endurance.*

INTRODUCTION

Walking involves a rhythmic, forward action of the legs that targets the large lower muscles of the body including the hip flexors, gluteus maximus, quadriceps, and hamstrings. Assisting those muscles are the gastrocnemius and the anterior tibialis. The less obvious but equally important, muscles are the hip abductors and hip adductors. The torso muscles are also actively engaged to keep

torso erect as one naturally swing his arms back and forth. (June E. Kahn and Lawrence J.M. Biscontini, 2007). Walking is a physical activity that is highly accessible and readily adopted. Obesity and a sedentary lifestyle are major risk factors for type 2 diabetes. Brisk walking can reduce the risk of type 2 diabetes through weight reduction and by helping the body use the hormone insulin more efficiently. (Frank B. Hu, 1999)

METHODS

Experimental Approach to the Problem

In order to address the hypothesis presented herein, we selected 40 old aged persons from katary village, The Nilgiris. The subjects were randomly assigned into two equal groups, namely, continuous brisk walking training group (n=20) and control group (n=20). The respective training was given to the experimental group the 5 days per week for the training period of 6 weeks. The control group was not given any sort of training except their routine.

DESIGN

The evaluated aerobic endurance was assessed by 1 mile walk/ run test and the unit of measurement was in minutes, The parameters were measured at baseline after 6 weeks of continuous brisk walking training were examined.

Training programme

The training programme was lasted for 45 minutes for session in a day, 5 days in a week for a period of 6 weeks duration. These 45 minutes included 5 minutes warm up, 35 minutes continuous speed walking training and 5 minutes warm down. Every two weeks of training 5% of intensity of load was increased from 55% to 80% of work load.. The continuous brisk walking training is the length of the time each action is held for and the number action in total 5 per weeks.

STATISTICAL ANALYSIS

The collected data on above said variables due to impact of continuous brisk walking training on aerobic endurance among old aged persons in Nilgiris was statistically analyzed with 't' test to find out the significant Improvement between pre and post test. In all cases the criterion for statistical significance was set at 0.05 level of confidence.

TABLE- I

**COMPUTATION OF T RATIO ON AEROBIC ENDURANCE OF EXPERIMENTAL GROUP
AND CONTROL GROUP**

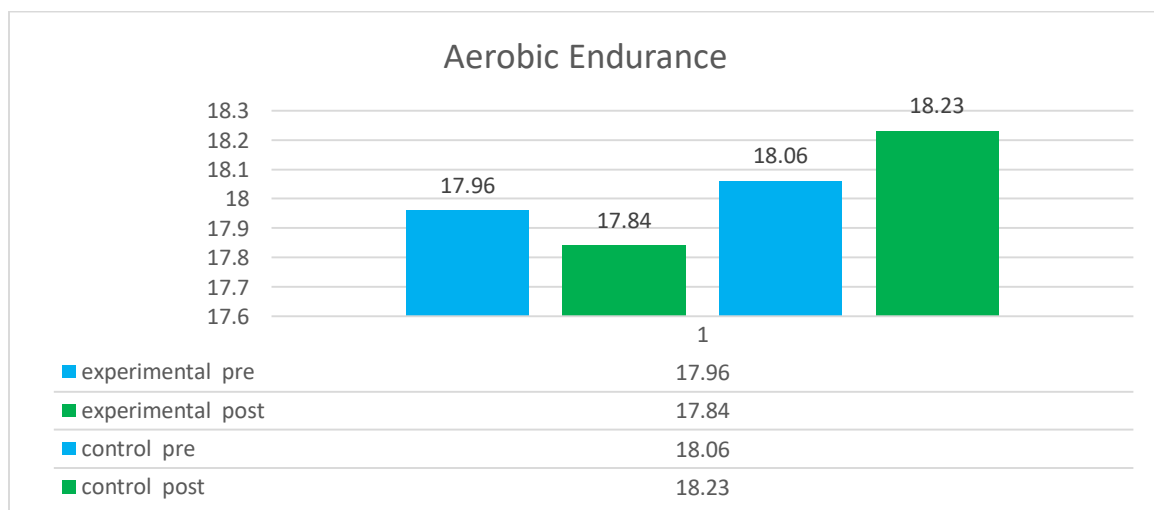
GROUP	VARIABLE		Experimental Group				't' ratio
			Mean	N	Std. Deviation	Std. Error Mean	
Experimental Group	Aerobic Endurance	Pre test	17.96	20	.57	.129	3.78*
		Post test	17.84	20	.57	.127	
Control Group	Aerobic Endurance	Pre test	18.06	20	.65	.14	1.29
		Post test	18.23	20	.57	.12	

*significant level 0.05 level (degree of freedom 2.093,1 and 19)

Table reveals the computation of mean, standard deviation and 't' ratio on aerobic endurance of experimental and control group. The obtained 't' ratio on aerobic endurance were 3.78 and 1.29 respectively. The required table value was 2.093 for the degrees of freedom 19 at the 0.05 level of significance. Since the obtained 't' values of experimental was greater than the table value it was found statistically significant and 't' values of control group was lesser than the required table value it was found statistically insignificant.

FIGURE- I

**BAR DIAGRAM SHOWING THE MEAN VALUE ON OLD AGED PERSON OF
EXPERIMENTAL GROUP AND CONTROL GROUP**



Discussion on findings

The present study experimented the impact of continuous brisk walking training on aerobic endurance among old aged persons. The results of this study indicated that continuous brisk walking training is more efficient to bring out desirable changes over the aerobic endurance among old aged persons. The finding of the present study had similarity with the findings of the investigators referred in this study. **Marie Murphy et al. (2002)** expressed that a regular brisk walking programme would alter the tension and anxiety of sedentary adults. **Pillard T et al., (2002)**. Twelve weeks brisk walking resulted with fall in Low Density Lipoprotein (LDL) and loss of body fat of men aged 63-69 years **Hardmen A. E and Hudson .A (1994)**High Density Lipoprotein (HDL) cholesterol of sedentary women positively increased due to the effect of 12 weeks of brisk walking). **Fritz T and Rosenqvist U (2001)** Blood glucose level of type 2 diabetic patients aged 55 to 70 years reduced immediately after half an hour walking. **Tully. M A et al. (2005)** suggested that twelve weeks of brisk walking programme is sufficient to decrease the systolic and diastolic blood pressure of the adult aged between 50 and 65 years. Brisk walking is positively associated with heart rate of previously sedentary women. **Jones P.R.M et al. (1992)**. **Pollock et al. (1971)** suggested that walking is appropriate for middle aged men to reduce the heart rate (HR) and blood pressure (BP).

REFERENCE

1. Marie Murphy et al. (2002) "Accumulating brisk walking for fitness, cardiovascular risk, and psychological health", *Medical Science and Sports Exercise*, Vol. 34, No. 9, pp. 1468–1474.
2. Paillard T et al. (2002) "Cholesterol reduction and increased cardiovascular fitness following a 12 weeks brisk walking", *The journal of nutrition, health & aging*, 6(2):138-140.
3. Hardman A.E. and Hudson A.(1994) "Brisk Walking and serum lipid and Lipoprotein variables in previously sedentary women and effect of 12 weeks of regular Brisk Walking followed by 12 weeks of detraining", *The Journal of Sports Medicine* 28(4):261-6.
4. Fritz T and Rosenqvist U (2001) "Walking for exercise - immediate effect on blood glucose levels in type 2 diabetes", *Scandinavian Journal of Primary Health Care*;19(1):31-3
5. Tully MA et al. (2005) "Brisk walking, fitness, and cardiovascular risk: a randomized controlled trial in primary care", *Preventive Medicine*, Volume; 41(2): 622-628
6. Jones P. R. M et al. (1992) "Brisk walking improves endurance fitness without changing body fatness in previously sedentary women", *European Journal of Applied Physiology and Occupational Physiology*, Volume 65, Number 4, 354-359
7. Pollock et al. (1971) "Effects of walking on body composition and cardio-vascular function of middle aged men", *Journal of applied physiology*, 30:1
8. June E. Kahn and Lawrence J.M. Biscontini (2007) "*Morning cardio workouts*", champaign. U.S.A. Human Kinetics, P. 46