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Influence of varied intensity of walking on selected muscular strength, muscular endurance variables among middle aged men

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Abstract
Today's people are leading a very unhealthy lifestyle. Inadequate sleep, eating disorder, lack of proper regular exercise, increased rate of obesity and other health diseases, shooting stress levels are some of the facts that define the contemporary world's lifestyle. It can be said that in the present era, human beings have got so engrossed in earning money, that they have virtually stopped paying attention to their physical and mental fitness. The purpose of this study was to find out the influence of varied intensity of walking on selected muscular strength, Muscular Endurance variables among middle aged men. The subjects were restricted to a minimum number of Sixty subjects consisting of Twenty men subjects would serve as control group and the remaining Forty would undergo systematic walking training and among forty, twenty for LIG and remaining twenty for HIG at The M.D.T Hindu College, Tirunelveli under the supervision of researcher. The subjects were selected from Tirunelveli city, and their age was from 35 to 45 years as per the school records. The study was formulated as a random group design. The score were compared by using (ANCOVA) The level of significant chosen was 0.05 level.

Keywords: Walking, high intensity, low intensity, muscular strength, muscular endurance

1. Introduction
In the modern world people have no time to take care about their health that's why the study is need. Many theses have been done only about walking, but the researcher area focuses walking on selected muscular strength, Muscular Endurance variables among middle aged men. Middle aged men can never do hard exercise. They can do simple exercise like jogging and walking. Middle aged men are affected by some disease like diabetics they being middle aged men, it is difficult to them to undertake hard exercise so the study is need.

Most of the people do not know the need of walking but walking is the simplest exercise. Middle aged men are ready to run fast at the age of 37 even though they are ready to run they don't know the benefits of walking. Without knowing the benefits of walking they run so the study is need.

2. Methodology
The purpose of the study was to find out the influence of varied intensity of walking on selected muscular strength, Muscular Endurance variables among middle aged men. To achieve this purpose, sixty men subjects who were not involved in any vigorous physical training programme at the age ranging from 35 to 45 years were selected from in and around Tirunelveli city. The selected subjects were divided into three groups at random with 20 each under the supervision of researcher. The control group did not undergo any special training programme. The selected subjects were medically examined by a qualified medical person for undergoing the training programme.

The training groups underwent 12weeks training programs regularly from 6 a. m to 7 a.m. in the morning session Weekly 6 days the subjects from the groups were instructed every day in the schaffter higher secondary school campus and The M.D.T Hindu college campus.

They were divided into two groups they are Low intensity walking group (LIWG) and High intensity walking group (LIWG)

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The researcher has instructed the low intensity walking group for the first two weeks 50% and then every week the researcher increased the intensity 2% every week. Like the same method was followed for the high intensity walking group but the researcher has started their intensity from 70% in the first two weeks then every week the researcher has increased 2% in their intensity per week. The training was given them at the morning session only in the same time slot circulated the experimental groups for more equate the groups

2.1 Analysis of Data and Results of the Study

Table I: Means, Standard Deviations and Adjusted Means among Experimental and Control Groups on muscular strength and Muscular Endurance

Criterion Variable	High Intensity Walking Group				Low Intensity Walking Group				Control group			
	Pre-test	Post-test	Adjusted post-test means	t test	Pre-test	Post-test	Adjusted post-test means	t test	Pre-test	Post-test	Adjusted post-test means	t test
muscular strength	36.350	40.550	40.385	40.385	36.000	38.900	38.939	38.939	35.850	36.200	36.326	36.326
	0.671	0.999			0.725	1.119			0.671	0.834		
muscular endurance	21.300	22.700	22.624	22.624	20.850	23.850	23.960	23.960	21.200	21.500	21.466	21.466
	0.733	0.923			0.671	0.745			0.768	0.827		

*Significant at.05 level. The table value required for.05 level of significance with df 19 is 1.729.

The table I show that the obtained dependent t-ratio values between the pre and post-test means on muscular strength and muscular endurance of High Intensity Walking Group, Low Intensity Walking Group and control groups are 40.385 and 22.624 38.939 and 23.960 36.326 and 21.466 respectively. The table value required for significant difference with df 19 at.05 level is 1.729. Since, the obtained 't' ratio value of experimental groups are greater than the table value, it is understood that training programmes had significantly improved the performance of muscular strength and muscular endurance. However, the control group has not improved significantly as the obtained 't' value is less than the table value, because they were not subjected to any specific training.

Table II: Analysis of Covariance of High Intensity Walking Group, Low Intensity Walking Group and control groups on muscular strength and Muscular Endurance

Criterion Variable		Sources of Variance	Sum of Squares	df	Mean Squares	F-Ratio
muscular strength	Pre-test	Between	2.633	2	1.317	2.769
		Within	27.100	57	0.475	
	Post-test	Between	192.900	2	96.450	98.260*
		Within	55.950	57	0.982	
	Adjusted Post-test	Between	156.507	2	78.254	93.644*
		Within	46.796	56	0.836	
muscular endurance	Pre-test	Between	2.233	2	1.117	2.125
		Within	29.950	57	0.525	
	Post-test	Between	55.233	2	27.617	39.601*
		Within	39.750	57	0.697	
	Adjusted Post-test	Between	59.773	2	29.887	48.291*
		Within	34.657	56	0.619	

*significant at.05 level of confidence. (the table value required for significance at.05 level with df 2 and 57 and 2 and 56 are 3.162 and 3.166, 3.162 and 3.166, 3.162 and 3.166respectively

From the table II, the obtained F-ratio for pretest is 2.769, 2.125 which is greater than the table value of 3.162 and 3.166 with df 1 and 56 required for significance at 0.05 level of confidence. The result of the study indicates that there was significant difference among the pre-test means of High Intensity Walking Group, Low Intensity Walking Group and control groups on muscular strength and muscular endurance. Table II also shows that the obtained F-ratio value is 93.644*, 48.291*which is higher than the table value 3.162 and 3.166 with df 2 and 56 required for significance at.05 level. Since the value of F-ratio is higher than the table value, it indicates that there is significant difference among the adjusted post-test means of High Intensity Walking Group, Low Intensity Walking Group and control groups. To find out which of the three paired means had a significant difference, the Scheffe's post-hoc test was applied and the results are presented in Table III.

Table III: Scheffe's Test for the Differences between the Adjusted Post-test Paired Means of muscular strength and Muscular Endurance

Criterion Variable	Adjusted Post-test Mean					
	High Intensity Walking Group	Low Intensity Walking Group	Control Group	Mean Differences	C.I. Value	Result at 5% Level
muscular strength	40.385	38.939		1.447	0.727	Sig
	40.385		36.326	4.059	0.727	Sig
		38.939	36.326	2.613	0.727	Sig
muscular endurance	22.624	23.960		1.336	0.626	Sig
	22.624		21.466	1.159	0.626	Sig
		23.960	21.466	2.494	0.626	Sig

*Significant at.05 level.

Table III shows that the adjusted post-test mean differences on muscular strength between the high intensity walking group, low intensity walking group; high intensity walking group and control group; low intensity walking group and control group were 4.059, 2.613and 1.447.respectively. The values are greater than the confidence interval value 0.727, which shows significant difference at.05 level of confidence.

Muscular endurance between the high intensity walking group, low intensity walking group; high intensity walking group and control group; low intensity walking group and control group were 1.159, 2.494and1.336respectively. The values are not greater than the confidence interval value 0.626, the value between high intensity walking group, low intensity walking group and control group is only significant difference at.05 level of confidence.

3. Conclusions
The following conclusions were derived from the analysis.
1. It was found that the High intensity walking group (HIWG) showed better result on the variables Muscular strength for middle aged men.
2. Low intensity walking group (LIWG) marked better performance on Muscular endurance among middle aged men.

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