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EFFECT OF AEROBIC ACTIVITIES ON BMI AND LDL AMONG COLLEGE WOMEN

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Abstract:

The purpose of the study was to find out the effect of aerobic activities on BMI and LDL among college women. To achieve the purpose of the study, thirty women were randomly selected as subjects from Government College, Chittur. The age of the subjects were ranged from 18 to 21 years. The subjects selected for this study were divided into two groups of fifteen subjects each. The experimental group I underwent yoga training and group II acted as a control group. The subjects were exposed to a yoga training programme for twelve weeks. The training programmes were organized in a progressive manner. The obtained data from the experimental and control groups initial and final readings were statistically analyzed with analysis of covariance (ANCOVA). The level of confidence which was fixed at 0.05 levels was considered as an appropriate one for this study. It was observed that the twelve weeks of aerobic activities have significantly impact on BMI and LDL.

Key Words: Aerobic Activities, BMI, HDL.

Introduction:

Aerobic exercise improves the cardiovascular situation. The term aerobic actually means "with oxygen," which means that breathing controls how much oxygen gets to the muscles to help them burn fuel and act. Aerobic training is a type of physical skill training that ranges from low to high intensity and relies on the aerobic intensity-creating process. "Aerobic" specific means relating to, involving, or investigating free oxygen" and refers to the use of oxygen to provide the necessary energy for time period training exercise via aerobic metabolism (Thome & Espelage).

Methodology:

In this context, the investigator made an attempt to investigate the effect of aerobic activities on BMI and LDL among college women. To achieve the purpose of the study, thirty women were randomly selected as subjects from Government College, Chittur. The age of the subjects were ranged from 18 to 21 years. The subjects selected for this study were divided into two groups of fifteen subjects each. The experimental group I underwent yoga training and group II acted as a control group. The subjects were exposed to a yoga training programme for twelve weeks. The training programmes were organized in a progressive manner. The obtained data from the experimental and control groups initial and final readings were statistically analyzed with analysis of covariance (ANCOVA). The level of confidence which was fixed at 0.05 levels was considered as an appropriate one for this study.

Results:

Table 1: Computation of Analysis of Covariance of Mean of Aerobic Activities and Control Groups on BMI

	AEG	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	31.92	31.72	BG	0.28	1	0.28	0.44
			WG	17.59	28	0.62	
Post-Test Means	29.01	31.68	BG	53.33	1	23.33	88.99*
			WG	7.34	28	0.26	
Adjusted Post-Test Means	29.14	31.89	BG	53.31	1	23.31	91.41*
			WG	7.14	28	0.25	

***** Significant at 0.05 level
(Table Value for 0.05 Level for df 1 & 28 = 4.19)
(Table Value for 0.05 Level for df 1 & 27 = 4.21)
df- Degrees of Freedom

An examination of table 1 indicated that the pretest means of aerobic activities and control groups were 31.92 and 31.72 respectively. The obtained F-ratio for the pre-test was 0.44 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 1 and 28. The post-test means of the aerobic activities and control groups were 29.01 and 31.68 respectively. The obtained F-ratio for the post-test was 88.99 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 28. The adjusted post-test means of the aerobic activities and control groups were 29.14 and 31.89 respectively. The obtained F-ratio for the adjusted post-test means was 91.41 and the table F-ratio was 4.21. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and

27. The pre, post and adjusted post test mean values of aerobic activities and control groups, on BMI are graphically represented in the figure 1.

Figure 1: Pre and Post Test Differences of the Aerobic Activities and Control Groups on BMI

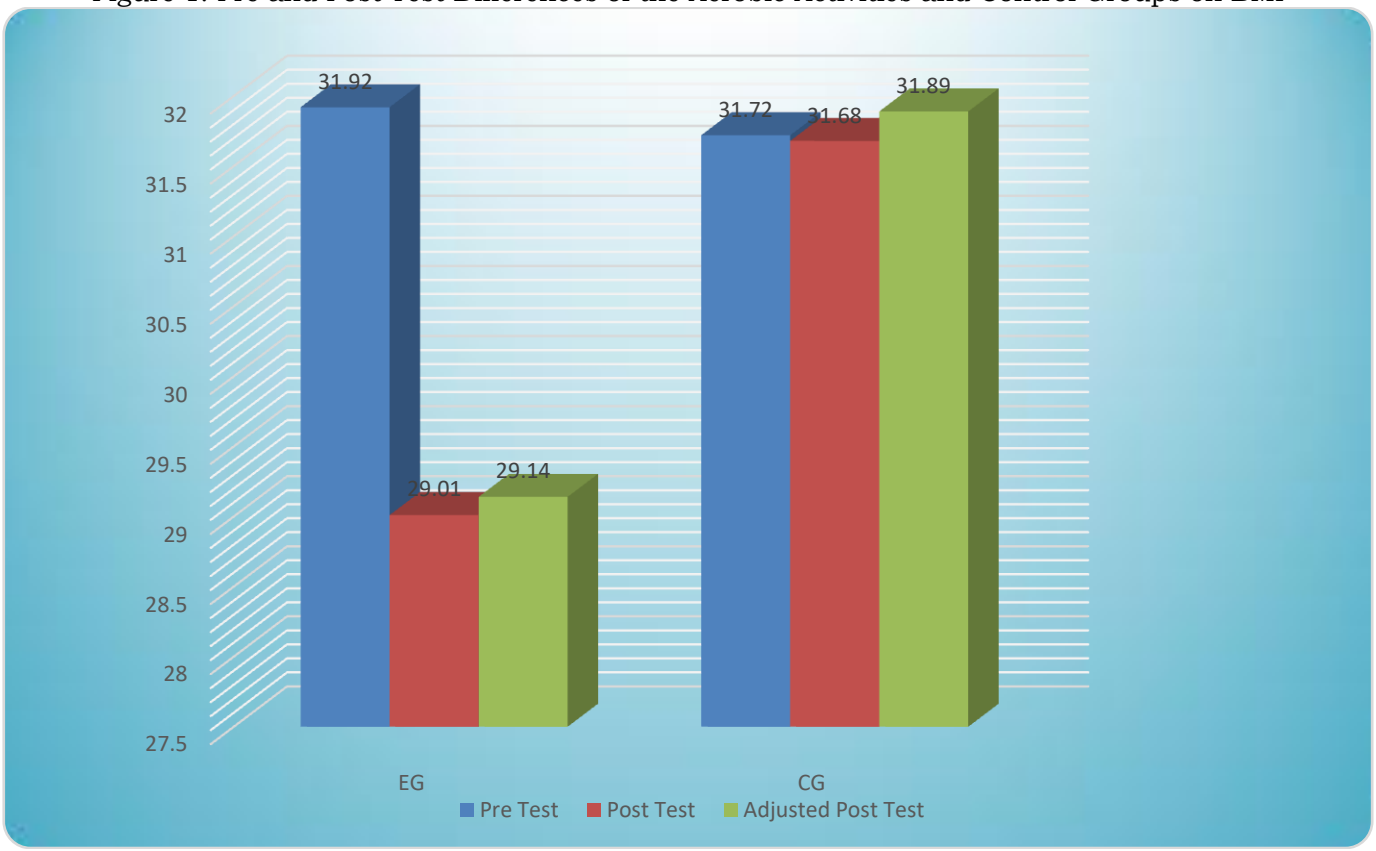


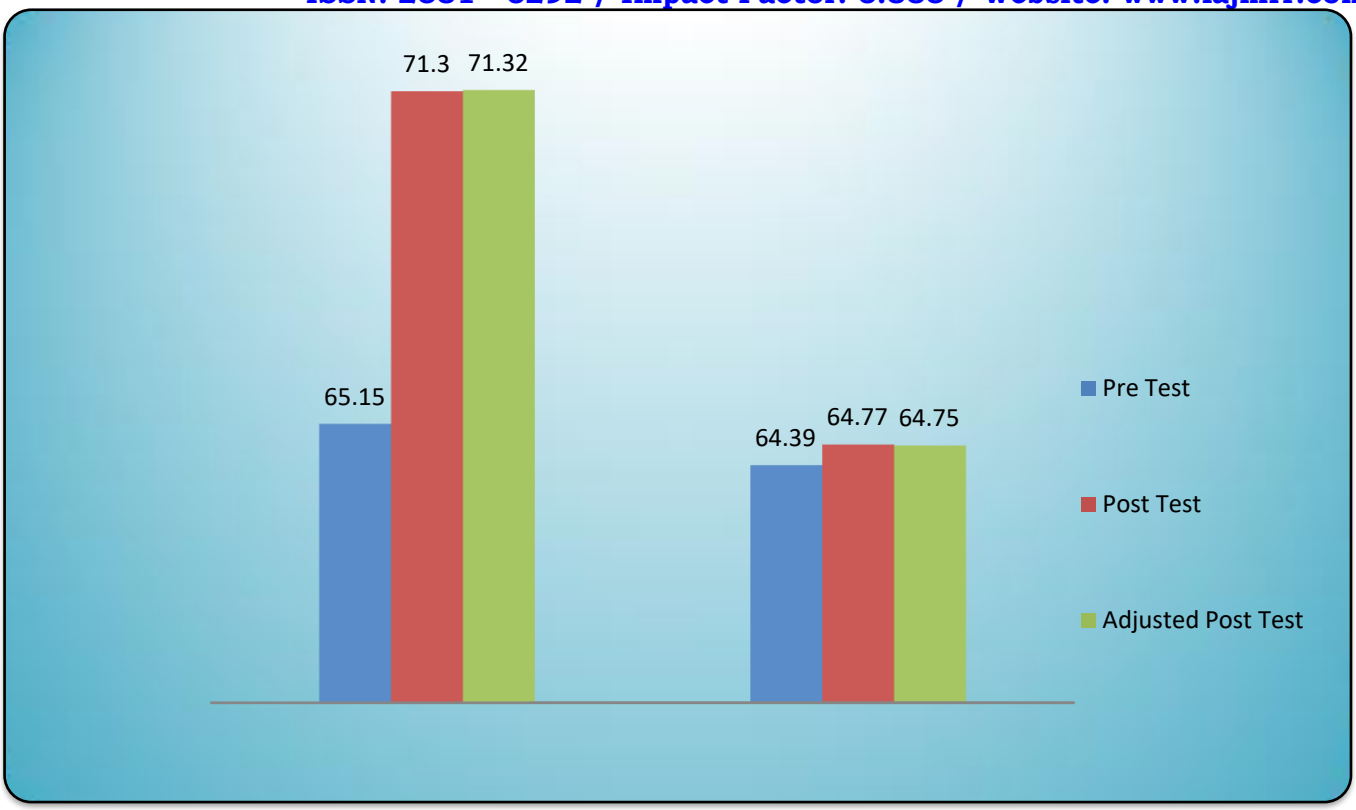
Table 2: Computation of Analysis of Covariance of Mean of Aerobic Activities and Control Groups on LDL

	YTG	CG	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	65.15	64.39	BG	4.27	1	4.27	0.81
			WG	146.03	28	5.21	
Post-Test Means	71.30	64.77	BG	119.15	1	119.15	28.39*
			WG	117.50	28	4.19	
Adjusted Post-Test Means	71.32	64.75	BG	114.33	1	114.33	26.38*
			WG	116.99	27	4.33	

***** Significant at 0.05 level
(Table Value for 0.05 Level for df 1 & 28 = 4.19)
(Table Value for 0.05 Level for df 1 & 27 = 4.21)
df- Degrees of Freedom

An examination of table 2 indicated that the pretest means of aerobic activities and control groups were 65.15 and 64.39 respectively. The obtained F-ratio for the pre-test was 0.81 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 1 and 28. The post-test means of the aerobic activities and control groups were 71.30 and 64.77 respectively. The obtained F-ratio for the post-test was 28.39 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 28. The adjusted post-test means of the aerobic activities and control groups were 71.32 and 64.75 respectively. The obtained F-ratio for the adjusted post-test means was 26.38 and the table F-ratio was 4.21. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 27. The pre, post and adjusted post test mean values of aerobic activities and control groups, on LDL are graphically represented in the figure 2.

Figure 2: Pre and Post Test Differences of the Aerobic Activities and Control Groups on LDL



Discussion:

The study supports the findings of De Souza (2009) and Suman (2016) found positive improvement on BMI and LDL

Conclusion:

It was observed that the twelve weeks of aerobic activities have significantly impact onBMI and LDL.

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