CHAPTER - IV

RESULTS AND DISCUSSIONS

4.1 OVER VIEW

This chapter deals with the test of significance, level of significance, computation of 't' test, computation of ANCOVA, discussion on finding and discussion on hypothesis were presented. The three groups namely integrated yoga module with satvic diet, integrated yoga module without satvic diet and control group were analysed for the differences in their measures of physical, physiological and psychological variables in relation to pre test, post test and adjusted post test scores.

The purpose of the study was to find out the effect of integrated yoga modules with and without satvic diet on selected physical, physiological and psychological variables among college female students. To achieve the purpose of the present study, sixty college female students from Dhanalakshmi Srinivasan Group of Institutions, Perambalur, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 21 years. The subjects were divided into three equal groups of twenty each. Group I acted as Experimental Group I (Integrated Yoga Module with satvic diet), Group II acted as Experimental Group II (Integrated Yoga Module without Satvic Diet) Group III acted as Control Group. The requirement of the experiment procedures, testing as well as exercise schedule was explained to the subjects so as to get full co-

operation of the effort required on their part and prior to the administration of the study.

Pre test was conducted for all the subjects on selected physical, physiological and psychological variables. This initial test scores formed as pre test scores of the subjects. The groups were assigned as Experimental Group I, Experimental Group II and Control Group in an equivalent manner. Experimental Group I was exposed to integrated yoga module with satvic diet, Experimental Group II was exposed to integrated yoga module without satvic diet and Control Group was not exposed to any experimental training other than their regular daily activities. Experimental groups namely integrated yoga module with satvic diet and integrated yoga module without satvic diet underwent their respective experimental training on six days in a week (Monday to Saturday) for twelve weeks. The duration of experimental training were planned for 45 minutes for 1 to 4 weeks, 60 minutes for 5 to 8 weeks and 75 minutes for 9 to 12 weeks. The subjects reported for experimental training between 6.00 am and 7.15 am.

After the experimental treatment, all the sixty subjects were tested on their physical, physiological and psychological variables. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant; Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypotheses.

4.2 TEST OF SIGNIFICANCE

This is the crucial portion of the thesis, that of arriving at the conclusion by examining the hypothesis. The procedure of testing the hypothesis in accordance with the results obtained in relation to the level of confidence which was fixed at 0.05 levels, was considered necessary for this study. The tests are usually called as the test of significance, since we test whether the difference between the pre-test and post-test scores of the samples are significant or not. In the present study, if they obtained F-ratio was greater than the table F-ratio at 0.05 levels, the hypothesis was accepted to the effect that there existed significant difference between the means of groups compared. And if they obtained, F-ratio was lesser than the table F-ratio at 0.05 level, then the hypothesis was rejected to the effect that there existed significant difference between the means of groups under study.

4.3 LEVEL OF SIGNIFICANCE

To test the obtained results on all the variables, level of significance 0.05 was chosen and considered as sufficient for the study.

4.4 COMPUTATION OF 't' TEST

The primary objective of the paired't' ratio was to describe the differences between the pre-test and post-test means of college female students.

Thus the obtained results were interpreted with earlier studies and presented in this chapter well along with graphical presentations.

TABLE - VII

SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF INTEGRATED YOGA MODULE WITH SATVIC DIET GROUP

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Flexibility	34.59	41.04	6.44	1.79	0.40	16.03*
2	Cardio respiratory endurance	1374.50	1744.50	370.00	77.30	17.28	21.40*
3	Muscular strength	5.75	10.60	4.85	1.18	0.26	18.34*
4	Resting pulse rate	71.95	67.35	4.60	1.23	0.27	16.70*
5	Systolic blood pressure	122.50	117.90	4.60	1.78	0.40	11.50*
6	Diastolic blood pressure	82.55	77.90	4.65	1.30	0.29	15.88*
7	Vital capacity	2.08	2.59	0.51	0.16	0.03	14.12*
8	Breath holding time	32.81	45.86	13.05	2.85	0.63	20.45*
9	Cognitive anxiety	28.50	20.90	7.60	2.60	0.58	13.05*
10	Somatic anxiety	26.45	19.85	6.60	1.87	0.41	15.74*
11	Self confidence	26.45	30.55	4.10	1.44	0.32	12.66*

* Significant at 0.05 level

An examination of table-VII indicates that the obtained‘t’ ratios were 16.03, 21.40, 18.34, 16.70, 11.50, 15.88, 14.12, 20.45, 13.05, 15.74 and 12.66 for flexibility, cardio respiratory endurance, muscular strength, resting pulse rate, systolic blood pressure, diastolic blood pressure, vital capacity, breath holding time, cognitive anxiety, somatic anxiety and self confidence respectively. The obtained‘t’ ratios on the selected variables were found to be greater than the required table value of 2.09 at 0.05 level of significance for 19 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

TABLE - VIII

SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF INTEGRATED YOGA MODULE WITHOUT SATVIC DIET GROUP

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Flexibility	34.18	36.67	2.49	1.66	0.37	6.67*
2	Cardio respiratory endurance	1392.25	1631.75	239.50	64.13	14.34	16.70*
3	Muscular strength	6.05	8.85	2.80	1.76	0.39	7.09*
4	Resting pulse rate	72.15	69.90	2.25	1.11	0.25	9.00*
5	Systolic blood pressure	122.70	120.15	2.55	1.19	0.26	9.57*
6	Diastolic blood pressure	82.95	79.75	3.20	1.28	0.28	11.16*
7	Vital capacity	2.09	2.39	0.30	0.13	0.02	10.02*
8	Breath holding time	33.17	39.64	6.47	3.30	0.73	8.74*
9	Cognitive anxiety	28.00	23.75	4.25	3.24	0.72	5.86*
10	Somatic anxiety	27.10	23.10	4.00	2.22	0.49	8.04*
11	Self confidence	25.90	28.85	2.95	2.25	0.50	5.84*

* Significant at 0.05 level

An examination of table-VIII indicates that the obtained‘t’ ratios were 6.67, 16.70, 7.09, 9.00, 9.57, 11.16, 10.02, 8.74, 5.86, 8.04 and 5.84 for flexibility, cardio respiratory endurance, muscular strength, resting pulse rate, systolic blood pressure, diastolic blood pressure, vital capacity, breath holding time, cognitive anxiety, somatic anxiety and self confidence respectively. The obtained‘t’ ratios on the selected variables were found to be greater than the required table value of 2.09 at 0.05 level of significance for 19 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

TABLE – IX

SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF CONTROL GROUP

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Flexibility	34.03	34.04	0.01	1.64	0.36	0.02
2	Cardio respiratory endurance	1397.00	1406.25	9.25	43.26	9.67	0.95
3	Muscular strength	6.15	6.05	0.10	0.96	0.21	0.46
4	Resting pulse rate	72.25	71.85	0.40	0.99	0.22	1.79
5	Systolic blood pressure	122.10	121.90	0.20	1.50	0.33	0.59
6	Diastolic blood pressure	83.00	82.85	0.15	1.34	0.30	0.49
7	Vital capacity	2.05	2.07	0.02	0.15	0.03	0.73
8	Breath holding time	32.51	32.97	0.46	1.72	0.38	1.19
9	Cognitive anxiety	27.60	28.00	0.40	3.96	0.88	0.45
10	Somatic anxiety	26.80	27.15	0.35	2.58	0.57	0.60
11	Self confidence	25.95	26.50	0.55	1.53	0.34	1.59

* Significant at 0.05 level

An examination of table-IX indicates that the obtained‘t’ ratios were 0.02, 0.95, 0.46, 1.79, 0.59, 0.49, 0.73, 1.19, 0.45, 0.60 and 1.59 for flexibility, cardio respiratory endurance, muscular strength, resting pulse rate, systolic blood pressure, diastolic blood pressure, vital capacity, breath holding time, cognitive anxiety, somatic anxiety and self confidence respectively. The obtained‘t’ ratios on the selected variables were found to be lesser than the required table value of 2.09 at 0.05 level of significance for 19 degrees of freedom. So it was found to be insignificant.

4.5 COMPUTATION OF ANALYSIS OF COVARIANCE

The following tables illustrate the statistical results of the integrated yoga module with satvic diet and integrated yoga module without satvic diet on selected physical, physiological and psychological variables among college female students.

TABLE - X

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON FLEXIBILITY

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	34.59	34.18	34.03	**BG**	3.36	2	1.68	0.72
				WG	131.44	57	2.30	
Post-Test Means	41.04	36.67	34.04	**BG**	499.33	2	249.66	136.55*
				WG	104.21	57	1.82	
Adjusted Post-Test Means	40.95	36.69	34.10	**BG**	466.24	2	233.12	137.47*
				WG	94.96	56	1.69	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.6 RESULTS OF FLEXIBILITY

An examination of table - X indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 34.59, 34.18 and 34.03 respectively. The obtained F-ratio for the pre-test was 0.72 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 41.04, 36.67 and 34.04 respectively. The obtained F-ratio for the post-test was 136.55 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 40.95, 36.69 and 34.10 respectively. The obtained F-ratio for the adjusted post-test means was 137.47 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on flexibility.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XI.

TABLE - XI

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON FLEXIBILITY

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
40.95	36.69	---	4.26*	1.06
40.95	---	34.10	6.85*	
---	36.69	34.10	2.59*	

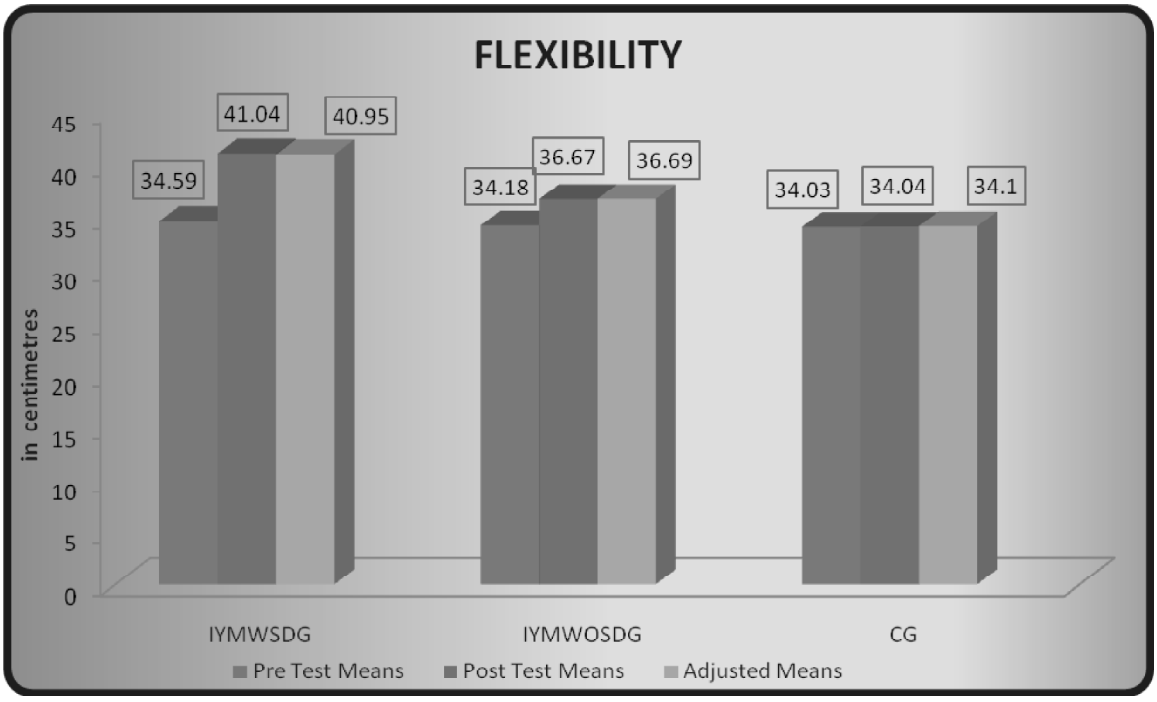
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XI proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (4.26), integrated yoga module with satvic diet and control group (6.85) and integrated yoga module without satvic diet and control group (2.59) at 0.05 level of confidence with the confidence interval value of 1.06.

The pre, post and adjusted means on flexibility were presented through bar diagram for better understanding of the results of this study in Figure-1.

FIGURE - 1

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON FLEXIBILITY



4.6.1 DISCUSSION ON FLEXIBILITY

The results presented in table X showed that obtained adjusted means on flexibility among integrated yoga module with satvic diet group was 40.95 followed by integrated yoga module without satvic diet group with mean value of 36.69, and control group with mean value of 34.10. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.72, 136.55 and 137.47 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved flexibility than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving flexibility of the college female students.

The study conducted by Chandrakumar & Ramesh (2016), Thakur & Bandopadhyay (2012), Asai & Rane (2011), Bharathapriya & Gopinath (2011) proved that there was an improvement in flexibility.

TABLE-XII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON CARDIO RESPIRATORY ENDURANCE

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	1374.50	1392.25	1397.00	**BG**	5625.83	2	2812.91	1.43
				WG	111788.75	57	1961.20	
Post-Test Means	1744.50	1631.75	1406.25	**BG**	1186505.83	2	593252.91	403.51*
				WG	83802.50	57	1470.21	
Adjusted Post-Test Means	1742.60	1632.36	1407.53	**BG**	1124204.34	2	562102.17	385.94*
				WG	81559.80	56	1456.42	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.7 RESULTS OF CARDIO RESPIRATORY ENDURANCE

An examination of table - XII indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 1374.50, 1392.25 and 1397.00 respectively. The obtained F-ratio for the pre-test was 1.43 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 1744.50, 1631.75 and 1406.25 respectively. The obtained F-ratio for the post-test was 403.51 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 1742.60, 1632.36 and 1407.53 respectively. The obtained F-ratio for the adjusted post-test means was 385.94 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree

of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on cardio respiratory endurance.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table XIII.

TABLE - XIII

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON CARDIO RESPIRATORY ENDURANCE

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
1742.60	1632.36	---	110.24*	31.23
1742.60	---	1407.53	335.07*	
---	1632.36	1407.53	224.83*	

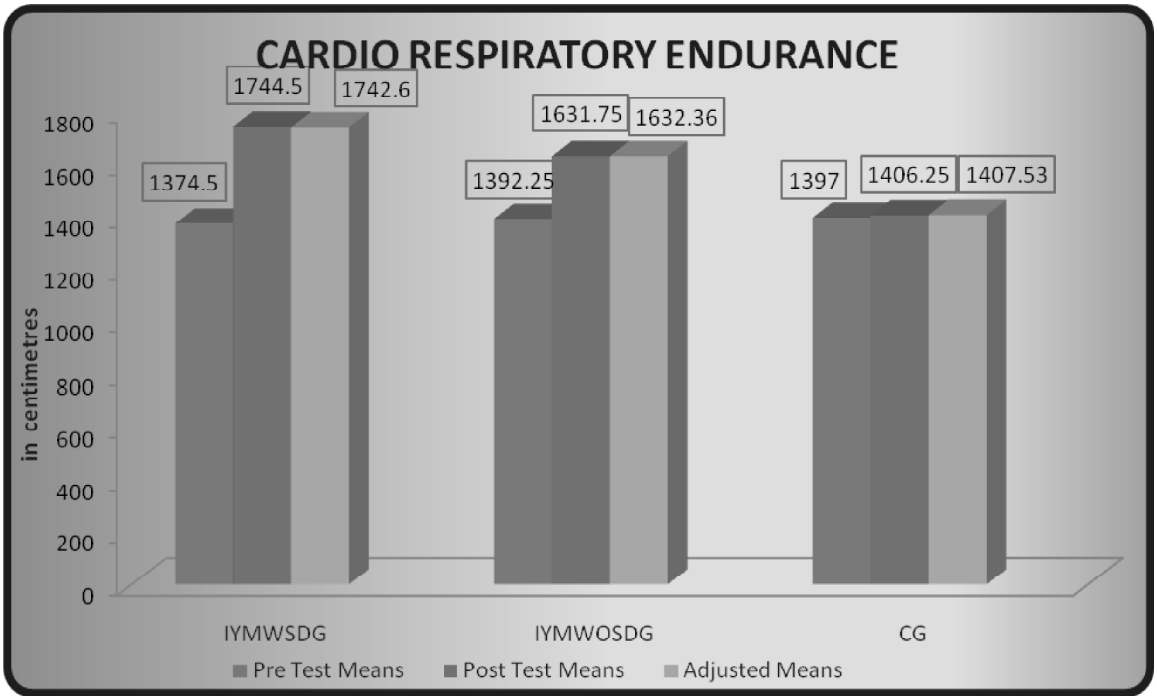
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XIII proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (110.24), integrated yoga module with satvic diet and control group (335.07) and integrated yoga module without satvic diet and control group (224.83) at 0.05 level of confidence with the confidence interval value of 31.23.

The pre, post and adjusted means on cardio respiratory endurance were presented through bar diagram for better understanding of the results of this study in Figure-2.

FIGURE - 2

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON CARDIO RESPIRATORY ENDURANCE



4.7.1 DISCUSSION ON CARDIO RESPIRATORY ENDURANCE

The results presented in table XII showed that obtained adjusted means on cardio respiratory endurance among integrated yoga module with satvic diet group was 1742.60 followed by integrated yoga module without satvic diet group with mean value of 1632.36, and control group with mean value of 1407.53. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.43, 403.51 and 385.94 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved cardio respiratory endurance than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving cardio respiratory endurance of the college female students.

The study conducted by Chandrakumar & Ramesh (2016), Parkhad et al. (2015), Asai & Rane (2011) proved that there was an improvement in cardio respiratory endurance.

TABLE - XIV

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON MUSCULAR STRENGTH

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	5.75	6.05	6.15	**BG**	1.73	2	0.867	0.67
				WG	73.25	57	1.28	
Post-Test Means	10.60	8.85	6.05	**BG**	210.70	2	105.35	80.82*
				WG	74.30	57	1.30	
Adjusted Post-Test Means	10.67	8.83	6.00	**BG**	217.03	2	108.51	89.77*
				WG	67.69	56	1.20	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.8 RESULTS OF MUSCULAR STRENGTH

An examination of table - XIV indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 5.75, 6.05 and 6.15 respectively. The obtained F-ratio for the pre-test was 0.67 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 10.60, 8.85 and 6.05 respectively. The obtained F-ratio for the post-test was 80.82 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 10.67, 8.83 and 6.00 respectively. The obtained F-ratio for the adjusted post-test means was 89.77 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on muscular strength.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XV.

TABLE - XV

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON MUSCULAR STRENGTH

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
10.67	8.83	---	1.84*	0.89
10.67	---	6.00	4.67*	
---	8.83	6.00	2.83*	

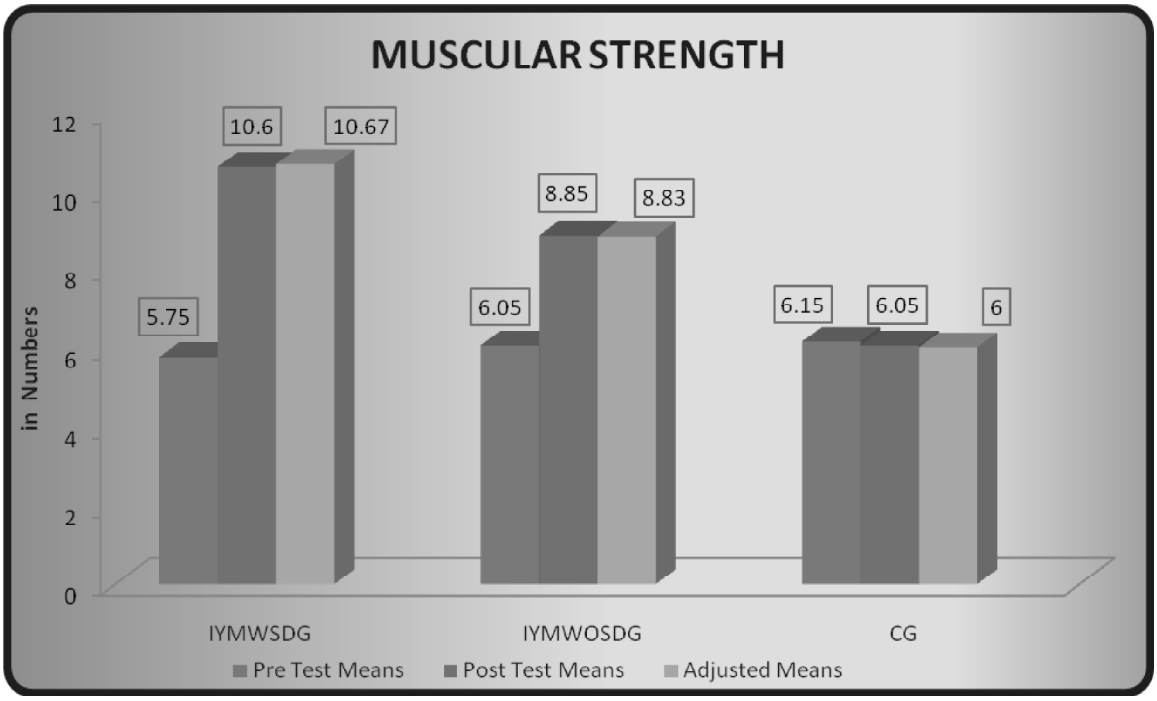
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XV proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (1.84), integrated yoga module with satvic diet and control group (4.67) and integrated yoga module without satvic diet and control group (2.83) at 0.05 level of confidence with the confidence interval value of 0.89.

The pre, post and adjusted means on muscular strength were presented through bar diagram for better understanding of the results of this study in Figure-3.

FIGURE - 3

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATEDYOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON MUSCULAR STRENGTH



4.8.1 DISCUSSION ON MUSCULAR STRENGTH

The results presented in table XIV showed that obtained adjusted means on muscular strength among integrated yoga module with satvic diet group was 10.67 followed by integrated yoga module without satvic diet group with mean value of 8.83, and control group with mean value of 6.00. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.67, 80.82 and 89.77 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved muscular strength than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving muscular strength of the college female students.

The study conducted by Asai & Rane, et al. (2011) proved that there was an improvement in muscular strength.

TABLE - XVI

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON RESTING PULSE RATE

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	71.95	72.15	72.25	**BG**	0.93	2	0.46	1.14
				WG	23.25	57	0.40	
Post-Test Means	67.35	69.90	71.85	**BG**	203.70	2	101.85	149.24*
				WG	38.90	57	0.68	
Adjusted Post-Test Means	67.31	69.90	71.87	**BG**	201.18	2	100.59	148.28*
				WG	37.99	56	0.67	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.9 RESULTS OF RESTING PULSE RATE

An examination of table - XVI indicated that the pretest means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 71.95, 72.15and 72.25 respectively. The obtained F-ratio for the pre-test was 1.14 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 67.35, 69.90 and 71.85 respectively. The obtained F-ratio for the post-test was 149.24 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 67.31, 69.90 and 71.87 respectively. The obtained F-ratio for the adjusted post-test means was 148.28 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on resting pulse rate.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XVII.

TABLE - XVII

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON RESTING PULSE RATE

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
67.31	69.90	---	2.59*	0.67
67.31	---	71.87	4.56*	
---	69.90	71.87	1.97*	

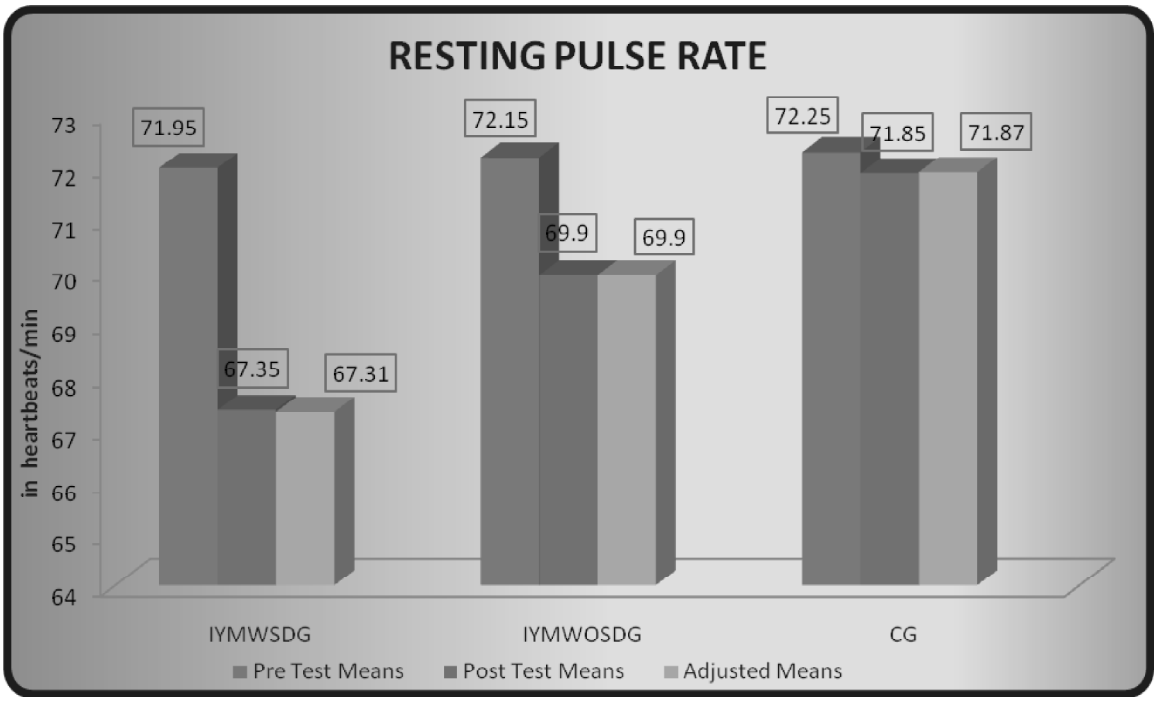
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XVII proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (2.59), integrated yoga module with satvic diet and control group (4.56) and integrated yoga module without satvic diet and control group (1.97) at 0.05 level of confidence with the confidence interval value of 0.67.

The pre, post and adjusted means on resting pulse rate were presented through bar diagram for better understanding of the results of this study in Figure-4.

FIGURE - 4

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON RESTING PULSE RATE



4.9.1 DISCUSSION ON RESTING PULSE RATE

The results presented in table XVI showed that obtained adjusted means on resting pulse rate among integrated yoga module with satvic diet group was 67.31 followed by integrated yoga module without satvic diet group with mean value of 69.90, and control group with mean value of 71.87. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.14, 149.24 and 148.28 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has decreased resting pulse rate than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in decreasing resting pulse rate of the college female students.

The study conducted by Ramesh Kumar & Chandrasekaran (2015), Hagins, et al. (2013), Bhavanani et al. (2012), Ankad, et al. (2011), Indla & Pandurang (2011) proved that there was an improvement in resting pulse rate.

TABLE - XVIII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	122.50	122.70	122.10	**BG**	3.73	2	1.86	1.28
				WG	83.00	57	1.45	
Post-Test Means	117.90	120.15	121.90	**BG**	160.83	2	80.41	76.20*
				WG	60.15	57	1.05	
Adjusted Post-Test Means	117.89	120.13	121.92	**BG**	160.43	2	80.21	75.24*
				WG	59.70	56	1.06	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.10 RESULTS OF SYSTOLIC BLOOD PRESSURE

An examination of table - XVIII indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 122.50, 122.70 and 122.10 respectively. The obtained F-ratio for the pre-test was 1.28 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 117.90, 120.15 and 121.90 respectively. The obtained F-ratio for the post-test was 76.20 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 117.89, 120.13 and 121.92 respectively. The obtained F-ratio for the adjusted post-test means was 75.24 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on systolic blood pressure.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table – XIX.

TABLE - XIX

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON SYSTOLIC BLOOD PRESSURE

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
117.89	120.13	---	2.24*	0.84
117.89	---	121.92	4.03*	
---	120.13	121.92	1.79*	

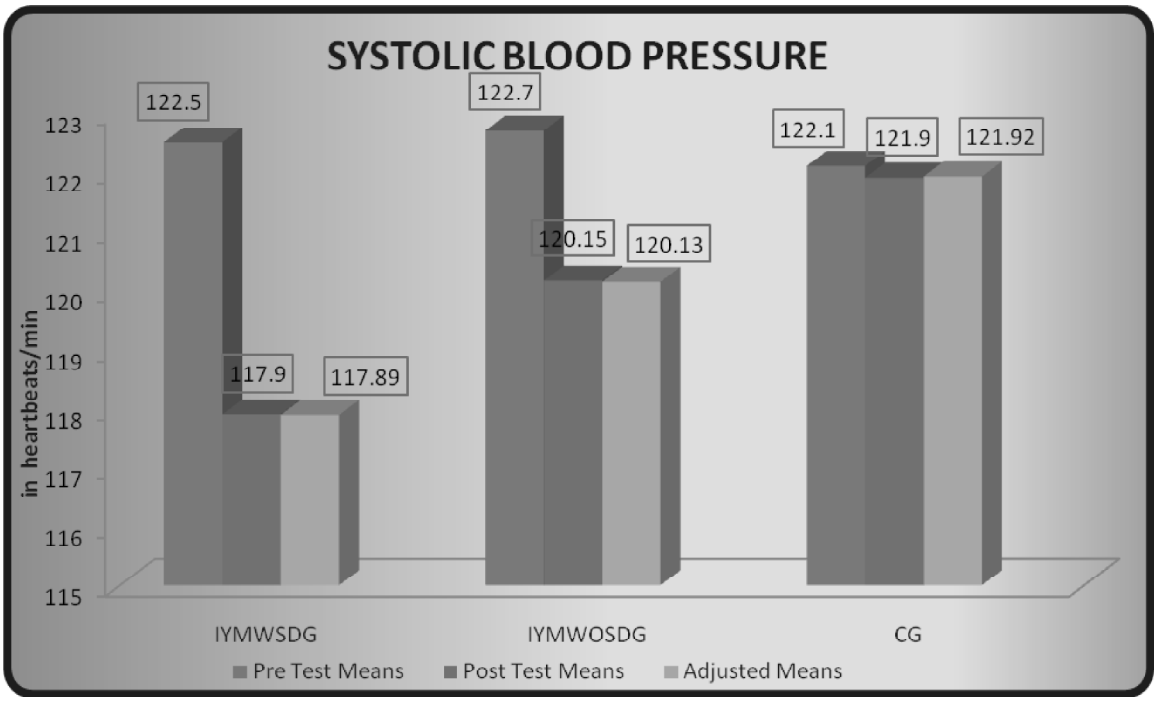
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XIX proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (2.24), integrated yoga module with satvic diet and control group (4.03) and integrated yoga module without satvic diet and control group (1.79) at 0.05 level of confidence with the confidence interval value of 0.84.

The pre, post and adjusted means on systolic blood pressure were presented through bar diagram for better understanding of the results of this study in Figure-5.

FIGURE - 5

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE



4.10.1 DISCUSSION ON SYSTOLIC BLOOD PRESSURE

The results presented in table XVIII showed that obtained adjusted means on systolic blood pressure among integrated yoga module with satvic diet group was 117.89 followed by integrated yoga module without satvic diet group with mean value of 120.13, and control group with mean value of 121.92. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.28, 76.20 and 75.24 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has decreased systolic blood pressure than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in decreasing systolic blood pressure of the college female students.

The study conducted by Ramesh Kumar & Chandrasekaran (2015), Yadav et al. (2016), Hagins, et al. (2013), Bhavanani et al. (2012), Ankad, et al. (2011), Indla & Pandurang (2011) proved that there was a decrease in systolic blood pressure.

TABLE - XX

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	82.55	82.95	83.00	**BG**	2.43	2	1.21	1.33
				WG	51.90	57	0.91	
Post-Test Means	77.90	79.75	82.85	**BG**	250.23	2	125.11	253.79*
				WG	28.10	57	0.49	
Adjusted Post-Test Means	77.85	79.77	82.87	**BG**	249.34	2	124.67	263.58*
				WG	26.48	56	0.47	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.11 RESULTS OF DIASTOLIC BLOOD PRESSURE

An examination of table - XX indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 82.55, 82.95and 83.00 respectively. The obtained F-ratio for the pre-test was 1.33 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 77.90, 79.75 and 82.85 respectively. The obtained F-ratio for the post-test was 253.79 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 77.85, 79.77 and 82.87 respectively. The obtained F-ratio for the adjusted post-test means was 263.58 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on diastolic blood pressure.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXI.

TABLE - XXI

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON DIASTOLIC BLOOD PRESSURE

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
77.85	79.77	---	1.92*	0.56
77.85	---	82.87	5.02*	
---	79.77	82.87	3.10*	

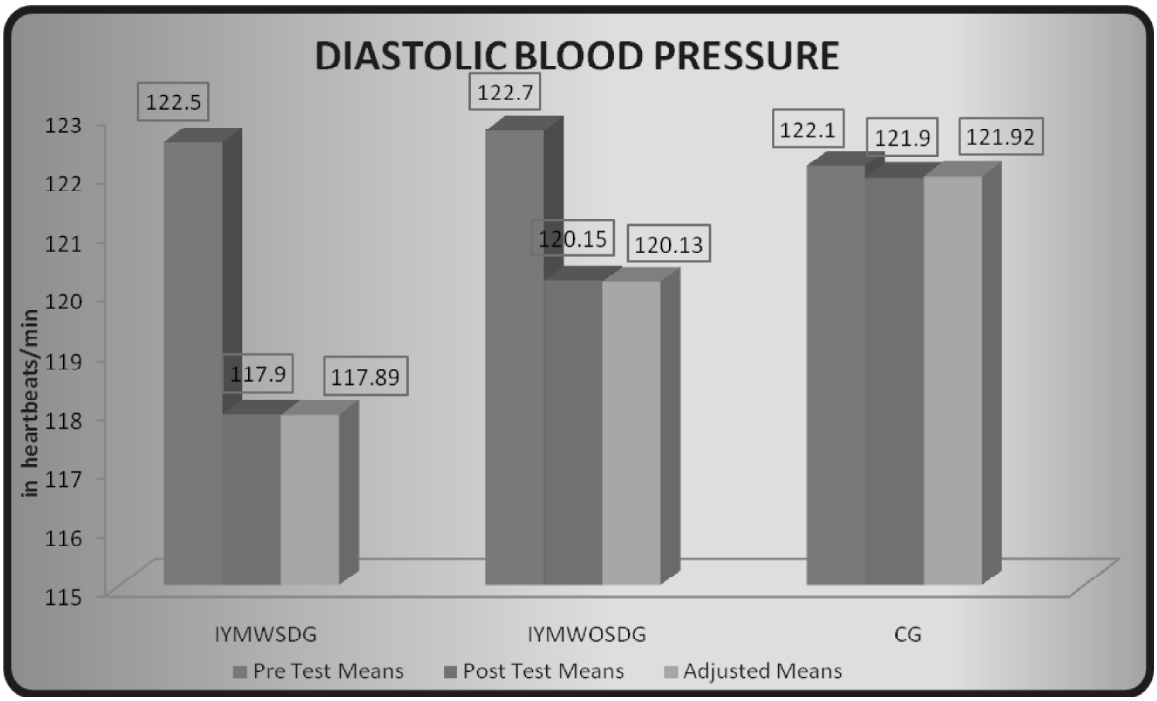
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXI proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (1.92), integrated yoga module with satvic diet and control group (5.02) and integrated yoga module without satvic diet and control group (3.10) at 0.05 level of confidence with the confidence interval value of 0.56.

The pre, post and adjusted means on diastolic blood pressure were presented through bar diagram for better understanding of the results of this study in Figure-6.

FIGURE - 6

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE



4.11.1 DISCUSSION ON DIASTOLIC BLOOD PRESSURE

The results presented in table XX showed that obtained adjusted means on diastolic blood pressure among integrated yoga module with satvic diet group was 77.85 followed by integrated yoga module without satvic diet group with mean value of 79.77, and control group with mean value of 82.87. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.33, 253.79 and 263.58 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has decreased diastolic blood pressure than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in decreasing diastolic blood pressure of the college female students.

The study conducted by Ramesh Kumar & Chandrasekaran (2015), Yadav et al. (2016), Hagins, et al. (2013), Bhavanani et al. (2012), Ankad, et al. (2011), Indla & Pandurang (2011) proved that there was a decrease in diastolic blood pressure.

TABLE - XXII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON VITAL CAPACITY

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	2.08	2.09	2.05	**BG**	0.02	2	0.01	0.60
				WG	0.99	57	0.01	
Post-Test Means	2.59	2.39	2.07	**BG**	2.75	2	1.37	188.31*
				WG	0.41	57	0.007	
Adjusted Post-Test Means	2.59	2.39	2.07	**BG**	2.69	2	1.34	183.10*
				WG	0.41	56	0.007	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.12 RESULTS OF VITAL CAPACITY

An examination of table - XXII indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 2.08, 2.09 and 2.05 respectively. The obtained F-ratio for the pre-test was 0.60 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 2.59, 2.39 and 2.07 respectively. The obtained F-ratio for the post-test was 188.31 and the table F-ratio was 3.15. Hence post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 2.59, 2.39 and 2.07 respectively. The obtained F-ratio for the adjusted post-test means was 183.10 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on vital capacity.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXIII.

TABLE - XXIII

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON VITAL CAPACITY

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
2.59	2.39	---	0.20*	0.06
2.59	---	2.07	0.52*	
---	2.39	2.07	0.32*	

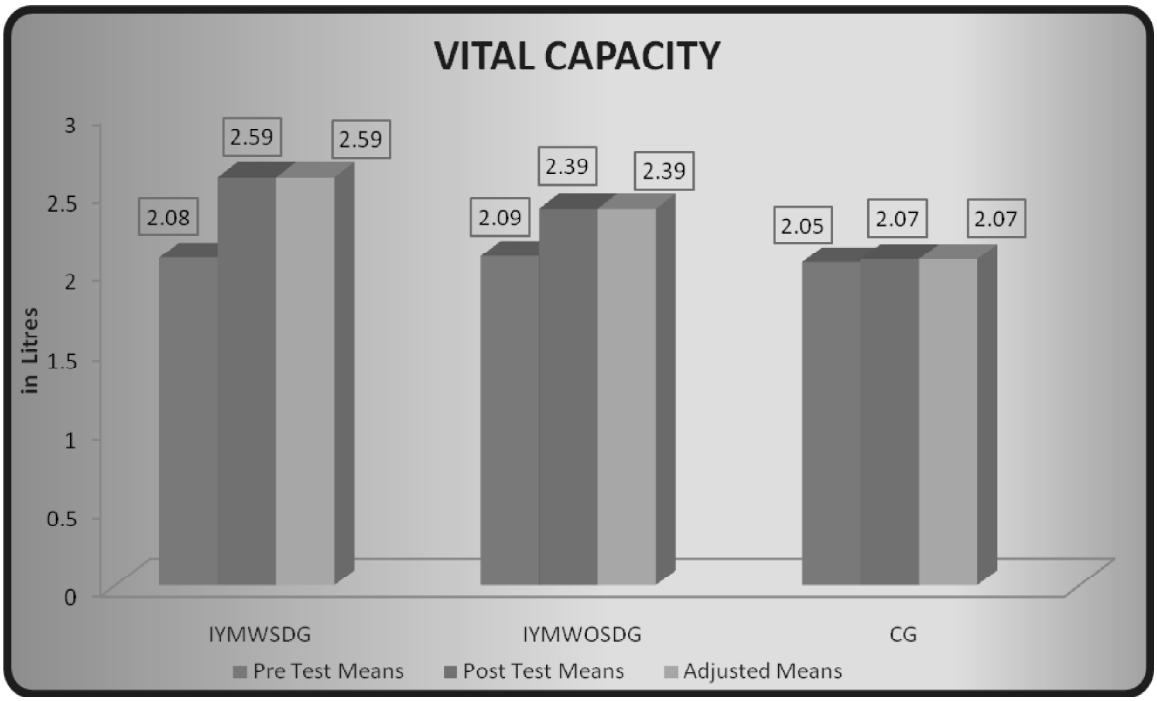
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXIII proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (0.20), integrated yoga module with satvic diet and control group (0.52) and integrated yoga module without satvic diet and control group (0.32) at 0.05 level of confidence with the confidence interval value of 0.06.

The pre, post and adjusted means on vital capacity were presented through bar diagram for better understanding of the results of this study in Figure-7.

FIGURE - 7

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON VITAL CAPACITY



4.12.1 DISCUSSION ON VITAL CAPACITY

The results presented in table XXII showed that obtained adjusted means on vital capacity among integrated yoga module with satvic diet group was 2.59 followed by integrated yoga module without satvic diet group with mean value of 2.39, and control group with mean value of 2.07. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.60, 188.31 and 183.10 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved vital capacity than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving vital capacity of the college female students.

The study conducted by Senthilkumar (2015) proved that there was an improvement in vital capacity.

TABLE - XXIV

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON BREATH HOLDING TIME

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	32.81	33.17	32.51	**BG**	4.30	2	2.15	1.11
				WG	110.32	57	1.93	
Post-Test Means	45.86	39.64	32.97	**BG**	1660.89	2	830.44	168.30*
				WG	281.25	57	4.93	
Adjusted Post-Test Means	45.85	39.68	32.93	**BG**	1656.78	2	828.39	165.94*
				WG	279.55	56	4.99	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.13 RESULTS OF BREATH HOLDING TIME

An examination of table - XXIV indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 32.81, 33.17 and 32.51 respectively. The obtained F-ratio for the pre-test was 1.11 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 45.86, 39.64 and 32.97 respectively. The obtained F-ratio for the post-test was 168.30 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 45.85, 39.68 and 32.93 respectively. The obtained F-ratio for the adjusted post-test means was 165.94 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on breath holding time.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXV.

TABLE - XXV

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON BREATH HOLDING TIME

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
45.85	39.68	---	6.17*	1.82
45.85	---	32.93	12.92*	
---	39.68	32.93	6.75*	

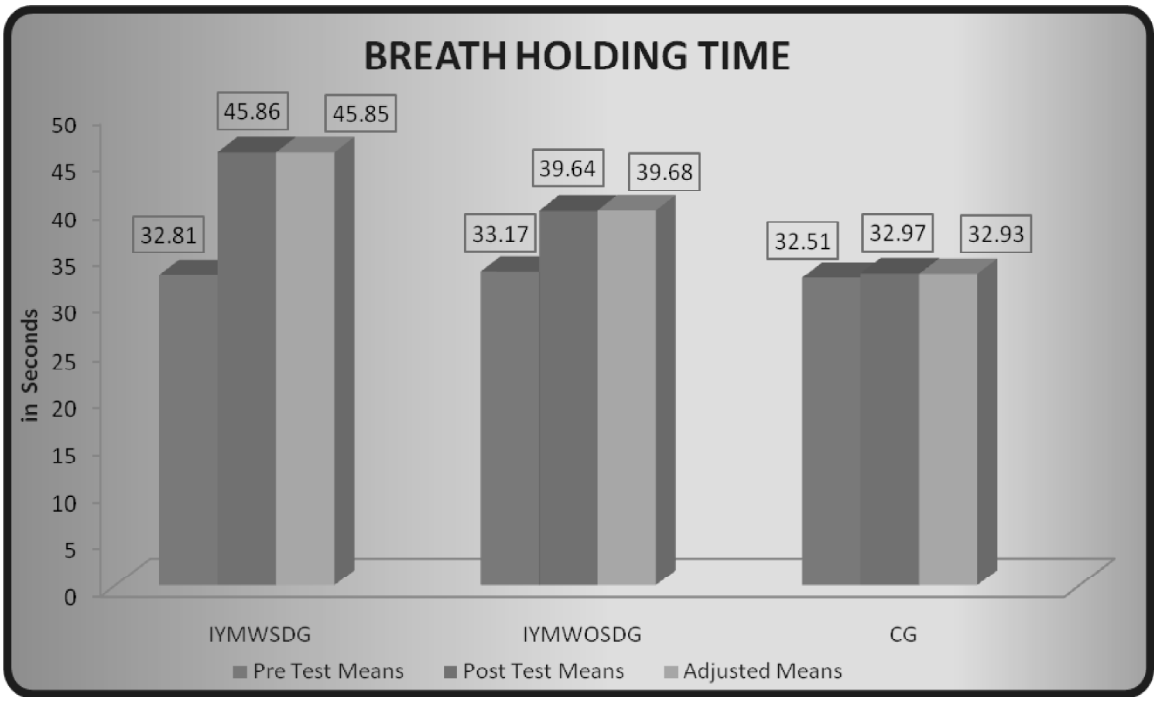
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXV proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (6.17), integrated yoga module with satvic diet and control group (12.92) and integrated yoga module without satvic diet and control group (6.75) at 0.05 level of confidence with the confidence interval value of 1.82.

The pre, post and adjusted means on breath holding time were presented through bar diagram for better understanding of the results of this study in Figure-8.

FIGURE - 8

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON BREATH HOLDING TIME



4.13.1 DISCUSSION ON BREATH HOLDING TIME

The results presented in table XXIV showed that obtained adjusted means on breath holding time among integrated yoga module with satvic diet group was 45.85 followed by integrated yoga module without satvic diet group with mean value of 39.68, and control group with mean value of 32.93. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.11, 168.30 and 165.94 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved breath holding time than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving breath holding time of the college female students.

The study conducted by Rajakumar (2010), Padmadevi (2007) proved that there was an improvement in breath holding time.

TABLE - XXVI

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON COGNITIVE ANXIETY

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	28.50	28.00	27.60	**BG**	8.13	2	4.06	0.67
				WG	343.80	57	6.03	
Post-Test Means	20.90	23.75	28.00	**BG**	510.63	2	255.31	56.50*
				WG	257.55	57	4.51	
Adjusted Post-Test Means	20.91	23.74	27.98	**BG**	494.52	2	247.26	53.86*
				WG	257.05	56	4.59	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.14 RESULTS OF COGNITIVE ANXIETY

An examination of table - XXVI indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 28.50, 28.00 and 27.60 respectively. The obtained F-ratio for the pre-test was 0.67 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 20.90, 23.75 and 28.00 respectively. The obtained F-ratio for the post-test was 56.50 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 20.91, 23.74 and 27.98 respectively. The obtained F-ratio for the adjusted post-test means was 53.86 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on cognitive anxiety.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXVII.

TABLE - XXVII

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON COGNITIVE ANXIETY

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
20.91	23.74	---	2.83*	1.73
20.91	---	27.98	7.07*	
---	23.74	27.98	4.24*	

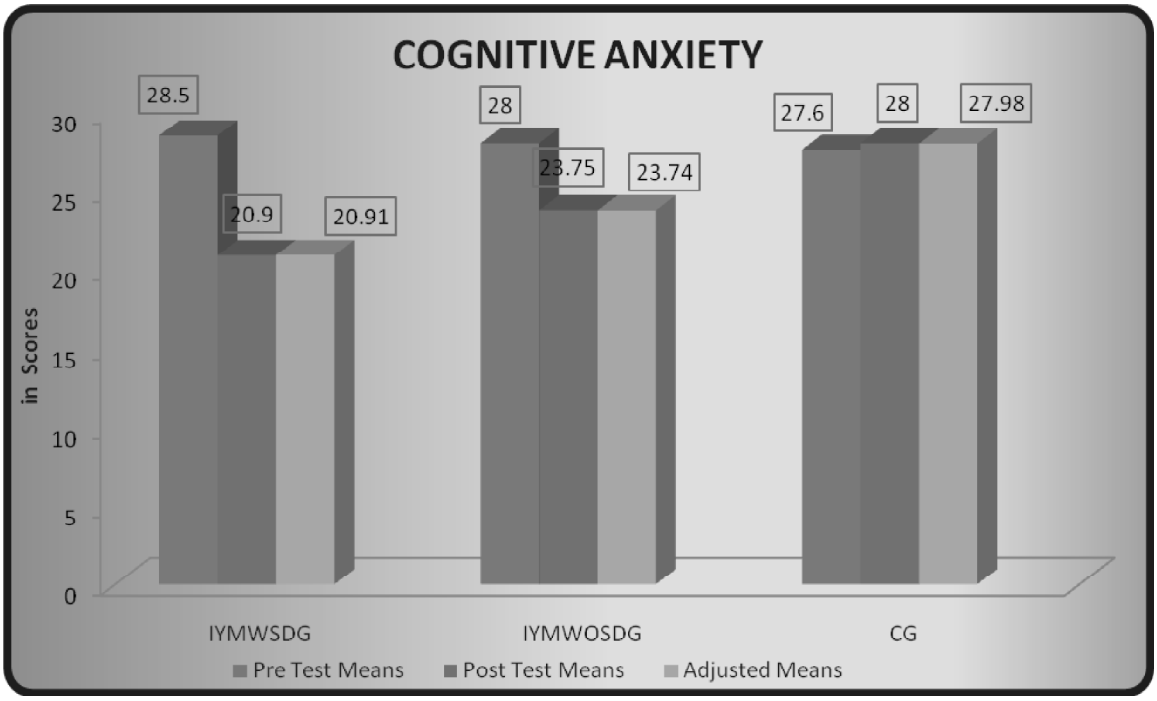
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXVII proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (2.83), integrated yoga module with satvic diet and control group (7.07) and integrated yoga module without satvic diet and control group (4.24) at 0.05 level of confidence with the confidence interval value of 1.73.

The pre, post and adjusted means on cognitive anxiety were presented through bar diagram for better understanding of the results of this study in Figure-9.

FIGURE - 9

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON COGNITIVE ANXIETY



4.14.1 DISCUSSION ON COGNITIVE ANXIETY

The results presented in table XXVI showed that obtained adjusted means on cognitive anxiety among integrated yoga module with satvic diet group was 20.91 followed by integrated yoga module without satvic diet group with mean value of 23.74, and control group with mean value of 27.98. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.67, 56.50 and 53.86 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved cognitive anxiety than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving cognitive anxiety of the college female students.

The study conducted by Hanton, et al. (2004), Li & Chi (2007), Padmadevi (2007) proved that there was an improvement in cognitive anxiety.

TABLE - XXVIII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF IN INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SOMATIC ANXIETY

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	26.45	27.10	26.80	**BG**	4.23	2	2.11	0.80
				WG	149.95	57	2.63	
Post-Test Means	19.85	23.10	27.15	**BG**	535.03	2	267.51	140.02*
				WG	108.90	57	1.91	
Adjusted Post-Test Means	19.81	23.13	27.15	**BG**	535.88	2	267.94	139.52*
				WG	107.54	56	1.92	

B- Between Group Means
W- Within Group Means
df- Degrees of Freedom

* - Significant
(Table Value for 0.05 Level for df 2 & 57 = 3.15)
(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.15 RESULTS OF SOMATIC ANXIETY

An examination of table - XXVIII indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 26.45, 27.10 and 26.80 respectively. The obtained F-ratio for the pre-test was 0.80 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 19.85, 23.10 and 27.15 respectively. The obtained F-ratio for the post-test was 140.02 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 19.81, 23.13 and 27.15 respectively. The obtained F-ratio for the adjusted post-test means was 139.52 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on somatic anxiety.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXIX.

TABLE - XXIX

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON SOMATIC ANXIETY

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
19.81	23.13	---	3.32*	1.13
19.81	---	27.15	7.34*	
---	23.13	27.15	4.02*	

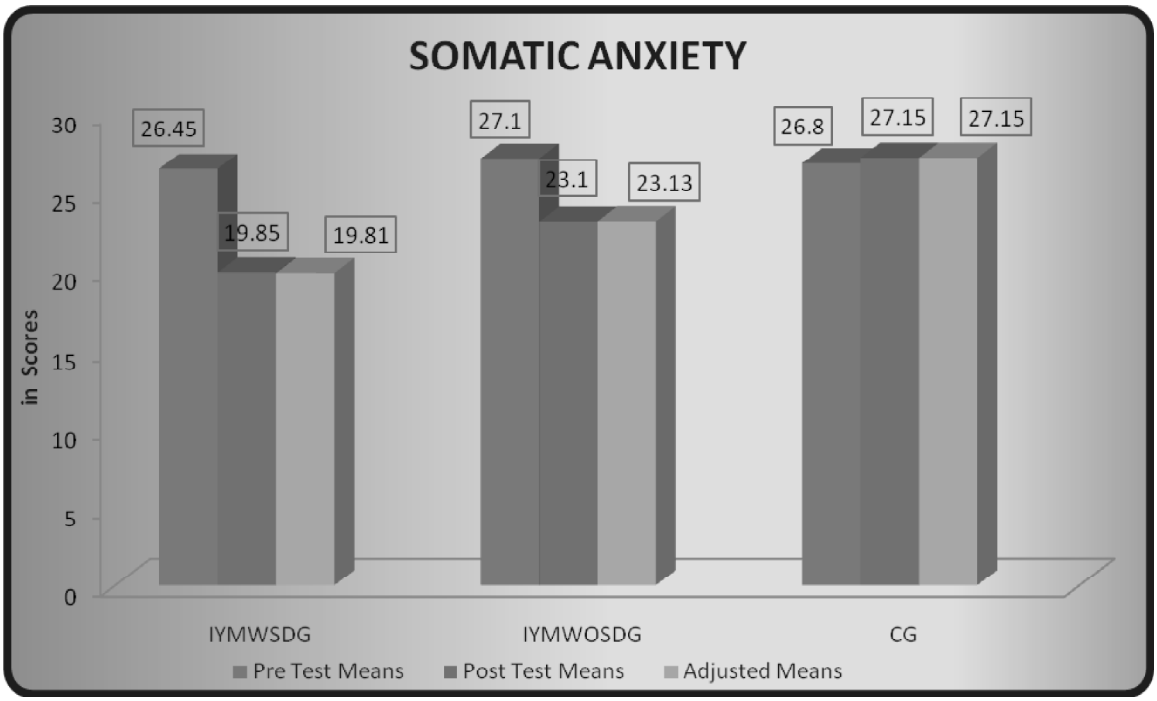
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXIX proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (3.32), integrated yoga module with satvic diet and control group (7.34) and integrated yoga module without satvic diet and control group (4.02) at 0.05 level of confidence with the confidence interval value of 1.13.

The pre, post and adjusted means on somatic anxiety were presented through bar diagram for better understanding of the results of this study in Figure-10.

FIGURE - 10

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SOMATIC ANXIETY



4.15.1 DISCUSSION ON SOMATIC ANXIETY

The results presented in table XXVIII showed that obtained adjusted means on somatic anxiety among integrated yoga module with satvic diet group was 19.81 followed by integrated yoga module without satvic diet group with mean value of 23.13, and control group with mean value of 27.15. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.80, 140.02 and 139.52 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved somatic anxiety than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving somatic anxiety of the college female students.

The study conducted by Hanton, et al. (2004), Li & Chi (2007), Padmadevi (2007) proved that there was an improvement in somatic anxiety.

TABLE - XXX

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SELF CONFIDENCE

	Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	26.45	25.90	25.95	**BG**	3.70	2	1.85	1.32
				WG	79.70	57	1.39	
Post-Test Means	30.55	28.85	26.50	**BG**	165.43	2	82.71	41.17*
				WG	114.50	57	2.00	
Adjusted Post-Test Means	30.52	28.86	26.51	**BG**	158.30	2	79.15	38.88*
				WG	114.01	56	2.03	

B- Between Group Means

W- Within Group Means

df- Degrees of Freedom

* - Significant

(Table Value for 0.05 Level for df 2 & 57 = 3.15)

(Table Value for 0.05 Level for df 2 & 56 = 3.16)

4.15 RESULTS OF SELF CONFIDENCE

An examination of table - XXX indicated that the pre test means of integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 26.45, 25.90 and 25.95 respectively. The obtained F-ratio for the pre-test was 1.32 and the table F-ratio was 3.15. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that there were no significant difference between the experimental and control groups indicating that the process of randomization of the groups was perfect while assigning the subjects to groups.

The post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 30.55, 28.85 and 26.50 respectively. The obtained F-ratio for the post-test was 41.17 and the table F-ratio was 3.15. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 57. This proved that the differences between the post test means of the subjects were significant.

The adjusted post-test means of the integrated yoga module with satvic diet, integrated yoga module without satvic diet and control groups were 30.52, 28.86 and 26.51 respectively. The obtained F-ratio for the adjusted post-test means was 38.88 and the table F-ratio was 3.16. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 56. This proved that there was a significant difference among the means due to the experimental trainings on self confidence.

Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's post hoc test. The results were presented in Table-XXXI.

TABLE - XXXI

THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED POST TEST PAIRED MEANS ON SELF CONFIDENCE

Adjusted Post-test means			Mean Difference	Required CI
Integrated yoga module with satvic diet	Integrated yoga module without satvic diet	Control Group		
30.52	28.86	---	1.66*	1.16
30.52	---	26.51	4.01*	
---	28.86	26.51	2.35*	

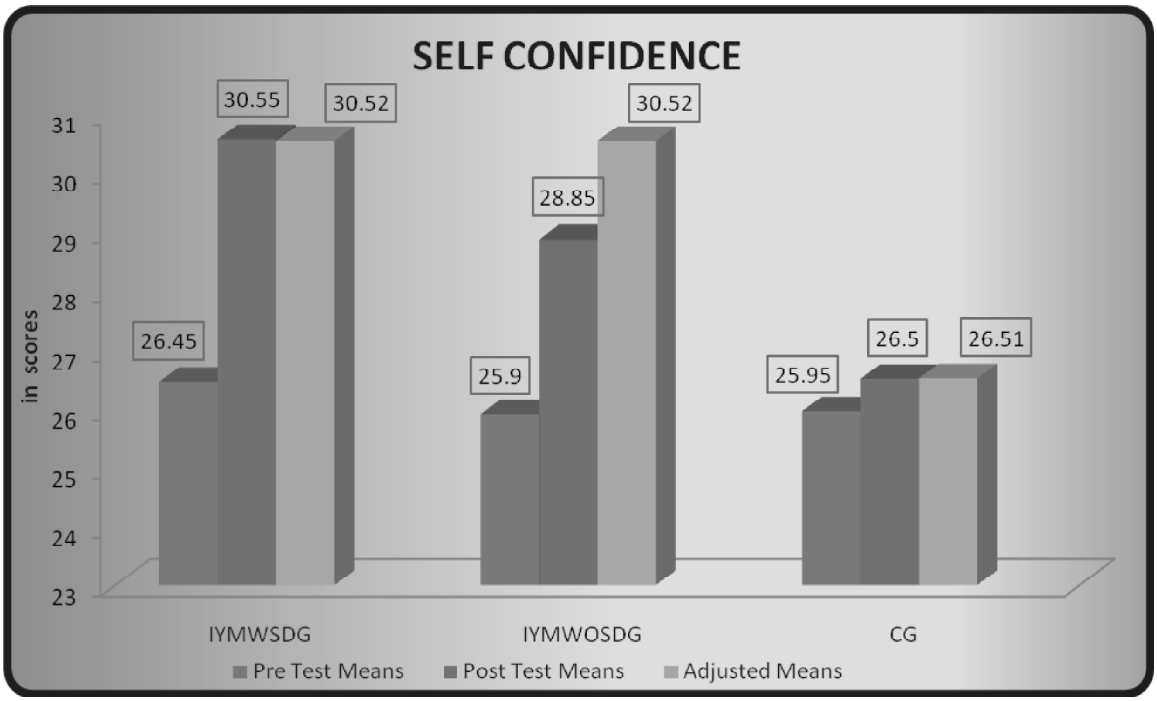
**** Significant at 0.05 level of confidence***

The multiple comparisons showed in Table XXXI proved that there existed significant differences between the adjusted means of integrated yoga module with satvic diet and integrated yoga module without satvic diet group (1.66), integrated yoga module with satvic diet and control group (4.01) and integrated yoga module without satvic diet and control group (2.35) at 0.05 level of confidence with the confidence interval value of 1.16.

The pre, post and adjusted means on self confidence were presented through bar diagram for better understanding of the results of this study in Figure-11.

FIGURE - 11

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE, INTEGRATED YOGA MODULE WITH SATVIC DIET, INTEGRATED YOGA MODULE WITHOUT SATVIC DIET AND CONTROL GROUPS ON SELF CONFIDENCE



4.15.1 DISCUSSION ON SELF CONFIDENCE

The results presented in table XXX showed that obtained adjusted means on self confidence among integrated yoga module with satvic diet group was 30.52 followed by integrated yoga module without satvic diet group with mean value of 28.86, and control group with mean value of 26.51. The differences among pretest scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 1.32, 41.17 and 38.88 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on post test and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.15 and 3.16. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training of integrated yoga module with satvic diet and integrated yoga module without satvic diet has improved self confidence than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences exist between the experimental groups, clearly indicating that integrated yoga module with satvic diet was significantly better than integrated yoga module without satvic diet in improving self confidence of the college female students.

The study conducted by Hanton, et al. (2004), Li & Chi (2007), Padmadevi (2007) proved that there was an improvement in self confidence.

4.16 DISCUSSION ON THE HYPOTHESES

1. First hypothesis stated that that the integrated yoga modules with satvic diet would significantly improve the selected physical, physiological and psychological variables among college female students.

   The findings of the study showed that there were significant improvement in selected physical, physiological and psychological variables among college female students from their baseline to post training due to influence of integrated yoga module with satvic diet among the college female students. Hence the first hypothesis was accepted on the above said variables.

2. Second hypothesis stated that the integrated yoga modules without satvic diet would significantly improve the selected physical, physiological and psychological variables among college female students.

   The findings of the study showed that there were significant improvement in selected physical, physiological and psychological variables among college female students from their baseline to post training due to influence of integrated yoga module without satvic diet among the college female students. Hence the second hypothesis was accepted on the above said variables.

3. Third hypothesis stated that integrated yoga modules with satvic diet would significantly improve the selected physical, physiological and psychological variables among college female students than the integrated yoga modules without satvic diet and control group.

The findings of the study showed that integrated yoga modules with satvic diet showed significant differences in selected physical, physiological and psychological variables than the integrated yoga module without satvic diet group and control group among the college female students. Hence the third research hypothesis was accepted on the above said variables.