CHAPTER - IV

ANALYSIS OF DATA AND RESULTS OF STUDY

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 hypotheses. The three groups namely Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were analyzed for the differences in their measures of physiological, hematological and psychological variables in relation to pretest, posttest and adjusted post test scores.

The purpose of the study was to find out the effect of different yogic practices on selected physiological, hematological and psychological variables among adolescent boys. To achieve the purpose of the present study, forty five adolescent boys from Sreevatsa Viswanathan Vivekananda Vidyalaya Junior colleges, chitlapakkam, chennai were selected as subjects at random and their ages ranged from 13 to 17 years. The subjects (N=45) were randomly assigned to three equal groups of fifteen students each. The requirement of the experiment procedures, testing as well as different yogic practices schedule were 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.

Pretest was conducted for all the subjects on selected physiological, hematological and psychological variables. The initial test scores formed as pretest 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 Satyananda Saraswathi yoga practices, Experimental Group II was exposed to Maharishi Mahesh yoga practices and Control Group was not exposed to any experimental training other than their regular daily activities. The duration of experimental period was 12 weeks. After the experimental treatment, all the forty five subjects were tested on their physiological, hematological and psychological

variables. The final test scores formed the post test scores of the subjects. The pretest and post test scores were subjected to statistical analysis using dependent 't' test and Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, if any. 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 level, 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 the obtained F-ratio was greater than the table F-ratio at 0.05 level, the hypothesis was accepted to the effect that there existed significant difference between the means of groups compared. And if the 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 adolescent boys.

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

TABLE - IV

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

S.N	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Pulse Rate	74.40	70.53	3.87	2.19	0.56	6.80*
2	Systolic Blood Pressure	122.20	118.46	3.73	2.63	0.67	5.49*
3	Diastolic Blood Pressure	81.73	78.00	3.73	1.33	0.34	10.83*
4	RBC	4.07	4.42	0.34	0.18	0.04	7.13*
5	Hemoglobin	13.56	14.56	1.00	0.38	0.09	10.26*
6	WBC	5726.66	6780.00	1053.33	666.40	172.06	6.12*
7	Self-Concept	161.66	176.00	14.33	15.35	3.96	3.61*
8	Self Esteem	18.26	21.73	3.46	3.75	0.97	3.57*
9	Anxiety	17.53	14.33	3.20	2.80	0.72	4.41*

* Significant at 0.05 level

An examination of table-IV indicates that the obtained 't' ratios were 6.80, 5.49, 10.83, 7.13, 10.26, 6.12, 3.61, 3.57 and 4.41 for pulse rate, systolic blood pressure, diastolic blood pressure, RBC, hemoglobin, WBC, self-concept, self-esteem and anxiety respectively. The obtained 't' ratios on the selected variables were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that the differences were statistically significant and explained its effects positively.

TABLE – V

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

MAHARISHI MAHESH YOGA GROUP

S.N	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Pulse Rate	74.86	71.06	3.80	1.61	0.41	9.12*
2	Systolic Blood Pressure	122.06	118.86	3.20	1.65	0.42	4.11*
3	Diastolic Blood Pressure	81.86	78.66	3.20	1.08	0.27	2.60*
4	RBC	4.00	4.29	0.28	0.19	0.05	5.57*
5	Hemoglobin	13.62	14.46	0.84	0.46	0.11	7.05*
6	WBC	5560.00	6580.00	1020.00	729.18	188.27	5.41*
7	Self-Concept	161.13	175.13	14.00	15.46	3.99	3.50*
8	Self Esteem	17.26	19.86	2.60	2.92	0.75	3.44*
9	Anxiety	18.33	15.80	2.53	1.64	0.42	5.97*

* Significant at 0.05 level

An examination of table-V indicates that the obtained 't' ratios were 9.12, 4.11, 2.60, 5.57, 7.05, 5.41, 3.50, 3.44 and 5.97 for pulse rate, systolic blood pressure, diastolic blood pressure, RBC, hemoglobin, WBC, self-concept, self-esteem and anxiety respectively. The obtained 't' ratios on the selected variables were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that the differences were statistically significant and explained its effects positively.

TABLE – VI

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

S. No.	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Pulse Rate	74.33	74.20	0.13	0.63	0.16	0.80
2	Systolic Blood Pressure	121.66	121.33	0.33	1.04	0.27	1.23
3	Diastolic Blood Pressure	81.00	80.80	0.20	0.77	0.20	1.00
4	RBC	4.07	4.08	0.01	0.05	0.01	1.09
5	Hemoglobin	13.70	13.77	0.07	0.30	0.07	0.92
6	WBC	5786.66	5793.33	6.66	96.11	24.81	0.26
7	Self-Concept	163.33	163.53	0.20	1.61	0.41	0.48
8	Self Esteem	17.73	17.93	0.20	1.52	0.39	0.50
9	Anxiety	18.86	18.73	0.13	2.03	0.52	0.25

Insignificant at 0.05 level

An examination of table-VI indicates that the obtained 't' ratios were 0.80, 1.23, 1.00, 1.09, 0.92, 0.26, 0.48, 0.50 and 0.25 for pulse rate, systolic blood pressure, diastolic blood pressure, RBC, hemoglobin, WBC, self-concept, self-esteem and anxiety respectively. The obtained 't' ratios on the selected variables were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 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 SatyanandaSaraswathi yoga and Maharishi Mahesh yoga groups on selected physiological, hematological and psychological variables among adolescent boys.

TABLE – VII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEANS OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON PULSE RATE

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	74.40	74.86	74.33	BG	2.53	2	1.26	0.66
				WG	80.66	42	1.92	
Post-Test Means	70.53	71.06	74.20	BG	117.73	2	58.86	50.38*
				WG	49.06	42	1.16	
Adjusted Post-Test Means	70.55	71.02	74.22	BG	118.92	2	59.46	50.95*
				WG	47.84	41	1.16	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.6 RESULTS OF PULSE RATE

An examination of table - VII indicated that the pretest means of SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 74.40, 74.86 and 74.33 respectively. The obtained F-ratio for the pre-test was 0.66 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 70.53, 71.06 and 74.20 respectively. The obtained F-ratio for the post-test was 50.38 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 70.55, 71.02 and 74.22 respectively. The obtained F-ratio for the adjusted post-test means was 50.95 and the table F-ratio was 3.23. Hence, the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the packages of experimental training on pulse rate.

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

TABLE – VIII

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

Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
70.55	71.02	---	0.47	
70.55	---	74.22	3.67*	0.99
---	71.02	74.22	3.20*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table VIII proved that there existed significant differences between the adjusted means of SatyanandaSaraswathi yoga with control group (3.67) and Maharishi Mahesh yoga with control group (3.20). There was no significant difference between SatyanandaSaraswathiyoga and Maharishi Mahesh yoga (0.47) at 0.05 level of confidence with the confidence interval value of 0.99.

The pre, post and adjusted means on pulse rate are 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 SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH

YOGA AND CONTROL GROUPS ON PULSE RATE
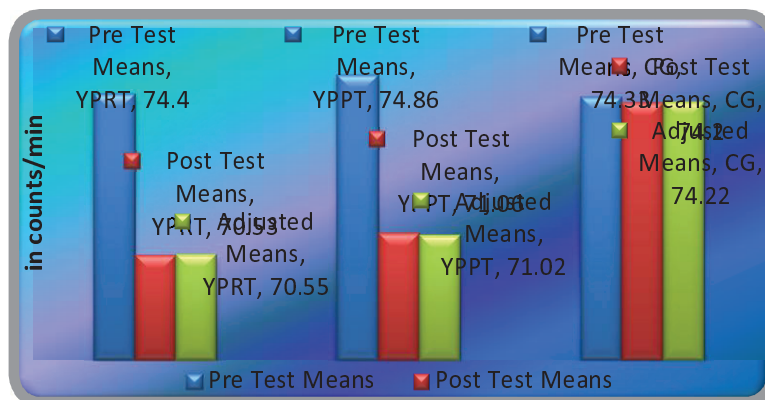
4.6.1 DISCUSSION ON PULSE RATE

The results presented in table VIII showed that the obtained adjusted means on pulse rate among SatyanandaSaraswathi yoga group was 70.55 followed by Maharishi Mahesh yoga group with mean value of 71.02, and control group with mean value of 74.22. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.66, 50.38 and 50.95 respectively. It was found that the obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that due to twelve weeks training SatyanandaSaraswathi yoga and Maharishi Mahesh yoga had decreased pulse rate than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that significant differences existed between the experimental groups, clearly indicating that SatyanandaSaraswathi yoga was better than Maharishi Mahesh yoga in decreasing pulse rate of the adolescent boys. The studies conducted by **Kewal Krishnan and Sudhir Kumar Sharma (2009)**proved that there was a decrease in pulse rate due to yoga practices.

TABLE-IX

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	122.20	122.06	121.66	BG	2.31	2	1.15	0.16
				WG	296.66	42	7.06	
Post-Test Means	118.46	118.86	121.33	BG	72.31	2	36.15	9.56*
				WG	158.80	42	3.78	
Adjusted Post-Test Means	118.35	118.82	121.49	BG	85.45	2	42.73	21.76*
				WG	80.51	41	1.96	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.

4.7 RESULTS OF SYSTOLIC BLOOD PRESSURE

An examination of table - IX indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 122.20, 122.06 and 121.66 respectively. The obtained F-ratio for the pre-test was 0.16 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that there were no significant differences 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 118.46, 118.86 and 121.33 respectively. The obtained F-ratio for the post-test was 9.56 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 118.35, 118.82 and 121.49 respectively. The obtained F-ratio for the adjusted post-test means was 21.76 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was significant difference among the means due to the packages of both yogic practices 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 X.

TABLE - X

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
SSYG	MMYG	Control Group		
118.35	118.82	---	0.47	
118.35	---	121.49	3.14*	1.29
---	118.82	121.49	2.67*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table X proved that there existed significant differences between the adjusted means of SatyanandaSaraswathi yoga with control group (3.14), Maharishi Mahesh yoga with control group (2.67). There was no significant difference between SatyanandaSaraswathiyoga and Maharishi Mahesh yoga (0.47) at 0.05 level of confidence with the confidence interval value of 1.29.

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-2.

FIGURE - 2

**PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH**

**YOGA AND CONTROL GROUPS ON SYSTOLIC
BLOOD PRESSURE**
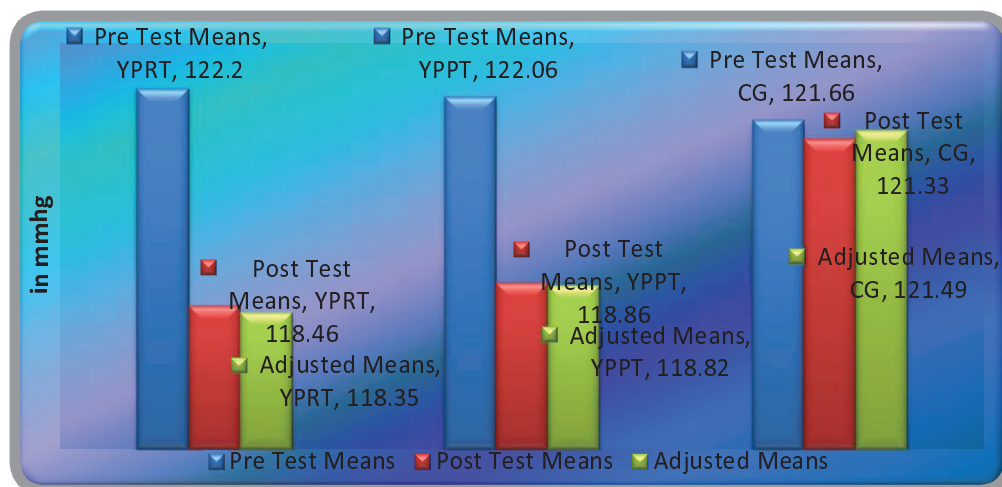
4.7.1 DISCUSSION ON SYSTOLIC BLOOD PRESSURE

The results presented in table X showed that the obtained adjusted means on systolic blood pressure among SatyanandaSaraswathi yoga group was 118.35 followed by Maharishi Mahesh yoga group with mean value of 118.82, and control group with mean value of 121.49. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.16, 9.56 and 21.76 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga packages had 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 were significant differences between the experimental groups, clearly indicating that Satyananda Saraswathi yoga was better than Maharishi Mahesh yoga in decreasing systolic blood pressure of the adolescent boys. The studies conducted by**Begum.,(2013), Sathyanarayana., (2013), and Swaroop., (1997)** proved that there was a decrease in systolic blood pressure due to the yoga practices.

TABLE – XI

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	81.73	81.86	81.00	BG	6.53	2	3.26	2.12
				WG	64.66	42	1.54	
Post-Test Means	78.00	78.66	80.80	BG	64.17	2	32.08	18.78*
				WG	71.73	42	1.70	
Adjusted Post-Test Means	77.86	78.44	81.15	BG	84.94	2	42.47	40.78*
				WG	42.69	41	1.04	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.8 RESULTS OF DIASTOLIC BLOOD PRESSURE

An examination of table - XI indicated that the pretest means of SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 81.73, 81.86 and 81.00 respectively. The obtained F-ratio for the pre-test was 2.12 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 78.00, 78.66 and 80.80 respectively. The obtained F-ratio for the post-test was 18.78 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the SatyanandaSaraswathi yoga, Maharishi Mahesh yoga and control groups were 77.86, 78.44 and 81.15 respectively. The obtained F-ratio for the adjusted post-test means was 40.78 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. 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-XII.

TABLE - XII

**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
SSYG	MMYG	Control Group		
77.86	78.44	---	0.58	
77.86	---	81.15	3.29*	0.94
---	78.44	81.15	2.71*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XII proved that there existed significant differences between the adjusted means of SatyanandaSaraswathi yoga with control group (3.29), Maharishi Mahesh yoga with control group (2.71). There was no significant difference between SatyanandaSaraswathi yoga and Maharishi Mahesh yoga (0.58) at 0.05 level of confidence with the confidence interval value of 0.94.

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-3.

FIGURE – 3

PRE POST AND ADJUSTED POST TEST DIFFERENCES OF THE SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE
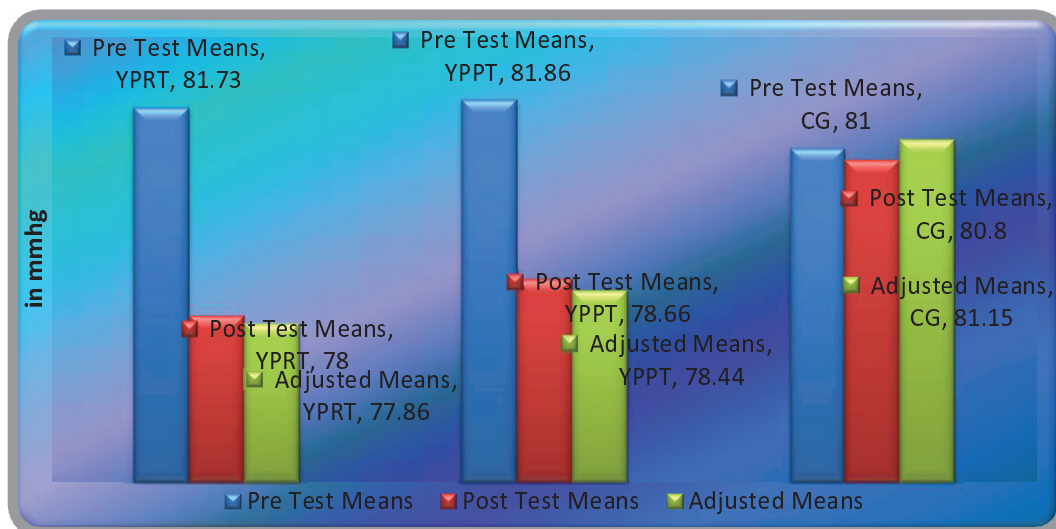
4.8.1 DISCUSSION ON DIASTOLIC BLOOD PRESSURE

The results presented in table XII showed that the obtained adjusted means on diastolic blood pressure among SatyanandaSaraswathi yoga group was 77.86 followed by Maharishi Mahesh yoga group with mean value of 78.44, and control group with mean value of 81.15. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 2.12, 18.78 and 40.78 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of SatyanandaSaraswathi yoga and Maharishi Mahesh yoga had 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 were significant differencesbetween the experimental groups, clearly indicating that SatyanandaSaraswathi yoga was better than Maharishi Mahesh yoga in decreasing diastolic blood pressure of the adolescent boys. The studies conducted by**Begum.,(2013), Sathyanarayana., (2013), and Swaroop., (1997)** proved that there was a decrease in diastolic blood pressure due to the yoga practices.

TABLE - XIII

**COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND
CONTROL GROUPS ON RBC**

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	4.00	4.07	4.05	BG	0.04	2	0.02	0.54
				WG	1.62	42	0.03	
Post-Test Means	4.42	4.29	4.08	BG	0.87	2	0.43	10.90*
				WG	1.69	42	0.04	
Adjusted Post-Test Means	4.41	4.32	4.07	BG	0.90	2	0.45	20.08*
				WG	0.92	41	0.02	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.9 RESULTS OF RBC

An examination of table - XIII indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 4.00, 4.07 and 4.05 respectively. The obtained F-ratio for the pre-test was 0.54 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 4.42, 4.29 and 4.08 respectively. The obtained F-ratio for the post-test was 10.90 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 4.41, 4.32 and 4.07 respectively. The obtained F-ratio for the adjusted post-test means was 20.08 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the experimental trainings on RBC.

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-XIV.

TABLE - XIV

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

Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
4.41	4.32	---	0.09	
4.41	---	4.07	0.34*	0.13
---	4.32	4.07	0.25*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XIV proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (0.34) and Maharishi Mahesh yoga with control group (0.25). There was no significant difference between Satyananda Saraswathiyoga and Maharishi Mahesh yoga (0.09) at 0.05 level of confidence with the confidence interval value of 0.13.

The pre, post and adjusted means on RBC 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, SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH

YOGA AND CONTROL GROUPS ON RBC
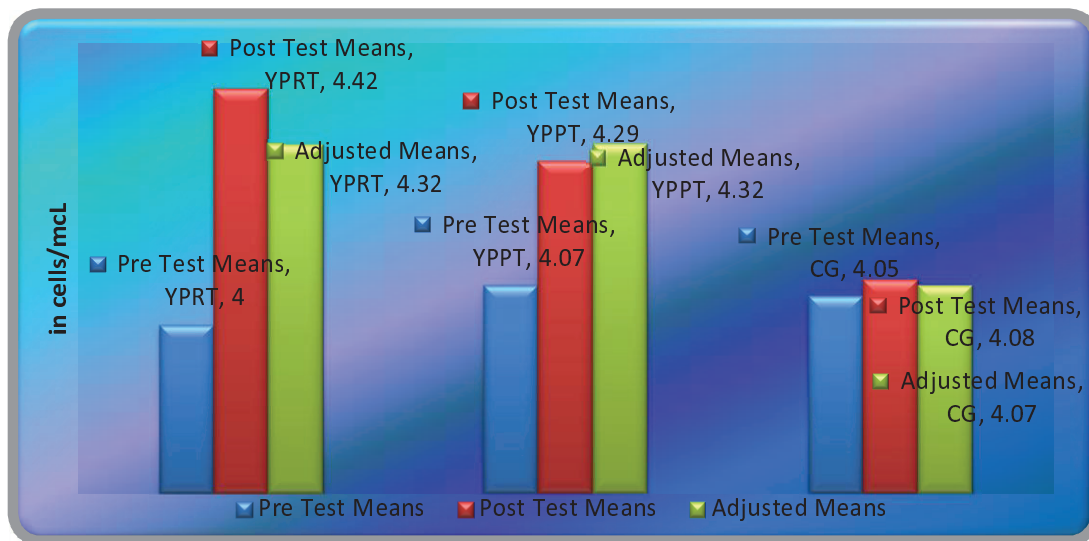
4.9.1 DISCUSSION ON RBC

The results presented in table XIV showed that the obtained adjusted means on RBC among Satyananda Saraswathi yoga group was 4.41 followed by Maharishi Mahesh yoga group with mean value of 4.32, and control group with mean value of 4.07. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.54, 10.90 and 20.08 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga had increased RBC than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that significant differences existed between the experimental groups, clearly indicating that Satyananda Saraswathi yoga was better than Maharishi Mahesh yoga in increasing RBC of the adolescent boys. The studies conducted by **Jothi.,(2014), and Kravitz., (2013)**proved that there was an increase in Red Blood Cells due to yogic practices.

TABLE - XV

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON HEMOGLOBIN

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	13.56	13.62	13.70	BG	0.14	2	0.07	0.47
				WG	6.52	42	0.15	
Post-Test Means	14.56	14.46	13.77	BG	5.61	2	2.80	33.20*
				WG	3.55	42	0.08	
Adjusted Post-Test Means	14.58	14.46	13.75	BG	5.99	2	2.99	40.86*
				WG	3.00	41	0.07	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.10 RESULTS OF HEMOGLOBIN

An examination of table - XV indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 13.56, 13.62 and 13.70 respectively. The obtained F-ratio for the pre-test was 0.47 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that there were no significant differences 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 14.56, 14.46 and 13.77 respectively. The obtained F-ratio for the post-test was 33.20 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 14.58, 14.46 and 13.75 respectively. The obtained F-ratio for the adjusted post-test means was 40.86 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the packages of both yogic practices on hemoglobin.

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 – XVI.

TABLE – XVI

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

| Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
14.58	14.46	---	0.12	
14.58	---	13.75	0.83*	0.24
---	14.46	13.75	0.71*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XVI proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (0.83), Maharishi Mahesh yoga with control group (0.71). There was no significant difference between Satyananda Saraswathi yoga and Maharishi Mahesh yoga (0.12) at 0.05 level of confidence with the confidence interval value of 0.24.

The pre, post and adjusted means on hemoglobin 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,
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND
CONTROL GROUPS ON HEMOGLOBIN**
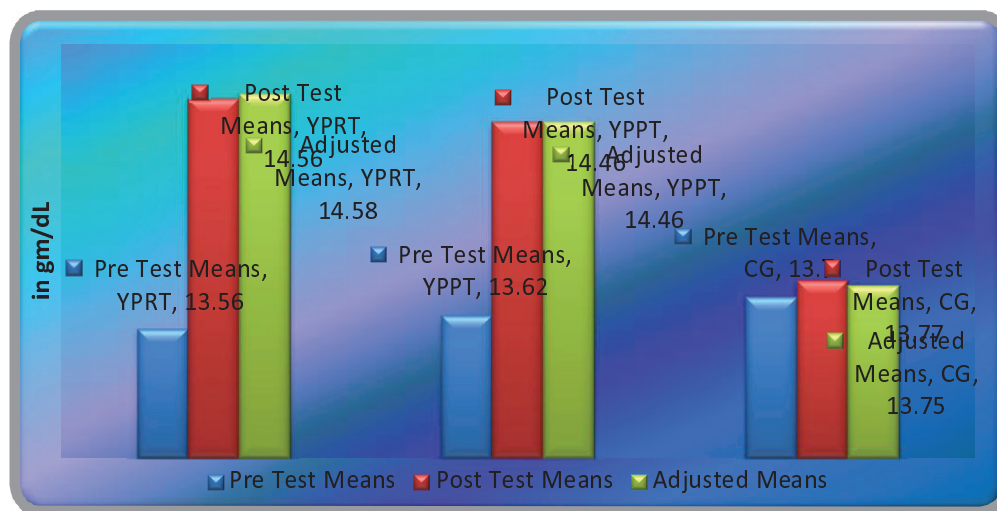
4.10.1 DISCUSSION ON HEMOGLOBIN

The results presented in table XVI showed that the obtained adjusted means on hemoglobin among Satyananda Saraswathi yoga group was 14.58 followed by Maharishi Mahesh yoga group with mean value of 14.46, and control group with mean value of 13.75. The differences among pre test scores, post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and the obtained F values were 0.47, 33.20 and 40.86 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga had increased hemoglobin than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that significant differences existed between the experimental groups, clearly indicating that Satyananda Saraswathi yoga was significantly better than Maharishi Mahesh yoga in increasing hemoglobin of the adolescent boys. The studies conducted by **Dean.,(2011), Chinnasamy., (1992) and Geetanjali., (2013)**proved that there was an increase in hemoglobin through yoga practices.

TABLE – XVII

**COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND
CONTROL GROUPS ON WBC**

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	5726.66	5560.00	5786.66	BG	413777.77	2	206888.88	0.55
				WG	15662666.66	42	372920.63	
Post-Test Means	6780.00	6580.00	5793.33	BG	8161777.77	2	4080888.88	20.75*
				WG	8257333.33	42	196603.17	
Adjusted Post-Test Means	6768.50	6622.39	5762.43	BG	8782335.15	2	4391167.57	27.19*
				WG	6619626.99	41	161454.31	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.11 RESULTS OF WBC

An examination of table - XVII indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 5726.66, 5560.00 and 5786.66 respectively. The obtained F-ratio for the pre-test was 0.55 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 6780.00, 6580.00 and 5793.33 respectively. The obtained F-ratio for the post-test was 20.75 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 6768.50, 6622.39 and 5762.43 respectively. The obtained F-ratio for the adjusted post-test means was 27.19 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the experimental trainings on WBC.

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-XVIII.

TABLE - XVIII

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

Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
6768.50	6622.39	---	146.11	
6768.50	---	5762.43	1006.07*	372.91
---	6622.39	5762.43	860.00*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XVIII proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (1006.07), Maharishi Mahesh yoga with control group (860.00). There was no significant difference between Satyananda Saraswathi yoga and Maharishi Mahesh yoga (146.11) at 0.05 level of confidence with the confidence interval value of 372.91.

The pre, post and adjusted means on WBC 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, SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON WBC
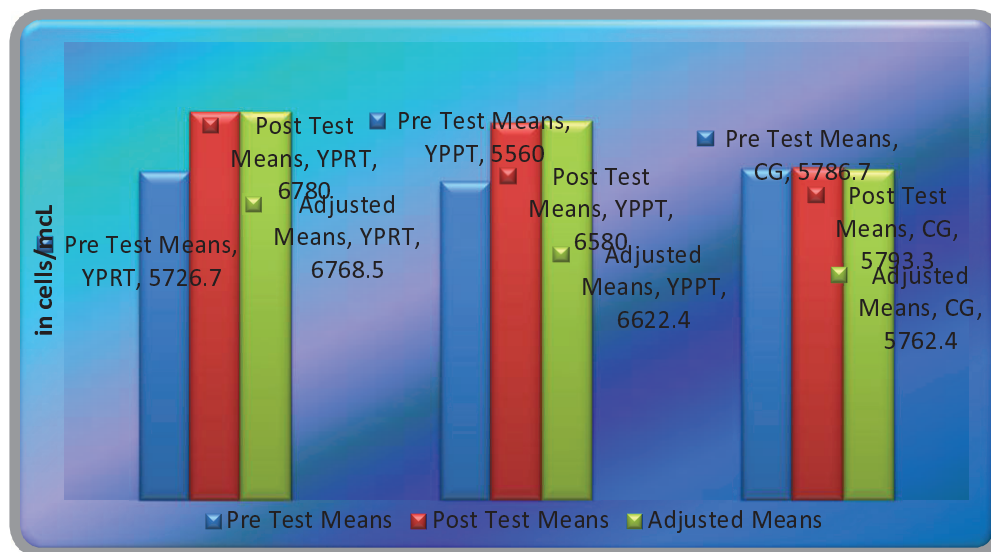
4.11.1 DISCUSSION ON WBC

The results presented in table XVIII showed that the obtained adjusted means on WBC among Satyananda Saraswathi yoga group was 6768.50 followed by Maharishi Mahesh yoga group with mean value of 6622.39, and control group with mean value of 5762.43. 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 0.55, 20.75 and 27.19 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga had increased WBC than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that significant differences existed between the experimental groups, clearly indicating that Satyananda Saraswathi yoga was better than Maharishi Mahesh yoga in increasing WBC of the adolescent boys. The studies conducted by **Yoga.,(2011),**

Chandrashekar., (2007) and Datla and Karimulla., (2005)proved that there was an increase in White Blood Cells through yoga practices.

TABLE – XIX

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON SELF CONCEPT

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	161.66	161.13	163.33	BG	39.51	2	19.75	0.18
				WG	4536.40	42	108.01	
Post-Test Means	176.00	175.13	163.53	BG	1453.64	2	726.82	4.00*
				WG	7617.46	42	181.36	
Adjusted Post-Test Means	176.22	175.68	162.75	BG	1730.14	2	865.07	5.94*
				WG	5970.86	41	145.63	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22) df-

Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.12 RESULTS OF SELF CONCEPT

An examination of table - XIX indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 161.66, 161.13 and 163.33 respectively. The obtained F-ratio for the pre-test was 0.18 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 176.00, 175.13 and 163.53 respectively. The obtained F-ratio for the post-test was 4.00 and the table F-ratio was 3.22. Hence post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 176.22, 175.68 and 162.75 respectively. The obtained F-ratio for the adjusted post-test means was 5.94 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the packages of both the yogic practices on self-concept.

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

TABLE - XX

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

Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
176.22	175.68	---	0.54	
176.22	---	162.75	13.47*	11.19
---	175.68	162.75	12.93*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XX proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (13.47), Maharishi Mahesh yoga with control group (12.93). There was no significant difference between Satyananda Saraswathi yoga and Maharishi Mahesh yoga (0.54) at 0.05 level of confidence with the confidence interval value of 11.19.

The pre, post and adjusted means on self-concept 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,
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH**

YOGA AND CONTROL GROUPS ON SELF CONCEPT
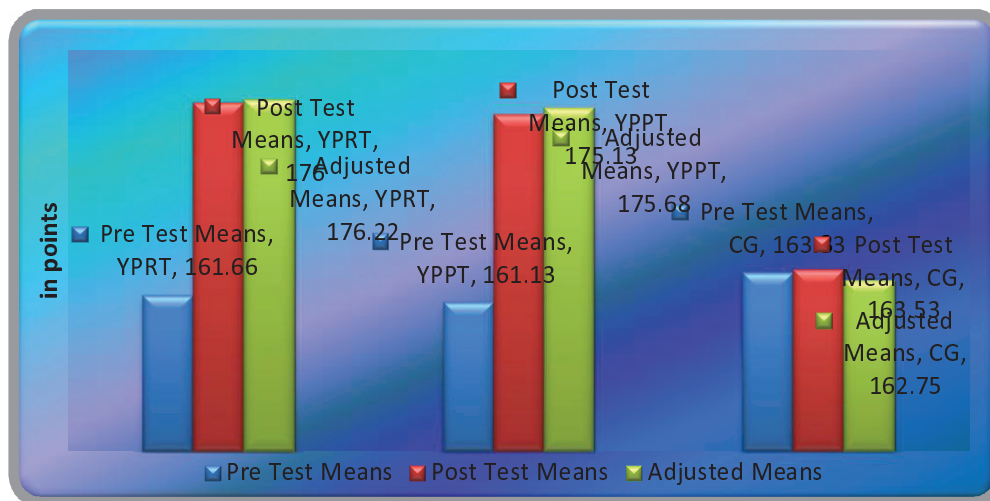
4.12.1 DISCUSSION ON SELF CONCEPT

The results presented in table XX showed that the obtained adjusted means on self-concept among Satyananda Saraswathi yoga group was 176.22 followed by Maharishi Mahesh yoga group with mean value of 175.68, and control group with mean value of 162.75. 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 0.18, 4.00 and 5.94 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga had improved self-concept than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences between the experimental groups, clearly indicating that Satyananda Saraswathiyoga was better than Maharishi Mahesh yoga in improving self-concept of the adolescent boys. The studies conducted by **Salvi., (2013), Dale., (2011), Taylor., (1995) and Kundu., (2014)**proved that there was an increase in self-concept through yoga practices.

TABLE - XXI

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON SELF ESTEEM

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	18.26	17.26	17.73	BG	7.51	2	3.75	0.37
				WG	416.80	42	9.92	
Post-Test Means	21.73	19.86	17.93	BG	108.31	2	54.15	4.97*
				WG	457.60	42	10.89	
Adjusted Post-Test Means	21.41	20.17	17.94	BG	92.21	2	46.10	6.46*
				WG	292.48	41	7.13	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.13 RESULTS OF SELF ESTEEM

An examination of table - XXI indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 18.26, 17.26 and 17.73 respectively. The obtained F-ratio for the pre-test was 0.37 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 21.73, 19.86 and 17.93 respectively. The obtained F-ratio for the post-test was 4.97 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 21.41, 20.17 and 17.94 respectively. The obtained F-ratio for the adjusted post-test means was 6.46 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was a significant difference among the means due to the packages of both yogic practices on self-esteem.

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-XXII.

TABLE - XXII

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

| Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
21.41	20.17	---	1.24	2.47
21.41	---	17.94	3.47*	
---	20.17	17.94	2.23*	

* Significant at 0.05 level of confidence

The multiple comparisons showed in Table XXII proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (3.47), Maharishi Mahesh yoga with control group (2.23). There was no significant difference between Satyananda Saraswathi yoga and Maharishi Mahesh yoga (1.24) at 0.05 level of confidence with the confidence interval value 2.47.

The pre, post and adjusted means on self-esteem 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,
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND
CONTROL GROUPS ON SELF ESTEEM**
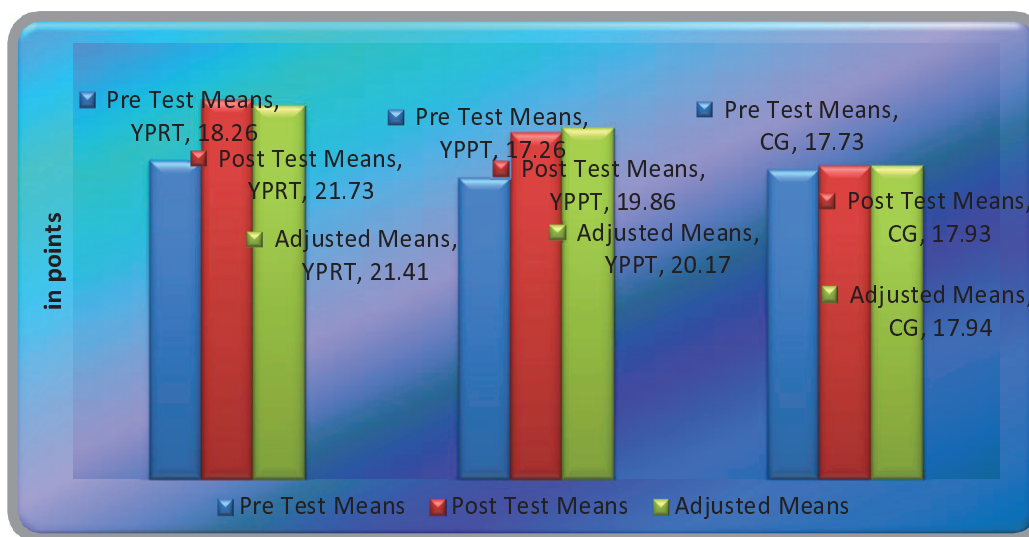
4.13.1 DISCUSSION ON SELF ESTEEM

The results presented in table XXII showed that the obtained adjusted means on self-esteem among SatyanandaSaraswathi yoga group was 21.41 followed by Maharishi Mahesh yoga group with mean value of 20.17, and control group with mean value of 17.94. 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 0.37, 4.97 and 6.46 respectively. It was found that obtained F value on pre test scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of SatyanandaSaraswathi yoga and Maharishi Mahesh yoga had improved self-esteem than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there was significant differences between the experimental groups, clearly indicating that SatyanandaSaraswathiyoga was better than Maharishi Mahesh yoga by increasing self-esteem of the adolescent boys. The studies conducted by **Thayer., (1967),**

Kasala., (2014) and Saraswathi., (1974) proved that there was an improvement in self-esteem through yoga practices.

TABLE – XXIII

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND CONTROL GROUPS ON ANXIETY

	SSYG	MMYG	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	17.53	18.33	18.86	BG	13.51	2	6.75	0.38
				WG	738.80	42	17.59	
Post-Test Means	14.33	15.80	18.73	BG	150.57	2	75.28	6.09*
				WG	518.66	42	12.34	
Adjusted Post-Test Means	14.83	15.73	18.29	BG	94.70	2	47.35	13.43*
				WG	144.45	41	3.52	

B- Between Group Means   * - Significant

W- Within Group Means   (Table Value for 0.05 Level for df 2 & 42 = 3.22)

df- Degrees of Freedom   (Table Value for 0.05 Level for df 2 & 41 = 3.23)

4.14 RESULTS OF ANXIETY

An examination of table - XXIII indicated that the pretest means of Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 17.53, 18.33 and 18.86 respectively. The obtained F-ratio for the pre-test was 0.38 and the table F-ratio was 3.22. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. 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 Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 14.33, 15.80 and 16.28 respectively. The obtained F-ratio for the post-test was 6.09 and the table F-ratio was 3.22. Hence the post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. This proved that the differences between the posttest means of the subjects were significant.

The adjusted post-test means of the Satyananda Saraswathi yoga, Maharishi Mahesh yoga and control groups were 14.83, 15.73 and 18.29 respectively. The obtained F-ratio for the adjusted post-test means was 13.43 and the table F-ratio was 3.23. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. This proved that there was significant difference among the means due to the packages of both the yogic practices on anxiety.

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

TABLE – XXIV

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

| Adjusted Post-test means			Mean Difference	Required CI
SSYG	MMYG	Control Group		
14.83	15.73	---	0.90	
14.83	---	18.29	3.46*	1.74
---	15.73	18.29	2.56*	

*** Significant at 0.05 level of confidence**

The multiple comparisons showed in Table XXIV proved that there existed significant differences between the adjusted means of Satyananda Saraswathi yoga with control group (3.46), Maharishi Mahesh yoga with control group (2.56). There was no significant difference between Satyananda Saraswathi yoga and Maharishi Mahesh yoga (0.90) at 0.05 level of confidence with the confidence interval value of 1.74.

The pre, post and adjusted means on 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,
SATYANANDA SARASWATHI YOGA, MAHARISHI MAHESH YOGA AND
CONTROL GROUPS ON ANXIETY**
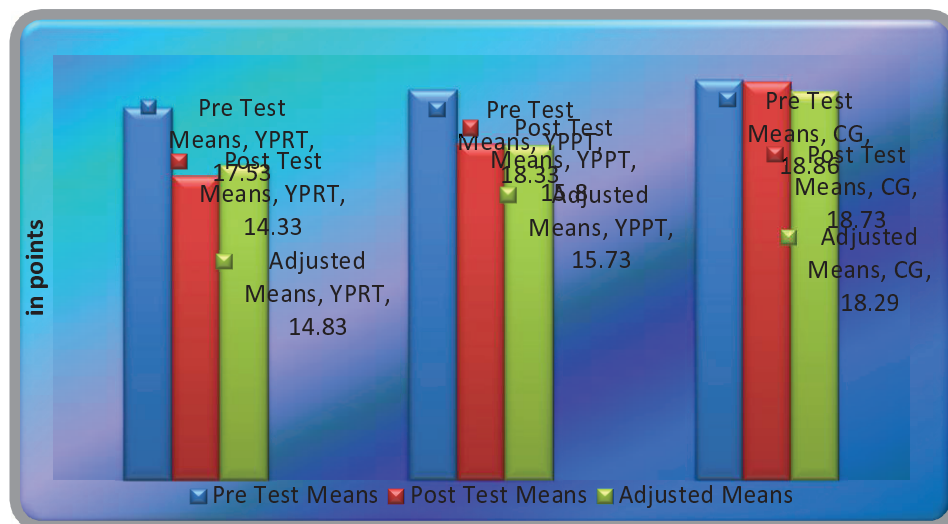
4.14.1 DISCUSSION ON ANXIETY

The results presented in table XXIV showed that the obtained adjusted means on anxiety among Satyananda Saraswathi yoga group was 14.83 followed by Maharishi Mahesh yoga group with mean value of 15.73, and control group with mean value of 18.29. 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 0.38, 6.09 and 13.43 respectively. It was found that obtained F value on pretest scores were not significant and the obtained F values on posttest and adjusted means were significant at 0.05 level of confidence as these were greater than the required table F value of 3.22 and 3.23. The post hoc analysis through Scheffe's Confidence test proved that twelve weeks training of Satyananda Saraswathi yoga and Maharishi Mahesh yoga had decreased anxiety than the control group and the differences were significant at 0.05 level. Further, the post hoc analysis showed that there were significant differences between the experimental groups, clearly indicating that Satyananda Saraswathi yoga was significantly better than Maharishi Mahesh yoga in decreasing anxiety of the adolescent boys. The studies conducted by), **Ross and Thomas., (2010), Thakur., (2013Gupta., (2006)** and **Telles., (2009)**proved that there was a decrease in anxiety due to yogic practices.

DISCUSSION ON HYPOTHESES

On the basis of the results of the study, the following discussions on the hypotheses formulated in the study were recorded

1. As the findings of the study showed that both the yogic practices packages such as Swami Sathyananda Saraswathi Yogic practices and Maharishi Mahesh Yoga Practices influence changes in the selected Physiological, Hematological and Psychological variables such as decrease in Pulse Rate, Diastolic and Systolic Blood Pressure, the 1st hypotheses formulated in the study was accepted at 0.05 level of confidence.

2. The results of the study indicated that Swami Sathyananda Saraswathi Yogic practices and Maharishi Mahesh Yoga Practices had increased Red Blood Cells, Hemoglobin count and White Blood Corpuscles in Blood among adolescent boys significantly. Hence, the formulated hypotheses II was accepted at 0.05 level of confidence.

3. It had also been recorded from the findings that Yoga practices from Swami Sathyananda Saraswathi Yogic practices and Maharishi Mahesh Yoga Practices had significantly decreased Anxiety and increased Self-concept and Self-esteem. Hence, the third hypotheses formulated in the study were also accepted at 0.05 level of confidence.

4. The fourth Hypotheses as null hypothesis that there would no significant differences between the effects of Swami Sathyananda Saraswathi Yogic practices and Maharishi Mahesh Yogic Practices was rejected at 0.05 level of confidence as Swami Sathyananda Saraswathi Yogic practices had significantly decreased Resting Pulse Rate, Diastolic and Systolic Blood Pressure, increased Red Blood Cells, Hemoglobin and White Blood Corpuscles and decreased Anxiety and increased Self-concept and Self-esteem better than Maharishi Mahesh Yoga Practices.