## **CHAPTER - IV**

## **RESULTS AND DISCUSSION**

### **4.1 OVERVIEW**

This chapter deals with the analysis of data collected from the subjects under the study. The purpose of this study was to find out the effect of Hatha yoga sadhana on selected physiological, psychological and clinical variables among Anorexia syndrome teenage girls. For the study Anorexia syndrome teenage girls were selected as subjects. Their age was ranging from 15 to 18 years. The subjects were divided into two equal groups, as Experimental group (hatha yoga sadhana) and Control group (no training). They were analyzed with the differences in the measures of selected physiological, psychological and clinical variables such as systolic blood pressure, diastolic blood pressure, heart rate, hemoglobin, total cholesterol, calcium, depression, emotional maturity and anxiety.

The subjects were selected randomly but the groups were not equated in relation to factors to be examined hence the difference between the means and two groups pre and post test were taken into an account during the analysis of covariance, where the final means were adjusted for difference in the initial means and the adjusted means were tested for significance difference.

# **4.2 TEST OF SIGNIFICANCE**

As Clarke and Clarke (1972) say, "these data must be analyzed in ways appropriate to the research design. Such analysis can only be appropriate to the research design. Such analysis can only be accomplished through the application of pertinent statistics".

This is the vital portion of thesis achieving the conclusion by examining the hypotheses. The procedure of testing the hypotheses was either by accepting the hypotheses or rejecting the same in accordance with the results obtained in relation to the level of confidence.

The test was usually called the test of significance since this test whether the differences between groups or within many groups' scores were significant or not. In this study, if the obtained F-value was greater than the table value, the null hypotheses were rejected to the effect that there existed significant difference among the means of the groups compared and if the obtained values were lesser than the required values, then the null hypotheses were accepted to the effect that there existed no significant differences among the means of the groups under study.

### 4.2.1 LEVEL OF SIGNIFICANCE

The subjects were compared on selected criterion variables among Anorexia syndrome teenage girls on the effect of hatha yoga sadhana. The selected criterion variables were measured both at initial and final stage of the experimental period from all the two groups selected for the study. The difference between initial and final means on each of the selected criterion variable was the effect of hatha yoga sadhana on the subjects. The obtained data were subjected to statistical treatment using ANCOVA. In all the cases, .05 level of confidence was fixed to test the significance, which was considered as appropriate.

## 4.3 COMPUTATION OF ANALYSIS OF COVARIANCE

## 4.4 RESULTS ON SYSTOLIC BLOOD PRESSURE

The physiological variable systolic blood pressure was measured was measured through use instrument by instrument "Stethoscope", Sphygmomanometer

and "stop watch calculation".. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table - VII

TABLE-VII

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF SYSTOLIC BLOOD PRESSURE OF EXPERIMENTAL AND CONTROL GROUP (Total Scores in mm/hg)

Test	Hatha yoga Group	Control group	Source of variance	df	Sum of square	Mean square	F
Pre-test	138.27	140.40	Between	1	34.13	34.13	2.34
mean			Within	28	408.53	14.59	2.34
Post-test	129.67	139.47	Between	1	720.30	720.30	39.62*
mean			Within	28	509.07	18.18	39.02
Adjusted	129.70	139.43	Between	1	655.21	655.21	34.78*
mean	129.70	139.43	Within	27	508.62	18.84	34.70

<sup>\*</sup>significant.at 0.05 level of confidence

Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

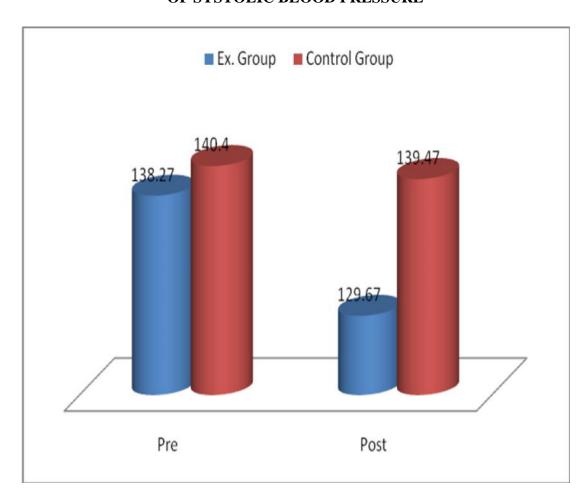
Table VII shows that the pre test mean scores of systolic blood pressure of Experimental group I hatha yoga sadhana practices was 138.27. and control group was 140.40 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 129.67 and 139.47 respectively. The obtained F value on pre test scores 2.34 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 39.62 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores

among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 34.78 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the physiological variable systolic blood pressure.

The obtained adjusted mean values were presented through bar diagram in figure I.

FIGURE - 1

BAR DIAGRAM ON ORDERED PRE AND POST MEANS
OF SYSTOLIC BLOOD PRESSURE



## 4.4.1 DISCUSSION ON FINDINGS OF SYSTOLIC BLOOD PRESSURE

The results presented in Table VII proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 34.78, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered systolic blood pressure of the anorexia syndrome teenage girls compared to control group. The result of this study on Systolic blood pressure has in line with the study conducted by **Chiriac et al. (2002)** 

### 4.5 RESULTS ON DIASTOLIC BLOOD PRESSURE

The physiological variable diastolic blood pressure was measured was measured through use instrument by instrument "Stethoscope", Sphygmomanometer and "stop watch calculation". The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table VIII

TABLE-VIII

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF DIASTOLIC BLOOD PRESSURE OF EXPERIMENTAL AND CONTROL GROUP (Total Scores in mm/hg)

Test	Hatha yoga Group	Control group	Source of varaince	df	Sum of square	Mean square	F
Pre-test	90.53	91.80	Between	1	12.03	12.03	2.51
mean	70.33		Within	28	134.13	4.79	2.31
Post-test	85.60	90.33	Between	1	168.03	168.03	32.46*
mean	83.00		Within	28	144.93	5.18	-32.40
Adjusted	85.69	90.25	Between	1	143.21	143.21	27.14*
mean	05.07	70.23	Within	27	142.46	5.28	

<sup>\*</sup>significant.at 0.05 level of confidence

Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

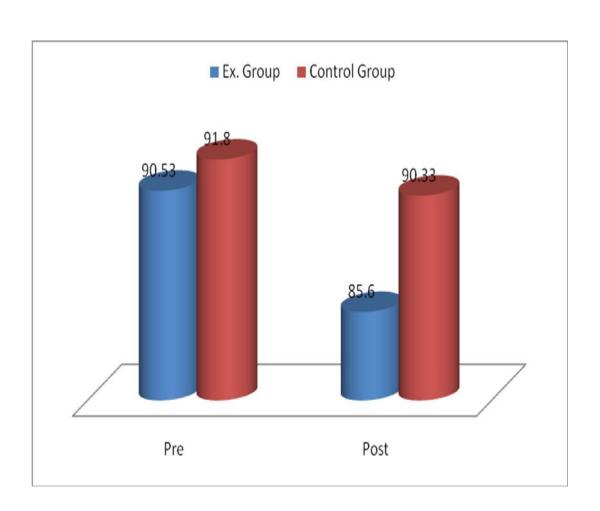
Table VIII shows that the pre test mean scores of diastolic blood pressure of Experimental group I hatha yoga sadhana practices was 90.53. and control group was 91.80 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 85.60 and 90.33 respectively. The obtained F value on pre test scores 2.51 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 32.46 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 27.14 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve

weeks of hatha yoga sadhana practices on the physiological variable diastolic blood pressure .

The obtained adjusted mean values were presented through bar diagram in figure 2.

FIGURE - 2

BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF DIASTOLIC BLOOD PRESSURE



### 4.5.1 DISCUSSION ON FINDINGS OF DIASTOLIC BLOOD PRESSURE

The results presented in Table VIII proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 27.14, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered diastolic blood pressure of the anorexia syndrome teenage girls. Since there was significant results obtained post hoc analysis was done and it was found that hatha yoga sadhana practices significantly altered diastolic blood pressure of the anorexia syndrome teenage girls compared to control group. The result of this study on Diastolic blood pressure has in line with the study conducted by **Chiriac e al. (2002)** 

### 4.6 RESULTS ON HEART RATE

The physiological variable heart rate was measured through use instrument over period of one minute, by instrument "Stethoscope", and "stop watch calculation. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table – IX.

TABLE-IX

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF HEART
RATE OF EXPERIMENTAL AND CONTROL GROUP

(Total Scores in beats/min)

Test	Hatha yoga group	Control group	Source of variance	df	Sum of square	Mean square	F
		85.63	Between	1	8.48	8.48	
Pre-test mean	86.69		Within	28	1629.77	58.21	0.15
		82.68	Between	1	772.36	772.36	21.73*
Post-test mean	72.54	02.00	Within	28	995.25	35.54	21176
			Between	1	818.67	818.67	
Adjusted mean	72.37	82.85	Within	27	841.20	31.16	26.28*

<sup>\*</sup>significant.at 0.05 level of confidence

Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

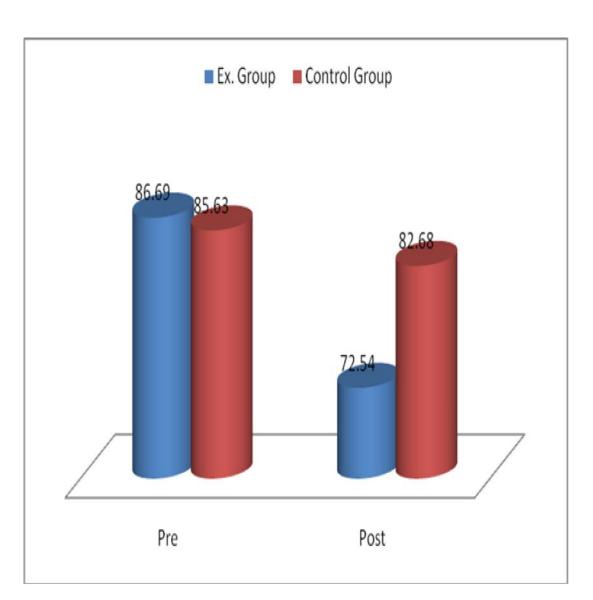
Table IX shows that the pre test mean scores of heart rate of Experimental group I hatha yoga sadhana practices was 86.69. and control group was 85.63. The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 72.54 and 82.68 respectively. The obtained F value on pre test scores 0.15 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 21.73 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 26.28 was greater than the required F value at 3.22. This proved

that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the physiological variable heart rate

The obtained adjusted mean values were presented through bar diagram in figure 3.

FIGURE - 3

BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF HEART RATE



### 4.6.1 DISCUSSION ON FINDINGS OF HEART RATE

The results presented in Table IX proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 26.28, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered heart rate of the anorexia syndrome teenage girls. Since there was significant results obtained post hoc analysis was done and it was found that hatha yoga sadhana practices significantly altered heart rate of the anorexia syndrome teenage girls compared to control group. The result of this study on Heart rate has in line with the study conducted by **Chiriac et al. (2002)** 

### 4.7. RESULTS ON HEMOGLOBIN

The clinical variable hemoglobin was measured through blood test was used".. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table  $-\,\mathrm{X}$ .

TABLE-X
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF HEMOGLOBIN OF EXPERIMENTAL AND CONTROL GROUP (Total Scores in mg/dl)

Test	Hatha yoga group	Control group	Source of variance	Df	Sum of square	Mean square	F	
Pre-test	Pre-test 10.05	10.23	Between	1.00	0.23	0.23	0.16	
mean 10.05	10.23	Within	28.00	39.11	1.40	0.10		
Post-test	12.61		Between	1.00	93.99	93.99	117 24*	
mean 13.61	13.01	10.07	Within	28.00	22.43	0.80	117.34*	
Adjusted mean 13.62	12.62	10.07	Between	1.00	94.18	94.18	114.66*	
	13.62		Within	27.00	22.18	0.82		

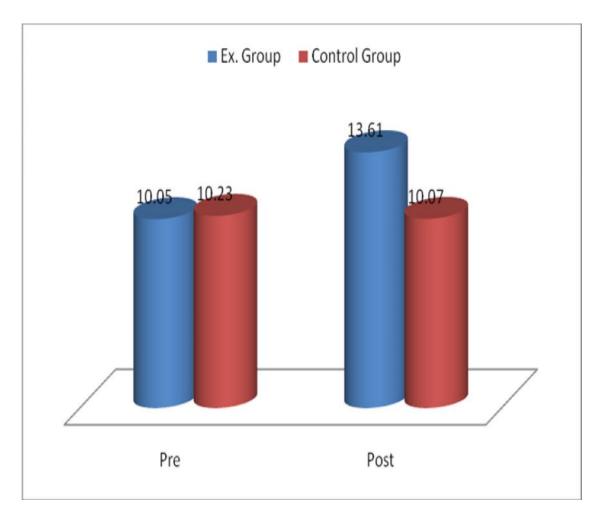
<sup>\*</sup>significant.at 0.05 level of confidence

Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table X shows that the pre test mean scores of hemoglobin of Experimental group I hatha yoga sadhana practices was 10.05. and control group was 10.23. The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 13.61 and 10.07 respectively. The obtained F value on pre test scores 0.16 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 117.34 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 114.66 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the clinical variable hemoglobin

The obtained adjusted mean values were presented through bar diagram in figure 4.

FIGURE – 4
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF HEMOGLOBIN



# 4.7.1 DISCUSSION ON FINDINGS OF HEMOGLOBIN

The results presented in Table X proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 114.66, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered hemoglobin of the anorexia syndrome teenage girls. Since there was significant results obtained post hoc analysis was done and it was found that hatha yoga sadhana

practices significantly altered hemoglobin of the anorexia syndrome teenage girls compared to control group. The result of this study on hemoglobin has in line with the study conducted by **Chiriac et.al.** (2002)

### 4.8. RESULTS ON TOTAL CHOLESTEROL

The clinical variable total cholesterol was measured through blood test was used". The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table XI.

TABLE-XI

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF TOTAL
CHOLESTEROL OF EXPERIMENTAL AND CONTROL GROUP
(Total Scores in mg/dl)

Test	Hatha yoga group	Control group	Source of varaince	Df	Sum of square	Mean square	F
<b>Pre-test</b>	55.40	56.87	Between	1	16.13	16.13	2.99
mean	33.40	30.87	Within	28	151.33	5.40	
Post-test	61.00	56.33	Between	1	163.33	163.33	14.06*
mean	61.00	.00	Within	28	325.33	11.62	
Adjusted	c1 1 4	<b>7</b> 6 10	Between	1	165.70	165.70	12.00%
mean	61.14	56.19	Within	27	319.90	11.85	13.98*

<sup>\*</sup>significant.at 0.05 level of confidence

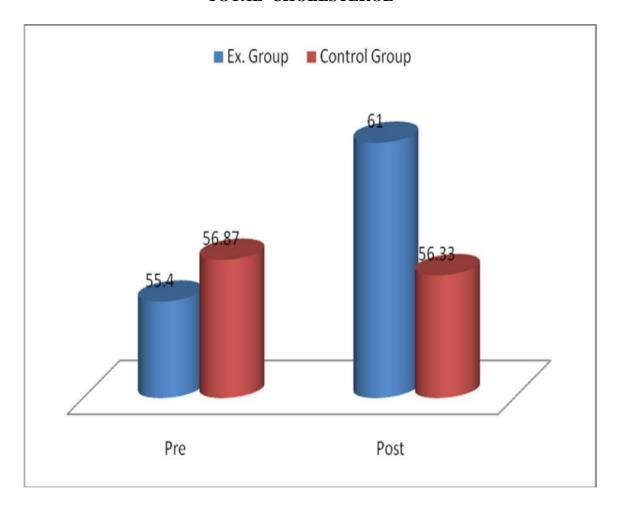
Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table XI shows that the pre test mean scores of total cholesterol of Experimental group I hatha yoga sadhana practices was 55.40. and control group was 56.87 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 61.00 and 56.33 respectively. The obtained F value on pre test scores 2.99 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference

between the groups as the obtained F value at 14.06 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 13.98 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the clinical variable total cholesterol

The obtained adjusted mean values were presented through bar diagram in figure-5

FIGURE - 5
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF
TOTAL CHOLESTEROL



### 4.8.1 DISCUSSION ON FINDINGS OF TOTAL CHOLESTEROL

The results presented in Table XI proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 13.98, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered total cholesterol of the anorexia syndrome teenage girls. Since there was significant results obtained post hoc analysis was done and it was found that hatha yoga sadhana practices significantly altered total cholesterol of the anorexia syndrome teenage girls compared to control group. The result of this study on total cholesterol has in line with the study conducted by **Chiriac et al. (2002)** 

### 4.9. RESULTS ON CALCIUM

The clinical variable calcium was measured through blood test was used"...

The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table XII.

TABLE-XII

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF CALCIUM OF EXPERIMENTAL AND CONTROL GROUP (Total Scores in mg/dl)

Test	Hatha yoga Group	Control group	Source of variance	Df	Sum of square	Mean square	F
Pre-test	9.41	9.47	Between	1	0.03	0.03	0.40
mean	9.41	9.47	Within	28	1.91	0.07	
			Between	1	12.61	12.61	162.97*
Post-test mean	9.23	10.53	Within	28	2.17	0.08	102.97
			Between	1	12.35	12.35	154.64*
Adjusted mean	9.23	10.52	Within	27	2.16	0.08	134.04

<sup>\*</sup>significant.at 0.05 level of confidence

Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table XII shows that the pre test mean scores of calcium of Experimental group I hatha yoga sadhana practices was 9.41 and control group was 9.47 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 9.23 and 10.53 respectively. The obtained F value on pre test scores 0.40 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 162.97 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 154.64 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the clinical variable calcium.

The obtained adjusted mean values were presented through bar diagram in figure 6.

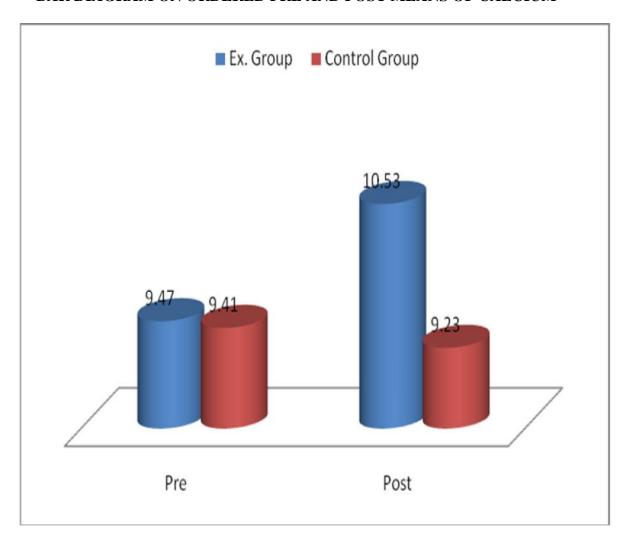


FIGURE - 6
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF CALCIUM

# 4.9.1 DISCUSSION ON FINDINGS OF CALCIUM

The results presented in Table XII proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 154.64, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered Calcium of the anorexia syndrome teenage girls.

### 4.10. RESULTS ON DEPRESSION

The psychological variable depression was measured through questionnaire was used. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table XIII

TABLE-XIII

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF DEPRESSION OF EXPERIMENTAL AND CONTROL GROUP (Total scores in points)

Test	Hatha yoga group	Control group	Source of variance	Df	Sum of square	Mean square	F
Pre-test	Pre-test mean 50.93	50.12	Between	1	4.80	4.80	0.11
mean		50.13	Within	28	1238.67	44.24	0.11
Post-test	22.02	52.80	Between	1	2960.13	2960.13	12.20*
mean	mean 32.93		Within	28	6231.33	222.55	13.30*
Adjusted	22.00	52.75	Between	1	2917.60	2917.60	12 60*
mean	32.99		Within	27	6209.97	230.00	12.69*

<sup>\*</sup>significant.at 0.05 level of confidence

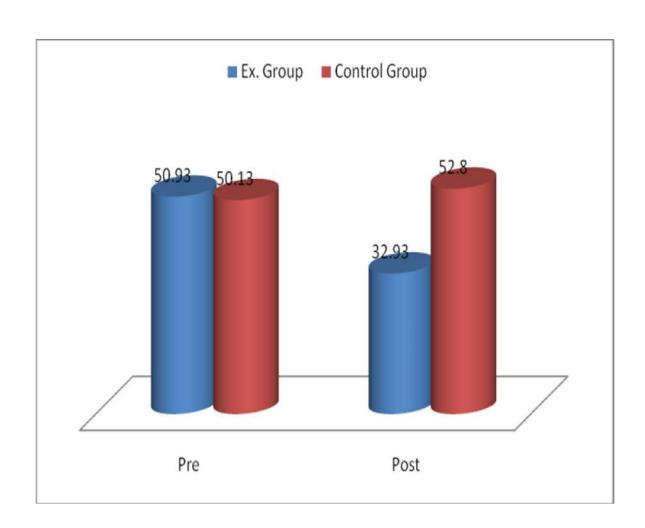
Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table XIII shows that the pre test mean scores of depression of Experimental group I hatha yoga sadhana practices was 50.93. and control group was 50.13. The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 32.93 and 52.80 respectively. The obtained F value on pre test scores 0.11 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 13.30 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were

significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 12.69 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the psychological variable depression.

The obtained adjusted mean values were presented through bar diagram in figure 7.

FIGURE - 7
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF DEPRESSION



### 4.10.1 DISCUSSION ON FINDINGS OF DEPRESSION

The results presented in Table XIII proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 12.69, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered depression of the anorexia syndrome teenage girls compared to control group. The result of this study on depression has in line with the study conducted by **Chiriac et al. (2002)** 

## 4.11. RESULTS ON EMOTIONAL MATURITY

The psychological variable emotional maturity was measured through questionnaire was used".. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table XIV

TABLE-XIV
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF
EMOTIONAL MATURITY OF EXPERIMENTAL AND CONTROL GROUP
(Total Scores in points)

Test	Hatha yoga group	Control group	Source of variance	Df	Sum of square	Mean square	F
Pre-test	0.45	0.44	Between	1	0.00	0.00	0.41
mean	0.43	0.44	Within	28	0.03	0.00	0.41
Post-test	0.68	0.45	Between	1	0.41	0.21	64.41*
mean	0.08	0.43	Within	28	0.09	0.00	04.41"
Adjusted	0.60	0.45	Between	1	0.40	0.20	61.15*
mean	0.68		Within	27	0.09	0.00	01.15*

<sup>\*</sup>significant.at 0.05 level of confidence

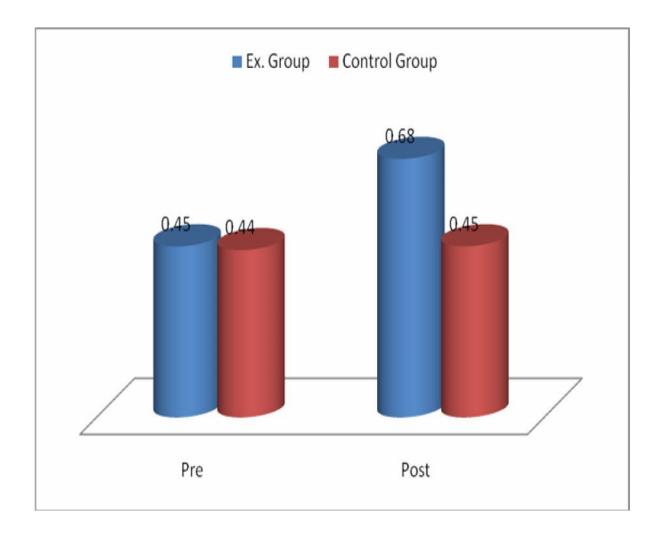
Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table XIV shows that the pre test mean scores of emotional maturity of Experimental group I hatha yoga sadhana practices was 0.45. and control group was

0.44 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 0.68 and 0.45 respectively. The obtained F value on pre test scores 0.41 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 64.41 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 61.15 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the psychological variable emotional maturity.

The obtained adjusted mean values were presented through bar diagram in figure 8.

FIGURE – 8
BAR DIAGRAM ON ORDERED PRE AND POST MEANS
OF EMOTIONAL MATURITY



## 4.11.1.DISCUSSION ON FINDINGS OF EMOTIONAL MATURITY

The results presented in Table XIV proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 61.15, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered emotional maturity of the anorexia syndrome teenage girls compared to control group.

The result of this study on emotional maturity has in line with the study conducted by Chiriac et al. (2002)

### 4.12. RESULTS ON ANXIETY

The psychological variable anxiety was measured through questionnaire was used".. The results on the effect of hatha yoga sadhana practices among anorexia syndrome teenage girls is presented in table -XV

TABLE-XV

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF ANXIETY OF EXPERIMENTAL AND CONTROL GROUP (Total Scores in points)

Test	Hatha yoga group	Control group	Source of variance	Df	Sum of square	Mean square	F
Pre-test	36.60	34.13	Between	1	45.63	45.63	2.54
mean		34.13	Within	28	503.33	17.98	
Post-test	10.52	35.93	Between	1	2270.70	2270.70	76.26*
mean	18.53		Within	28	832.67	29.74	76.36*
Adjusted	19.33	35.14	Between	1	1718.60	1718.60	74.45*
mean	19.33	33.14	Within	27	623.25	23.08	14.43**

<sup>\*</sup>significant.at 0.05 level of confidence

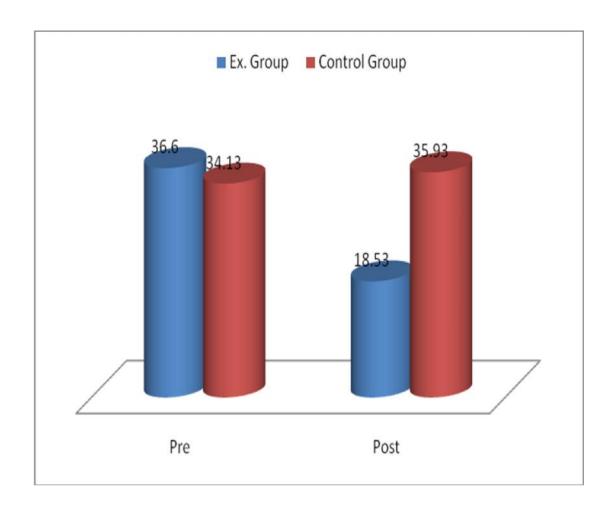
Table value for df 1 and 28 was 3.21 Table value for df 1 and 27 was 3.22.

Table XV shows that the pre test mean scores of anxiety of Experimental group I hatha yoga sadhana practices was 36.60 and control group was 34.13 The post test means showed differences due to Twelve weeks of hatha yoga sadhana practices and mean values recorded were 18.53 and 35.93 respectively. The obtained F value on pre test scores 2.54 was lesser than the required F value of 3.22 to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal. The post test scores analysis proved that there was significant difference between the groups as the

obtained F value at 76.36 was greater than the required F value at 3.22. This proved that the differences between the post test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F value at 74.45 was greater than the required F value at 3.22. This proved that there was Significant differences among the means due to Twelve weeks of hatha yoga sadhana practices on the psychological variable emotional maturity.

The obtained adjusted mean values were presented through bar diagram in figure 9.

FIGURE - 9
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF ANXIETY



### 4.12.1 DISCUSSION ON FINDINGS OF ANXIETY

The results presented in Table XV proved that the obtained F value on pre test scores was less than the required F value and the difference were not significant. The obtained F value on adjusted mean value was 74.45, which was greater than the required F value to be significant at 0.05 levels. Hence, it was proved that twelve weeks treatment through hatha yoga sadhana practices training significantly altered anxiety of the anorexia syndrome teenage girls compared to control group. The result of this study on anxiety has in line with the study conducted by **Chiriac et al.** (2002)

### 4.13 DISCUSSION ON HYPOTHESIS

The formulated hypothesized that there would be significant differences due to hatha yoga sadhana practice among the experimental group than control group on selected physiological, clinical and psychological variables of Anorexia syndrome teenage girls. The results presented in tables VII, VIII, IX, X, XI, XII, XIII, XIV, and XV on physiological variables such as systolic blood pressure, diastolic blood pressure and heart rate, clinical variables such as hemoglobin, total cholesterol and calcium and psychological variables such as depression, emotional maturity and anxiety, respectively proved that there was significant changes due to twelve weeks selected hatha yoga sadhana practices, hence, the hypothesis was accepted at 0.05 level.