

CHAPTER IV

RESULTS AND DISCUSSIONS

4.1 OVERVIEW

This chapter deals with the analysis of data collected from sample under study. The two groups of experimental group and one group of control group were analyzed for the differences in Physiological, Biochemical and Psychological variables in relation in pre test, post test.

In this study 90 diabetic women were taken as subjects and their age was ranged from 35 to 45 years. To test the significance of changes made from the pre and post test on three groups individually paired Analysis of Co-Variance (ANCOVA) test was applied. The significance of the means of the obtained test results was tested at 0.01 of confidence. Thus the obtained results were interpreted with earlier studies and presented in this chapter well along with graphical applications.

4.2. TEST OF SIGNIFICANCE

This is crucial portion of the thesis in arriving at the conclusion by examining the hypothesis. The procedure of testing the hypothesis was entered either by accepting the hypothesis or rejecting the hypothesis in accordance with the result is obtained in relation to the level of confidence. 0.01 level of confidence which was considered sufficient for the study. The test was usually called the test of significance. If the obtained value was greater than the table value null hypothesis was rejected. If the obtained value was less than table value, the null hypothesis was accepted.

4.2.1 LEVEL OF SIGNIFICANCE

The probability level below which we rejected the hypothesis is term as the level of significance. The F- ratio obtained by the Analysis of Co-Variance needed 3.10 for significant at 0.01 level. In addition to that the significant difference between the paired adjusted means were tested by computing the confidence interval value utilizing the Scheffe's post-hoc test, in which the obtained means difference value needed to be greater than the Scheffe's confidence interval value for significance.

4.3. COMPUTATION OF ANALYSIS OF COVARIANCE AND POST HOC TEST

4.3.1. RESULTS OF RESTING PULSE RATE

The Resting Pulse Rate was measured through digital pulse measuring apparatus. The Table -XI shows the variance of Resting Pulse Rate among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XI
ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO EXPERIMENTAL
GROUPS AND THE CONTROL GROUP IN RESTING PULSE RATE

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	72.29	72.20	72.18	Between	0.182	2	0.0908	0.307
				Within	24.840	84	0.296	
Post test mean	68.33	67.23	72.25	Between	404.02	2	202.01	255.4*
				Within	66.432	84	0.791	
Adjusted Post test Mean	70.30	69.71	72.21	Between	98.870	2	49.435	153.5*
				Within	27.039	84	0.322	
Mean Difference	3.96	4.97	0.07					

* Significant at 0.01 level.

The obtained F value on pre test scores 0.307 was lesser than the required F value of 3.10 to be significant at 0.01 level. This proved that there was no significant difference between the groups a pre test and post test and the randomization at the pre test was equal.

The post test scores analysis proved that there was significant difference between the groups, as the obtained F value 255.4 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of 153.5 was greater than the required F value of 3.10. This proved that there was a significant

difference among the means due to Yogic practices and Naturopathy Practices on Physiological variable, Resting Pulse Rate.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in table – XI (A).

Table – XI (A)
SCHEFFE'S POST-HOC TEST FOR RESTING PULSE RATE

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
70.30	69.71	72.21	1.90*	3.98
			2.49*	
			0.59*	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XI (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Resting Pulse Rate were presented through bar diagram for better understanding of the results of this study in Figure -2.

BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG YOGIC PRACTICES,
NATUROPATHY PRACTICES AND CONTROL GROUP ON RESTING PULSE RATE

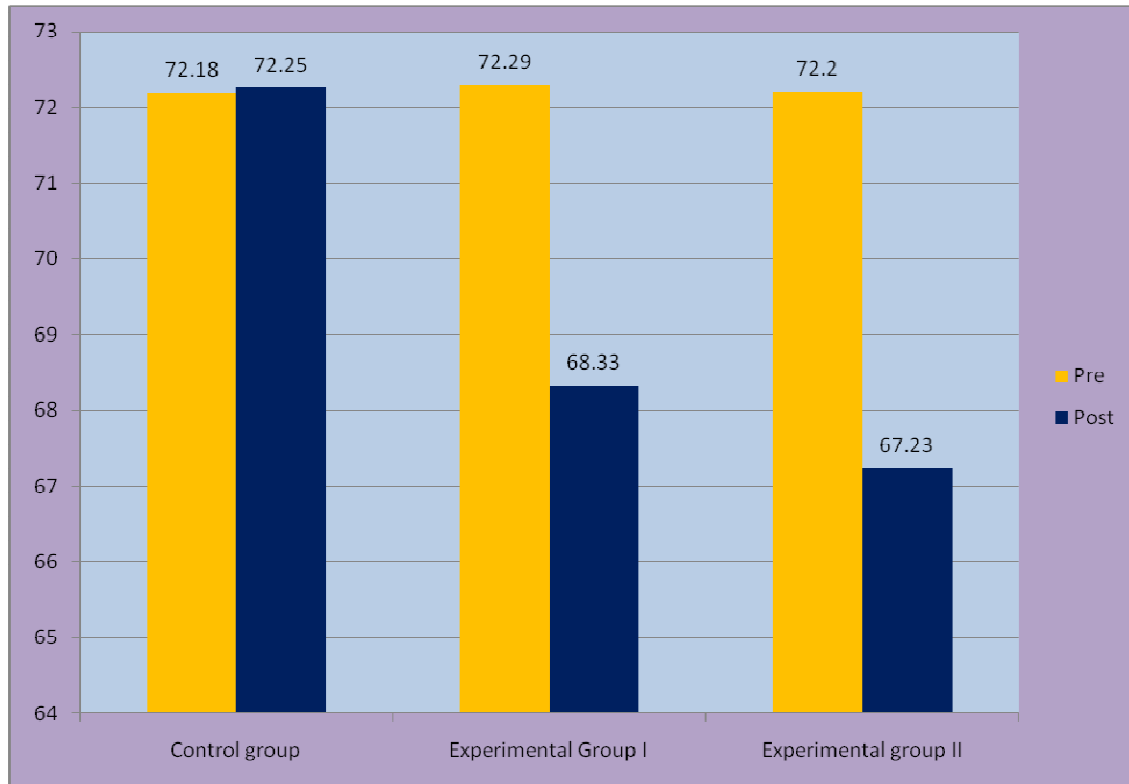


Fig- 2

4.3.1.1. DISCUSSION ON THE FINDINGS OF RESTING PULSE RATE

The Table- XI (A) shows that Scheffe's confidence interval values of Resting Pulse Rate among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table- XI (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 70.30, 69.71 and 72.21 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 1.90, 2.49 and 0.59 respectively. The required Scheffe's confidence interval to be significant at 0.05 level was 3.98 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings of Tanaka TH, et. al. (2013) and Baena-Beato PA, et. al. (2013) who have found that yogic practices and Naturopathy Practices improved significantly on physiological variable, resting pulse rate among diabetic women.

4.3.2. RESULTS OF SYSTOLIC BLOOD PRESSURE

The Systolic Blood Pressure was measured through digital Blood Pressure measuring apparatus. The Table -XII shows the variance of Systolic Blood Pressure among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XII

**ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO EXPERIMENTAL
GROUPS AND THE CONTROL GROUP IN SYSTOLIC BLOOD PRESSURE**

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	131.9	132.2	131.7	Between	3.402	2	1.701	0.164
				Within	870.4	84	10.362	
Post test mean	121.7	118.8	131.3	Between	2500.7	2	1250.3	81.90*
				Within	1282.2	84	15.265	
Adjusted Post test Mean	126.8	125.5	131.5	Between	576.07	2	288.03	33.74*
				Within	717.03	84	8.536	
Mean Difference	10.2	13.4	0.4					

* Significant at 0.01 level.

The obtained F value on pre test scores 0.164 was lesser than the required F value of 3.10 to be significant at 0.01 level. This proved that there was no significant difference between the groups a pre test and post test and the randomization at the pre test was equal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 81.90 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of 33.74 was greater than the required F value of 3.10. This proved that there was a significant

difference among the means due to Yogic practices and Naturopathy Practices on Physiological variable, Systolic Blood Pressure.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe’s Confidence Interval test. The results were presented in table –XII (A).

Table –XII (A)
SCHEFFE’S POST-HOC TEST FOR SYSTOLIC BLOOD PRESSURE

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
126.8	125.5	131.5	4.67*	1.99
			6.00*	
			1.33*	

* Significant at 0.01 level.

The multiple mean comparisons shown in table - XII (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Systolic Blood Pressure were presented through bar diagram for better understanding of the results of this study in Figure - 3.

BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG YOGIC PRACTICES,
NATUROPATHY PRACTICES AND CONTROL GROUP ON
SYSTOLIC BLOOD PRESSURE

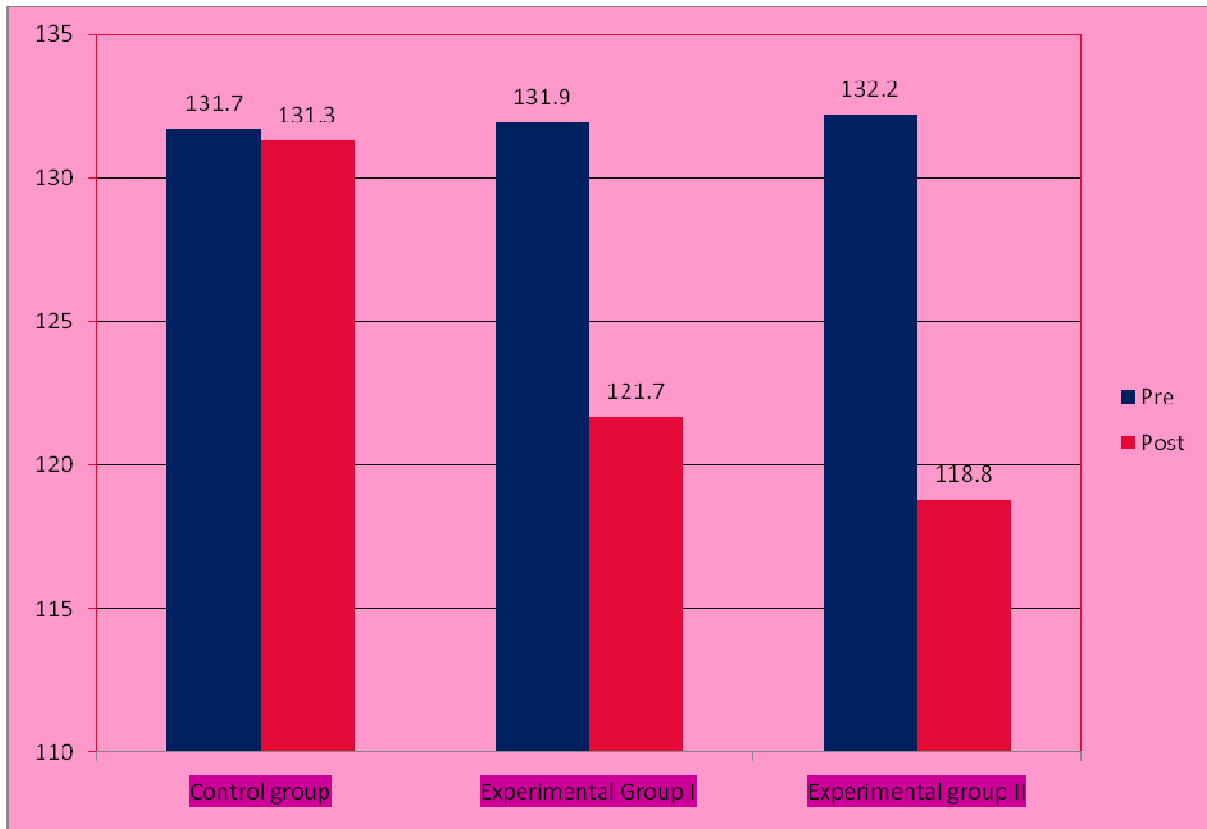


Fig-3

4.3.2.1. DISCUSSION ON THE FINDINGS OF SYSTOLIC BLOOD PRESSURE

The Table-XII (A) shows that Scheffe's confidence interval values of Systolic Blood Pressure among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table-XII (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 126.8, 125.5 and 131.5 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 4.67, 6.00 and 1.33 respectively. The required Scheffe's confidence interval to be significant at 0.05 level was 1.99 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings Shenbagavalli¹, A. and Poomayil(2010), M. who have found that yogic practices and Naturopathy Practices improved significantly on physiological variable, Systolic Blood Pressure among diabetic women.

4.3.3. RESULTS OF DIASTOLIC BLOOD PRESSURE:

The Diastolic Blood Pressure was measured through digital Blood Pressure measuring apparatus. The Table - XIII shows the variance of Diastolic Blood Pressure among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XIII**ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO EXPERIMENTAL GROUPS AND THE CONTROL GROUP IN DIASTOLIC BLOOD PRESSURE**

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	78.38	79.01	77.97	Between	15.724	2	7.862	1.167
				Within	565.79	84	6.736	
Post test mean	74.48	75.21	78.31	Between	239.7	2	119.8	13.09*
				Within	774.2	84	9.217	
Adjusted Post test Mean	76.41	77.02	78.07	Between	40.851	2	20.425	5.90*
				Within	290.3	84	3.457	
Mean Difference	3.9	3.8	0.34					

* Significant at 0.01 level.

The obtained F value on pre test scores 1.167 was lesser than the required F value of 3.10 to be significant at 0.01 level. This proved that there was no significant difference between the groups a pre test and post test and the randomization at the pre test was equal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 13.09 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of

5.90 was greater than the required F value of 3.10. This proved that there was a significant difference among the means due to Yogic practices and Naturopathy Practices on Physiological variable, Diastolic Blood Pressure.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe’s Confidence Interval test. The results were presented in table – XIII (A).

Table – XIII (A)
SCHEFFE’S POST-HOC TEST FOR DIASTOLIC BLOOD PRESSURE

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
76.41	77.02	78.07	1.66*	1.17
			1.07*	
			0.59	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XIII (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Diastolic Blood Pressure were presented through bar diagram for better understanding of the results of this study in Figure - 4.

BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG YOGIC PRACTICES, NATUROPATHY PRACTICES AND CONTROL GROUP ON DIASTOLIC BLOOD PRESSURE

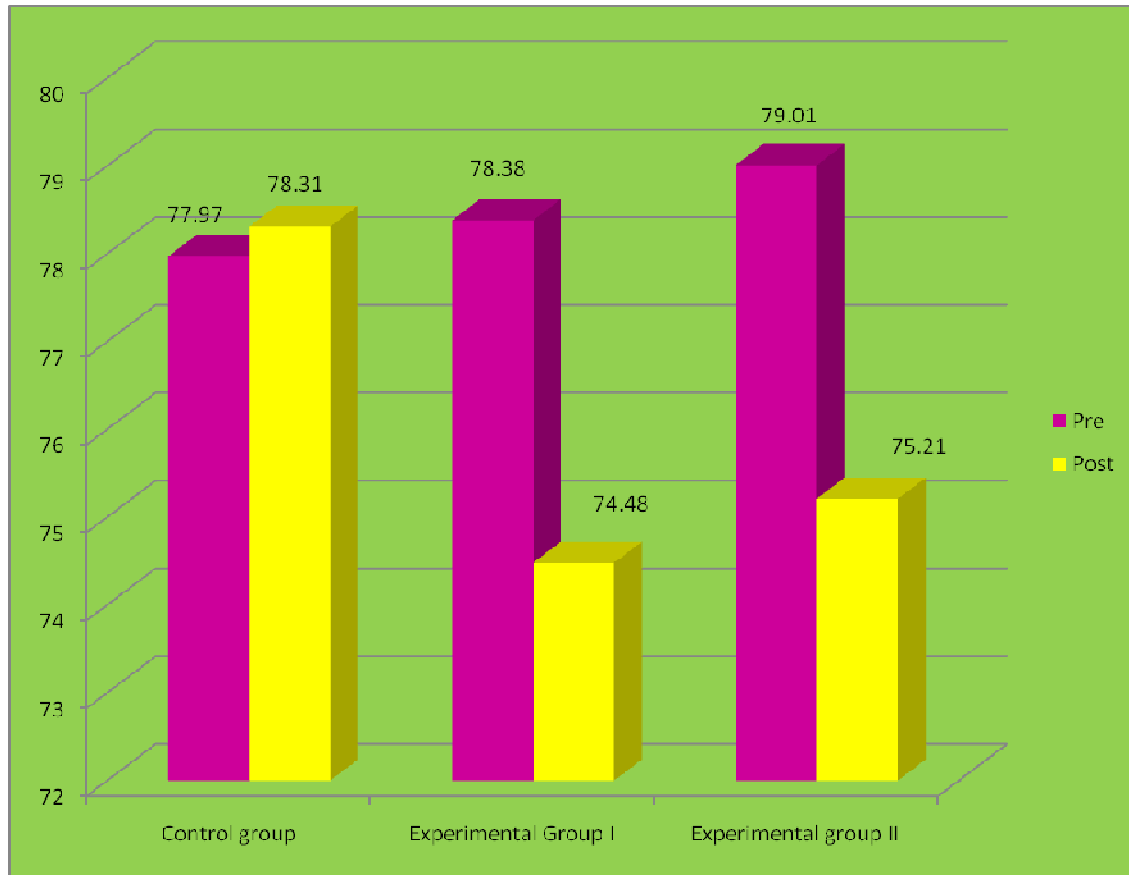


Fig - 4

4.3.3.1. DISCUSSION ON THE FINDINGS OF DIASTOLIC BLOOD PRESSURE

The Table- XIII (A) shows that Scheffe's confidence interval values of Diastolic Blood Pressure among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table- XIII (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 76.41, 77.02 and 78.07 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 1.66, 1.07 and 0.59 respectively. The required Scheffe's confidence interval to be significant at 0.05 level was 1.17 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings of Shiekh GA, et., al. (Dec 2011) who have found that yogic practices and Naturopathy Practices improved significantly on physiological variable, Diastolic Blood Pressure among diabetic women.

4.3.4. RESULTS OF FASTING BLOOD GLUCOSE TEST:

The Fasting Blood Glucose Test was measured through Blood sample. The Table - XIV shows the variance of Fasting Blood Glucose level among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XIV

**ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO EXPERIMENTAL
GROUPS AND THE CONTROL GROUP IN FASTING BLOOD GLUCOSE TEST**

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	92.23	174.7	91.16	Between	14245.6	2	71227.7	161.19*
				Within	39766.0	90	441.84	
Post test mean	87.26	115.6	91.74	Between	14403.8	2	7201.9	11.53*
				Within	56209.2	90	624.54	
Adjusted Post test Mean	89.85	145.0	91.45	Between	61080.0	2	30540.0	85.27*
				Within	32230.7	90	358.12	
Mean Difference	4.97	59.1	0.58					

*Significant at 0.01 level.

The obtained F value on pre test scores 161.19 was greater than the required F value of 3.10 to be significant at 0.01 level. This proved that there was significant difference between the groups a pre test and post test and the randomization at the pre test was unequal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 11.53 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of 85.27 was greater than the required F value of 3.10. This proved that there was a significant

difference among the means due to Yogic practices and Naturopathy Practices on Biochemical variable, Fasting blood glucose level.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in table – XIV (A).

Table – XIV (A)
SCHEFFE'S POST-HOC TEST FOR FASTING BLOOD GLUCOSE TEST

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
89.85	145.0	91.45	1.76*	0.53
			53.5*	
			55.3*	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XIV (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Fasting blood glucose level were presented through bar diagram for better understanding of the results of this study in Figure - 5.

BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG YOGIC PRACTICES, NATUROPATHY PRACTICES AND CONTROL GROUP ON FASTING BLOOD GLUCOSE TEST

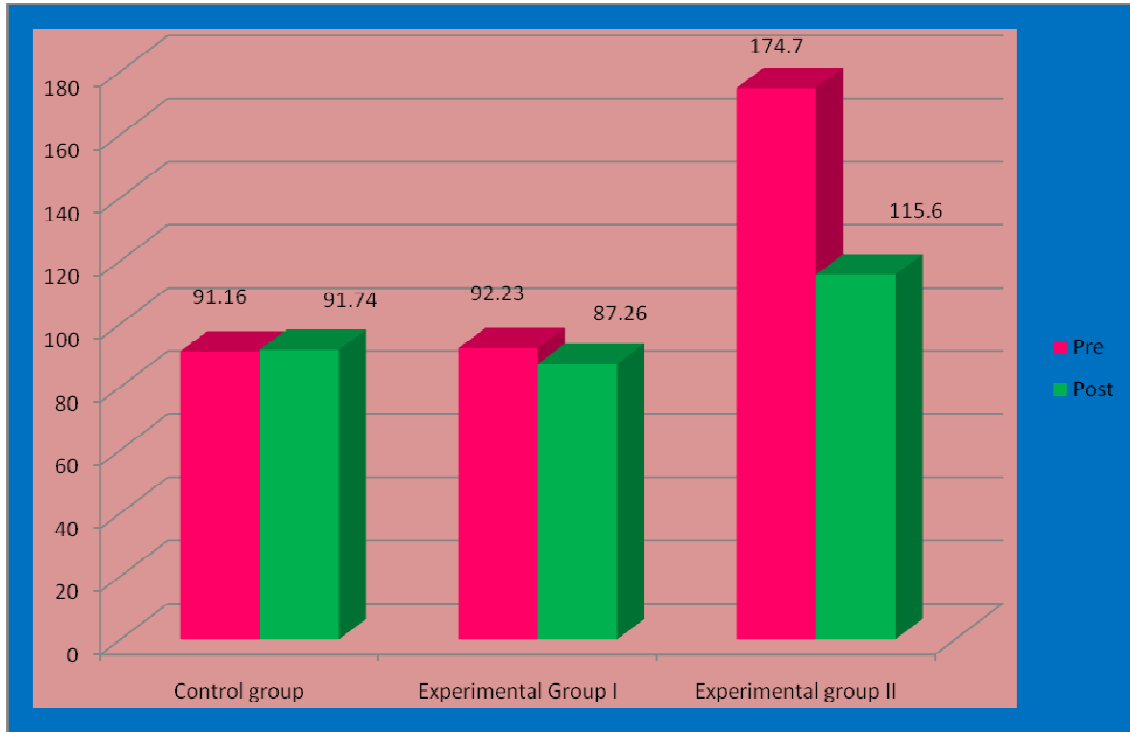


Fig - 5

4.3.4.1. DISCUSSION ON THE FINDINGS OF FASTING BLOOD GLUCOSE

The Table- IX (A) shows that Scheffe's confidence interval values of Fasting blood glucose level among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table- IX (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 89.85, 145.0 and 91.45 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 1.76, 53.5 and 55.3 respectively. The required Scheffe's confidence interval to be significant at 0.01 level was 0.53 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings of Amita S, Prabhakar S, (Nov 2011) who have found that yogic practices and Naturopathy Practices improved significantly on Biochemical variable, Fasting blood glucose level among diabetic women.

4.3.5. RESULTS OF POST PRANDIAL BLOOD GLUCOSE TEST:

The Fasting Blood Glucose Test was measured through Blood sample. The Table - XV shows the variance of Post prandial blood glucose level among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XV

**ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO
EXPERIMENTAL GROUPS AND THE CONTROL GROUP IN
POST PRANDIAL BLOOD GLUCOSE TEST**

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	252.9	250.4	231.3	Between	8349.08	2	4174.5	6.40*
				Within	56720.2	87	651.9	
Post test mean	210.6	136.8	180.9	Between	82890.6	2	41445.3	3.40*
				Within	10592.9	87	12175.7	
Adjusted Post test Mean	231.7	193.2	206.1	Between	23095.8	2	11547.9	3.32*
				Within	302058.9	87	3471.9	
Mean Difference	42.3	113.6	50.4					

*Significant at 0.01 level.

The obtained F value on pre test scores 6.40 was greater than the required F value of 3.10 to be significant at 0.01 level. This proved that there was significant difference between the groups a pre test and post test and the randomization at the pre test was unequal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 3.40 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of

3.32 was greater than the required F value of 3.10. This proved that there was a significant difference among the means due to Yogic practices and Naturopathy Practices on Biochemical variable, Post prandial blood glucose level.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in table – XV (A).

Table – XV (A)
SCHEFFE'S POST-HOC TEST FOR POST PRANDIAL BLOOD GLUCOSE TEST

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
231.7	193.2	206.1	25.62*	2.11
			12.93*	
			38.55*	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XIV (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Post prandial blood glucose level were presented through bar diagram for better understanding of the results of this study in Figure - 6.

BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG YOGIC PRACTICES, NATUROPATHY PRACTICES AND CONTROL GROUP ON POST PRANDIAL BLOOD GLUCOSE TEST

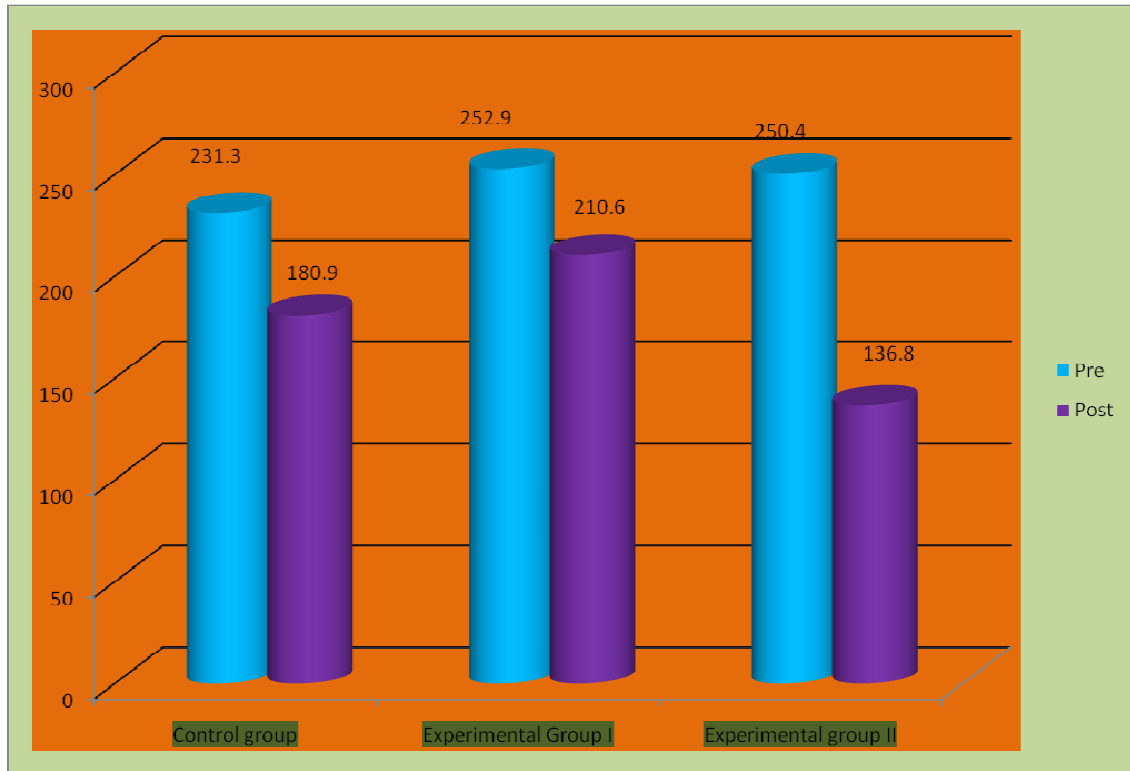


Fig - 6

4.3.6. RESULTS OF STRESS:

The Stress was measured through Latha Sathis`s Stress Questionnaire. The Table - XVI shows the variance of Stress among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XVI

**ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO EXPERIMENTAL
GROUPS AND THE CONTROL GROUP IN STRESS**

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	95.66	99.38	90.14	Between	1253.8	2	626.94	1.03
				Within	52506.8	84	625.08	
Post test mean	75.97	70.97	102.3	Between	16448.2	2	8224.1	12.62*
				Within	54726.1	84	651.50	
Adjusted Post test Mean	85.81	85.17	96.22	Between	2232.9	2	1116.4	2.03*
				Within	46033.1	84	548.01	
Mean Difference	19.69	28.41	12.16					

*Significant at 0.01 level.

The obtained F value on pre test scores 1.03 was lesser than the required F value of 3.10 to be significant at 0.05 level. This proved that there was no significant difference between the groups a pre test and post test and the randomization at the pre test was equal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 12.62 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of

2.03 was greater than the required F value of 3.10. This proved that there was a significant difference among the means due to Yogic practices and Naturopathy Practices on Psychological variable Stress.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe’s Confidence Interval test. The results were presented in table – XVI (A).

Table – XVI (A)
SCHEFFE’S POST-HOC TEST FOR STRESS

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
85.81	85.17	96.22	10.41*	0.11
			11.05*	
			0.64	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XVI (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Stress were presented through bar diagram for better understanding of the results of this study in Figure - 7.

**BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG
YOGIC PRACTICES, THERAPEUTIC EXERCISES AND
CONTROL GROUP ON STRESS**

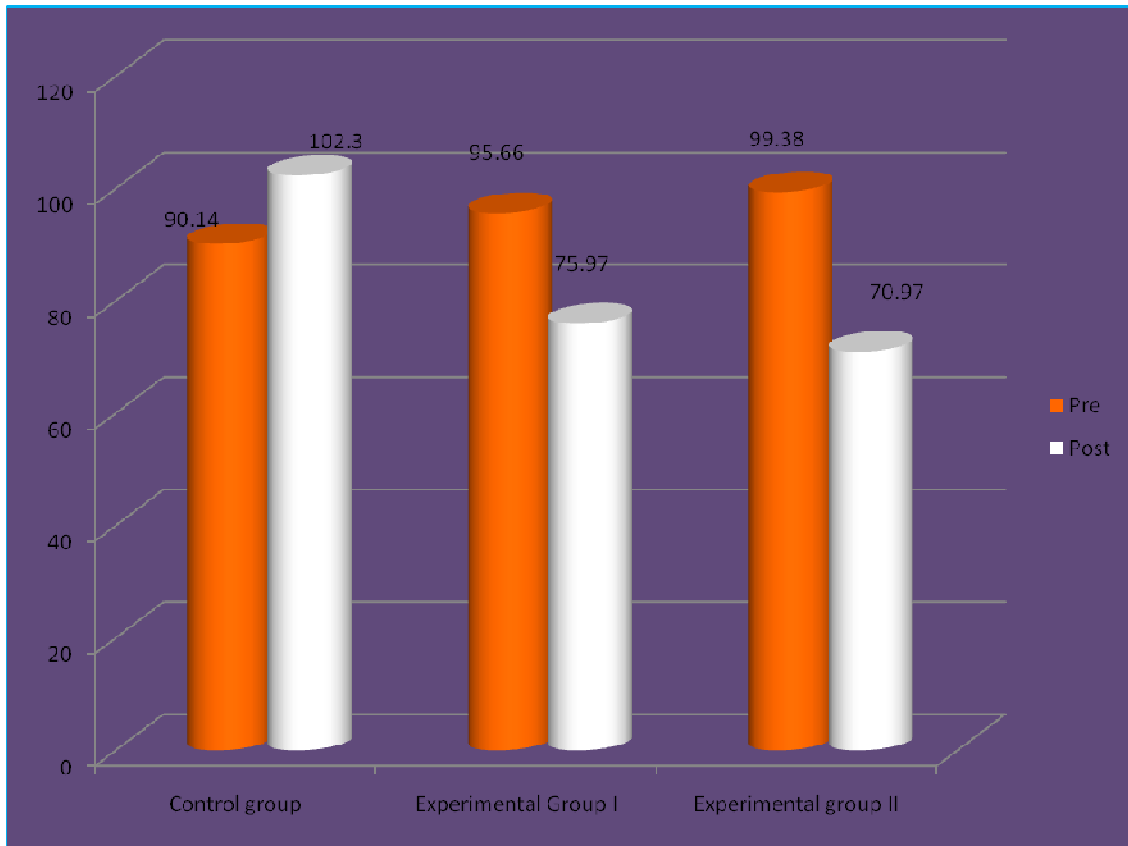


Fig - 6

4.3.6.1. DISCUSSION ON THE FINDINGS OF STRESS

The Table- XVI (A) shows that Scheffe's confidence interval values of Stress among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table- XVI (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 85.81, 85.17 and 96.22 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 10.41, 11.05 and 0.64 respectively. The required Scheffe's confidence interval to be significant at 0.01 level was 0.11 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings of Sharma MP, et.al. (2013) and Hurwitz EL, et. al. (2005) who have found that yogic practices and Naturopathy Practices improved significantly on Psychological variable, Stress among diabetic women.

4.3.7. RESULTS OF JOB SATISFACTION:

The Job Satisfaction was measured through Job Satisfaction Scale – Bubby, B.L., Uppal.K.K and Verma S.K. (1989). The Table - XVII shows the variance of Job Satisfaction among Yogic practices (Group-A), Naturopathy Practices (Group-B) and Control group (Group-C) of diabetic women.

TABLE – XVII
ANALYSIS OF CO-VARIANCE OF THE MEANS OF TWO
EXPERIMENTAL GROUPS AND THE CONTROL GROUP
IN JOB SATISFACTION

(Low scores indicate satisfaction and high scores indicate dissatisfaction)

	Experimental Group I	Experimental Group II	Control Group	Source of variance	Sum of square	Df	Mean square	Obtained F-ratio
Pre test Mean	61.69	64.28	55.83	Between	1086.7	2	543.39	1.94
				Within	23476.1	84	279.47	
Post test mean	52.59	46.97	63.62	Between	4163.8	2	2081.9	9.55*
				Within	18304.8	84	217.91	
Adjusted Post test Mean	57.14	55.62	59.72	Between	249.67	2	124.83	0.52
				Within	20122.06	84	239.56	
Mean Difference	9.1	17.31	7.79					

*Significant at 0.01 level.

The obtained F value on pre test scores 1.94 was lesser than the required F value of 3.10 to be significant at 0.01 level. This proved that there was no significant difference between the groups a pre test and post test and the randomization at the pre test was equal.

The post test scores analysis proved that there was significant difference between the groups, as obtained F value 9.55 was greater than the required F value of 3.10. This proved that the differences between the post test means of 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 of 0.52 was lesser than the required F value of 3.10. This proved that there was a no significant

difference among the means due to Yogic practices and Naturopathy Practices on Psychological variable Job Satisfaction.

Since significant improvements were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in table – XVII (A).

Table – XVII (A)
SCHEFFE'S POST-HOC TEST FOR JOB SATISFACTION

MEANS			Mean difference	Required C.I
Experimental Group I	Experimental Group II	Control Group		
57.14	55.62	59.72	2.59*	0.37
			4.10*	
			1.52*	

*Significant at 0.01 level.

The multiple mean comparisons shown in table - XVII (A) proved that there existed significant differences between the adjusted means of Yogic practices (Group A) and control group (Group-C), Naturopathy Practices (Group-B) and control group (Group-C). There was significant difference between Yogic practices (Group A) and Naturopathy Practices (Group-B).

The ordered adjusted means on Job Satisfaction were presented through bar diagram for better understanding of the results of this study in Figure - 8.

**BAR DIAGRAM SHOWING THE MEAN DIFFERENCE AMONG
YOGIC PRACTICES, NATUROPATHY PRACTICES AND
CONTROL GROUP ON JOB SATISFACTION**

(Low scores indicate satisfaction and high scores indicate dissatisfaction)

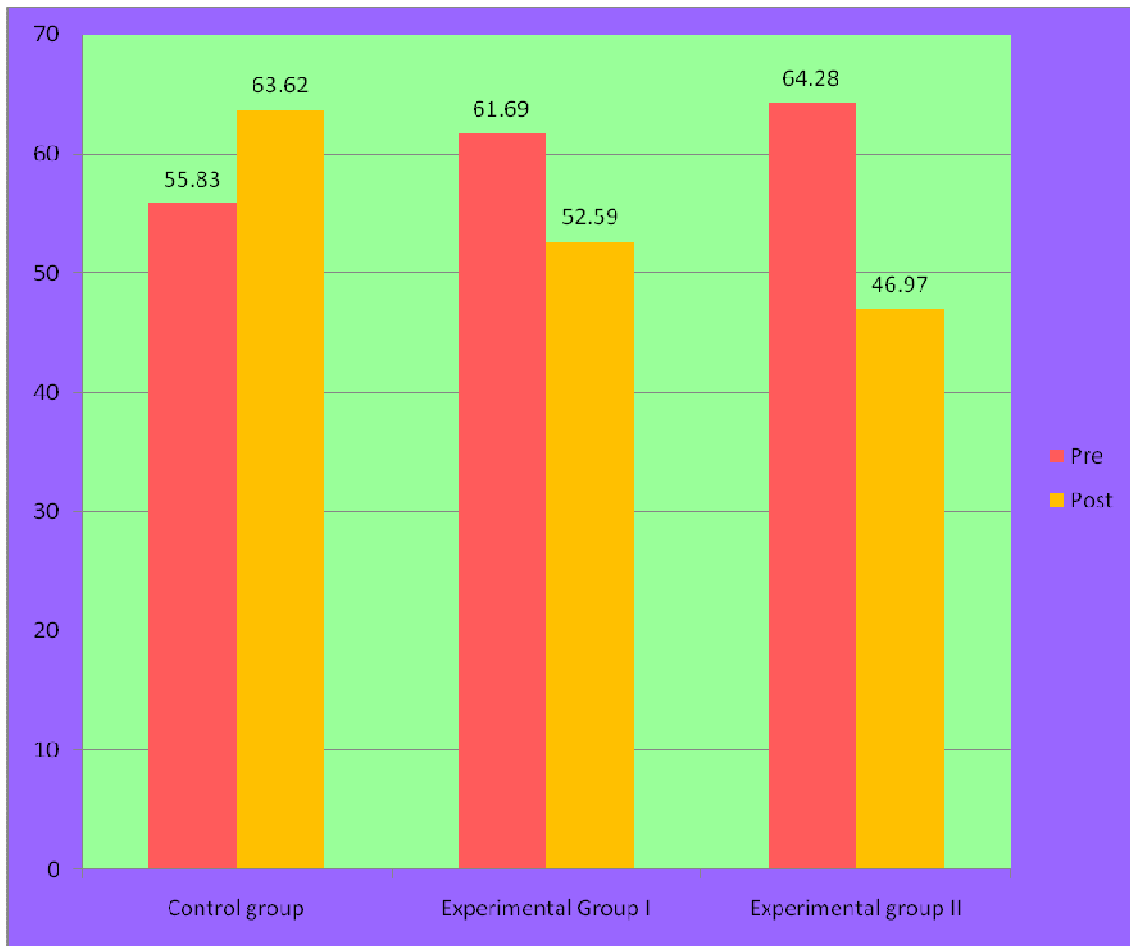


Fig - 8

4.3.7.1. DISCUSSION ON THE FINDINGS OF JOB SATISFACTION

The Table- XVII (A) shows that Scheffe's confidence interval values of Job Satisfaction among Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women.

From the Table- XVII (A) it is clear that the mean value of Yogic practices (Group A), Naturopathy Practices (Group-B) and Control group (group C) of diabetic women were 57.14, 55.62 and 59.72 respectively.

The mean difference between Yogic practices (Group A) and Naturopathy Practices (Group-B), Yogic practices (Group A) and control group (group C), Naturopathy Practices (Group-B) and control group (group C) were 2.59, 4.10 and 1.52 respectively. The required Scheffe's confidence interval to be significant at 0.01 level was 0.37 and the difference between Yogic practices (Group A), Naturopathy Practices (Group-B) and control group (group C) of diabetic women were greater than required confidence interval and hence it is significant.

The findings of this study are in agreement with the findings of Clarke G, et. al. (2012) and Johnston V, et. al. (2011) who have found that yogic practices and Naturopathy Practices improved significantly on Psychological variable, Job Satisfaction among diabetic women.

4.4. DISCUSSION ON HYPOTHESIS

For the purpose of this study it was hypothesized that the Yogic practices (Group A), Naturopathy Practices (Group-B) would improve the selected Physiological, Biochemical and Psychological variables as compared to control group (group C).

The results presented in Tables XI to XVII proved that there was a significant difference due to Yogic practices (Group A) and Naturopathy Practices (Group-B) on Physiological variables like Resting Pulse Rate, & Blood Pressure, Biochemical variables like Fasting blood glucose level & Post prandial blood glucose level and Psychological variables like Stress & Job satisfaction. Thus, the hypothesis was accepted at 0.01 level of confidence.

It was also hypothesized that the changes on selected Physiological, Biochemical and Psychological variables as a result of Yogic practices (Group A) and Naturopathy Practices (Group-B) would differ significantly. The Post hoc analysis of the results proved that Yogic practices (Group A) was slightly effective than the Naturopathy Practices (Group-B) in reducing Resting Pulse Rate, Blood Pressure, Fasting blood glucose level, Post prandial blood glucose level, Stress and Job satisfaction and the hypothesis was accepted at 0.01 level of confidence.