CHAPTER IV

ANALYSIS OF DATA & INTREPRETATION OF RESULTS

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4.1.0 Test of the hypothesis

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Analysis of Data and Interpretation of Result

After discussing the importance of Yoga and taking a brief review of researches conducted in this area to support the rationale of the present study, detailed plan of the study was presented in the III chapter. The hypotheses to be tested, variable involved, sample selected, tools employed and the manner in which the relevant data was collected and other methodological details are discussed in this chapter. The data thus collected was subjected to appropriate statistical procedure to test the hypotheses with which this study was initiated. The details of the statistical techniques employed for analysis of the data, results obtained through this analysis and the decisions regarding the rejection or non rejection of hypothesis are presented in this chapter.

Statistical techniques are used for organizing, analyzing and interpreting numerical data. Statistics is a basic tool of measurement & evaluation, when research has quantifiable data. Statistical method goes to the fundamental purposes of description and analysis. By statistics we can analyze and interpret the data and can draw conclusions. If the collective data are systematically arranged and analyzed through appropriate scientific and statistical techniques, the results obtained are scientific and correct.

Interpretation of data refers to that important part of the investigation which is associated with the drawing of the inference from the collected facts after an analytical study. It is the interpretation that makes it possible for us to utilize collected data in various fields.

4.1.0 Test of the hypotheses

Table 4.1.1: Difference between mean scores of experimental and control group with respect to cardio vascular endurance

S. No.	Group	Test	No. of students (N)	Mean (M)	S.D. (σ)	df	t-value	Significance
1.	Experimental	Post-test	22	157.92	1211.63	42	4.47	*Significant
2.	Control	Post -test	22	117.49	1024.25			

*Significant at 0.05 level

The table indicates the computed value of the 't' test is 4.47. The critical value of 't' test is 2.02 at 0.05 level of significance. The computed value of 't' is greater than the critical value of 't'. Hence the hypothesis H_01 "There will be no significant influence of Yoga training on cardio-vascular endurance" is rejected.

It may be inferred that 8 weeks of Yoga training influences/improves the cardiovascular endurance of female teacher trainees.

Table 4.1.2 : Difference between mean scores of experimental and control group with respect to explosive power

S. No.	Group	Test	No. of students (N)	Mean (M)	S.D. σ	df	t-value	Significance
1.	Experimental	Post	22	0.17	0.17	42	0.48	*Not significant
2.	Control	Post	22	0.19	0.16			

* Not significant at 0.05 level

The table indicates the computed value of the 't' test is 0.48. The critical value of 't' test is 2.02 at 0.05 level of significance. The computed

value of 't' is less than the critical value of 't' and hence the hypothesis $H_0$2 "There will be no significant effect of yoga training on explosive power", is accepted.

It may be inferred that 8 weeks of yoga training does not affect the explosive power of female teacher trainees.

Table 4.1.3 : Difference between mean scores of experimental and control group with respect to flexibility

S. No.	Group	Test	No. of students (N)	Mean (M)	S.D. σ	df	t-value	Significance
1.	Experimental	Post	22	1.91	6.83	42	5.03	*Significant
2.	Control	Post	22	- 3.12	4.05			

* Significant at 0.05 level

The table indicates the computed value of the 't' test is 5.03. The critical value of 't' test is 2.02 at 0.05 level of significance. The computed value of 't' is greater than the critical value of 't' and hence the hypothesis $H_0$3 "There will be no significant influence of yoga training on flexibility", is rejected.

It may be inferred that 8 weeks of yoga training improves the flexibility of female teacher trainees.

Table 4.1.4 : Difference between mean scores of experimental and control group with respect to heart rate

S. No.	Group	Test	No. of students (N)	Mean (M)	S.D. σ	df	t-value	Significance
1.	Experimental	Post	22	37.50	3.46	42	1.98	*Not Significant
2.	Control	Post	22	39.82	3.71			

* Not significant at 0.05 level

The table indicates the computed value of the 't' test is 1.98. The critical value of 't' test is 2.02 at 0.05 level of significance. The computed value of 't' is less than the critical value of 't' and hence the hypothesis H_04 "There will be no significant impact of yoga training on heart rate", is accepted.

It may be inferred that 8 weeks of yoga training improves the heart rate of female teacher trainees.

Table 4.1.5 : Difference between mean scores of experimental and control group with respect to breath holding time

S. No.	Group	Test	No. of students (N)	Mean (M)	S.D. σ	df	t-value	Significance
1.	Experimental	Post	22	43.36	12.65	42	4.63	*Significant
2.	Control	Post	22	27.77	9.44			

* significant at 0.05 level

The table indicates the computed value of the 't' test is 4.63. The critical value of 't' test is 2.02 at 0.05 level of significance. The computed value of 't' greater than the critical value of 't' and hence the hypothesis H_05

"There will be no significant impact of yoga training on breath holding time". is rejected.

It may be inferred that 8 weeks of yoga training improves the breath holding time of female teacher trainees.

There is only 5% chance of there being no differences in the performance. There are 95% chances for the repetition of the same outcome.