

CHAPTER-IV

ANALYSIS

AND

INTERPRETATION

CHAPTER – IV

ANALYSIS AND INTERPRETATION

LIST OF OBJECTIVES AND HYPOTHESIS

ANALYSIS AND INTERPRETATION

RESULTS

CHAPTER - IV

ANALYSIS AND INTERPRETATION

In this chapter the data regarding 'A Study of Stress Among Girls Studying in X Standard in Islampur City' has been analyzed and interpreted for getting the desired results. There are 15 secondary schools in Islampur city, but only two secondary girl schools are taken for the study. In the present research survey method is used.

The researcher collected the data from 190 (out of 197) girl students from Malati Vasantdada Patil Kanya Prashala and Yashwant Kanya High School in Islampur city. The purpose of the study is to find out examination stress level and state anxiety level of these X standard girl students.

In the present study data is classified into two categories. First is based on two tests i.e. before preliminary examination and S.S.C. Board examination and second is based on the academic performance i.e. the academic achievement in preliminary and S.S.C. Board examination of the students.

Data consists of the stress score before preliminary examination and stress score before S.S.C. Board examination of the selected 190 girl students. It usually has quantitative meaning of some sort and the usual approach is to perform an appropriate type of statistical analysis, which is done by descriptive statistics and inferential statistics.

In descriptive statistics mean, standard deviation and correlation of the collected data are calculated. In inferential statistics, statistics are measures of the sample and parameters are the measures of population. In the present study 't' values are calculated and conclusions are drawn.

Thus data collected for the study was treated, scored and analyzed on computer using descriptive and inferential statistics that is helped in objective interpretation.

LIST OF OBJECTIVES AND HYPOTHESIS

Objectives No.1

To determine the stress level of girls before preliminary examination.

Objectives No. 2

To determine the stress level of girls before Board examination.

Objectives No. 3

To determine the state anxiety level of girls before preliminary examination.

Objectives No. 4

To determine the state anxiety level of girls before Board exam.

Objectives No. 5

To compare the stress level of girls students before the preliminary examination and before S.S.C. Board examination.

Related To Hypothesis No.1

There is no significant difference in the stress level among X standard girls before preliminary examination and before

S. S. C. Board examination.

Objectives No. 6

To compare the state anxiety level of girls before the preliminary examination and before S.S.C. Board examination.

Related to Hypothesis No.2

There is no significant difference in the state anxiety level among X standard girls before preliminary examination and before S. S. C. Board examination.

Objectives No. 7

To find relationship between stress level and academic performance of girls before preliminary examination.

Related to Hypothesis No.3

There is no significant relationship between the stress levels before the preliminary examination and academic performance in preliminary examination.

Objectives No.8

To find relationship between stress level and academic performance of girls before Board examination.

Related to Hypothesis No.5

There is no significant relationship between the stress level before Board examination and academic performance in Board examination.

Objectives No.9

To find relationship between state anxiety level and academic performance before preliminary examination.

Related to Hypothesis No.4

There is no significant relationship between the state anxiety level before the preliminary examination and academic performance in preliminary examination.

Objectives No.10

To find relationship between state anxiety level and academic performance before Board examination.

Related to Hypothesis No.6

There is no significant relationship between the state anxiety level before Board examination and academic performance in the Board examination.

Objectives No.11

To suggest appropriate measures to the girl students to combat stress based on the results of the study.

Objectives No.12

To suggest appropriate measures to be taken by school authorities to create an environment to develop ideal stress for maximizing the performance of the students, based on the results of the study.

ANALYSIS AND INTERPRETATION

Objective No. 1

To Find out the stress level of girls before preliminary examination.

TABLE No. 7
STRESS LEVEL WISE DISTRIBUTION OF GIRLS
BEFORE PRELIMINARY EXAMINATION

Sr.No.	Stress Level of Girls Before Preliminary Examination.	No. of Girl Students	Percentage of Girl Students
1	Low Stress	0	0
2	Moderate Low Stress	18	9.48
3	Moderate Stress	143	75.26
4	Moderate High Stress	29	15.26
5	High Stress	0	0
Total		190	100.00

Observation and Interpretation

Table No.7 shows the stress level wise distribution of the 190 girl students. There are 18 girl students i.e.(9.48%) in the moderate low stress level whereas there are 143 girl students i.e. (75.26 %) in the moderate level of stress where as there are 29 girl students i.e.(15.26%) in the moderate high stress level whereas there are no girl students in low stress level and there are no girl students in high stress level.

Objective No. 2

To find out the stress level of girls before Board examination.

TABLE No. 8
STRESS LEVEL WISE DISTRIBUTION OF GIRLS
BEFORE BOARD EXAMINATION

Sr.No	Stress Level of Girls Before Board Exam.	No. of Girl Students	Percentage of Girl Students
1	Low Stress	0	0
2	Moderate Low Stress	03	1.58
3	Moderate Stress	102	53.68
4	Moderate High Stress	85	44.74
5	High Stress	0	0
Total		190	100.00

Observation and Interpretation

Table No.8 shows the stress level wise distribution of the 190 girl students before Board examination. There are 3 girl students i.e. (1.58%) in the moderate low stress level whereas there are 102 girl students i.e. (53.68 %) in the moderate level of stress whereas there are 85 students i.e. (44.74%) in the moderate high stress level whereas there are no girl students in low stress level and there are no girl students in high stress level.

Objective No. 3

To determine the state anxiety level of girls before preliminary examination.

TABLE No. 9

**STATE ANXIETY LEVEL WISE DISTRIBUTION OF
GIRLS BEFORE PRELIMINARY EXAMINATION.**

Sr. No	State Anxiety Levels of Girls Before Preliminary Exam.	No. of Girl Students	Percentage of Girl Students
1	Low State Anxiety	0	0
2	Moderate Low State Anxiety	28	14.74
3	Moderate State Anxiety	99	52.10
4	Moderate High State Anxiety	63	33.16
5	High State Anxiety	0	0
Total		190	100.00

Observation and Interpretation

Table No.9 shows that the state anxiety level wise distribution of the 190 girl students before preliminary examination. There are 28 girl students i.e. (14.74%) in the moderate low state anxiety level. whereas there are 99 girl students i.e. (52.10%) in the moderate state anxiety level. Whereas there are 63 girl students (33.16%) in the moderate high state anxiety level. Whereas there are no girl students in low state anxiety level and there are no girl students in high state anxiety level.



Objective No. 4

To determine the state anxiety level of girl students before Board examination

TABLE No.10
STATE ANXIETY LEVEL WISE DISTRIBUTION OF
GIRLS BEFORE BOARD EXAMINATION

Sr. No	State Anxiety level of Girls Before Board Exam.	No. of Girl Students	Percentage of Girl Students
1	Low State Anxiety	0	0
2	Moderate Low State Anxiety	13	6.84
3	Moderate State Anxiety	104	54.74
4	Moderate High State Anxiety	73	38.42
5	High State Anxiety	0	0
Total		190	100.00

Observation and Interpretation

Table No.10 shows the state anxiety level wise distribution of the 190 girl students before Board examination. There are 13 girl students i.e. (6.84%) in the moderate low state anxiety level. Where as there are 104 girl students i.e. (54.74%) in the moderate state anxiety level where as there are 73 girl students i.e. (38.42%) in the moderate high state anxiety level where as there are no girl students in low state anxiety level and there are no girl students in high state anxiety level.

Objective No. 5

To compare the stress level of girl students before preliminary examination and before S.S.C. Board examination.

TABLE No. 11
COMPARISON OF STRESS LEVEL BEFORE
PRELIMINARY EXAMINATION AND BEFORE
S.S.C. BOARD EXAMINATION

S r. N o.	Before Preliminary Examination			Before S.S.C. Board Examination		
	Stress levels of girls before Prelim. Exam.	No. of Girl Students	% of Girls Students	Stress Levels of Girls Before. Board Exam.	No of Girls Students	% of Girls Students
1	Low Stress	0	0	Low Stress	0	0
2	Moderate Low Stress	.18	9.48	Moderate Low Stress	3	1.58
3	Moderate Stress	143	75.26	Moderate Stress	102	53.68
4	Moderate High Stress	29	15.26	Moderate High Stress	85	44.74
5	High Stress	0	0	High Stress	0	0.0
	Total	190	100		190	100

Observation and Interpretation

Table No.11 shows that comparison of stress level before preliminary examination and before S.S.C. Board examination.

There are 18 girl students i.e. (9.48%) in the moderate low stress level before preliminary examination whereas there are 3 girl students i.e. (1.58%) in the moderate low stress level before Board examination. There are 143 girl students i.e. (75.26%) in the moderate level of stress before preliminary examination whereas there are 102 girl students i.e. (53.68%) in the moderate level of stress before Board examination. Also there are 29 girl students i.e. (15.26%) in the moderate high stress level before preliminary examination whereas there are 85 girl students i.e. (44.74%) in the moderate high stress level before Board examination. There are no girl students in low stress level and high stress level before preliminary examination and before Board examination.

We conclude that percentage of girl students in moderate high stress level is increases in Board examination than preliminary examination.

Related to Hypothesis No.1 is tested in Table No.12

Hypothesis No.1

There is no significant difference in the stress level among X Standard girls before preliminary and before S.S.C Board examination.

TABLE No. 12
COMPARISON OF STRESS BEFORE PRELIMINARY
EXAMINATION AND BEFORE S.S.C. BOARD
EXAMINATION.

Stress Level Before Prelim. Examination.		Stress Level Before Board Examination.		df	Cal. 't' Value	Table value .01 level	Table value .05 level
N =190		N =190					
Mean	SD	Mean	SD				
31.38	5.13	35.42	6.06	189	5.73 E-21 115 0	2.00	1.97

Observation and Interpretation

The Table No. 12 shows that mean and standard deviation of stress test before preliminary examination is 31.38 and 5.13 also mean and standard deviation of stress test of girl students before board examination is 35.42 and 6.06

It is observed from the above table calculated 't' value was found to be 5.73 E-21 which is less than the table value 2.60 at 0.01 level of significance for df 189 also calculated 't' value was found to be 5.73 E-21 which is less than the table value 1.97 at 0.05 level of significance for df 189. So the difference is not significant. The hypothesis no. 1 is accepted therefore there is no significant difference in the stress level among X standard girls before preliminary and before S.S.C. Board examination.

Objective No. 6

To compare the state anxiety level of girl students before the preliminary examination and before S.S.C. Board examination

TABLE No.13

**COMPARISON OF STATE ANXIETY LEVEL BEFORE
PRELIMINARY EXAMINATION AND BEFORE
S.S.C. BOARD EXAMINATION.**

S r. N o.	Before Preliminary Examination			Before S.S.C. Board Examination		
	State Anxiety Levels of Girls B.P.E.	No. of Girl Students	% of Girl Students	State Anxiety Levels of girls B.B.E.	No of Girl Students	% of Girl Students
1	Low State Anxiety	0	0	Low State Anxiety	0	0
2	Moderate Low State Anxiety	28	14.74	Moderate Low State Anxiety	13	6.84
3	Moderate State Anxiety	99	52.10	Moderate State Anxiety	104	54.74
4	Moderate High State Anxiety	63	33.16	Moderate High State Anxiety	73	38.42
5	High State Anxiety	0	0	High State Anxiety	0	0.0
	Total	190	100		190	100

B.P.E.=Before preliminary examination

B.B.E.=Before Board examination

Observation and Interpretation

Table No.13 shows the comparison of state anxiety level before preliminary examination and before S.S.C. Board examination. There are 28 students i.e. (14.74%) in the moderate low state anxiety level before preliminary examination whereas there are 13 girl students i.e. (6.84%) in the moderate low state anxiety level before Board examination. There are 99 girl students i.e. (52.10%) in the moderate state anxiety level before preliminary examination whereas there are 104 girl students i.e. (54.74%) in the moderate state anxiety level before Board examination. Also there are 63 girl students i.e. (33.16%) in the moderate high state anxiety level before preliminary examination whereas there are 73 girl students i.e. (38.42%) in the moderate high state anxiety level before Board examination.

We conclude that percentage of girl students in Moderate State Anxiety, Moderate High State Anxiety is increases in Board examination than preliminary examination.

Related to Hypothesis No.2 is tested in Table No.14

Hypothesis No.2

There is no significant difference in state anxiety level among X standard girl students before preliminary examination and before S.S.C. Board examination.

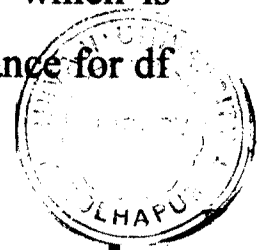
TABLE No. 14
COMPARISON OF STATE ANXIETY BEFORE
PRELIMINARY EXAMINATION AND BEFORE
S.S.C. BOARD EXAMINATION.

State Anxiety Level Before Prelim. Exam.		State Anxiety Level Before S.S.C .Board Exam.		df	Cal 't' Value	Table value .01 level	Table value .05 level
N=190		N=190					
Mean	SD	Mean	SD				
43.14	9.21	45.89	8.96	189	6.82 E-05 ≅ 0	2.60	1.97

Observation and Interpretation

Table No.14 shows that mean and standard deviation of state anxiety test of girl students before preliminary examination are 43.14 and 9.21 respectively and also shows that mean and standard deviation of state anxiety test of girl students before Board examination are 45.89 and 8.96 respectively.

In preliminary examination 't' value were calculated to the hypothesis No. 2. It is observed from the above table calculated 't' value was found to be 6.82 E-05 which is less than the table value 2.60 at 0.01 level of significance for df 189 also calculated 't' value was found to be 6.82 E-05 which is less than the table value 1.97 at 0.05 level of significance for df



189. So the difference is not significant. Hence the hypothesis No.2 is accepted. Therefore there is no significant difference in the state anxiety level among X standard girl students before preliminary examination and before S.S.C. Board examination.

Objective No. 7

To find relationship between stress level and academic performance before preliminary examination.

Related to Hypothesis No.3 is tested in Table No.15

Hypothesis No.3.

There is no significant relationship between the stress level before preliminary examination and academic performance in preliminary examination.

TABLE No. 15

**CORRELATION BETWEEN THE STRESS LEVEL AND
ACADEMIC PERFORMANCE IN PRELIMINARY
EXAMINATION**

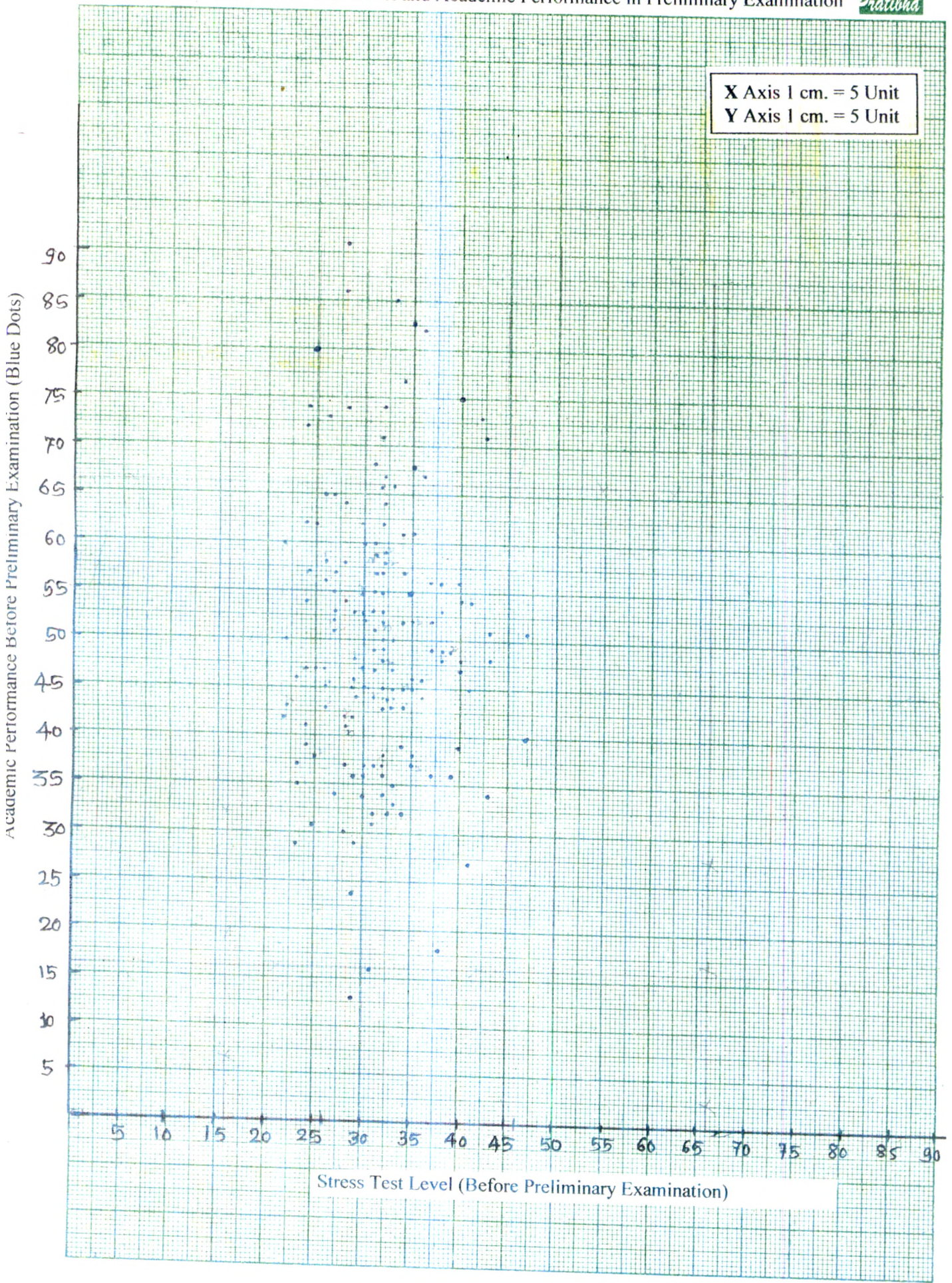
Sr. No.	Details of Variables	Mean	S.D.	Correlation
1.	Stress Level	31.38	05.11	0.0097
2.	Academic Performance	49.07	13.10	

Observation and Interpretation

Table No. 15 shows that the value of coefficient of correlation between stress level and academic performance in preliminary examination is .0097. The correlation between stress level and academic performance in preliminary examination is positive but negligible. Therefore there is negligible relationship between stress level and academic performance in preliminary examination.

Correlation Between Stress Level and Academic Performance in Preliminary Examination

Pratibha



The Graph No. 1 Shows that the academic performance of the maximum students before preliminary examination is moderate and the level of their stress is also moderate. In the same way the performance of the students having low stress level is also low. The graph also shows that the performance of some of the students having low stress level is high and the same is the case regarding some of the students having high stress level.

The stress level and the academic performance are of the maximum students before preliminary examination is moderate but there is no relationship between academic performance and stress level so we can say that the academic performance of the students before preliminary examination is not based on the stress level of the students.

Objective No. 8

To find relationship between stress level and academic performance before Board examination.

Related to Hypothesis No.5 is tested in Table No.16

Hypothesis No. 5

There is no significant relationship between the stress level before Board examination and academic performance in Board examination.

TABLE No.16
CORRELATION BETWEEN STRESS LEVEL
AND ACADEMIC PERFORMANCE IN
BOARD EXAMINATION.

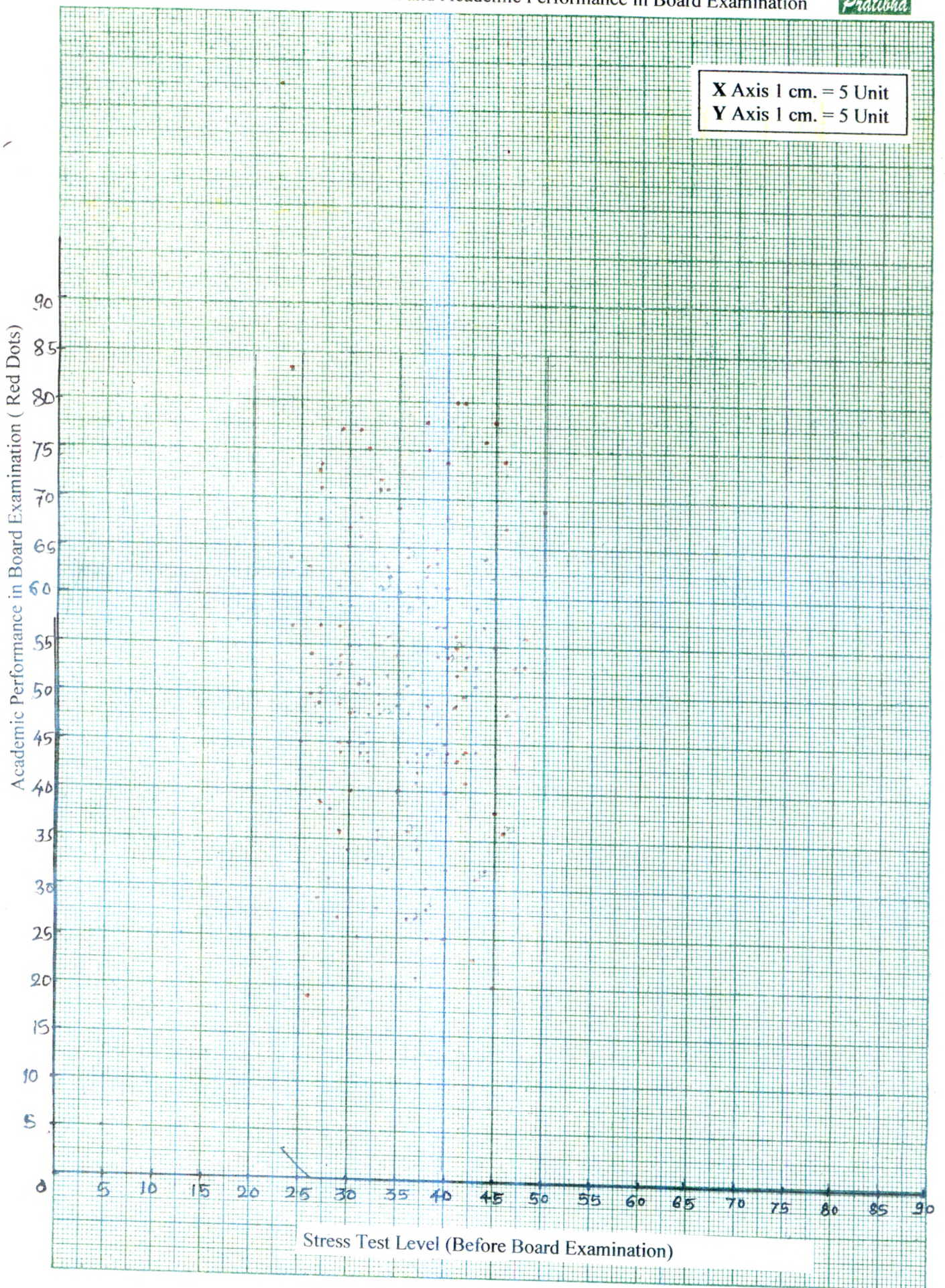
Sr.No.	Details of Variables	Mean	S.D.	Correlation
1.	Stress Level	35.42	6.08	-.0054
2.	Academic Performance	51.34	13.62	

Observation and Interpretation

Table No.16 shows that the correlation between stress level and academic performance in Board examination is - .0054. The correlation between stress level and academic performance in preliminary examination is negative. Therefore there is a negligible relationship between stress level and academic performance in Board examination.



Correlation Between Stress Level and Academic Performance in Board Examination



The Graph No. 2 Shows that the academic performance of the maximum students before Board examination is moderate and the level of their stress is also moderate. In the same way the performance of the students having low stress level is also low. The graph also shows that the performance of some of the students having low stress level is high and the same is the case regarding some of the students having high stress level. However, the level of stress of maximum students is increased before Board examination than preliminary examination.

The stress level and the academic performance are of the maximum students before Board examination is moderate but there is no relationship between academic performance and stress level so we can say that the academic performance of the students before Board examination is not based on the stress level of the students.

Objective No. 9

To find relationship between state anxiety level and academic performance before preliminary examination.

Related to Hypothesis No.4 is tested in Table No.17

Hypothesis No.4

There is no significant relationship between the state anxiety level before preliminary examination and academic performance in preliminary examination.

TABLE No. 17

**CORRELATION BETWEEN STATE ANXIETY
AND ACADEMIC PERFORMANCE BEFORE
PRELIMINARY EXAMINATION**

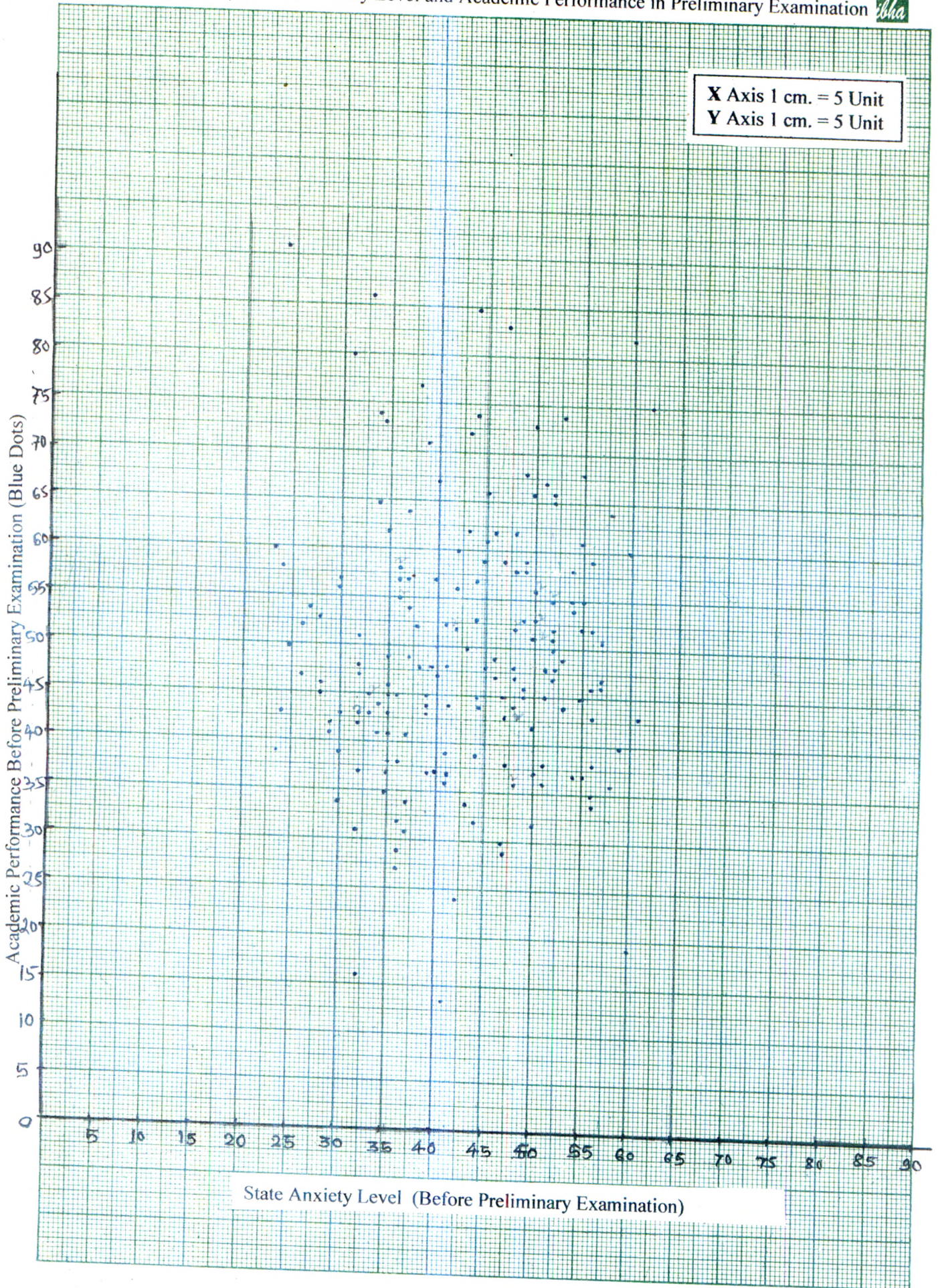
Sr.No.	Details of Variables	Mean	S.D.	Correlation
1.	State Anxiety Level	43.13	09.20	0.0557
2.	Academic Performance	49.07	13.10	

Observation and Interpretation

Table No 17. shows that correlation between the state anxiety level and academic performance before preliminary examination. The correlation between state anxiety and academic performance before preliminary examination is .0557. Therefore there is negligible relationship between state anxiety level before preliminary examination and academic performance in preliminary examination.



Correlation Between State Anxiety Level and Academic Performance in Preliminary Examination *bha*



The Graph No. 3 Shows that the academic performance of the maximum students before preliminary examination is moderate and the level of their state anxiety is also moderate. In the same way the performance of the students having low state anxiety level is also low. The graph also shows that the performance of some of the students having low state anxiety level is high and the same is the case regarding some of the students having high state anxiety level.

The state anxiety level and the academic performance are of the maximum students before preliminary examination is moderate but there is no relationship between academic performance and state anxiety level so we can say that the academic performance of the students before preliminary examination is not based on the state anxiety level of the students.

Objective No. 10

To find relationship between state anxiety level and academic performance before Board examination.

Related to Hypothesis No.6 is tested in Table No.18

Hypothesis No.6

There is no significant relationship between the state anxiety level before Board examination and academic performance in Board examination.

TABLE No. 18

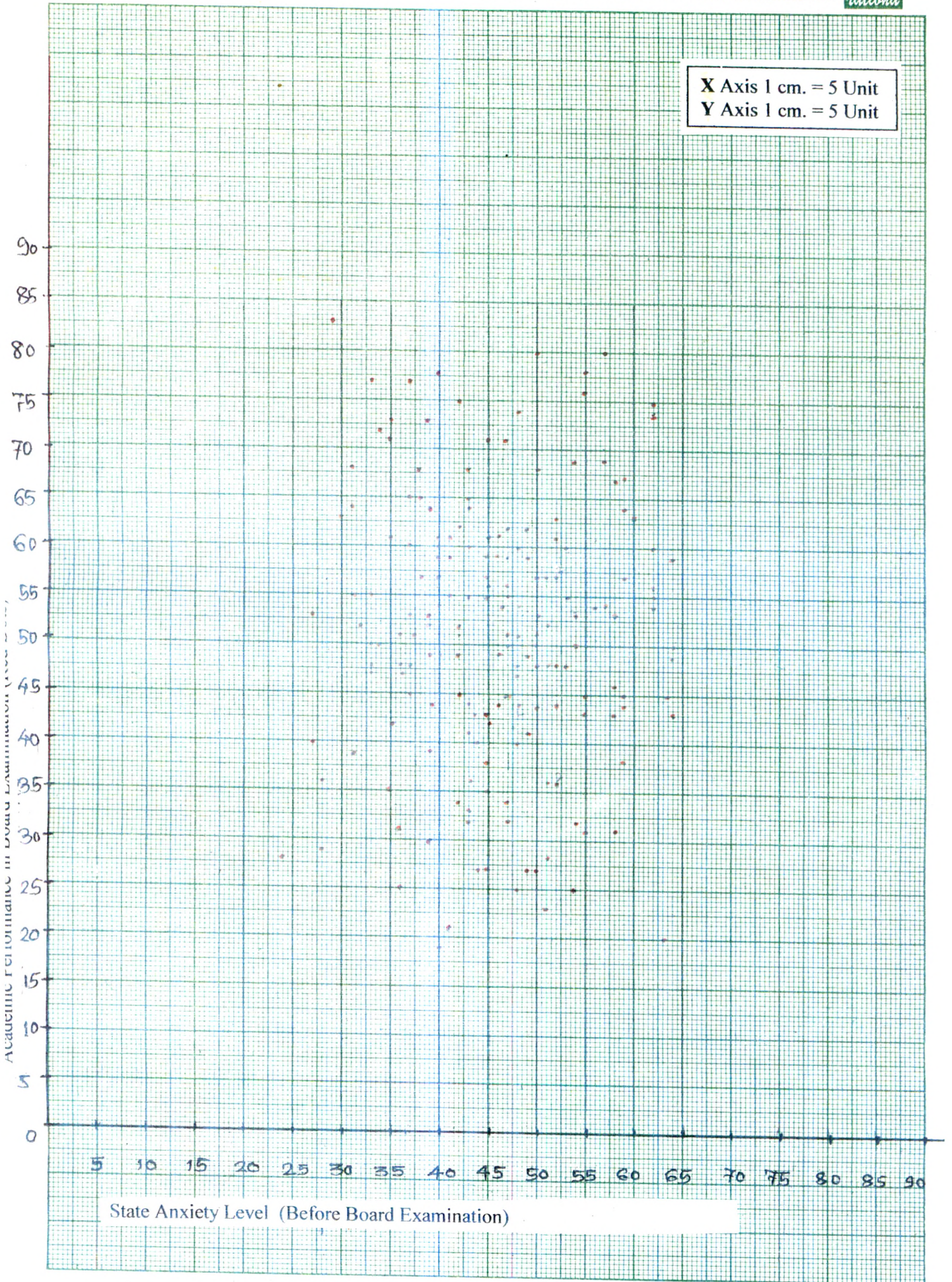
**CORRELATION BETWEEN STATE ANXIETY AND
ACADEMIC PERFORMANCE BEFORE
BOARD EXAMINATION**

Sr.No.	Details of Variables	Mean	S.D.	Correlation
1.	State Anxiety Level	45.89	08.96	0.0132
2.	Academic Performance	51.34	13.62	

Observation and Interpretation

Table No.18. shows that relationship between state anxiety level and academic performance in Board examination. The correlation between state anxiety and academic performance before Board examination is 0.0132 which is positive. Therefore there is negligible correlation between state anxiety level and academic performance in Board examination.

Correlation Between State Anxiety Level and Academic Performance in Board Examination *matibha*



The Graph No. 4 shows that the academic performance of the maximum students before Board examination is moderate and the level of their state anxiety is also moderate. In the same way the performance of the students having low state anxiety level is also low. The graph also shows that the performance of some of the students having low state anxiety level is high and the same is the case regarding some of the students having high state anxiety level. However, the level of stress of maximum students is increased before Board examination than preliminary examination.

The state anxiety level and the academic performance are of the maximum students before Board examination is moderate but there is no relationship between academic performance and state anxiety level so we can say that the academic performance of the students before Board examination is not based on the state anxiety level of the students.



Objective No.11

To suggest appropriate measures to the girl students having combat stress based on the results of the study.

1. Nervousness is the root cause of the combat stress. In order to lessen nervousness fresh and healthy educational atmosphere should be given to girls by the concerned schools. During the examination period good and suitable atmosphere to be given to create confidence and security among the intelligent girl students.
2. Besides the curriculum the school should organize several co-curricular and extra-curricular activities so that the girl students will get engaged in these activities and they will remain fresh, active and stress less or stress free or their stress will get decreased.
3. To help for struggling problem.
4. The biological change is one of the factors causing stress among girl students. In the period of such changes the lectures of the experts to be arranged to give the latest information about sexual education to lessen the stress.
5. Girl students accept the challenge with healthy spirit and work hard under examination stress, and then the stress becomes friendly and helps them to achieve their goal. If girls are not mentally prepared to cope with the demands of such situations, stress that may hamper their performance in the examination. so they should be prepared mentally well.

Objective No.12

To suggest appropriate measures to be taken by school authorities to create an environment to develop ideal stress for maximizing the performance of the students, based on the results of the study.

1. School should give self awareness that is be aware of your needs, values, desires, listen to your body.
2. School authorities can create hectic, chaotic environment.
Students need quite, healthy, private space.
3. School authorities change children's way of looking at things.
Being positive, not negative can reduce a lot of stress.
4. Learn one technique that works for children. 20 minutes of relaxation of period a day can be great help to children health and make for better decision making increased energy and clear thinking.
5. School authorities should not self medicate relieving stress with cigarettes, alcohol and sleeping pills may help temporarily but children a high price by impairing children health.
6. Teacher should not hassle over every little thing.
7. Regular eating and enough sleep can reduce the stress.
8. The school authorities should give enough time to the students for the rest and eating.
9. School authorities create a daily time-table with brake after every 2 or 3 periods.

- 10. A school authority teaches to use relaxation techniques. Relaxation techniques are exercises done that reverse the physical stress response.**
- 11. Regular practice and self-learning is a study technique. Regular practice can yield many benefits because keep pointed the goal children.**

RESULTS

- 1. The stress level of maximum girl students before preliminary examination is at moderate level.**
- 2. The stress level of maximum girl students before Board examination is at moderate level.**
- 3. The state anxiety level of maximum girl students before preliminary examination is moderate level.**
- 4. The state anxiety level of maximum girl students before Board examination is moderate level.**
- 5. There is no significant difference in the stress level among X Standard girls before preliminary examination and before S.S.C. Board examination.**
- 6. There is no significant difference in the state anxiety level among X Standard girls before preliminary examination and before S.S.C. Board examination.**
- 7. There is negligible relationship between stress level and academic performance of the girls in preliminary examination.**
- 8. There is negligible relationship between stress level and academic performance of the girls in Board examination.**
- 9. There is negligible relationship between state anxiety level and academic performance of the girls in preliminary examination.**
- 10. There is negligible relationship between state anxiety level and academic performance of the girls in Board examination.**
- 11. Nervousness is the root cause of the combat stress. In order to lessen nervousness fresh and healthy educational atmosphere should be given to girls by the concerned schools. During the**

examination period good and suitable atmosphere to be given to create confidence and security among the intelligent girl students.

- a. Besides the curriculum the school should organize several co-curricular and extra-curricular activities so that the girl students will get engaged in these activities and they will remain fresh, active and stress free or their stress will be decreased.
 - b. The biological change is one of the factors causing stress among girl students. In the period of such changes the lectures of the experts to be arranged to give the latest information about sexual education to lessen the stress.
 - c. Girl students accept the challenge with healthy spirit and work hard under examination stress, and then the stress becomes friendly and helps them to achieve their goal. If girls are not mentally prepared to cope with the demands of such situations, stress that may hamper their performance in the examination. so they should be prepared mentally well.
12. School should give self awareness that is be aware of your needs, values, desires, listen to your body.
- a. School authorities can create hectic, chaotic environment.
Students need quite, healthy, private space.
 - b. School authorities change children's way of looking at things.
Being positive, not negative can reduce a lot of stress.
 - c. Learn one technique that works for children. 20 minutes of relaxation of period a day can be great help to children health

and make for better decision making increased energy and clear thinking.

- d.** School authorities should not self medicate relieving stress with cigarettes, alcohol and sleeping pills may help temporarily but children a high price by impairing children health.
- e.** Teacher should not hassle over every little thing.
- f.** Regular eating and enough sleep can reduce the stress.
- g.** The school authorities should give enough time to the students for the rest and eating.
- h.** School authorities create a daily timetable with brake after every 2 or 3 periods.
- i.** A school authority teaches to use relaxation techniques. Relaxation techniques are exercises done that reverse the physical stress response.
- j.** Regular practice and self-learning is a study technique. Regular practice can yield many benefits because keep pointed the goal.