Shri Swami Vivekanand Shikshan Sanstha's

Dattajirao Kadam Arts, Science and Commerce collage, Ichalkaranji.

A

PROJECT REPORT

ON

"A STUDY OF STUDY TIME &EXAM SCORE BY USING STATISTICAL METHODS"

Submitted

By

Miss. Prachi Uday Latane.

Miss. Karishma Ashok Latkar.

Miss. Shraddha Suresh Matwade.

Miss. Manasi Vijay Wadar.

Subjected To

Department of statistics DKASC College, Ichalkaranji.

Shri Swami Vivekanand Shikshan Sanstha's

Dattajirao Kadam Arts, Science and Commerce collage, ichalkaranji.

DEPARTMENT OF STATISTICS

CERTIFICAT E

This to certify that.

Miss. Prachi Uday Latane.	*35967*
Miss. Karishma Ashok Latkar.	*35968*
Miss. Shraddha Suresh Matwade.	*35962*
Miss. Manasi Vijay Wadar.	*35963*

has satisfactorily carried out the required project work prescribed by Shivaji University, Kolhapur for B.sc III course in STATISTICS. The entitled"A STUDY OF STUDY TIME AND EXAM SCORRE BY USING STATISTICAL METHODS" is bonafide work in the year 2023-2024.

Project Guide

Miss. Sawant. N. N

Head of department

Mr. Suryawanshi .V.R

HEAD,
Department of Statistics.
Dattajirao Kadam Arts, Scienc
& Commerce College
ICHALKARANJI

Principal

Dr. Maner. S .M

ACKNOWLEDGEMENT

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We would like to thank Mr. Vijay Suryawanshi Sir, Head Department of Statistics, The Dattajirao Kadam Arts ,Science and Commerce College Ichalkaranji, for providing us necessary facilities.

We are also thankful to Miss Namrata Savant Madam for their timely Suggestion and Encouragement.

Miss. Prachi Uday Latane.

Miss. Karishma Ashok Latkar.

Miss. Shraddha Suresh Matwade.

Miss. Manasi Vijay Wadar.

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Introduction

Student's study time and academic performance can reflect their learning status This study investigates the relationship between study time and academic performance by analyzing the number of selected Courses , study and grades.

Most of students nowadays have a problem in using time management to improve study skill. They are having a hard time to discipline their selves on how to effectively spend their time in studying. They envision themselves being successful in their studies and school work but they fail to put together realistic plan, or establish a routine, that will enable them to achieve academic success.

The project can also help for students better understand the requirement and expectation of different types of exams and develop strategies for improving their performance.

Objectives

1. To study the percentage of last year exam in rural and urban for male and female.

2. To study relationship between male & female students by using graphical representation.

3. Analyze the correlation between study hours & exam scores to determine if there is a significant relationship.

4. To create visualization such as histogram to illustrate the relation between study hour and exam scores.

5. To conduct chi-square test to access the rural and urban for male and female the significance of different in exam scores based on varying study hour ranges.

6. To study the satisfaction level for some criteria.

Methodology

Study Material:

We constructed a questionnaire consisting of different questions was used to collect information regarding different types of qualification . The technique used for the data collection for different types of qualification by using convenient statistical tools.

The study area use for this project was taken purposively in rural and urban area for male and female students. The 203 samples size is taken for this study from that 111 female and 92 male.

Types of Data:

There are two types of data:

1.Quantitative Data:- The data represented numerically, including anything that

Can be counted, measured , or given a numerical value.

2.Qualitative Data:- The measures of 'types' and may be represented by a name ,

Symbol ,or a number code.

Source of Data:

We have collected Primary Data of 2023-24. We constructed a

Questionnaire consisting of different questions was used to collected information regarding the types of qualification.
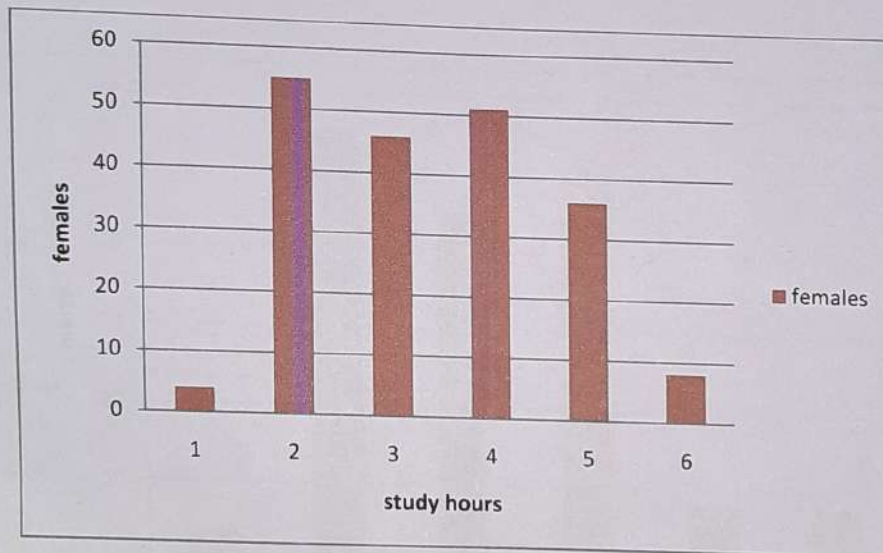
Statistical Tools:

1. MS-Excel   2. Microsoft word

Questionnaire Link:

https://docs.google.com/forms/d/1znx6jroEM1-BJr fKRup9iDnX9mXt_CG7r7adbs-Zkl/edit#

Histogram of study hour and frequency of females

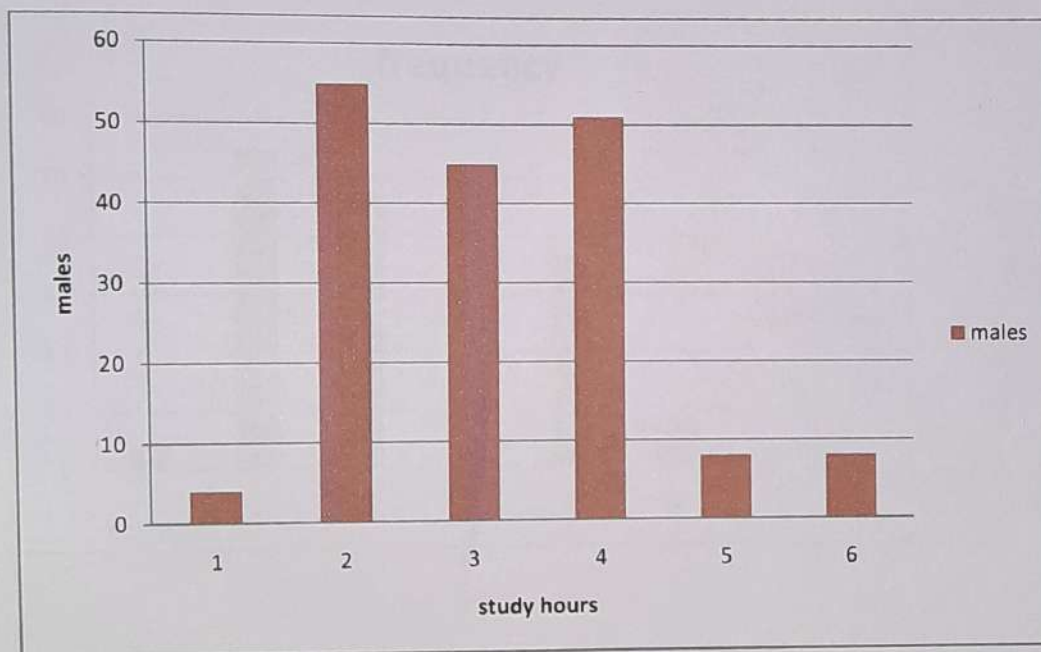| study hours	females
1	4
2	55
3	46
4	51
5	36
6	8

Conclusion:

From above histogram we observe that in females the frequency are 2to 5 study hours are high.

Histogram of study hours and frequency of males

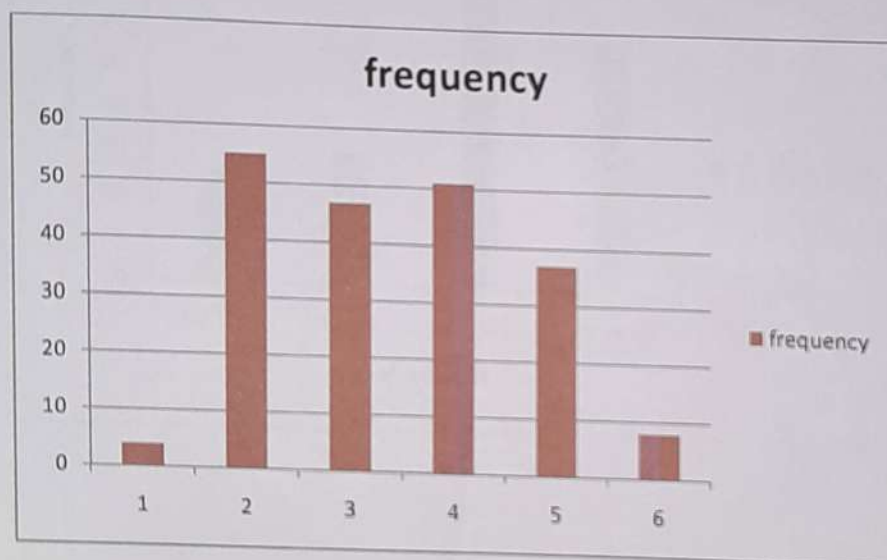| study hours	males
1	4
2	55
3	45
4	51
5	8
6	8

Conclusion:

From above histogram we observe that in males the frequency are 2 to 4 study hours are high.

Histogram of study hour and frequency

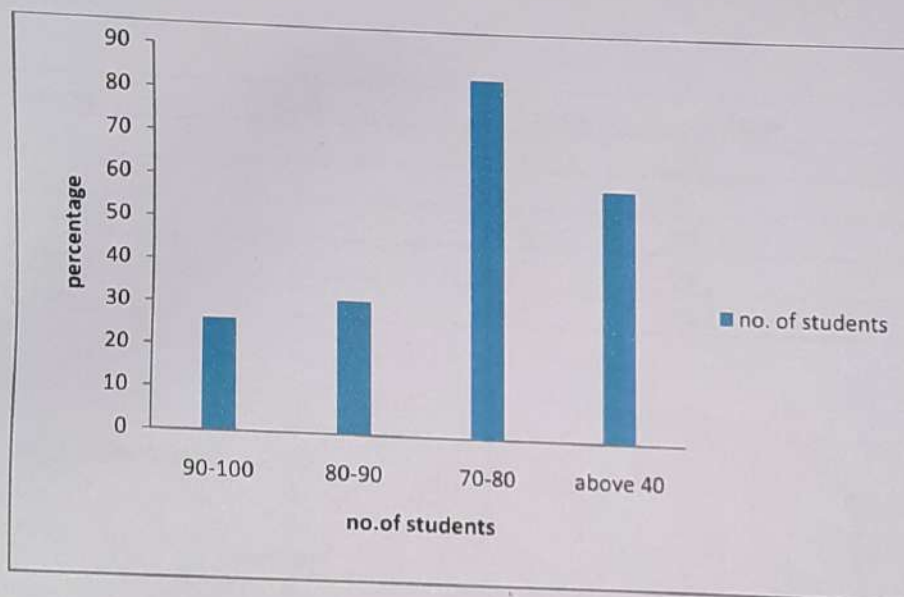| study hour	frequency
1	4
2	55
3	47
4	51
5	37
6	8

Conclusion:

From above histogram we observe that in males and females the frequency are 2 to 5 study hours are high.

Histogram of no. of student and percentage

percentage of students	no. of students
90-100	26
80-90	31
70-80	84
above 40	59

- For the class of 90-100 we are used 1.

- For the class of 80-90 we are used 2.

- For the data of 70-80 we are used 3.

- For the data of all the above of 40 we are used 4.

Conclusion:

From the above histogram we observe that maximum students get 70 to 80 percentage.

Chi-square test for Independence

Testing of Hypothesis:

H0:There is no relation betweeen rural and urban.

        V/S

H1:There is relation betweeen rural and urban.

Marks	Rural	Urban	Total
90-100	3	7	10
80-90	28	15	43
70-80	56	28	84
Above 40	42	24	66
Total	129	74	203

Test Statistics:

$$\chi^2 = \sum \frac{(Oi - Ei)^2}{Ei}$$

$$\chi^2 = 5.2472$$

Level of significance: $\alpha = 0.05$

Degrees of Freedom(D.F): $(n-1)=3$

P-value:

      P-value=9.348403568

Conclusion: Here, P-value is greater than 0.05 Therefore,we do not reject H0 and coclude that there is no relation between Rural and Urban.