

Behavioral Study (Details)of X Grade Students

Data analysis of Class Division, Study Habits, Achievement Motivation using SPSS

The data obtained on 100 students collected on 15 variables are given below. Enter the data in SPSS by creating appropriate variables, labels and values, the details of the variables are given in the next page

Description of the variables

The data presented above gives the details of the marks, along with the behavioral details of 100 students studying in tenth grade in a particular school. The details of the variables included in the data are described below

Variable	Details of the Variable
s_code	Student code
Age	Age of student
Gender	Gender(1=male,2=female)
Section	Section(1=sectionA, 2=sectionB,3=sectionC)
Marks1	Marks in Mathematics
Marks2	Marks in general science
Marks3	Marks in social studies
Marks4	Marks in English
A_motiv	Achievement Motivation Score
study_h	Study habits Score
Emotiona_Intelligence(ei)	1=High on emotional intelligence,2=Moderate on emotional intelligence,3=Low on emotional intelligence
Private_tution(pt)	1=Takes private tution,2=Does not take private tuition
Mothers employment(me)	Indicate whether the mother is employed or unemployed 1=Mother is working,2=Mother is not employed
Student satisfaction(sat)	Student satisfaction with the teaching learning process
Response	Response of the students to a particular question 1=Agree,2=Undecided,3=Disagree
Group(group)	Group they will choose in intermediate 1=MPC,2=BiPC,3=CEC/HEC

Maximum marks in each of Marks1, Marks2, Marks3 and Marks4 is twenty four

Practical exercise 1

1. In your note book write the names of all the variables and identify the nature of the variables and scale in which they are measured

2. Enter the data in SPSS data editor by creating appropriate variables, labels and values
3. Create a new Variable giving the total marks of the four subjects
4. Find the descriptive statistics for the variables in an interval scale
5. Examine the nature of the distribution of the variables by examining its skewness and kurtosis
6. Draw the histogram of the variables and compare the distribution with a normal curve

Practical exercise 2

7. Using the total marks create a new variable percentage of marks giving the percentage of marks secured by the student
8. Using the percentage of marks create a new variable Division of students using the following cut offs

Percentage of marks	Division
00-39	Fail
40-49	3rd class
50-59	2nd class
60-69	1st class
70 and above	1st class with distinction

9. Convert the study habits variable into a categorical variable by taking the scores and categories of study habits as indicated below

Score	Study Habit Category
28-51	Low on study habits
52-75	Moderate on study habits
76-98	High on study habits

10. Convert the achievement motivation variable in to a categorical variable by taking this course and categories of achievement motivation as indicated below

Score	Achievement Motivation Category
0-13	Low on achievement motivation
14-18	Moderate on achievement motivation
19-23	High on achievement motivation

11. If a student get a score of 50 and above on the satisfaction scale(sat variable) then it is assume that he is satisfied with the teaching learning process existing in the school. Using this information create a new variable indicating satisfied and not satisfied students

Practical exercise 3

12. Examine the relationship between student achievement and achievement motivation
13. Test whether there is any significant relationship between student's academic achievement and their study habits
14. What is the relationship between student's academic achievements and their satisfaction with the teaching learning process
15. Examine the relationship between study habits and achievement motivation
16. Test whether there is any relationship between marks in mathematics and marks in English
17. Examine the relationship that exists between students marks in social studies and English language
18. If students score high in mathematics then they would also do well general science. Examine this is true
19. Examine the relationship that exists between students marks in social studies and mathematics
20. Examine the relation that exists between the students marks in social studies and general science

Practical exercise 4

21. Test whether the 27 students randomly selected come from a longer group of students having a mean academic achievement score of 75%
22. Examine if there is any significant difference in total marks among boys and girls
23. Examine if there is any significant difference in marks between satisfied and not satisfied students
24. Examine if there is any significant difference in marks belonging to section A and section C
25. Examine if there is any significant difference in students in terms of marks (total marks) between those who take private tuition and those who do not take private tuition
26. Test whether there is a significant difference in the performance of students whose mothers are employed or unemployed
27. If students take private tuition they would have better study habits than compared to students who do not take private tuition. Examine?

Practice exercise 5

28. Examine if there is any significant difference academic performance of students belonging to the three different sections
29. Test whether there is any significant difference in achievement motivation in students coming from different sections
30. Which section of the students has better study habits?
31. Test whether there is any significant difference in the academic performance having different levels of emotional intelligence
32. Students with high emotional intelligence have better study habits than compare to be students having moderate or low levels of emotional intelligence. Test this hypothesis
33. There is no significant difference in the study habits of students coming from the three different sections. Examine this null hypothesis
34. Examine whether there is any significant difference in the academic performance of the students opting different groups in the intermediate scores
35. Students who choose MPC in intermediate are the ones who get good scores in mathematics. Examine if this is true