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Comparison of Stress Level among College Students

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ABSTRACT
During academic life, Students have to face many difficulties. Among these, Stress is one of the unavoidable factors during this period. This may be impact of various responsibilities as well as expectations from students. After failure to complete responsibilities and expectations, students got stressed further they had gone in depression. Also our educational system is another main cause of students stress. The current study deals with the stress level of students. In this study we have keen interest whether there is any difference in stress level of male and female. Stress impacts on academic performance of student's further leads to critical crises in career choice.
Key words: *Stress Level, t-test, Chi-square, P-value, Stressors*

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INTRODUCTION

As we know stress is not negotiable factor in student's academic life, we have to more careful in this stage of student's life. To make bright future in career, every student has right to choice of best subject or stream which gives wings to their fly. Our education system needs to change their pattern of academic system that gives open source to make career in their own choice. There must be free platform to select stream that may be useful and easy to make career as easy as possible. Due to some unexpected situation, students are unable to get proper knowledge of subject. Online mode of education is only optional way to teach student but it is not perfect wayof learning. It only gives information about subject but unable clear doubt as well as concept of any topic. So that student feels that they are educated but not full of knowledge. India has largest young population who committed suicide after failure of expectation and responsibilities bothering by parents and teachers also. To overcome this problem, our education system can be modified as comfortable as friendly to student. So that, every students can feel safe and free in involvement in education system.

Dimitrov B. E. G [1] studied academic stress of college students in India. Prabu Suresh P [2] carried out the comparative study among science and arts students. His study shows that the academic stress of science subject students' is higher than arts students. Deb Sibnath et al [3] studied the academicrelated stress among private secondary school students in India. The present research study compares score of stress between male and female students. Also it compare stress score of urban and rural area students.

MATERIAL AND METHODS

For this research, the data has been collected with help of questionnaires, distributed to students of Balwant College located in Vita. We have collected data of 190 students from four different education levels, namely, SSC, HSC, Graduate and Post Graduate. The data collected during period November 2021. Among 190 students, 64 were male and 126were female. The Statistical technique independent two sample t-test were used to compare the stress level of male and female students. However Pearson Chi-Square test were used to check whether the stress level of students are independent or not with other variables such as gender, area and education level of students. Statistical analysis has been carried out through SPSS software.

STATISTICAL ANALYSIS

The statistical methods such as descriptive statistics, independent two sample t-test andchi-square test for independence are used for analysis:

1) Descriptive Statistics:

The data collection for present study was done with the help of questionnaire. In this questionnaire, we

have given twenty questions to the students of college, to calculate stress level. Each Question of about stress is coded Never (1) , Almost Never (2), Some-times (3), Fairly Often(4), Very Often (5). The stress score of student's calculated by adding the responses of all these twenty questions. In this way, we get the score of stress which contains minimum possible score of stress were 20 and maximum possible score of stress is 100. This score of stress of students is dependent variable and the other variables gender, area and education of students are considered as independent variables.

The score of stress again converted in stress level and it is coded as: Low stress (1), Mild stress (2), moderate stress (3), high stress (4) and very high stress (5). The range for Low stress is20.0 to 35.9, for mild stress is 36.0 to 51.9, for moderate stress is 52.0 to 67.9, for high stress is 68.0 to 83.9 and for very high stress is84.0 to 100.0. The table-1 gives the descriptive statistics of the variable Gender, Area and Education of student. This descriptive statistic consists of count (n), Minimum stress score, Maximum stress score, Mean of stress score and Standard deviation (SD) of stress score in every category of independent variables Gender, Area and Education of student respectively. The frequency of five categories of stress level summarized with gender, area and education wise is shown in table-2. For the variable gender, in low stress level 7 males &3 females, in mild stress level 14 males & 16 females, in moderate stress level 30 males & 68 female, in high stress level 12 males&36 females and in very high stress level 1 male & 3 females. The frequency of stress level for other categorical variables, area and education of students is shown in table-2 respectively.

Table-1: Descriptive statistics

Independent variables		Dependent variable (Score of Stress)				
		Count	Minimum	Maximum	Mean	SD
Gender	Male	64	22	87	55.77	13.45
	Female	126	22	96	62.32	12.36
Area	Rural	166	22	96	60.05	13.05
	Urban	24	38	90	60.50	13.50
Education	SSC	14	32	73	56.14	13.71
	HSC	62	31	90	61.95	11.81
	Graduate	95	22	96	59.14	13.98
	Post Graduate	19	27	80	61.84	11.59

Table-2: Frequency of Stress level

Independent variables		Dependent variable (Stress level)					**Total**
		Low stress	Mild Stress	Moderate Stress	High Stress	Very High Stress	
Gender	Male	7	14	30	12	1	**64**
	Female	3	16	68	36	3	**126**
	Total	**10**	**30**	**98**	**48**	**4**	**190**
Area	Rural	10	25	86	43	2	**166**
	Urban	0	5	12	5	2	**24**
	Total	**10**	**30**	**98**	**48**	**4**	**190**
Education	SSC	2	2	8	2	0	**14**
	HSC	1	10	31	18	2	**62**
	Graduate	6	17	48	22	2	**95**
	Post Graduate	1	1	11	6	0	**19**
	Total	**10**	**30**	**98**	**48**	**4**	**190**

2) Independent two sample t-test:

The statistical test is used to compare the mean of two independent groups are known as independent two sample t test. This test consists of two variables, one of them is dependent variable and other is independent variable. To conduct independent two sample t-test the type of dependent variable should be quantitative and independent variable should be qualitative. To do independent two sample t-test the dependent variable is *Score of Stress* and independent variables are *gender* and *area* of students. The null and alternative hypotheses of this test are as follows:

i) Hypotheses: (*Score of Stress Vs Gender*):

H_0: There is no significant difference between mean stress score of male and female students.H_a: There is

significant difference between mean stress score of male and female students. .

ii) Hypotheses: (*Score of Stress Vs Area*):

H_0: There is no significant difference between mean stress score of student's belongs from ruraland urban area.

H_a: There is significant difference between mean stress score of student's belongs from rural andurban area.

Table-3: Independent two sample t-test

Dependent Variable	Independent Variable	t-test statistic value	Degrees of freedom	P-value (Sig.)	Result
Score of Stress	Gender	-3.352	188	0.001	Significant
	Area	-0.156	188	0.876	Not Significant

3) Chi-square test for independence:

The Chi-square test for independence is used to assess whether the two variables associated (related) or not. To conduct Chi-square test for independence, the type of both the dependent and independent variables should be qualitative. To do this test, the *Score of Stress* (Quantitative variable) is converted in to *Stress level* (Qualitative variable). The null and alternative hypotheses of this test are as follows:

i) Hypotheses: (*Stress level Vs Gender*):

H_0: The stress level and gender of student are independent. H_a: The stress level and gender of student are not independent.

ii) Hypotheses: (*Stress level Vs Area*):

H_0: The stress level and area of student are independent. H_a: The stress level and area of student are not independent.

iii) Hypotheses: (*Stress level Vs Education*):

H_0: The stress level and education of student are independent. H_a: The stress level and education of student are not independent.

Table-4: Chi-square test

Dependent Variable	Independent Variable	Pearson Chi-Square value	Degrees of freedom	P-value (Sig.)	Result
Stress level	Gender	10.337	4	0.035	Significant
	Area	7.176	4	0.127	Not Significant
	Education	8.389	12	0.754	Not Significant

RESULT AND DISCUSSION

The analysis of Independent two sample t-test (Table -3) shows that:

- For the variable Gender, the p-value (0.001) of Independent two sample t-test is less than 0.05 (level of significance). Hence we reject the null hypothesis at 5% level of significance and conclude that there is significant difference between mean stress score of male and female students.
- For the variable Area, the p-value (0.876) of Independent two sample t-test is greater than 0.05 (level of significance). Hence we fail to reject the null hypothesis at 5% level of significance and conclude that there is no significant difference between mean stress scoreof student's belongs from rural and urban area.

The analysis of Chi-square test for independence (Table -4) shows that:

- For the variable Gender, the p-value (0.035) of Chi-square test for independence is less than 0.05 (level of significance). Hence we reject the null hypothesis at 5% level of significance and conclude that the stress level and gender of student are not independent.
- For the variable Area, the p-value (0.127) of Chi-square test for independence is greater than 0.05 (level of significance). Hence we fail to reject the null hypothesis at 5% level of significance and conclude that the stress level and area of student are independent.
- For the variable Education, the p-value (0.754) of Chi-square test for independence is greater than 0.05 (level of significance). Hence we fail to reject the null hypothesis at 5% level of significance and conclude that the stress level and education of student areindependent.

CONCLUSION

The findings of presents study are the stress of male student is different than female student. However

the female students are more stressed than male students. The rural area students and urban area have the nearly equal stress score. In other words we can say that whether the student belongs to urban area or rural area, the stress of students is unaltered. The education of students also does not affect on the stress of student.

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