

Impact of Demographic and Academic Level on Academic Stress in Senior Secondary Students

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Abstract

Main motivation behind the said paper is to analyse scholarly worry among students of Senior Secondary school students in India and its relationship with segment & school related variables. The total sum of 477 pupils (46% females & 54% males) of 11th & 12th standards took part in examination. An adjustment of Kohn and Frazer (1986) scholastic pressure balance was utilized for quantifying scholarly worry in the pupils. The assessment found that last grades, examinations and research papers/sporadic tests were among the most basic stressors. Normality of data was tested by applying Wilcoxon and Shapiro Statistical tests and found that parametric test cannot be applied on the data. So, Hypothesis regarding the impact of Gender, Class/Grade, Stream, Caste and Parental Education on Academic Stress in the students was tested through the non-parametric tests like Mann-Whitney U test and Kruskal –Wallis test. The stream shows the gigantic impact on the Academic stress in the understudies however the remaining four variables don't show the colossal impact on the educational stress. The analysis of data was done on SPSS.

Keywords: Academic stress, Classes, Parental education, Streams, Senior Secondary students, Gender

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I. Introduction

For any sort of society, “Education” is one of the most noteworthy duty. There exists couple of instructive organizations that pass on information to pupils, put extraordinary accentuation on their

emotional and physical wellness & prosperity and mentors them for upcoming difficulties. Be that as it may, a large portion of schools & foundations in India don't comprehend psychological issues of the pupils. Mental concerns such as suicides & conduct issues are ascending among youngsters. 12 %

students matured 4-16 are experiencing mental clutters whereas 20 % students are indicating emotional scatters (ET Donors, 2018). The approach of e-learning and online courses, instruction has gone to our homes & organizations are going through enormous measure of cash to structure online courses fitting for the evolving condition. In spite of the fact that innovation and e-learning is aiding instructive framework for addressing cutting edge age difficulties yet it has not helped the reason for scholarly weight on students. Indeed, it has expanded parental weight, rivalry among students and its abuse has come about into youngsters going into medications and liquor. A psychological well-being study directed by NIMHANS (National Foundation of Emotional well-being & Neuro Sciences) shows that suicide occurring rate per 1 lakh individuals on an age underneath 14 was 0.5%, while it was 9.52% for the age 14-17 which is high when showed up distinctively according to the national individual common of 0.9 % (Harry Alexander, 2018).

A part of significant educational stressors for the students are appraisals, assessments, parental wants and assignments. The factors adding to Class related nerves consolidate scanty indicating procedures, teacher understudy associations, overpowering academic work, poor physical investigation corridor conditions balancing one's amusement time with school, disturbance enveloping educational assignments & timetables. The students experience the evil impacts of mental suffering in view of desire for insightful test or disillusionment (Verma, S., and Gupta, J., 1990). The said stressors may appear in any locale of understudy's condition for instance school, home or aides (Anderson, G. E. et al., 2005; Hess, R. S., and Copeland, E. P., 2006). Kouzma and Kennedy insisted factors such as predictable tests & appraisals, assessments or results, thinking incredibly hard & strain of

performing & succeeding are some crucial stressors for the students (Kouzma, N. M., and Kennedy, G. A., 2004) .

Every single one of those conditions or events that upset the customary day by day practice of people and expect changes as per be made are wellsprings of stress (Bernstein et al., 2008). Stressors or wellsprings of stress upset the physical and mental prosperity and thriving and need modifications and exercises to restore amicability (Lazarus and Cohen, 1977) .

Marwan Zaid Bataineh (2013) induced that an academic stress, inadequate time to think about, outstanding job that needs to be done every semester, tests uneven, low motivation, and high family wants were drive unobtrusively stress among students. It was similarly found that fear of frustration is critical wellspring of the stress in students .

The students become overwhelmed when they have to face stressors such as future masterminding, appraisals, assignments, mentioning instructors, picking majors or electives etc. What's more, pupils furthermore feel weight that whether they will have the alternative to meet wants for gatekeepers, partners & self (Blimling and Miltenberger, 1981).

Pupils are such a great amount of constrained to pass assessments and this is the way present day course readings and aides are planned and pupils study these aides and replicate the test prepared substance in their assessments (National Warning Board Report, 1993). Instructors are such a great amount of slanted in course inclusion and prospectus fulfillment and don't take any regard to the degree of understudy comprehension and cognizance (Raina, 1983). It is felt that the academic accomplishments in school assume a major job later on for the kid that pupils just as their folks center such a great amount around academic

work in the schools (Varma, 1998). Assessment pressures makes significant level of nervousness in pupils (Raina, 1983) and mental issues are very inclined and regular (Narang, 1994; Verma and Gupta, 1990; Verma & Singh, 1998) .

Research contemplates contrasting young ladies versus young men's pressure reasons that young ladies are increasingly worried in contrast with young men (Subrahmanyam, 1986; Verma and Gupta, 1990) yet young ladies outflank young men in academic outcomes (Mishra, 1992), that portrays that young ladies deal with their daily schedule in preferred manners over young men during assessments.

The majority of the Indian pupils embrace educational costs or instructing classes. Already educational costs were taken by those pupils who fall behind because of some affliction, changing school or board or different reasons. Be that as it may, over the long haul because of desires for guardians, school, family members, neighbors, looking for admission to lofty chief expert after school courses, educational costs have become ordinary interest for pupils now a days (Varma, 1998). This outcomes into twofold weight for pupils, they feel pressurized at school as well as by their guides. Pupils experience indistinguishable sort of worry during educational costs from they feel in school hours (Verma, S., et al., 2002).

Another stressor is schoolwork and the time spent on doing schoolwork and assignments. Pupils typically go through 3-4 hours regularly for doing schoolwork (Verma and Gupta, 1990). Pupils regularly do schoolwork under the supervision and checking of their folks. This constant weight of instructor at school, coaches and guardians make negative feelings and distressing circumstances for

pupils (Verma, S., et al., 2002). This paper looks at the academic worry in Senior Auxiliary School Pupils in India and its relationship with segment and school related elements .

II. Objective

The accompanying paper endeavours to contemplate sentiments of worry among the pupils of 11 and 12 standards concerning classes, parental education, groupings of pupils, gender and stream of pupils.

The objective is to look at the stress among the pupils especially secondary school in India and how this pressure is identified with school related, socio-economic and demographic factors.

Hypothesis

Hypotheses are as follows:

H1a: There is significant difference in stress level of pupils of different Gender

H2a: There is a significant difference in stress level of pupils of different Class

H3a: There is a significant difference in stress level of pupils of different stream

H4a: There is a significant difference in stress level of pupils of different Caste

H5a: There is a significant difference in stress level of pupils of different parental Education

III. Method

The data has been collected from pupils who are currently studying in 11th and 12th standards in various schools of India (n=477). The demographics and other details are as shown in table below:

DEMOGRAPHICS		No. of Student Respondents	% of Respondents
Class	11	326	68.34
	12	151	31.66
	TOTAL	477	100
Stream	Science	275	57.65
	Arts	60	12.58
	Commerce	142	29.77
	TOTAL	477	100
Gender	Male	256	53.67
	Female	221	46.33
	TOTAL	477	100
Caste	General	278	58.28
	SC	23	4.82
	ST	32	6.71
	OBC	64	13.42
	Not Specified	80	16.77
	TOTAL	477	100
Parental Education	12 th or Below	42	8.81
	Graduate	169	35.43
	PG and Above	146	30.61
	Not Specified	120	25.16
	TOTAL	477	100

Table 1

IV. Tools used

The data has been collected through structured questionnaire. The questionnaire consists of two parts

a) The demographical details

b) 35 items on academic stress scale (Kohn & Frazer, 1986).

V. Results

Tests of Normality							
	GENDER	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CGPA (10TH)	1.00	.104	236	.000	.935	236	.000
	2.00	.117	210	.000	.924	210	.000
Total	1.00	.064	236	.019	.985	236	.016
Stress	2.00	.050	210	.200*	.988	210	.076
%	1.00	.064	236	.020	.985	236	.016
Stress	2.00	.050	210	.200*	.988	210	.076
a. Lilliefors Significance Correction							
*. This is a lower bound of the true significance.							

Table 2: Normality (Gender) Test

Tests of Normality							
CLASS		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CGPA (10TH)	1.00	.110	310	.000	.934	310	.000
	2.00	.133	136	.000	.918	136	.000
Total	1.00	.073	310	.000	.983	310	.001
Stress	2.00	.039	136	.200*	.992	136	.660
%	1.00	.073	310	.000	.983	310	.001
Stress	2.00	.039	136	.200*	.992	136	.660
a. Lilliefors Significance Correction							
*. This is a lower bound of the true significance.							

Table 3: Normality (Class) Test

Tests of Normality								
	STREAM		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
			Statistic	df	Sig.	Statistic	df	Sig.
CGPA (10TH)		1	0.15	256	0	0.892	256	0
		2	0.084	54	.200*	0.965	54	0.118
		3	0.136	136	0	0.957	136	0
Total Stress		1	0.069	256	0.005	0.985	256	0.01
		2	0.062	54	.200*	0.986	54	0.756
		3	0.039	136	.200*	0.994	136	0.817
% Stress		1	0.069	256	0.005	0.985	256	0.01
		2	0.062	54	.200*	0.986	54	0.756
		3	0.039	136	.200*	0.994	136	0.817
a. Lilliefors Significance Correction								
*. This is a lower bound of the true significance.								

Table 4: Normality (Stream) Test

Tests of Normality								
	CASTE		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
			Statistic	df	Sig.	Statistic	df	Sig.
CGPA (10TH)		1	0.119	260	0	0.925	260	0
		2	0.109	60	0.073	0.956	60	0.029
		3	0.123	20	.200*	0.934	20	0.185
		4	0.125	28	.200*	0.943	28	0.131
Total Stress		1	0.037	260	.200*	0.996	260	0.7
		2	0.083	60	.200*	0.987	60	0.754
		3	0.167	20	0.146	0.946	20	0.304
		4	0.098	28	.200*	0.97	28	0.577
% Stress		1	0.037	260	.200*	0.996	260	0.7
		2	0.083	60	.200*	0.987	60	0.755
		3	0.167	20	0.146	0.946	20	0.304
		4	0.098	28	.200*	0.97	28	0.577
a. Lilliefors Significance Correction								
*. This is a lower bound of the true significance.								

Table 5: Normality (Caste) Test

Tests of Normality								
	PARENTAL EDUCATION		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
			Statistic	df	Sig.	Statistic	df	Sig.
CGPA (10TH)		1	0.105	40	.200*	0.947	40	0.061
		2	0.118	163	0	0.933	163	0
		3	0.144	140	0	0.898	140	0
Total Stress		1	0.093	40	.200*	0.97	40	0.358
		2	0.084	163	0.007	0.969	163	0.001
		3	0.072	140	0.071	0.988	140	0.258
% Stress		1	0.093	40	.200*	0.97	40	0.358
		2	0.084	163	0.007	0.969	163	0.001
		3	0.072	140	0.071	0.988	140	0.258
a. Lilliefors Significance Correction								
*. This is a lower bound of the true significance.								

Table 6: Normality (Parental Education) Test

Group Comparison Tables
Mann-Whitney Test

Ranks					
	GENDER		N	Rank	Ranks
CGPA (10TH)		1	236	214.68	50665.5
		2	210	233.41	49015.5
		Total	446		
Total Stress		1	256	234.73	60091.5
		2	221	243.94	53911.5
		Total	477		
% Stress		1	256	234.73	60091.5
		2	221	243.94	53911.5
		Total	477		

Test Statistics ^a			
	CGPA (10TH)	Total Stress	% Stress
Mann-Whitney U	22699.5	27195.5	27195.5
Wilcoxon W	50665.5	60091.5	60091.5
Z	-1.538	-0.728	-0.728
Asymp. Sig. (2-tailed)	0.124	0.467	0.467
a. Grouping Variable: GENDER			

Table 7: Mann-Whitney Test (Grouping Variable: Gender)

Ranks				
	CLASS	N	Mean Rank	Sum of Ranks
CGPA (10TH)	1	310	222.46	68961.5
	2	136	225.88	30719.5
	Total	446		
Total Stress	1	326	231.77	75557
	2	151	254.61	38446
	Total	477		
% Stress	1	326	231.77	75557
	2	151	254.61	38446
	Total	477		

Test Statistics ^a			
	CGPA (10TH)	Total Stress	% Stress
Mann-Whitney U	20756.5	22256	22256
Wilcoxon W	68961.5	75557	75557
Z	-0.259	-1.683	-1.683
Asymp. Sig. (2-tailed)	0.795	0.092	0.092
a. Grouping Variable: CLASS			

Table 8: Mann-Whitney Test (Grouping Variable: Class)

VI. Kruskal-Wallis Test

Ranks				
	STREAM	N	Mean Rank	
CGPA (10TH)	1	256	272.94	
	2	54	173.78	
	3	136	150.17	
	Total	446		
Total Stress	1	275	219.07	
	2	60	242.02	
	3	142	276.32	
	Total	477		
% Stress	1	275	219.07	
	2	60	242.02	
	3	142	276.32	
	Total	477		

Test Statistics ^{a,b}			
	CGPA (10TH)	Total Stress	% Stress
Chi-square	90.474	16.184	16.184
df	2	2	2
Asymp. Sig.	0	0	0
a. Kruskal Wallis Test			
b. Grouping Variable: STREAM			

Table 9: Kruskal-Wallis Test: (Grouping Variable: Stream)

Ranks				
	CASTE		N	Mean Rank
CGPA (10TH)		1	260	179.61
		2	60	134.67
		3	20	159.6
		Total	340	
Total Stress		1	278	183.36
		2	64	187.55
		3	23	165.93
		Total	365	
% Stress		1	278	183.36
		2	64	187.55
		3	23	165.93
		Total	365	

		Total	343	
Total Stress		1	42	177.7
		2	169	189
		3	146	167.8
		Total	357	
% Stress		1	42	177.7
		2	169	189
		3	146	167.8
		Total	357	

Test Statistics ^{a,b}			
	CGPA (10TH)	Total Stress	% Stress
Chi-square	17.646	3.312	3.312
df	2	2	2
Asymp. Sig.	0	0.191	0.191
a. Kruskal Wallis Test			
b. Grouping Variable: PARENTAL EDUCATION			

Table: Kruskal-Wallis Test: (Grouping Variable: Parental Education)

Test Statistics ^{a,b}			
	CGPA (10TH)	Total Stress	% Stress
Chi-square	10.54	0.724	0.724
df	2	2	2
Asymp. Sig.	0.005	0.696	0.696
a. Kruskal Wallis Test			
b. Grouping Variable: CASTE			

Table 10: Kruskal-Wallis Test: (Grouping Variable: Caste)

Ranks				
	PARENTAL EDUCATION		N	Mean Rank
CGPA (10TH)		1	40	130.19
		2	163	161.29
		3	140	196.41

VII. Discussions

The Normality was tested for significance of applying the parametric tests. From above tables, it can be observed that the data is not followed the Normality, therefore the non parametrics methods were used to test the difference in medians of the respective groups regarding their CGPA and stress. The Mann-Whitney test was used to compare the two groups while the Kruskal Wallis test was used for several groups. CGPA and Stress was not significantly different in Gender and class of the pupils. Both the CGPA and Stress was significantly different in Stream of pupils, whereas the CGPA was significantly different in Caste and the parental education groups.

VIII. Conclusion

The analysis in the paper reveals that the following are amongst the high level stressors in academic:

1. Final Grades
2. Examinations
3. Other Tests

Whereas the following below are the lowest in stressors:

- a) Practising and learning New skills
- b) Taking notes
- c) Forgetting things like pen etc in class

Stream shows the significant impact on the Academic stress in the pupils whereas the remaining four variables do not show the significant impact on the academic stress.

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