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"A descriptive study to assess level of academic stress and anxiety of science stream students among selected higher secondary school at Kheda District."

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ABSTRACT

The words "Stress" and " anxiety" have permeated every aspect of our generation today.In order to function properly, every student has to experience pleasant academic stress and anxiety,also known as eustress.When a student is unable to study or cope with a circumstance, they experience negative stress,also known as distress.Stress is a condition where a student's usal state of equilibrium is altered.By the year 2020, according to the WHO ,that will be one of the main causes of disability.The concern over academic stress and anxiety among science students has grown in recent years.According to estimates, academic stress and anxiety connect to annual performance and result impair the overall performance of 10% to 30% of School students of science stream.

AIM: The study aims are to assess academic stress and anxiety regarding school, education system and examination to improve level of knowledge and to reduce stressors, in higher secondary school students of science stream.

METHODOLOGY: Non- experimental research design with quantitative research approach was used for research study. The researcher used purposive sampling technique for selecting 300 samples. The tools used,

Section 1: socio-demographic data

Section 2: structured perceived academic stress scale questionnaires regarding stress.

Section 3: Anxiety scale to assess the attitude by anxiety scale.

Validity of tool was assessed by 11 experts.Assessment was ascertained by the chi-square formula.

RESULT: The level of perceived academic stress and anxiety among

higher secondary school students of science stream 74% of them are having moderate stress,8.7% of them are having mild stress and 17.3% of them are having severe stress.Level of anxiety 4.7% of them are having mild anxiety,85.7% of them are having moderate level of anxiety and 9.7% of them are having severe anxiety.

CONCLUSION: The study revealed that around majority students were having moderate,some low&very less of them are having severe stress. The level of anxiety revealed maximum moderate,some severe anxiety & very less mild anxiety.

KEYWORDS: Academics stress, Anxiety, perceived stress scale, higher secondary school students, and teaching - learning method.

INTRODUCTION

"The greatest weapon against stress is our ability to choose one thought over another."

~William James.

Academic stress is the anxiety and stress that comes from schooling and education .There is a lot of pressure that comes along with pursuing their education. Students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time (Abouserie, 1994)[1].Academic stress is defined as the body's response to academic related demands that exceed adaptive capabilities of students. It is estimated that 10-30% of students experience some degree of academic stress during their academic carrier[2]. Academic stress adversely affects student's personal, emotional, and physical well-being as well as their learning and performance levels[3].Adolescents are always considered to be full of energy and bright hope of the future. The stage of adolescence is characterized by significant physical, emotional and intellectual changes, and changes in social roles, relationships and expectations and is marked by stress[4].Parental participation and learning effect how parents treat their children, as well as how they handle their children's habits and cognitive processes. This, in turn, shapes their children's performance and behaviour toward them. As a result, the parent-child relationship is dependent on the parents' attitudes, understanding, and perspectives[5].

Parents and institutions relentlessly instil the fear of failure which affects their self-esteem and confidence. Ang&Huan (2006) reported increased expectations as one of the factors responsible for increased stress levels[6].In the Indian system of education, obtaining good marks are more important than acquiring knowledge[7]. This leads to overburdening the students with academic workload causing a lot of academic stress among Indian adolescents[8].In today's highly competitive world, students face various academic problems including exam stress, disinterest in attending classes and inability to understand the subject. Examination stress is the feeling of anxiety or apprehension over one's performance in the exams[9].

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Aims of study

The study aims are to assess academic stress and anxiety regarding school, education system and examination to improve level of knowledge and to reduce stressors, in higher secondary school students of science stream.

Objectives of the study

1) To assess level of academic stress and anxiety among higher secondary school student.
2) To find out correlation between academic stress and anxiety among higher secondary school student.
3) To find out the association between the academic stress and anxiety among higher secondary school student.

ASSUMPTION

- The study assumes that:
1. The higher secondary school students may experience academic stress and anxiety.
2. Many factors contribute to stress and anxiety among higher secondary school.

METHODOLOGY

Research approach: quantitative Approach was used in this study.

Research design: Non-experimental research design.

Variables:

Demographic Variable: In this study Age, gender, standard, parental level of education, language, religion, tuition, extracurricular activity, locality.

Research Variable: Stress, anxiety regarding psychological awareness

Research setting: The research setting is the physical location and conditions in which data collection takes place in study. The study was conducted in selected schools of Kheda district.

Target population:Target Population for the present study will be higher secondary school students of science stream attending academic performance in school inside the geographical boundaries of Kheda District during the time of study.

Sampling technique:The samples were selected through a Non-probability sampling technique.

Sample size: The sample consists of 300 Students at Nadiad city and vaso village of higher secondary schools of Kheda district.

The Non-probability sampling technique method was used to data collected using Structured questionnaire for academic stress and anxiety scale on academic stress and anxiety.. Data analysis was done mainly using descriptive statistics. The process of validity was done between 11/02/2023 to 02/03/2023. Data collection tool to 11 experts for the content validity. The process of reliability was a done after the validity of tool by advice from 11 experts. The score of reliability is 0.87 so the study was feasible to conduct.

RESULT

Section 1: Findings related to selected socio-demographic variables.

Table 1: Frequency and percentage of academic stress and anxiety of socio-demographic variables. N=300

Demographic variable	Frequency	%
1.Age		
a)15-16years	81	27.0%
b)17-18years	219	73.0%
c)19-20years	0	0%
2.Gender		
a) Male	125	41.7%
b) Female	175	58.3%
c) Other	0	0
3.Standard		
a) 11th	153	51.0%
b) 12th	147	49.0%
4.Religion		
a) Hindu	193	64.3%
b) Muslim	60	20.0%
c) Christian	46	15.3%
d) Others	1	0.3%
5.Education level of father		
a) Illiterate	12	4.0%
b) secondary	55	18.3%
c) higher secondary	123	41.0%
d) U.G	91	30.3%
e) P.G	19	6.3%
6. Education level of mother		
a) Illiterate	40	13.3%
b) secondary	91	30.3%
c) higher secondary	119	39.7%
d) U.G	73	14.3%
e) P.G	7	2.3%
7.Tuition		
a) Yes	180	60.0%
b) No	120	40.0%

8.Average no of hours spend per day for study at home		
a) 1-2 hour		
b) 3-4 hours	79	26.3%
c) more than 5 hours	183	61.0%
	38	12.7%
9.Participate Extracurricular activity		
a) Yes	197	65.7%
b) No	103	34.5%
10.Locality / Residency		
a) Local	157	52.3%
b) Up-down	120	40.0%
c) Hostel	23	7.7%

Section 2: Finding level of academic stress of higher secondary school student.

Table 2: frequency and percentage oflevel of academic stress.

N=300

Level of stress	Frequency	Percentage
Low stress	52	17.3%
Moderate stress	222	74.0%
Severe stress	26	8.7%

Table 2.1 reveals that most of students are suffering from the moderate academic stress. 52(17.3%) belongs to low stress, 222(74.0%) belongs to moderate stress, 26(8.7%) belongs to severe stress.

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STUDENTS

	Mild	moderate	Severe
■ studrnts	17.30%	74.00%	8.70%

Graph 2.1 Analysis of data related to academic stress level and it's score assessed in students.

■ percentage

	Mild	Moderate	Severe
percentage	4.70%	85.70%	9.70%

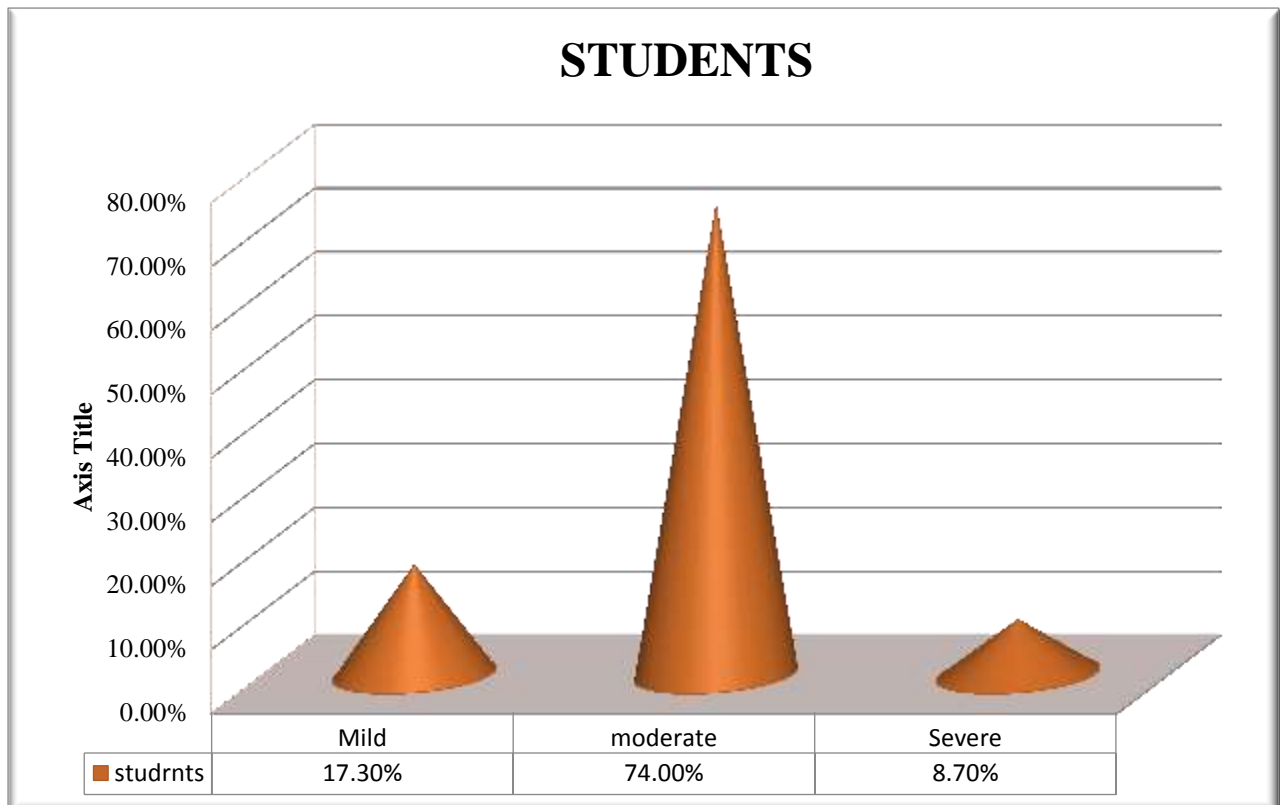**Graph2.2 bar graph is showing anxiety level assessed in students.**

Section 3: Finding level of academic anxiety of higher secondary school student.
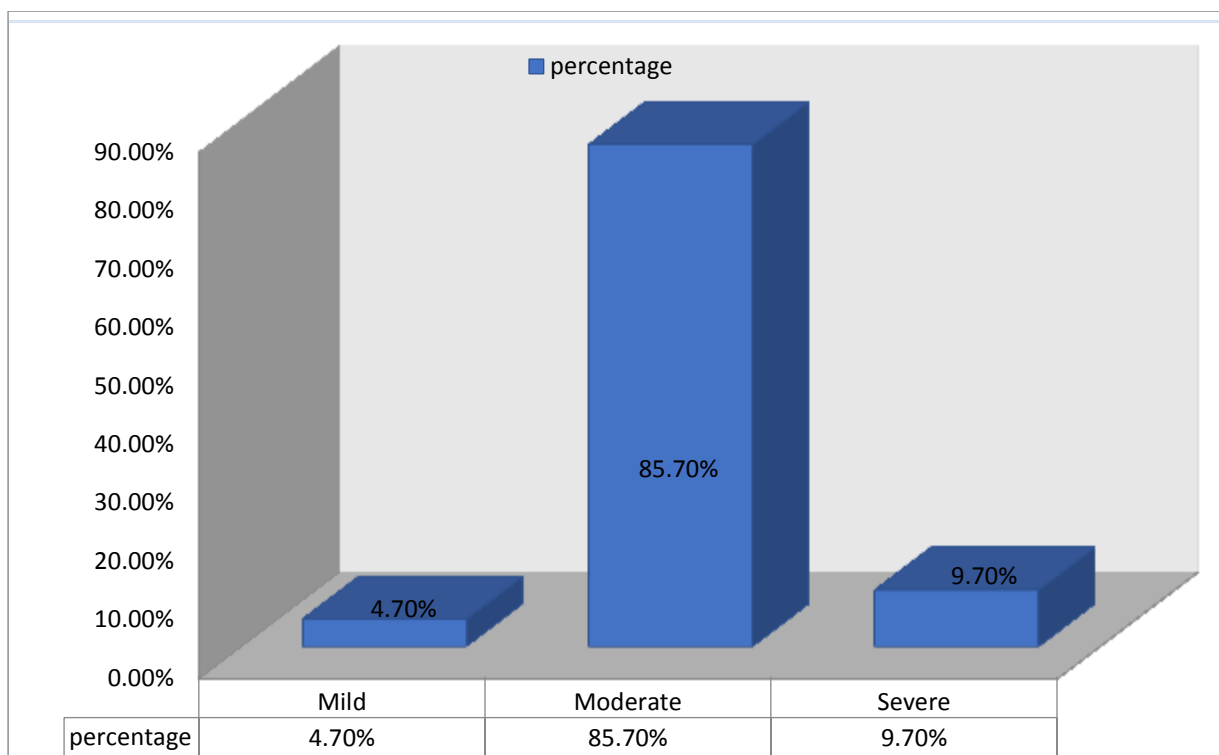
Table 3: frequency and percentage of level of academic anxiety.

level of stress	Frequency	Percentage
Mild anxiety	14	4.7%
Moderate anxiety	257	85.7%
Severe anxiety	29	9.7%

Table 3.1 revels that most of students are sufferings from moderate anxiety. 14(4.7%) belongs to mild anxiety, 257(85.7%) belongs to moderate anxiety, 29(9.7%) belongs to severe anxiety.

Section 4: Association between the academic stress and anxiety among higher secondary school student.

Table 4: Association between levels of academic stress among higher secondary school student.

Sr. No	Demographic Variable	Low Stress	Moderate Stress	Severe Stress	Chi Square value	Df	p-value
1.	Age						P=<0.0
	a)15-16years	25	45	11	19.91	2	5
	b)17-18years	27	177	15			0.000
	c)19-20years	00	00	00			**S**
2.	Gender						P=<0.0
	a) Male	37	86	2	31.732	2	5
	b) Female	15	136	24			0.0
	c) Other	00	00	00			**S**
3.	Standard						P=<0.0
	a) 11th	50	86	17	57.934	2	5
	b) 12th	02	136	9			0.0
							S
4.	Religion						P=<0.0
	a) Hindu	46	132	15	16.612	6	5
	b) Muslim	04	49	07			0.011
	c) Christian	02	40	04			**S**
	d) Others	00	01	00			
5.	Education level of father						P=>0.0
	a) Illiterate	5	6	1	9.788	8	5
	b) secondary	11	41	3			0.280

No.	Variable				χ²	df	P value
	c) higher secondary	21	91	11			NS
	d) U.G	10	72	9			
	e) P.G	5	12	2			
6.	Education level of mother						P=>0.0
	a) Illiterate	10	28	2	12.304	8	5
	b) secondary	12	72	7			0.138
	c) higher secondary	15	93	11			NS
	d) U.G	13	25	5			
	e) P.G	02	4	1			
7.	Tuition						P=<0.0
	a) Yes	34	137	9	7.880	2	5
	b) No	18	85	17			0.019
							S
8.	Average no of hours spend per day for study at home						P=>0.0
	a) 1-2 hour	9	62	8	4.896	6	5
	b) 3-4 hours	33	134	16			0.557
	c) more than 5 hours	10	26	2			NS
9.	Participate Extracurricular activity						
	a) Yes						P+>0.0
	b) No	33	146	18	0.260	2	5
		19	76	8			0.878
							NS
10.	Locality / Residency						
	a) Local	32	113	12	3.500	4	P=>0.0
	b) Up-down	15	93	12			5
	c) Hostel	5	16	2			0.478
							NS

(S)= SIGNIFICANT AT 0.05 LEVEL

(NS)= NOT SIGNIFICANT　　　　**(S) = SIGNIFICANT AT 0.05LEVEL**

The table no.4.1 envisages the outcome of chi-square analysis being carried out to bring out the association between the mean difference level of academic stress among higher secondary school students of science stream in selected schools of Kheda district with their selected demographic variables: Age, gender, standard, parental level of education, language, religion, tuition, extracurricular activity, localitywere accounted for determining the association with levelof academic stress.

Out of which gender, standard, religion, tuition of the demographic variable found significant associated at P value <0.05 with academic stress level.

Table 5: Association between levels of academic anxiety among higher secondary school student.

Sr. No	Demographic Variable	Mild anxiety	Moderate anxiety	Severe anxiety	Chi Square value	Df	p-value
1.	Age						$P=<0.05$
	a)15-16years	8	63	10	8.084	2	0.018
	b)17-18years	6	194	19			**S**
	c)19-20years	0	0	0			
2.	Gender						$P=>0.05$
	a) Male	7	109	9	1.808	2	0.405
	b) Female	7	148	20			**NS**
	c) Other	0	0	0			
3.	Standard						$P=<0.05$
	a) 11th	11	123	19	7.718	2	0.021
	b) 12th	3	134	10			**S**
4.	Religion						$P=>0.05$
	a) Hindu	8	161	24	5.367	6	0.498
	b) Muslim	4	53	3			**NS**
	c) Christian	2	42	2			
	d) Others	0	1	0			
5.	Education level of father						$P=>0.05$
	a) Illiterate	0	10	2	11.662	8	0.167
	b) secondary	3	41	11			**NS**
	c) higher secondary	6	109	8			
	d) U.G	4	79	8			
	e) P.G	1	18	0			
6.	Education level of mother						$P=>0.05$
	a) Illiterate	1	32	7	6.943	8	0.543
	b) secondary	3	79	9			**NS**
	c) higher secondary	7	105	7			
	d) U.G	3	35	5			
	e) P.G	0	6	1			
7.	Tuition						$P=>0.05$
	a) Yes	6	159	15	2.915	2	0.233
	b) No	8	98	14			**NS**
8.	Average no of hours spend per day for study at home						$P=<0.05$
	a) 1-2 hour	6	64	9	12.498	6	0.052
	b) 3-4 hours	3	162	18			**S**
	c) more than 5 hours	5	31	2			

9.	participate Extracurricular activity						P=>0.05
	a) Yes	6	170	21	3.843	2	0.146
	b) No	8	87	8			NS

10.	Locality / Residency						P=>0.05
	a) Local	7	136	14	1.487	4	0.829
	b) Up-down	6	100	14			NS
	c) Hostel	1	21	1			

(S)= SIGNIFICANT AT 0.05 LEVEL

(NS)= NOT SIGNIFICANT **(S) = SIGNIFICANT AT 0.05LEVEL**

The table no.4.2 envisages the outcome of chi-square analysis being carried out to bring out the association between the mean difference level of academic stress among higher secondary school students of science stream in selected schools of Kheda district with their selected demographic variables :Age, gender, standard, parental level of education, language, religion, tuition, extracurricular activity, localitywere accounted for determining the association with levelof academic stress.

Out of which age, standard of the demographic variable found significant associated at P value <0.05 with academic stress level.

Section 5: Correlation between academic stress and anxiety among higher secondary school student.

Table 6: correlation between academic stress and anxiety among higher secondary school student.

Co-relation	Mean	STD. deviation	r value
Stress	7.74	2.26	0.18
Anxiety	46.43	11.26	

The table no.5.1 shows that Stress & anxiety between co relation **r** value **0.18.**

Conclusion: The purpose of present study is to a Descriptive study to assess the academic stress and anxiety among the selected schools of kheda district.

The study has indicated students personal charectaristics as one of the main factors that influenced the effectiveness of school learning process.Technical support and technological advancement have provided learning facilities and stable for interactive applications. This study has also proven that effective measures for class learning helps in reduction of academic stress and anxiety.

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RECOMMENDATION

• A comprehensive study on academic stress and anxiety among students of different institutes such as private and non-private could be undertaken.

• A qualitative study can be done to be explore in depth information on contributing factors of academic stress and anxiety.

• A descriptive study could be done between perceived academic stress and anxiety and examination performance.

• Study can be done to assess the effectiveness of study methods used with maximum effectiveness and with less amount of stress and anxiety for students.

• A study can be done to assess awareness among teachers regarding academic stress and anxiety perceived by students.

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