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# A Comparative Study of Academic Stress among Arts, Science and Commerce Students of Maa Manikeshwari University

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**Abstract**
Academic stress has increasingly started to feel like part of the background noise of higher education. Postgraduate students, in particular, often juggle heavy coursework, competitive peer environments, and the quiet but persistent worry about what comes after graduation. With that in mind, the present study set out to examine how academic stress is experienced by students from the Arts, Science, and Commerce streams at Maa Manikeshwari University, and whether those experiences differ by stream or gender. In this study a descriptive survey approach was used and the data were analysed through descriptive statistics, ANOVA, and t-tests. In this study the investigator selects 100 students from arts, science & commerce stream of Maa Manikeshwari University via using stratified random sampling method. The findings hint that universities may need to think beyond curriculum delivery alone. More accessible counselling, realistic workload planning, and spaces where students can openly discuss stress might help. While the study doesn't claim to settle the issue, it does add a useful stream-wise perspective to the conversation on academic stress.

**Keywords:** Academic Stress, University Students, Educational Streams, Arts, Science and Commerce.

## 1. Introduction

Education is often seen as the force that shapes a person's outlook, skills, and future path. At the university level, though, learning doesn't come on its own. It tends to arrive with deadlines, competition, family expectations, and that quiet but constant question about what comes next after graduation. Put together, these pressures seem to feed into what we call academic stress, which increasingly looks like one of the central psychological issues students face today. Stress itself isn't always harmful. In simple terms, it's the body's response to a demand or challenge that unsettles one's mental or physical balance. A certain amount of pressure can actually help — many students, if they're honest, admit they study more seriously before an exam because of it. Trouble begins when the workload or expectations start to outpace a student's ability to cope. At that point, stress stops being motivating and starts interfering with concentration, mood, confidence, and sometimes even health. In academic settings, this strain often grows out of exams, packed schedules, limited time, fear of underperforming, and the sense that future success depends on present results.

Lately, researchers seem to be paying closer attention to academic stress among university students, probably because its effects show up not just in grades but also in mental health and social adjustment.

According to Chaplin (1982) Stress is a state of strain whether physical or psychological. Ann (1982) felt that stress ensures when situations are 'bad' from a personal point of view and it is essentially in the eye of the beholder. Whiten (1983) defines stress as any circumstances that threaten or perceived to be threaten a well-being and thereby tax our adaptive capacities. Still, stress doesn't fall evenly across all students. It appears to vary depending on the course structure, classroom environment, expectations from teachers, and how students are evaluated. Different academic streams bring different pressures. Science students, for instance, often juggle lab work, practical assessments, and dense syllabi. Arts students may find themselves buried in readings, interpretation-heavy theory, and long writing assignments. Commerce students, meanwhile, frequently deal with numerical subjects, professional competitiveness, and the feeling that their studies are tightly tied to career outcomes. None of these paths is necessarily harder than the others — just stressful in different ways. Looking at these stream-wise differences may be more important than it first sounds. Universities today are more diverse in curriculum design and assessment styles, and one-size-fits-all student support probably misses the mark. If educators understand how stress varies across Arts, Science, and Commerce students, they may be better able to design counselling services, academic support, or even small teaching adjustments that actually match students' needs. Sometimes even modest changes in evaluation style or workload distribution can make a noticeable difference in how students cope.

With this in mind, the present study focuses on postgraduate students of Maa Manikeshwari University and attempts to compare academic stress across Arts, Science, and Commerce streams. It also explores whether stress levels differ across selected student characteristics. Rather than treating student stress as a single uniform issue, the study takes a comparative approach, hoping to add something practical to the broader conversation on student well-being in higher education — and perhaps offer insights that institutions can actually use to make academic life a bit more manageable.

## 2. Review of related literature

Research conducted in India consistently shows that academic stress is a major concern for students across school and university levels. Many studies point to examination pressure, parental expectations, and competition for future careers as central causes. For example, Deb, Strodl, and Sun (2015) found that a large proportion of higher secondary students in Kolkata reported stress mainly due to parental pressure and comparison with high-performing peers. Similar findings were reported by Ranamanikham and Jayanthi (2015), who identified expectations from parents and teachers as key stressors among adolescents.

Several Indian studies also highlight the close link between academic stress and mental health. Kour and Parveen (2018) observed a significant positive relationship between academic stress and depression, while Mishra (2017) reported that students with lower stress performed better academically than highly stressed students. Likewise, Das and Sahoo (2012) found that higher stress levels were associated with increased depression among postgraduate students.

Differences across academic streams have also been explored, though findings are not entirely consistent. Reddy et al. (2018) reported significant variation in stress across streams, with Commerce students showing higher stress and Humanities students lower stress. In contrast, Kauts (2016) found Science students to be more stressed than students from Humanities and Commerce. These mixed results suggest that stress levels may depend not only on the stream but also on institutional practices and academic expectations.

Overall, Indian research clearly establishes academic stress as widespread, yet stream-wise comparisons within specific universities remain limited. This indicates the need for localized studies examining how academic stress varies across Arts, Science, and Commerce students within a single institutional context.

## 3. Rationale of the study

These days, school pressure feels like a normal thing at college - yet every student carries it differently. Depending on what they study shapes how tough things get. Heavy course loads, labs piling up, tests back-to-back hit science learners hard. Numbers that must add up perfectly, due dates stacking fast, job market worries weigh down commerce minds. Meanwhile, arts folks wrestle vague tasks and grading that seems unclear, quiet but wearing. Stress shows up in many forms. One reason deeper comparisons remain rare? Direct contrasts between academic tracks get little attention, particularly when confined to one campus. Zooming in on Maa Manikeshwari University opens space to spot trends large surveys tend to overlook - its unique blend of teaching style, diverse learners, and resources likely nudges stress in quiet but meaningful directions. Far beyond feelings, pressure here ties closely to grades, drive levels, and how clearly someone sees life after school. Peering into which students face steeper struggles - and why those gaps exist - might feed real changes: better advising methods, course designs adjusted thoughtfully, strategies shaped by actual needs instead of assumptions. Insights like these quietly build stronger paths forward - not guarantees, just steadier ground beneath feet already moving.

## 4. Statement of the problem

From the above rationale of the study the problem may be stated as the "**A Comparative Study of Academic Stress among Arts, Science and Commerce Students of Maa Manikeshwari University**".

## 5. Objective of the study

- To assess the levels of academic stress in students from the Arts, Science, and Commerce streams of Maa Manikeshwari University
- To identify the factors contributing to academic stress in each stream.
- To compare the academic stress levels across the three streams and determine if there are significant differences.
- To gain information if there is difference in academic stress level of male and female students.

## 6. Hypothesis of the study

- Students in the science stream have higher academic stress in comparison to the arts and commerce stream of MMU.
- Students of arts stream have higher academic stress in comparison to the science and commerce stream of MMU.
- Students of the commerce stream have higher academic stress in comparison to the arts and science stream of MMU.
- There exist no significant differences in academic stress between the arts, science and commerce streams of MMU.
- There exists no significance difference of academic stress between male and female students.

## 7. Design of the study

### 7.1 Method

The researcher used a descriptive and comparative research design using a cross-sectional approach for conducting this study. A descriptive research design aims to document the characteristics, behaviours, or prevalence of a phenomenon within a population without manipulating variables, providing a snapshot of the current state. In contrast, a comparative research design examines differences or similarities between two or more groups.

### 7.2 Population

In this present study the population comprise of P.G. students of three different streams i.e. Arts, science & commerce of Maa Manikeshwari University. In arts stream there are 614 students, in science stream there are 344 students and in commerce stream there are 64 students hence the total population is 1024 students of Maa Manikeshwari University.

### 7.3 Sample

In this study the investigator selects 100 students from arts, science & commerce stream of Maa Manikeshwari University via using stratified random sampling method.

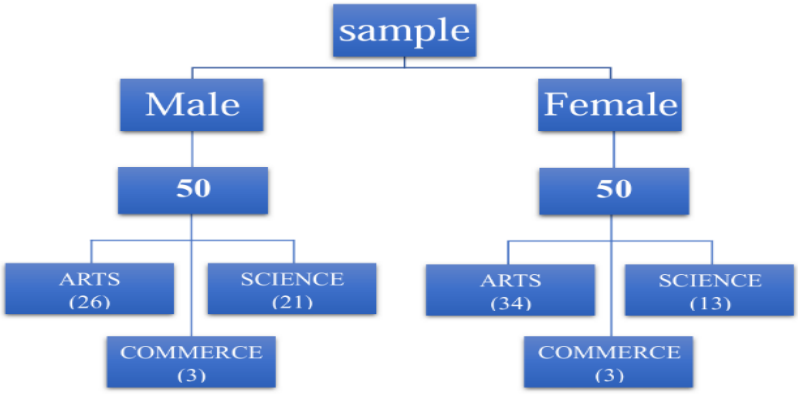



**Chart 1: Distribution of sample**

### 7.4 Tools and techniques

In this present study the investigator collected the data from respondents by using the Students' Academic Stress Scale (SASS). This scale was originally developed by Kim (1970) and adopted by Rajendran and Kaliappan (1990) and again adapted by Rao (2012). This tool is a five-point Likert scale which consists of 40 items describing the stress from various sources. Each item had five alternatives varying from the response 'No Stress' to 'Extreme Stress'. Each response carries a score of '0', '1', '2', '3' and '4' respectively. The total items were 40, therefore 160 (4 x 40) is the maximum possible score and the higher the value of the score, the more academic stress and vice versa. Additionally this scale suggests five factors of academic stress and each factor consist of eight items; those are:

1. Inadequate study facilities,
2. Teacher-pupil relationship / Teaching methods
3. Personal inadequacy
4. Interpersonal difficulties with teachers
5. Fear of failure

### 7.5 Procedure of data collection

The data collection process was done through online mode via using of google forms. The original data

collection tool was converted into soft copy mode and distributed to selected students to collect their responses. Before collection of data a proper instruction was gave to them that how to respond in this tool and gave them assure that their data will be confidential and only be use for research purposes only.

**7.6 Techniques of data analysis**

In this study for the analysis and interpretation of the data, the investigator used descriptive statistical techniques like mean, standard deviation and inferential statistics like analysis of variance (ANOVA) and t-Test. All these statistical analyses were carried out using the MS Excel 2021 and SPSS statistical package 27.0 .

**8. Data analysis and interpretation**

**8.1. Objective 1:** To assess the levels of academic stress in students from the Arts, Science, and Commerce streams of Maa Manikeshwari University.

**Hypothesis 1**- Students in the science stream have higher academic stress in comparison to the arts and commerce stream of MMU.

**Hypothesis 2-** Students of arts stream have higher academic stress in comparison to the science and commerce stream of MMU.

**Hypothesis 3-** Students of the commerce stream have higher academic stress in comparison to the arts and science stream of MMU.

This scale has 40 items and the highest score possible is 160 and the lowest score possible is 1. And there are four level of academic stress like slightly stress, moderate stress, high stress and extreme stress. So, the predetermined stress level is:

**Table 1: Showing predetermined level of stress**

| Range | Level of stress |
|---|---|
| **1-40** | Slightly stress |
| **41-80** | Moderate stress |
| **81-120** | High stress |
| **121-160** | Extreme stress |

**Table 2: Level of academic stress in arts stream**

| Level of Strss | No. of Students | Percentage (%) |
|---|---|---|
| **Slightly stress** | 5 | 8.33% |
| **Moderate stress** | 41 | 68.33% |
| **High stress** | 13 | 21.66% |
| **Extreme stress** | 1 | 1.66% |

**Table 3: Level of academic stress in science stream**

| Level of Strss | No. of Students | Percentage (%) |
|---|---|---|
| **Slightly stress** | 10 | 29.41% |
| **Moderate stress** | 18 | 52.94% |

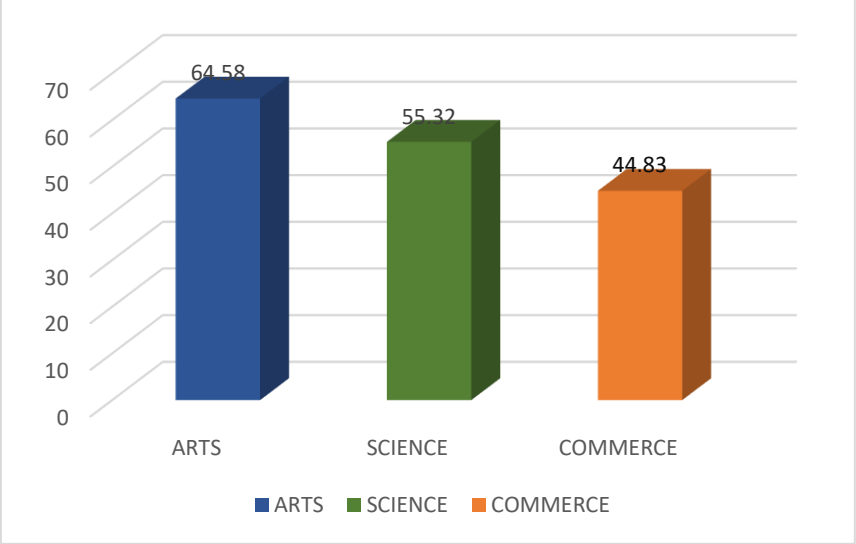
| | | |
|---|---|---|
| **High stress** | 6 | 17.65% |
| **Extreme stress** | 0 | 0 |

**Table 4: Level of academic stress in commerce stream**

| Level of Strss | No. of Students | Percentage (%) |
|---|---|---|
| **Slightly stress** | 2 | 33.33% |
| **Moderate stress** | 4 | 66.66% |
| **High stress** | 0 | 0 |
| **Extreme stress** | 0 | 0 |

Now to test above three hypothesises, to determine which stream has the highest academic stress each stream's mean scores are compared.

**Fig. 1: Mean score comparison of each stream**




**Interpretation:** As per above graphs and tables we can clearly see that there are four different type of academic stress levels and every stream has their own different level of academic stress. like as per table 2, in Arts stream 41 out of 60 which is 68.33% students score between 41-80 which indicates that in Arts stream the level of academic stress is moderate. Like that per table 3 in Science stream 18 out of 34 which is 52.94% students score between 41-80 which also indicates that students from Science stream faces the moderate level of academic stress and in the case of Commerce stream it is not different than other streams, again as per table 4 in Commerce stream 4 out of 6 which is 66.66% students score between 41-80 which indicates that majority of students in Commerce stream faces the moderate level of academic stress. In addition to test above three hypothesises each stream's mean scores are compared in graph 1 which is Arts stream has the mean score of 64.58, Science stream has 55.32 and Commerce stream has 44.83, which clearly shows that among three streams Arts stream has the more academic stress than the other two streams hence we can reject the hypothesis 1 and 3 and accept the hypothesis 2 that Students of Arts stream have higher academic stress in comparison to the Science and Commerce stream of MMU.

**8.2 Objective 2:** To identify the factors contributing to academic stress in each stream.
Here factors are analysed one by one and each streams mean scores are compared. Because each dimension consists of 8 items so that highest score possible is 32 and lowest score possible is 1. And their range of academic stress are given.

**Table 5: Showing Factor wise predetermined level of academic stress**

| Range | Level of stress |
|---|---|
| **1-8** | Slightly stress |
| **09-16** | Moderate stress |
| **17-24** | High stress |
| **25-32** | Extreme stress |

**Fig. 2: Showing academic stress due to Inadequate study facilities**

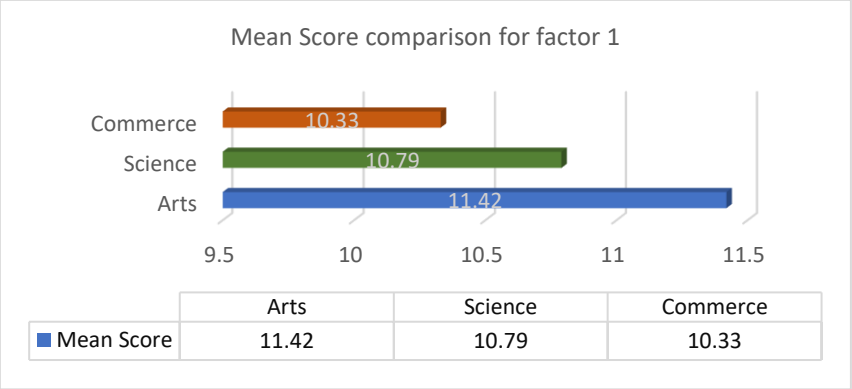



**Fig. 3: Showing academic stress due to Teacher-pupil relationship**

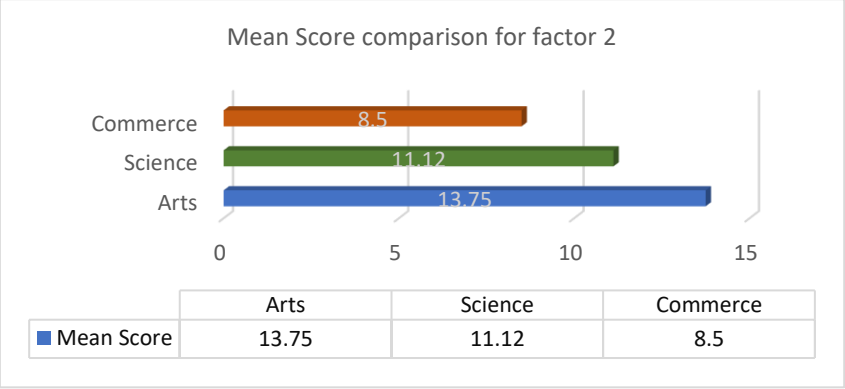


**Fig. 4: Showing academic stress due to Personal inadequacy**

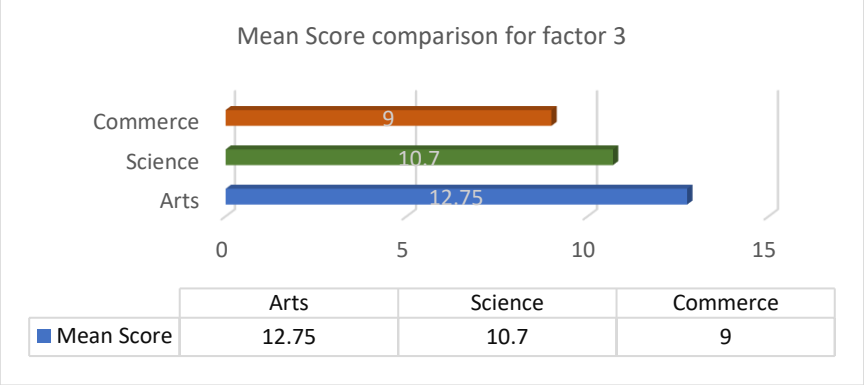



**Fig. 5: Showing academic stress due to Interpersonal difficulties with teachers**

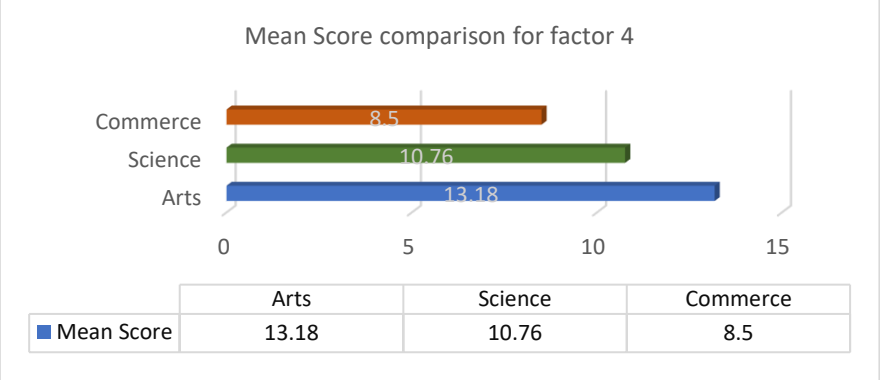
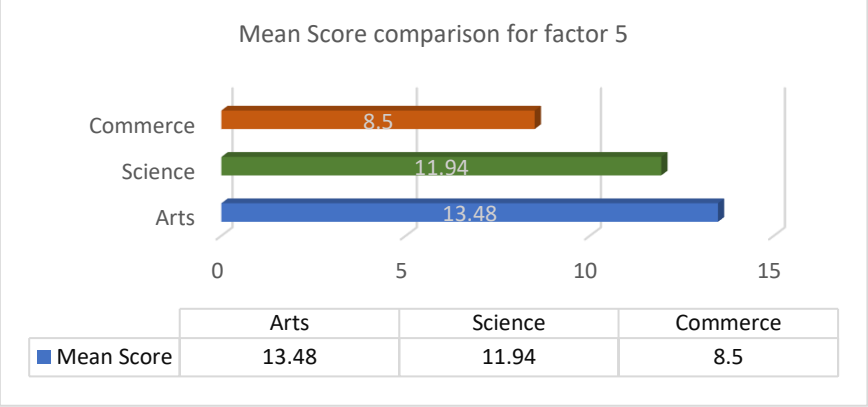



**Fig. 6: Showing academic stress due to Fear of failure**




**Interpretation:** From above graphs it is clearly seen that various factors affects the academic stress level of students. Like in this academic stress scale there are five factors which are Inadequate study facilities (FI), Teacher-pupil relationship / Teaching methods (F2), Personal inadequacy, (F3) Interpersonal difficulties with teachers (F4) and Fear of failure (F5). To identify the factor which affects to academic stress all streams mean scores are compared in their respective factors area. If we observe Fig. 2 we can clearly see that due to inadequate study facilities mean score of Arts stream is 11.42, Science stream is 10.79 and commerce stream is 10.33 is shows that students from arts stream faces more academic stress for inadequate study facilities. Again, if we observe Fig. 3 we can clearly see that due to Teacher-pupil relationship / Teaching methods mean score of Arts stream is 13.75, Science stream is 11.12 and commerce stream is 8.5 is shows that students from arts stream faces more academic stress for Teacher-pupil

relationship / Teaching methods. Again, if we observe Fig. 4 we can clearly see that due to Personal inadequacy mean score of Arts stream is 12.75, Science stream is 10.7 and commerce stream is 9 is shows that students from arts stream faces more academic stress for Personal inadequacy. If we observe fig. 5 we can clearly see that due to Interpersonal difficulties with teachers mean score of Arts stream is 13.18, Science stream is 10.76 and commerce stream is 8.5 it shows that students from arts stream faces more academic stress for Interpersonal difficulties with teachers. If we observe fig 6 we can clearly see that in factor 5 due to Fear of failure mean score of Arts stream is 13.48, Science stream is 11.94 and commerce stream is 8.5 is shows that students from arts stream faces more academic stress for Fear of failure. So last but not the least in every factor mean score of Arts stream is quite higher than science and commerce it shows that students of Arts stream face more academic stress for every factor in this Academic stress scale.

**8.3 Objective 3:** To compare the academic stress levels across the three streams and determine if there are significant differences.

**Hypothesis 4:** There exist no significant differences in academic stress between the Arts, Science and Commerce streams of MMU.

**$H_0$: $\mu_1 = \mu_2 = \mu_3$ (All group means are equal)**

To achieve this objective and test this hypothesis and to compare the means and to see if there is significant different or not, investigator used the F- Test (ANOVA). Gained results are:

**Table 6: Showing results of Anova test**

| ANOVA | | | | | |
|---|---|---|---|---|---|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 3377.89 | 2 | 1688.95 | 4.078 | 0.020 |
| Within Groups | 40174.86 | 97 | 414.17 | | |
| Total | 43552.75 | 99 | | | |

**Interpretation:** From the table no 6 it is revealed that the calculated F-value of Arts, Science and Commerce stream is 4.078, and to calculate the critical value df for grater mean square is 2 and df for smaller mean square is 97 hence our critical value of F is 3.09 which is smaller than our computed F value which is 4.078. Hence our null hypothesis ($H_o$) can reject and we can conclude that there exists significant difference between the mean scores of Arts, Science and commerce streams.

**8.4 Objective 4:** To gain information if there is difference in academic stress level of male and female students.

**Hypothesis 5:** There exists no significance difference of academic stress between male and female students. $\mu_{male} = \mu_{female}$

To test this hypothesis, the following procedure is adopted. The t-test was employed to find out the statistical difference between the male and female students of Maa Manikeshwari University. Results are given bellow:

**Table 7: showing results of t-test between male and female**

| Gender | (N) | (M) | (SD) | t- value | df | p-value |
|---|---|---|---|---|---|---|
| **Male** | 50 | 56.18 | 18.96 | -1.97 | 98 | 0.052 |
| **Female** | 50 | 64.32 | 22.26 | | | |

**Interpretation:** From the table 7 it is revealed that the calculated t-value of male and female students is -1.97 with the 98 df. So, our critical value of 't' at 0.05 level of significance is 1.98. Our computed t-value (-1.97) is smaller than the critical value (1.98) also p-value (0.052) is above than 0.05 (p>0.05). So null hypothesis accepted hence it can be concluded that there exists no significance difference of academic stress between male and female students of Maa Manikeshwari University.
Hence, the formulated hypothesis is accepted.

## 9. Major findings

- Arts stream students recorded the highest mean score 64.58, followed by Science 55.32 and Commerce 44.83, indicating that Arts students experience higher academic stress compared to their peers.
- ANOVA results revealed the calculated F-value is 4.078, which is greater than the critical value 3.09, indicating a statistically significant difference in academic stress levels among the three streams.
- However, the t-test result -1.97 was less than the critical value (1.98), and the p-value 0.052 > 0.05, indicating that the difference is not statistically significant.

## 10. Educational implications of this study

- Universities should recognise that academic stress differs across Arts, Science, and Commerce streams and plan support accordingly.
- Curriculum planners may balance workload and evaluation methods to reduce unnecessary academic pressure.
- Teachers can help minimise stress by using supportive teaching practices, continuous assessment, and constructive feedback.
- Orientation programmes and study-skills training may help students manage academic demands more effectively.
- Universities should strengthen counselling services and organise stress-management and mental-health awareness programmes.
- Career guidance support is necessary to reduce students' anxiety about future employment.
- Educational planners should focus on creating student-friendly academic environments that promote both achievement and well-being.

## 11. Suggestions for further research

The present study has certain limitations and the Academic Stress area is so wide hence various suggestions regarding the further study are mentioned below.

- The present study was conducted only on Maa Manikeshwari University which can be extend to other Universities and make a comparative study.
- It was evaluating Academic Stress of 100 post-graduate students, which can be extended to large numbers of sample for more comprehensiveness result and better generalization.
- It was conducted on post-graduate student; further under-graduate students can also be considered as sample for future research.
- The present study was focussed on variables like streams and gender which also can be conducted on other variables like socio economic status, achievement level, year of study etc.

- The present study confined to students of state university, similar studies can also be conducted on degree/autonomous college, deemed university or central university.
- The present study was employed by descriptive survey design. similar studies can also be planned by adopting other research designs.
- The present study is quantitative in nature. Similar studies can also be planned by adopting mixed method and qualitative research method.

## 12. Conclusion

This study set out to explore how much academic stress postgraduate students experience across different streams, and whether those differences really matter. What comes through fairly clearly is that stress is a genuine part of student life for many of them—though how strongly it's felt, and why, seems to shift with academic demands, expectations, and worries about what comes after graduation. The findings also hint that stress rarely comes from just one source. More often, it appears to build up from overlapping pressures—heavy coursework, exams, the push to perform, and that lingering uncertainty about future jobs. A certain amount of stress might push students to stay focused, but once it crosses a line, it's likely to hurt both their performance and their well-being. That raises a practical question for universities: how do you challenge students without exhausting them? In that sense, the study suggests that institutions like Maa Manikeshwari University may need to look beyond marks and rankings alone. Academic mentoring, accessible counselling, and fairer evaluation patterns could make a noticeable difference in how students cope day to day. Overall, academic success probably shouldn't come at the cost of mental health. When universities try to ease unhealthy pressure while still supporting learning, they're not just improving results—they're helping shape graduates who feel more confident, capable, and emotionally steady.

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