

A STUDY ON IMPACT OF ACADEMIC STRESS ON MBA STUDENTS OF GUJARAT TECHNOLOGICAL UNIVERSITY

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ABSTRACT

The objective of this study is to explore the components of academic stress among the Masters of Business Administration students of GTU affiliated colleges. Many researchers have identified the components of Academic stress and different stressors which impact the students. This study further tries to enlighten each component of academic stress such as curriculum and instruction, team work related issues, assessment, and placement, impact on performance and outcomes of Academic stress. Three major stressors have been identified which affect the performance and three major outcomes of stress. Around twelve micro issues have been identified under the curriculum and instruction component while three stressors were prioritized related to team work; seven sub issues regarding assessment and three micro issues under placement components of academic stress. The sample comprises of 118 Masters of Business Administration students of GTU affiliated colleges from all the five zones of Gujarat. Data was collected through structured academic stress questionnaire.

Keywords: Stress, Academic Stress, Stressors.

INTRODUCTION:

India has one of the largest education systems in the world. The Indian education system is divided into two major segments: core and non-core businesses. The core group consists of schools and higher education, while the non-core business focuses on segments such as pre- schools, vocational training and coaching classes.¹

MBA is one of the most common career choices amongst the youth in India today. There are 1600 business schools in India offering two year MBA programs and various universities have also formed². Among these GTU (Gujarat Technology University) was established vide Government of Gujarat legislature act no 20 of 2007, dated 16th May 2007³.

Stress in academic institutions can have both positive and negative consequences if not well managed. Academic institutions have different work settings compared to nonacademic and therefore one would expect the difference in symptoms, causes, and consequences of stress in the two set up. Stress seems to be very common in college student's life. They have to survive academically and to prepare themselves for further graduate or professional trainings.

Also *Express India*, on Jan 10 2010 reported that Crime Records Bureau figures show India's suicide rate has risen 8 per cent a year for 10 years. According to a 2007 estimate, 45 per cent of suicides involve people between 15 and 29. And WHO lists suicide among the top three causes of death in the age group 15-35. The motive when students kill themselves is invariably academic pressure – this accounts for 99 per cent suicides in the age group 12-18 – but psychiatrists sought to assess why the trend has risen of late and put it down to three reasons: deprivation of sunshine, exam results, and the copycat syndrome.⁴

Our education system has gradually evolved into a rat race, where in the exciting and enriching experience of learning has been stripped down to a mere number game. By now we are conveniently oblivious of the thousands of dreams that could not be fulfilled because of the pressure and stress inflicted on them because of the so called rat race so there has to be study of impact of stress on performance and mental health.

LITERATURE REVIEW:

Definition of Stress:

Stress can refer to experiencing events perceived as endangering one's physiological, physical or psychological wellbeing or a combination of these and when there is excessive pressure its intensity and chronic nature can lead to mental and physical ill health including depression, nervous breakdown and heart disease (Quick, Nelson and Hurrell, 1997).

Impact of Academic Stress:

From the literature Andrews, B. and J. M. Wilding (2004) an apparent increase in seriously disturbed students consulting student health services in the UK has led to concern that increasing financial difficulties and other outside pressures may affect student mental health and academic performance. The current research investigated whether student anxiety and depression increases after college entry, the extent to which adverse life experiences contribute to any increases, and the impact of adversity, anxiety and depression on exam performance.

Stress among Management Students:

As the management education is an important medium that facilitates improvement of leadership qualities and turns out excellent future managers, which is quite evident. Students entering into the professional education needs to face many challenges to which they have never been exposed earlier. The pressure to earn good grades and to earn a degree is very high (Hirsch & Ellis, 1996).

Ong and Cheong (2009) found that academic stressors topped the list at 63 per cent; interpersonal scored 17.5 per cent, intrapersonal 13.0 per cent, environmental 2.5 per cent and 3.5 per cent reported no stress at all among a sample of 285 international students in professional courses. The overall top five most frequently reported stressors were workload, lecturer characteristics, CGPA, too many tests and course difficulty.

¹ <http://www.oifc.in/Sectors/Education>, Nov 28, 2011

² http://en.wikipedia.org/wiki/Master_of_Business_Administration

³ <http://www.gtu.ac.in/gcet/About.aspx>

⁴ Kinnari somni. Petition performs the Indian education system and desress education Student voice of India. 2010 March 29. Available from: <http://studentvoiceindia.com/>

Other potential sources of stress include excessive homework, unclear assignments, and uncomfortable classrooms (Kohn & Frazer, 1986). In addition to academic requirements, relations with faculty members and time pressures may also be sources of stress (Sgan-Cohen & Lowental, 1988). Academic institutions have different work settings compared to nonacademic and therefore one would expect the difference in symptoms, causes, and consequences of stress in the two set up (Elfering et al., 2005; Chang & Lu, 2007).

From the literature Purna Prabhakar Nandamuri and Gowthami(2011), a study conducted in 500 postgraduate management students from various management institutes spread across the Warangal district of Andhra Pradesh in India which reveals that four major areas that cause stress among management students and out of that the curriculum factor has attracted high prominence followed by the teamwork aspect. The instruction and assessment and placement issues also are contributing for academic stress among the respondents

RESEARCH GAP:

MBA students have many obstacles to overcome in order to achieve optimal academic performance. A number of researches have been done looking at the correlation of many stress factors that university students experience and the effects of stress on their achievements and mental health. However, a review of literature indicates that not much have been prioritized on the stress-related research. Therefore, it is timely to conduct a research to examine this particular issue as findings from the present study would benefit various parties in the university especially the institutes in planning and conducting necessary programmes for the students so that stress-related factors could be reduced and better academic performance could be achieved by the students.

AIM & OBJECTIVES OF THE STUDY:

The main objective of this research is to understand the “Impact of academic stress upon performance and mental health of MBA students.” In this study it was attempt to identify the stressors which affect the performance of students, to analyze the curriculum & instruction related components, teamwork related aspects, the assessment related factors, the placement related issues responsible for stress, and also the impact of time management on the stress level of students.

METHODOLOGY:

Single Cross sectional study was conducted to examine the relationships of independent and dependent variable by applying the self administered survey questionnaire. And with the help of literature review the various hypotheses to examine the relation between dependent and independent variable are also used. In the following Research the procedure which is adopted is quantitative approach. Respondents were 116 students who are taken from all the five zones of GTU affiliated MBA Colleges.

Statistical Analysis include:

ANOVA, Chi Square, Factor Analysis, Independent , sample t-test

Statistical Analysis tools:

Excel and SPSS

RESULTS AND DISCUSSIONS:

- **To identify the stressors which affect the performance of students and consequences faced by stress:**

From the study it was found that there are academic stressors as well as psychological stressors which affect the performance of students. In academic stressors lack of time for recreational activities and pedagogy of teaching were having high impact. Whereas in behavioral stressors cultural effect having high impact on performance. Due to stress the students were facing the problems like suffer from headache, sleeplessness, nervousness and moodiness

- **To analyze the curriculum and instruction related components responsible for stress:**

When the curriculum and instruction related components responsible was studied we found that the Presentations, achieving academic goals, timely submission of projects quantum of syllabus were the stressors which causes the stress among the students of GTU.

• **To explore teamwork related aspects responsible for stress:**

It was found from the research that out of total respondents there are 43% of the students sometimes felt that individual task is better than teamwork. And in the teamwork related stressors adjustment of group mindset was having high impact on the students.

• **To know the assessment related factors of academic stress:**

It was found from the research that out of total respondents there are 37% of the students who were of the opinion that they are always stressful because of assessment criteria of GTU.

It was also found that the assessment related stressors i.e. syllabus, duration of semester, number of projects and assignments causing more stress to the students.

• **To find out the placement related issues causing stress among MBA students:**

From the study it can be analyzed that job profile is the stressor which affects the students in high manner while students were least bothered about the expectations from institute and parents. Out of 116 only 29 students were placed and placed students gave low preference to the time management of study. It means placed students were stressed because of projects and assignments more.

• **To identify the impact of time management on the stress level of students:**

From the data it can be analyzed that 65% students responded that they didn't get time for extra activities. It can be concluded from the data that 41% responded that they can sometimes managed their co- curricular activities without hampering their studies. It can be concluded that while pursuing the course majority students didn't get time for extra activities.

DATA ANALYSIS AND INTERPRETATIONS:

CHI-SQUARE ANALYSIS:

H_{0,1}: The education background is independent on feeling of student that individual task is better than teamwork

INTERPRETATION:

The observed value is not greater than the critical Chi-square value of 24.9958 so researcher's decision is not to reject the null hypothesis. In other words researcher fails to reject the hypothesis that education background is independent on feeling of student that individual task is better than team work. $\chi^2 (.05, N = 113) = 15.244, p = 24.9958$

H_{0,2}: Gender is independent on stress because of assessment criteria of GTU.

INTERPRETATION:

The observed value is greater than the critical Chi-square value of 7.8147 so researcher's decision is to reject the null hypothesis. In other words researcher rejects the hypothesis that gender is independent on stress because of assessment criteria of GTU. $\chi^2 (.05, N = 113) = 8.441, p = 7.8147$

H_{0,3}: Annual Income is independent on stress because of assessment criteria of GTU.

INTERPRETATION:

The observed value is greater than the critical Chi-square value of 16.9190 so researcher's decision is to reject the null hypothesis. In other words researcher rejects the hypothesis that annual income is independent on stress because of assessment criteria of GTU. $\chi^2 (.05, N = 113) = 17.010, p = 16.9190$

ANOVA ANALYSIS:

H_{0,4}: There is no significant difference in level of agreement regarding stressors affect the performance among students of different zones.

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding stressors affect the performance among students of different zones. There is no significant difference in the level of agreement regarding stressors affect the performance among students of different zones at the $p > 0.05$ level for three conditions [F (34, 78) = 1.481, $p = 0.079$]

H_{0.5}: There is no significant difference in level of agreement regarding consequences faced by stress among students of different zones.

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding consequences faced by stress among students of different zones. There is no significant difference in the level of agreement regarding consequences faced by stress among students of different zones at the $p > 0.05$ level for three conditions [F (41, 71) = 1.276, $p = 0.182$]

H_{0.6}: There is no significant difference in level of agreement regarding curriculum and instruction related components cause stress among student different zones

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding curriculum and instruction related components cause stress among student different zones. There is no significant difference in the level of agreement regarding curriculum and instruction related components cause stress among student different zones at the $p > 0.05$ level for three conditions [F (24, 88) = 1.057, $p = 0.408$]

H_{0.7}: There is no significant difference in level of agreement regarding assessment related components cause stress among student of different zones.

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding assessment related components cause stress among student of different zones. There is no significant difference in the level of agreement regarding assessment related components cause stress among student of different zones at the $p > 0.05$ level for three conditions [F (23, 89) = 2.711, $p = 1.195$]

H_{0.8}: There is no significant difference in level of agreement regarding stressors affect the performance among students of different educational background

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding stressors affect the performance among students of different educational background. There is no significant difference in level of agreement regarding stressors affect the performance among students of different educational background at the $p > 0.05$ level for three conditions [F (34, 78) = 0.695, $p = 0.881$]

H_{0.9}: There is no significant difference in level of agreement regarding consequences faced by stress among students of different background

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding consequences faced by stress among students of different zones. There is no significant difference in the level of agreement regarding consequences faced by stress among students of different background at the $p > 0.05$ level for three conditions [F (41, 71) = 1.319, $p = 0.152$]

H_{0.10}: There is no significant difference in level of agreement regarding curriculum and instruction related components cause stress among student different background.

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding curriculum and instruction related components cause stress among student different background. There is no significant difference in the level of agreement regarding curriculum and instruction related components cause stress among student different background at the $p > 0.05$ level for three conditions [F (24, 88) = 0.832, $p =$

0.687]

H_{0.11}: There is no significant difference in level of agreement regarding assessment related components cause stress among student of different zones.

INTERPRETATION:

A one-way ANOVA was conducted to compare the significance difference in the level of agreement regarding assessment related components cause stress among student of different background. There is no significant difference in the level of agreement regarding assessment related components cause stress among student of different zones at the $p > 0.05$ level for three conditions [$F(23, 89) = 1.111, p = 0.350$]

INDEPENDENT T TEST:

H_{0.12}: There is no significant difference in level of agreement regarding academic stressors affect the performance of students between Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding academic stressors affect the performance of students between Male & Female. There was a significant difference in the score for level of agreement towards male ($M = 3.32, S.D = 0.66$) and female ($M = 3.55, S.D = 0.51$); $t(111) = -1.955, p = 0.043$. These results suggest that there is significant difference between levels of agreement regarding academic stressors affect the performance of students and between Male & Female.

H_{0.13}: There is no significant difference in level of agreement regarding Psychological stressors affect the performance of students between Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding Psychological stressors affect the performance of students between Male & Female. There was a significant difference in the score for level of agreement towards male ($M = 2.96, S.D = 0.82$) and female ($M = 3.13, S.D = 0.70$); $t(111) = -1.1, p = 0.26$. These results suggest that there is no significant difference between level of agreement regarding psychological stressors affect the performance of students and between Male & Female

H_{0.14}: There is no significant difference in level of agreement regarding Physiological outcomes of stress faced by students between Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding Physiological outcomes of stress faced students between Male & Female. There was a significant difference in the score for level of agreement towards male ($M = 3.26, S.D = 0.92$) and female ($M = 3.39, S.D = 0.6$); $t(111) = -0.842, p = 0.37$. These results suggest that there is no significant difference between levels of agreement regarding physiological outcomes of stress faced by students between Male & Female.

H_{0.15}: There is no significant difference in level of agreement regarding Psychological outcomes of stress faced by students between Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding Psychological outcomes of stress faced students between Male & Female. There was a significant difference in the score for level of agreement regarding physiological outcomes of stress towards male ($M = 3.17, S.D = 0.78$) and female ($M = 3.17, S.D = 0.73$); $t(111) = -0.026, p = 0.979$. These results suggest that there is no significant difference between levels of agreement regarding Psychological outcomes of stress faced by students between Male & Female.

H_{0.16}: There is no significant difference in level of agreement regarding Behavioral outcomes of stress faced students between Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding behavioral outcomes of stress faced students between Male & Female. There was a significant difference in the score for level of agreement regarding behavioral outcomes of stress towards male ($M = 2.87, S.D = 0.77$) and female ($M = 2.84,$

S.D = 0.72); $t(111) = 0.24, p = 0.81$. These results suggest that there is no significant difference between levels of agreement regarding Behavioral outcomes of stress faced students between Male & Female.

H_{0.17}: There is no significant difference in level of agreement regarding curriculum related components which cause stress among Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding curriculum related components which cause stress among Male & Female. There was a significant difference in the score for level of agreement regarding curriculum related components which cause stress among Male & Female towards male (M = 3.57, S.D = 0.58) and female (M = 3.45, S.D = 0.50); $t(111) = 1.1, p = 0.27$. These results suggest that there is no significant difference between levels of agreement regarding curriculum related components which cause stress among Male & Female

H_{0.18}: There is no significant difference in level of agreement regarding assessment related components which cause stress among Male & Female

INTERPRETATION:

An independent sample t test was conducted to compare level of agreement regarding assessment related components which cause stress among Male & Female. There was a significant difference towards male (M = 3.19, S.D = 0.84) and female (M = 3.21, S.D = 0.74); $t(111) = -0.2, p = 0.857$. These results suggest that there is no significant difference between levels of agreement regarding assessment related components which cause stress among Male & Female.

FACTOR ANALYSIS:

Level of agreement of students regarding stressors which affect performance of students.

Table 1: KMO and Bartlett's Test

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .606 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 127.398 |
| | Df | 36 |
| | Sig. | .000 |

INTERPRETATION:

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy for the various Attributes categories measured is 0.606, which indicates that the scale is appropriate and helps in extracting the factor. The ideal measure for this test is $KMO > 0.50$ and here in this case KMO is 0.606 which indicates that the variables are measuring a common factor. Again Bartlett's test of sphericity indicated the inter-correlation matrix is factorable and inter-correlation matrix come from a population in which the variables are non-collinear.

Table 2: Total Variance Explained

| Components | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|------------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.830 | 31.449 | 31.449 | 2.830 | 31.449 | 31.449 | 2.557 | 28.416 | 28.416 |
| 2 | 1.810 | 20.109 | 51.558 | 1.810 | 20.109 | 51.558 | 1.741 | 19.340 | 47.756 |
| 3 | 1.288 | 14.307 | 65.865 | 1.288 | 14.307 | 65.865 | 1.630 | 18.109 | 65.865 |
| 4 | .918 | 10.200 | 76.065 | | | | | | |
| 5 | .643 | 7.139 | 83.204 | | | | | | |
| 6 | .549 | 6.101 | 89.305 | | | | | | |
| 7 | .459 | 5.097 | 94.402 | | | | | | |
| 8 | .304 | 3.373 | 97.775 | | | | | | |
| 9 | .200 | 2.225 | 100.000 | | | | | | |

INTERPRETATION:

It is cleared from the above table that two components covers almost 51% of the data under Principle Component Analysis method and cover considerable variation. Again if we broaden the limit then, the statistics reveal that six components cover almost 89% of the data. Again rotated component matrix makes the situation Crystal and helps in identifying the crucial factors:

FACTOR ANALYSIS:

Table 3

| | | |
|-----------------------------|------|---------------------------|
| Financial strain | .834 | Family & cultural support |
| Expectation from parents | .820 | |
| Bullying | .702 | |
| Support from family | .644 | Hostel atmosphere |
| Living conditions in hostel | .807 | |
| Quality of food in mess | .757 | |
| Home sickness | .517 | Cooperative friends |
| Support from friends | .813 | |
| Adjustment with roommates | .767 | |

INTERPRETATION:

It is clear from the Factor Analysis that the performance of hostelite is majorly affected by the family support and cultural background from they belong as well as the surrounding in the hostel.

Factor 1: Is named as family and cultural support as financial strain, support from family and expectations from parents come under this factor. There is also one statement is bullying which covers the cultural support.

Factor 2: Is named as hostel atmosphere as living conditions in hostel and quality of food in mess is come under this factor. There is also one statement named home sickness generally this happened when hostel atmosphere is not good or person is not comfortable with the environment.

Factor 3: Is named as cooperative friends, as support from friends and adjustment with roommates is there so cooperation is there from both the friends as well as roommates in the hostel.

REGRESSION MODEL:

Financial Strain = a+ b (Annual Income)

H_{0,19}: There is a significant linear relationship between financial strain and annual income.

INTERPRETATION:

R square value indicates that 3.2% (p < .0001) of the variance in the financial strain of the student is accounted by annual income of the family. And relationship between financial strain and annual income is 0.232 and 3.663. The output suggests that there is significant linear relationship between financial strain and annual income

CONCLUSION:

Stress in academic institutions can have both positive and negative consequences if not well managed. Academic institutions have different work settings compared to nonacademic and therefore one would expect the difference in symptoms, causes, and consequences of stress.

By identifying the sub issues of each component of academic stress among the MBA students of Gujarat Technological University affiliated colleges, the study could provide better insights to the academic administrators for initiating efforts to reduce the intensity of academic stress.

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