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A Study on the Factors Influencing the Incidence of Academic Stress among Management Students in Mumbai

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Abstract:
The purpose of this research is to define academic stress and investigate its constituent elements in postgraduate management students. Numerous stressors have been found by experts who have long studied academic stress in students. In order to pinpoint the specific reasons that are contributing to stress, the study also attempts to conduct a thorough investigation into each aspect of academic stress, including curriculum, group work-related concerns, evaluation, and placement. Variables for each stressor were gathered and incorporated into the questionnaire to gather primary data, based on qualitative information gathered from in-person interviews with 20 management students. 397 postgraduate management students from different management institutes located in Mumbai make up the sample for the quantitative study.

Keywords*: Stress, Academic stress, Management students, stressors*

1. Introduction:

1.1 Stress: The Latin term "Stringere," which refers to suffering, adversity, or affliction, is where the word "stress" first appeared (Dhanalakshmi & Murthy, 2018). Physiology served as the foundation for the stress theory's scientific foundation, which was established by proponents including Canon (1914), Mason (1971), and Selye (1965). Recent definitions of stress, however, place a strong emphasis on how a circumstance and a person interact (Michie, 2002). Selye (1965) distinguished clearly between harmful stress (distress) and beneficial stress (eustress). Numerous academics have acknowledged that a small amount of stress helps people stay motivated and succeed (Ng et al., 2016; Saqib & Rehman, 2018; Yikealo et al., 2018).

Conversely, significant physiological and mental issues are brought on by excessive stress (Azila Gbettor et al., 2015; Essel & Owusu, 2017; Jain & Singhai, 2018; Reddy et al., 2017). This study's primary goal is to conduct a thorough analysis of the topic of academic stress, including prevalent academic stressors, the impacts of academic stress, and effective coping techniques. Since the middle of the 20th century, scientists have been examining stress, and it continues to be a topic of study in many areas of the social, biological, physiological, and environmental sciences. An interdisciplinary focus on how we may better understand and manage stress in today's environment has resulted from these ongoing issues, which highlight the extent to which stress affects various stages of health, behaviour, and life.

Every person experiences mild to moderate levels of stress or anxiety as a result of major life events and daily annoyances. Stress is a common occurrence in human life. The American Psychological Association states that stress is defined by changes that affect every body system, influencing a person's emotions and behaviour. Although it is a common reaction to stressful events in daily life, it can turn unhealthy when it gets in the way of day-to-day activities. Every individual has a different

perspective on and method for handling stress, and every student faces a number of challenges during their academic career.

1.2 Academic stress: When students encounter difficulties and interpret them as unpleasant, academic stress is a systematic, adaptive psychological process that takes place in the classroom (Toribio and Franco, 2016). It is a harmful issue in many different areas. It is exemplified by the mental and physical reactions to academic pressures that exceed an individual's ability to cope with them. This encompasses emotions of stress, worry, and strain associated with academic obligations such as tests, assignments, and general workload (Pascoe et al., 2020). Throughout their academic careers, students experience a variety of transitions, including as being promoted to new classes, moving away from home, and meeting individuals from other backgrounds. While some students embrace these changes and find them enjoyable, others experience anxiety as a result of them.

It is noteworthy that a significant percentage of students report experiencing major stress connected to academic obligations, indicating an alarming rise in the incidence of academic stress (American College Health Association, 2021). Students' mental health is impacted by extreme stress, which can result in a number of psychiatric diseases, including depression (Schimelpfening, 2020). In order to create an educated society, students are the foundation of the future. For them, achieving academic success is an important life goal, and it might be negatively affected if they experience depression (Abbas et al., 2024; Akinola et al., 2019). Students are unable to avoid experiencing stress and anxiety, which are emotional states that are regarded as fundamental elements of every person's life (Jim´enez-Mijangos et al., 2023a).

They must complete a number of academic assignments during their course, which can cause stress (Jim´enez-Mijangos et al., 2023a). Research on academic stress in students has been conducted for a long time. According to Fairbrother and Warn (2003), stressors include an excessive number of assignments, competition with other students, failures, and strained relationships with lecturers or other students. According to Carveth et al. (1996), academic stressors include students' perceptions of the vast amount of knowledge that is needed and their belief that they do not have enough time to acquire it.

The biggest causes of academic stress, according to students, are taking and studying for tests, grade competition, and having a lot of material to learn in a short period of time. Students report feeling stressed out about their studies at predictable periods each semester (Abouserie, 1994). Students suffer from physical and mental impairment when stress is viewed negatively or becomes extreme. Effective time management, social support, positive self-evaluation, and participation in recreational activities are common strategies used by students to lessen stress (Murphy & Archer, 1996). The first scientific study that explicitly linked academic stress with leisure satisfaction was that conducted by Ragheb and McKinney (1993), who found a negative correlation between the two.

The semester system, packed lecture rooms, and a lack of resources for academic work are all examples of stressors at the institutional level (Awino & Agolla, 2008). The academic environment is extremely stressful due to the expectation to perform well on tests and exams and the time allotted for them (Erkutlu & Chafra, 2006). Social relationships both inside and outside the institution are likely to be impacted, which has an impact on a person's life in terms of dedication to reaching their objectives (Fairbrother & Warn, 2003). Understanding the reasons behind students' stress will enable the educational administrator to keep an eye on and manage the stressors that are causing the students' anxiety. Students frequently believe that teachers have significant influence over their life and that they are largely helpless (Altbach, 1970).

According to Hartshorn (1976), students frequently lack the time and/or opportunity to cultivate interpersonal relationships. One stressor associated with these duties is the fear of academic failure (Kolko, 1980). Accordingly, students' pressures can be divided into four categories: self-imposed, time or health-related, financial, and academic (Goodman, 1993). Students' perceptions of the vast amount of knowledge needed and the lack of time to acquire it are two examples of academic stressors (Carveth et al, 1996). The biggest causes of academic stress, according to students, are taking and studying for tests, grade competition, and having a lot of material to learn in a short period of time. Students report feeling stressed out about their studies at predictable periods each semester (Abouserie, 1994).

To succeed at their best academically, students must overcome numerous challenges. To succeed in college, one must do much more than simply study. A student's academic performance may be threatened by a variety of pressures, including social activities and time management. According to a study by Neumann et al. (1990), learning environments that require unreasonably high levels of effort and lack supportive systems that would enable efficient coping may actually cause students to suffer the burnout phenomena. Students are prone to experience stress in higher education institutions because deadlines and pressure to do well on tests or exams are the main demands made of them. This emphasizes the necessity for studies to look into the causes of the academic stress that students at different management schools experience.

A study done by Neumann et al. (1990) concludes that students may in fact experience the burnout phenomenon due to learning conditions that demand excessively high levels of effort and do not provide supportive mechanisms that would facilitate effective coping. In a higher learning institution, where the demands placed on students are based on deadlines and pressure for excelling in tests or examination, the students are likely to be the victims of stress (Gaikwad & Bhattacharya, 2024). This highlights the need for research to examine the sources of academic stress faced by students at various management institutions. Education professionals will be more equipped to focus on the causes of students' academic stress and the application of counseling techniques to support students' healthy physical and mental development.

1.3 Stress among Management Students: Since management education is a crucial tool for developing leadership skills and producing outstanding future managers, students starting professional school must overcome numerous obstacles to which they have never before been exposed. There is a lot of pressure to perform well academically and obtain a degree (Hirsch & Ellis, 1996). Excessive homework, ambiguous assignments, and uncomfortable classroom environments are additional possible stressors (Kohn & Frazer, 1986). Stress can also come from time constraints in addition to academic obligations (Sgan-Cohen & Lowental, 1988). For the benefit of society, it is critical that students get the knowledge and abilities that will enable them to favorably impact the growth of any country's overall economy.

2. Review of Literature:

Rakesh Kumar Agarwal and Shailendra Singh Chahar (2007) investigated the various forms of role stress that are prevalent among Indian engineering and management students. The students' main sources of stress were identified as role overload, role stagnation, and self-role distance. Compared to female pupils, male students reported more role stagnation. There were no discernible differences between management and engineering students or between first-year students and their seniors on any of the role stresses, according to the results. Understanding the social and educational climate that exists in the nation is made easier by the study's findings.

Students may experience emotional stress and learning difficulties as a result of teachers' frequent emphasis on knowledge acquisition at the expense of their emotional needs during instruction. Students may also experience new emotions like anxiety, concern, frustration, melancholy, and humiliation. These emotions' instability can easily lead to odd behavior, which can then impact students' learning outcomes and ability to adjust if institutions, parents, and teachers do not provide timely, appropriate counseling, or if they are unable to get the right kind of support from their peers or siblings (Chen et al, 2006).

Piekarska (2000) noted that frequent and powerful factors are crucial for the development of stress. There is a correlation between the outcomes of stress and personality and psychological traits. Towbes and Cohen (1996) created the "College Chronic Life Stress Survey," which measures how frequently college students experience chronic stress. Interpersonal disputes, issues with self-esteem, and financial difficulties are among the elements on this scale that can cause stress over time. These stresses were assessed based on how frequently a student had to cope with them each week. It was discovered that first-year students outperformed other students in terms of chronic stress.

Similar studies were conducted by Rocha-Singh (1994) to investigate the origins of stress among undergraduates. Hirsch and Ellis (1996) claim that college students' perceptions and reactions to stress are particularly heightened by the dynamic interaction between an individual and their surroundings. College students may confront different issues and circumstances than their counterparts who are not enrolled. Academics, interpersonal relationships, money, everyday inconveniences (including parking and tardiness), and family ties were identified as collegiate stressors in previous studies (Larson, 2006). Stress has been characterized by additional tasks, time demands, and inadequate resources within each domain conflict.

Students usually come into circumstances during the learning time that could make them feel slightly apprehensive or tense because of small or big changes. Therefore, a major component of the learning process that impacts everyone is academic stress. Academic mental stress is becoming a bigger problem. Once thought to be the most carefree and casual time, the study period is now under a lot of strain from many responsibilities, leading to stress that increases students' risk of depression, heart attacks, suicide, and strokes (Ahuja and Banga, 2019). A number of internal and external variables have combined to make it a more urgent issue for students in recent years.

Domestic issues, future-focused thinking, increased competition in school, mentorship, peer and family pressure, the educational environment, and financial pressures are the primary stressors (Hosseinkhani et al., 2020). Its degree increases as academic demands rise, and it can either be a motivator or a roadblock to students' development. In contrast to the first phase of the academic period, when the only stressor for students was growing educational competition, students reported higher levels of stress during the second phase due to domestic issues, institution rules, the educational system, career insecurity, instructor interaction, and financial burdens (Hosseinkhani et al., 2021).

According to a study, outstation students experience higher levels of stress than students who are local (Sahu and Jha, 2020). According to several research, female students are more stressed about their academics than their male counterparts (Calaguas, 2011; Ye et al., 2018; Banu et al., 2015; Garett et al., 2017b). Students' physical, mental, and emotional health as well as their academic performance are significantly impacted by academic stress, which can reach dangerously high levels. Assessing stress is essential to avoiding bad consequences as soon as possible. Students' stress levels are frequently assessed using psychological instruments including interviews and self-report questionnaires (Jim´enez-Mijangos et al., 2023b).

Professionals might suggest a management strategy depending on students' stress levels by identifying their tension. A comprehensive understanding of stressors, symptoms, stress levels (mild, moderate,

and severe), and their effects is necessary to develop effective stress management solutions at the educational level. Accordingly, stress management needs to be addressed on a personal, social, and institutional level (Reddy et al., 2018). Students can receive the necessary assistance to manage well, improve their academic achievement, and improve their mental and physical health by putting a complete strategy into practice. Additionally, stress can be controlled by offering a particular stress management training.

Additionally, educational organizations might host training sessions, workshops, and seminars to inform parents, educators, and students on the prevalence of academic stress. This can assist them in comprehending its characteristics, recognizing its origins and indicators, and providing suitable direction. Students can acquire the abilities needed to successfully overcome obstacles, achieve academic success, and preserve a good balance between their personal and academic life by adopting an inclusive approach.

3. Objectives of Study

The main objectives of the study are:

1. To find out the components of academic stress experienced by management students in Mumbai
2. To analyze the curriculum related components responsible for stress
3. To explore the group work related aspects creating stress among management students
4. To know the evaluation related factors of academic stress
5. To find out the placement related issues causing stress among management students

4. Formulation of hypotheses: Based on the literature review, we can formulate the following hypotheses:

1. H0: Curriculum related issues do not significantly lead to academic stress among management students.
2. H1: Curriculum related issues significantly lead to academic stress among management students.
3. H0: Group work related issues do not significantly lead to academic stress among management students.
4. H1: Group work related issues significantly lead to academic stress among management students.
5. H0: Evaluation related issues do not significantly lead to academic stress among management students.
6. H1: Evaluation related issues significantly lead to academic stress among management students.
7. H0: Placement related issues do not significantly lead to academic stress among management students.
8. H1: Placement related issues significantly lead to academic stress among management students.

5. Research Methodology:

This study's goal is to define academic stress and investigate its constituent elements among Mumbai's postgraduate management students. First, secondary data is gathered from research publications found on Google Scholar and EBSCO. The target group for this descriptive study consists of students from a number of Mumbai-based B-schools that have been accredited. First, a qualitative study using in-person interviews was conducted in a number of Mumbai B-schools. Twenty students participated in theinterviews.

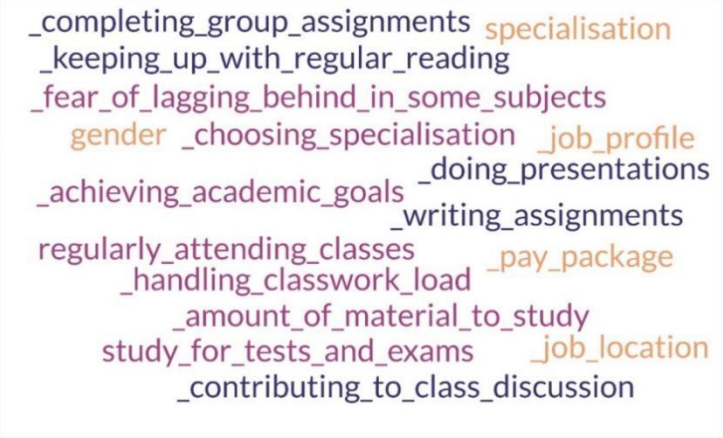
Then, as part of a quantitative study employing the survey approach, 397 students from several approved B-schools in Mumbai were given a questionnaire. The sample was selected using judgment

sampling. Every construct had a Cronbach alpha > 0.7, which is a measure of construct reliability. Structural equation modeling is used to test the validity of the model.

6. **Data collection (questionnaire):** The questionnaire has Likert scale questions (scale of 1 to 5) for each construct namely curriculum related stressors, group work related stressors, evaluation related stressors and placement related stressors.

7. Analysis

(a) Qualitative study: Based on the personal interviews conducted at different management institutes in Mumbai, the following word cloud was prepared.



(b) Descriptive Statistics

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	214	53.9	53.9	53.9
	Female	183	46.1	46.1	100.0
	Total	397	100.0	100.0	

Comment: The percentage of male respondents (53.9%) is more than the percentage of female respondents (46.1%) in the sample.

Specialization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Marketing	122	30.7	30.7	30.7
	Finance	145	36.5	36.5	67.3
	HR	40	10.1	10.1	77.3
	IT	50	12.6	12.6	89.9
	Operations	40	10.1	10.1	100.0
	Total	397	100.0	100.0	

Comment: Majority of the students belonged to Finance (36.5%) and Marketing (30.7%) specialization. The remaining students belonged to HR (10.1%), IT (12.6%) and Operations (10.1%).

(c) Reliability of different constructs

Sr. No.	Construct	Cronbach alpha
1	Curriculum related stressors	0.993
2	Group work related stressors	0.837
3	Evaluation related stressors	0.791
4	Placement related stressors	0.795
5	Overall academic stress	0.798

Comment: Since the value of Cronbach alpha > 0.7 for all constructs, we conclude that they have high reliability.

(d) Use of structural equation modelling

Overall Tests

Model tests

Label	X^2	df	p
User Model	850	424	< .001
Baseline Model	14606	465	< .001

Comment: The chi-square/df value is 2 and the p value < 0.001. This indicates a good fit.

Fit indices

		95% Confidence Intervals		
SRMR	RMSEA	Lower	Upper	RMSEA p
0.037	0.040	0.045	0.055	0.450

Comment: The RMSEA value is 0.04 which indicates a good fit.

User model versus baseline model

	Model
Comparative Fit Index (CFI)	0.970
Tucker-Lewis Index (TLI)	0.967
Bentler-Bonett Non-normed Fit Index (NNFI)	0.967
Relative Noncentrality Index (RNI)	0.970
Bentler-Bonett Normed Fit Index (NFI)	0.942
Bollen's Relative Fit Index (RFI)	0.936

User model versus baseline model

	Model
Bollen's Incremental Fit Index (IFI)	0.970
Parsimony Normed Fit Index (PNFI)	0.959

Comment: All the above indices have a value > 0.9 and hence indicate a good fit.

Additional fit indices

	Model
Goodness of Fit Index (GFI)	0.992
Adjusted Goodness of Fit Index (AGFI)	0.990
Parsimony Goodness of Fit Index (PGFI)	0.898

Comment: Since the above indices are >=0.9, they indicate a good fit.

Estimates

Parameters estimates

				95% Confidence Intervals			β 95% Confidence Intervals			
Independent	**Dependent**	**Estimate**	**SE**	**Lower**	**Upper**	**β**	**Lower**	**Upper**	**z**	**p**
Curriculum related	Academic stress	0.700	0.0533	-0.0974	0.1114	0.00667	-0.0927	0.106	0.131	0.00895
Group work related	Academic stress	0.2033	0.0276	-0.0337	0.0744	0.03920	-0.0648	0.143	0.737	0.0461
Evaluation related	Academic stress	-0.23257	0.0473	-0.3252	-0.1399	-0.26587	-0.3670	-0.165	-4.919	< .001
Placement related	Academic stress	0.5489	0.0450	-0.0334	0.1432	0.06654	-0.0402	0.173	1.219	0.0223

Parameters estimates

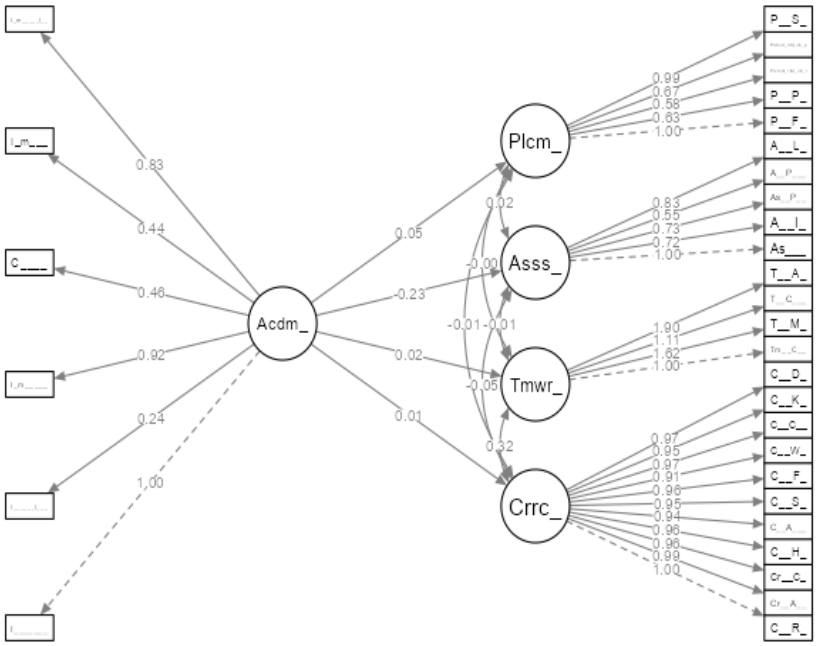
				95% Confidence Intervals			β 95% Confidence Intervals			
Independent	**Dependent**	**Estimate**	**SE**	**Lower**	**Upper**	**β**	**Lower**	**Upper**	**z**	**p**

Comment: The p value for the effect of curriculum related stressors on overall academic stress is 0.00895< 0.05. Hence the effect of curriculum related stressors on overall academic stress is significant. The p value for the effect of group-work related stressors on overall academic stress is 0.0461< 0.05. Hence the effect of group-work related stressors on overall academic stress is significant. The p value for the effect of evaluation related stressors on overall academic stress is < 0.001. Hence the effect of evaluation related stressors on overall academic stress is significant. The p value for the effect of placement related stressors on overall academic stress is 0.0223< 0.05. Hence the effect of placement related stressors on overall academic stress is significant.

Reliability indices

Variable	**α**	**ω_1**	**ω_2**	**ω_3**	**AVE**
Academic stress	0.798	0.837	0.837	0.854	0.505
Curriculum related	0.993	0.993	0.993	0.993	0.930
Teamwork related	0.837	0.820	0.820	0.766	0.549
Assessment related	0.791	0.798	0.798	0.798	0.520
Placement related	0.795	0.811	0.811	0.818	0.531

Path diagram



Understanding how several elements, such as stressors linked to the curriculum, group work, evaluation, and placement, significantly contribute to academic stress among students at Mumbai management institutes is the aim of this study. The model fit indices (CFI, TLI, NNFI > 0.9, RMSEA < 0.05) show that the model fits well. Cronbach alpha values and AVEs (average variance extracted) are better than 0.5 for each of the five variables: curriculum-related stresses, group-work-related stressors, evaluated-related stressors, placement-related stressors, and overall academic stress. This indicates that each of these constructs has high validity and reliability. Our model has thus been validated satisfactorily.

9. Conclusion:

This study mainly focused on investigating the micro problems of various academic activity components in the professional course work setting, since numerous research studies have revealed that academic stress is more prevalent among students enrolled in professional courses. Academics often consist of curriculum, group projects, assessment, and placement. Of these, stressors linked to evaluation were found to have the greatest effect on overall academic stress (p value < 0.001), whereas stressors connected to group work had the least effect (p value < 0.0461).

10. Managerial implications:

The study could give academic administrators more information to start efforts to lessen the severity of academic stress by identifying the sub-issues of each component of academic stress among postgraduate management students. Due to a variety of academic and personal variables, academic

stress is a serious and upsetting multifaceted problem. Due to the increasing demands of education and the academic workload, children face numerous pressures during their time in school. These pressures, which can hinder students' personal, academic, and professional chances, manifest in a variety of physical and psychological symptoms. In order to give kids the resources and support they need to succeed both academically and emotionally, addressing academic stress necessitates teamwork on several fronts. In order to effectively handle academic stress, this research also highlights the importance of putting successful techniques into practice. Students and educational institutions should actively employ the methods and strategies suggested in this paper to reduce stress since they can result in a more balanced and useful academic experience.

11. Limitations and scope for further research:

1. Consideration has only been given to management students from Mumbai. The subject of future research may be management students at other B-schools around the country.
2. Increasing the sample size can help to improve the results' reliability.
3. Other courses can also be incorporated within the study, including science, engineering, MCA etc.

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