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Students' Perception of the Impact of Course Work on Exam Stress

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Abstract: College student life can be very demanding requiring an emotional, physical and financial commitment for a significant period of time. Along with these demands the students also have to cope with living away from their family and friends for the first time. As a result, it is not surprising that many freshers often find the college life stressful. This study seeks to assess the relationship between student perceptions of course load, their ability to manage time, and exam stress. Seventy respondents enrolled in the MBA programme of a self-financing academic institution in Chennai, India were selected by non- probabilistic convenient sampling in order to carryout this study. The sample responded to the survey self-administered to them with items measuring exam stress, perceived course load, and ability to manage time. There was a significant difference in students' perception of course load, ability to manage time, and exam stress scores across the 2 years of their course work. The results revealed that exam stress was positively correlated with students' perceptions of course load and negatively related to their ability to manage time with course work. Further studies can be undertaken to evaluate the role of stress/time management programs to reduce stress.

Keywords: Perception, Stress, Course load, Exam Stress, Time Management.

1. Introduction

Stress is an emotional and physiological response to a stressor that triggers the sympathetic division of the autonomic nervous and endocrine systems into preparation for change according to Hayes, (1994). To a student, the prospect of sitting an examination could be identified as a stressor and the resulting emotional and physiological state could be described as exam stress.

Identifying factors influencing student achievement and academic performance is a quest for most teachers and a primary goal of most educational researchers (Eggen and Kauchak,1999). The term exam stress refers to the emotional reactions that some students have towards exams (Mc Donald, 2001). The fear of exam is not an irrational fear – after all how you perform in exams can shape the course of an academic career. However excessive fear of exams may interfere with the student's ability to be successful in the examination (Musch and Broder, 1999). Students with high exam stress / anxiety develop and maintain less complete conceptual representations of the course content. In order to improve academic performance, academic counselors often focus on the underlying causes of test anxiety and on the student's studying behavior (Topman and Jansen, 1984). Many factors can lead to the development of exam stress and test anxiety. Students' past experiences and beliefs, which have been shaped by a complex interplay of factors, may result in unique reactions to a test situation and lead to test anxiety (Mc

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Donald, 2001). These may include their past experiences with courses and their perceptions of course load, as well as their ability to manage time.

There are three components of exam stress, viz., physical, cognitional and emotional (Lay and Schouwenburg, l993). The cognitive component is the mental activity that revolves around the testing situation and its potential implications on the individual and constituent elements, such as thinking about consequences of failure, worrying a great deal about examinations, and lack of confidence in one's ability. The emotionality component is the physiological component of test anxiety leading to tension, apprehension, and nervousness towards examinations, physical component involves typical bodily reactions to anxiety such as a knot in the stomach, palpitation, nausea, and perspiration. Demographic variables such as age, gender, ethnicity, and study habits also affect test anxiety levels. Perceived course load could be one of the factors leading to test anxiety. Extensive course load and comprehensive information in academic curricula necessitates use of proper time management and effective study strategies.

Time management can be defined as clusters of behavioral skills that are important in the organization of study and course load (Lay and Schouwenburg, l993). Hence, one of the aspects of time management is to develop effective study habits that essentially help in managing the study load. Time management skills typically include planning in advance, prioritizing the work, and adhering to the preset schedules. Students' perceptions of their learning environment are important determinants of the quality of their learning outcomes. The course load may also affect the manner in which students learn and can be useful in the design and evaluation of curricula (Walker and Siebert,1990) Students' perceptions of the teaching and the learning environment, such as assessment methods, relevance of the course, and their course load also influence students' approaches to learning (Weerakon, 2005). Thus, students' perceptions of these curriculum elements need to be taken into account in curricula assessment and evaluation (Ramsden, 1992).

The educational institutions in India fall under two broad categories, viz., government funded institutions and self-financed institutions. The latter as their name implies are self-funded, have more expensive fee structure and need to mobilize their finance only through the fees paid by the students. In order to attract students with good academic credentials these institutions need to prove themselves by show-casing their success in imparting good quality education. The academic success and placement history of the past students are important indices that help students choose an institution. Thus it is evident that an investigation on factors that influence the academic performance of students in any self-financed institution in India would be of value to that institution. For the first time, such an effort is made in this work by studying a target population of students pursuing their Masters degree in Business Administration in a self-financed institution. The details of the research methodology used in this study and its outcome are discussed in the following sections.

2. Research Methodology

A cross-sectional survey design was employed in this study. A pre-validated questionnaire was administered to students enrolled in the master of business administration programme in one of

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the self finance colleges in Chennai, Tamil Nadu, India. A non-probabilistic convenient sampling procedure was used. The perceived course load was measured on a scale of 0-10 with anchors at 0 = low, 5 = moderate and 10 = high. Students were asked their perception of their study / course load for each respective year of enrollment in the MBA program. Thus the students in the first year of this course indicated their perception of their course load for that year, and those who were in the second year indicated their perception of their course load in both the years of study. Perception of course load included both the amount of study material as well as the perceived degree of difficulty following the same and in the other components like assignments, projects etc. Ability to manage time was also measured on a scale 0-100 with anchors at 0 = not at all, 50 = somewhat, and 100 = all the time.

Against 10 items, students were asked to rate their emotions with respect to exam stress on a 5-point scale on which a score of 1 stands for “not at all typical of me” and 5 indicates, “very much typical of me”. A higher score would indicate higher exam stress. Data were collected during a class lecture in May, 2009, four weeks prior to the final examination. A week when no tests were scheduled was intentionally chosen. The curriculum in the first year included courses in statistics, operation research, economics, organizational behavior, management accounting, legal aspects in business, human resource management, financial management, marketing management, management information systems, production management, with 23 credit hours during the first semester and 24 during the second. The second-year curriculum included strategic management, international business management, specialization electives in different areas of management and project work with 26 credit hours in the first semester and 12 credit hours in the second semester. The majority of the courses included instructions using Microsoft *PowerPoint* software or overhead projection of transparencies. University pattern of question papers were used on examinations in the majority of courses. The teaching pedagogy included case studies, lectures, and sharing of real life experiences. Data were analyzed using the *SPSS* statistical package with a α level of 0.05 set a priori. Reliability analyses for the domains were carried out by calculating Cronbach's coefficient alpha. A higher score (0.7 and higher) indicated acceptable reliability of the domains measured. Descriptive analyses, Spearman correlation analyses, and analysis of variance (ANOVA) were conducted to evaluate the study objectives.

3. Results and discussion

70 students completed the survey instrument. The response rate for each year (M1* = 38 %, M2** = 32%) was adequate considering the data was collected from the respondents through voluntary participation. Students were more active in co-curricular activities during their II Semester (61.4%) compared to students in other years.

The scale that was used to measure exam stress was reliable, as indicated by a value of 0.9 for the Cronbach's alpha. In general, students in this study indicated low to moderate exam stress (2.6 ± 0.8). Approximately 44% of students indicated experiencing nervousness during tests. In addition, 66.2% experienced some level of stress during examinations even though they were well prepared for a test. Furthermore, 58.8% of the students revealed that they were somewhat bothered by taking examinations. Approximately 15% of the students indicated that they were

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depressed after taking an examination. Some students indicated they exhibited physical symptoms such as perspiration (13.7%), stomach ailment (17.2%), and increased heart beats (22.3%) while taking an examination.

Before proceeding with the analysis to identify the effect of courses taught in the year enrolled, an ANOVA test was performed in order to evaluate the consistency of scores for perception of course load and ability to manage time. These scores were consistent for these variables across the respective years tested ($p > 0.05$). However, there was a significant difference ($p < 0.05$) in exam stress, perception of course load and time management across the 2 years. Students perceived the course load to be high in the first year (M1, 88.1 ± 12.9) and low in the second year (M2 67.4 ± 21.2). There was also a significant difference in the level of exam stress and course load between M1 and M2 students ($p < 0.05$).

A Spearman correlation analysis indicated that students' perceptions of course load were positively correlated with exam stress ($r = 0.24$, $p < 0.001$). Students' ability to manage time was, however, negatively correlated with exam stress ($r =-0.20$, $p < 0.001$). Further, age of a student ($r=0.91$, $p < 0.001$) was significantly associated with exam stress, with younger students reporting lower exam stress compared to older students.

Students used many coping strategies during times of stress and / or anxiety. Many of them indicated "talking to a family member" as their primary strategy for coping with stress and / or (39.4%) followed by talking to classmates (33.2%) and using self-coping strategies (32.6%). Only about 2% of the students indicated approaching a faculty member or counselor to help them cope with stress.

Table 1 Characteristics of MBA Students participating in a Survey of the Students' Perception of Course Load on Exam Stress (Overall N= 70)

Variable	**M1 Students, n = 38**	**M2 Students, n = 32**
Age, mean (SD)	22 years	23 years
Male	11%	22%
Female	89%	78%

* Age range in years (minimum-maximum) for first-year students, 21-24: second- year, 21-26

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Table 2 Exam Stress Scores of MBA Students

Variable	NTM	NVTM	SWTM	FTM	VMTM	Mean (SD)
All numbers expressed are in percentage %						
Failure to perform better	9.8	37.1	32.0	13.9	7.2	2.7 (1.1)
Nervousness	16.5	39.7	22.2	17.0	4.6	2.5 (1.1)
Perspiration	39.5	36.3	10.5	10.0	3.7	2.0 (1.1)
Task-irrelevant cognitions	20.2	43.5	22.8	9.3	4.2	2.3 (1.0)
Panicky	15.2	36.1	25.7	16.2	6.8	2.6 (1.1)
Upset stomach	26.4	38.3	18.1	15.6	1.6	2.2 (1.1)
Increased heartbeats	20.7	37.3	19.7	19.2	3.1	2.5 (1.1)
Depression	19.8	41.7	22.9	10.4	5.2	2.4 (1.1)
Worry	14.6	26.6	20.8	21.9	16.1	2.9 (1.3)
Anxious even when well-prepared	13.0	20.8	27.1	26.6	12.5	3.1 (1.2)

Exam Stress = 2.6 ± 0.8; Cronbach alpha = 0.9: **NTM**- Not Typical of Me, **NVTM-** Not Very Typical of Me, **SWTM –** SomeWhat Typical of Me, **FTM –** Fairly Typical of Me, **VMTM –** Very Much Typical of Me

Table 3 Exam Stress, Students Perception of Course Load, and Ability to Manage Time among First-& Second year MBA Students

Variables	First-Year	Second-Year	
Exam Stress	2.9 (1.0)	2.3 (0.8)	$p<.05$
Perception of course load	88.1 (12.9)	70.7 (16.4)	$p<.05$
ability to manage time	68.3 (16.6)	78.5 (17.9)	$p<.05$

This study revealed some interesting results about Exam Stress and perceptions of course load in students that can be applied by institutions while preparing academic curricula and help students reduce exam stress. The majority of the students in this study experienced moderate Exam Stress. Exam stress was also positively associated with the students' perception of course load. Interventions aimed to reduce exam stress may improve academic performance in students.

There was also a significant effect of the year of enrollment on exam stress levels, students' perception of course load, and their ability to manage time with the course work. Most importantly, the mean exam stress scores were higher for M2 students compared to students in M1 year. Perception of the course load among the M2 students was the highest and ability to manage time with the course work was the least among M2 students compared with students in other academic years. These results may be attributed to an increase in the course load or to the difficulty of the course material in that particular academic year. At this college, the perceived greater course load in the second year could be attributed to the specialized elective courses which were a part of the M2 curriculum. Such high-stakes courses could have led to high levels of test anxiety and the perception of increased course load among students. These results are important in understanding the perception of the students regarding course material and provide a basis for conducting intervention. Based on these statistics, there is a need to reassess the amount of study material allocated for courses and during examinations, which would help students reduce exam stress, perform better academically, and gain adequate knowledge through their curriculum.

The negative correlation between time management and exam stress could be explained by the fact that with better time management and test preparation students would not exhibit exam stress while taking examinations. Inadequate time management and procrastination of study tasks lead to many problems. With better time management skills, students would not end up "cramming" for examinations, and thereby decrease exam stress and improve their academic performance. Though students have access to faculty mentors on campus, very few students in our study actually used these resources. Since students preferred to relieve their stress through interactions with the members of their family or fellow students over their mentors this study emphasizes that this institution needs to conduct stress and time management programs for the students. Future studies should examine the role of such programs and evaluate the effect of such programs on academic performance.

Some limitations should be considered before applying the results obtained in this research. Second-year students had a comprehensive dissertation which could have increased their perception of course load. The second-year curriculum had the least number of credit hours, yet was perceived by students to be most burdensome with respect to course load. Because curricula across various universities are diverse, these results may not be generalizable to all colleges, as the study was limited to one college affiliated to one university. Further research at more universities may be necessary to understand students' perception of course load and associated exam stress. Student perception of course load may include multiple and complex factors that were not evaluated in this study. Future studies should also evaluate interventional programs to reduce stress and anxiety.

4. Conclusions

Perceptions of course load and time management is associated with exam stress and/or anxiety. Exam stress levels, student perception of course load, and their ability to manage time varied based on the academic year in which they were enrolled. Further studies are needed to assess other factors that may lead to exam stress, and to develop interventions to reduce it.

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