HOW PERCEIVED STRESS CAN INFLUENCE ACADEMIC PERFORMANCE: ANALYZING THE ROLE OF SOME CRITICAL STRESSORS

Dr. Muhammad Zia-ur-Rehman∗ & Ms Rabia Sharif∗

Abstract
The purpose of this study is to assess the impact of stressors on academic performance of students of management sciences. Though researchers have explored stress from different aspects, yet more work is required to explore this issue in management sciences’ students of developing countries like Pakistan. This study tries to make an in-depth investigation into impact on academic performance due to four stressors i.e. financial stressors, course load, time management and social support. A quantitative approach has been adopted. The sample consists of 155 students from three universities located in Islamabad out of which response rate was 94 per cent. Results indicate that two main stressors of course load and social support affect the academic performance of students of management sciences.

Key Words: stress, academic performance, management sciences, social support, course load

Introduction
It has been portrayed in many movies that university life is very ideal and there is a lot of fun and freedom in it. In reality the university life is a very challenging phase. But why do some intelligent students cannot give due attention to their studies and lag behind others in the university? Why the retention ratio of intelligent students is declining in university? What are the main factors due to which upcoming generation of university students seem to be more stressful than ever before? What steps can be taken to help university students in making themselves more successful academically? This research paper aims at helping university students, university administrations and

∗ Dr Muhammad Zia-ur-Rehman is Assistant Professor, Department of Leadership and Management Sciences, Faculty of Contemporary Studies National Defence University Islamabad.
∗ Ms Rabia Sharif is currently working as lecturer at the Department of Management Sciences, Air University, Islamabad.
society in increasing understanding about some of the main stressors that influence university students' successes and failures. This paper examines the impact of stress on academic performance of students of management sciences in Pakistan, which is measured by GPA. Though different researchers have explored stress in different dimensions, yet many of them have concluded that still research gap exists and more work is required in different other dimensions of stress.¹

In academic institutions, stress can have positive or negative impact if it cannot be managed properly.² Symptoms, causes and consequences of stress in academic institutions are different from non-academic ones, as their work-setting is different.³ It is a right of each individual to learn and acquire the necessary knowledge and skill. Individuals having knowledge play a great role in development of the general economy of any nation. However, the students are facing different challenges due to intricate academic environment⁴. Similarly, students also have to face some environmental challenges that affect their academic performance.

University students have great concern about their lower Grade-Point Average (GPA), as people get benefit on different levels i.e. socially, economically, and personally, from their academic success or higher GPA. It is thus very important to determine the factors that create impact on academic performance. Stress and academic success of students are negatively related⁵. Therefore, it is important to study how stressors affect academic performance of university students. This paper aims to explore stressors affecting students of Business Administration and impacting their academic success.

**Research questions**

1. To establish how poor time management acts as a stressor for university students?
2. To what extent financial constraints create stress among university students?
3. To find out what is impact of stress on university students' academic performance?

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Research objectives

The research objectives are based on the inquiry about the main stressors due to which upcoming generation’s university students seem to be more stressful than ever before. Main objectives are as follows:

- To identify various aspects causing the stress, and their symptoms.
- To identify the steps which help university students manage stress.
- To help students become more successful academically.

Research Gap and Significance of the Study

It is observed that the various studies have been conducted on many dimensions but still there exists a gap to be researched on related to stress in academic institutions. Stress is considered positive as well as negative related to managing itself. There are causes, indicators and results, on which more research is needed especially in academia. Elfering is of the opinion that in academic institutions, these causes, results and symptoms can be different from institution to institution, therefore, providing the ground for further research in this area. As it is considered that success and stress are negatively related in academia, it is necessary to find out in what way stressors create impact on the students’ academic performance. Therefore, it is of utmost significance to do further research in this field for identifying different challenges faced by the students in the academic environment, because this leads to overall academic performance.

Literature Review and Theoretical Justification

University life is considered to be a blissful time, but it can be very stressful and challenging for many students. According to Newton, students suffer from anxiety or stress. Though lot of researchers had tried to explore stress, yet they defined it in different ways. According to some researchers, stress is a stimulus and a hypothetical state. This study defines stress from psychosocial perspective, and has not touched physical and/or physiological stress. According to Lazarus & Launier a person becomes stressful when he finds that his/her relationship with the environment is threatening, as he/she perceives that adaptive resources are lesser than environmental demand.

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6 Rees, p.123.
According to Fleming and Baum no situation or event is generally stressful.10

According to researchers11 stress is due to incongruity between environmental requirements (stressors) and individual competency to accomplish these requirements. So, when an individual faces a scenario that he/she perceives as destructive and cannot deal with it, he/she will be under stress. Stress can also be due to constructive or destructive experience; Cox & Brockley12 have an observation that stress is an insight occurrence, which results from a gap between the demand set and capability of an individual to accomplish the mission fruitfully. Thus, due to unsteady circumstances, the person experiences stress which eventually leads into stress reaction.

Different researchers like Ross, Niebling, & Heckert,13 support the fact that university environment places numerous demands like increased academic workload, pressure to attain and maintain good grades, establishing good relationships with new faculty members and new friends, efficient time-management, and increased independence from families, which need to be adapted by students. If students cannot meet these demands, they might suffer from stress that may have adverse impact on their self-esteem, result in poorer mental health, poorer processing of information, and weekend memory. Stanley and Manthorpe14 explored that nowadays there is more public concern in different societies about stress as evidence have shown that university students are exposed to poor mental health.

Previous researchers have identified high level of depression and anxiety among university students globally.15 Facts have proved that most of the college students are less able to complete complex academic tasks, as they experience high levels of psychological distress.16 Thus different researchers have explored different aspects of stress. Up-till now researchers, exploring students’ stressors, focused on some specific sectors of the student population, i.e. medical students17, students practicing or studying law18, hospitality

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11 Fleming, p.240 (ref 9).
13 Ibid. Cox, pp.140.
Perceived Stress and Academic Performance

Students\textsuperscript{19}, psychology students\textsuperscript{20}, and social work students\textsuperscript{21}. Some other researchers have developed some generalized measures of perceived stress\textsuperscript{22}.

Still research gap regarding stress exists in one sector, which is Business Administration or the field of management sciences and the students related to this discipline especially in a developing country like Pakistan. The business management education helps in improving leadership and entrepreneurial qualities of individuals, which ultimately leads towards helping in development of the economy in which they perform. In the professional education of management sciences, students have to be exposed to many challenges.

As university students are victim of stress, therefore, researchers have identified numerous stressors. In previous studies few stressors that have been identified by scholars include a lot of projects and reports, rivalry between classmates on getting good grades, failures, inadequate pocket money or financial resources, lack of social support from classmates or unfriendly relationship with faculty members (resource persons), family or domestic problems\textsuperscript{23}. Stressors related to university/institution working environment include congested classrooms/halls\textsuperscript{24}, semester system, and scarce resources to carry out academic work efficiently. Some of students perceive stress due to increased pressure to perform well in examinations and quizzes or due to their poor time management skills. The fact that Lack of Social Support Act (LSSA) as a stressor is being supported by numerous other researchers as well, who stress student’s attachment to another individual/student/mentor that provide consultation. Adult attachment occurs when students feel themselves safe in adult attachment association and seek consultancy from that adult, especially when they are under stress. Individuals, who have secure adult attachment relationship (AAR), can easily adapt themselves to environmental changes and uncertainties. Thus they become more competent academically and socially, and have better ego strength, so importance of social support cannot be denied\textsuperscript{25}.


Similarly, many researchers have explored financial stressors affecting students. Students feel themselves stressful due to lack of financial resources as well. Some of financial stressors identified by students include unavailability of computers, books, or congested classrooms/halls, as unavailability leads to failure. Lack of financial resources creates depression and decreases quality of life in individuals. Children belonging to poor family or of lower class, mostly become victim of psychological problems, depression, lonesomeness, and become very sensitive emotionally. Research also supports that academic workload creates stress in some students. In one of the studies related to students’ stress in Israel found that some of academic stressors include too many assignments or examination fever. Mostly female students get stressful due to ineffective time management. Research also explored that individual’s perception of control over time is one of sources of student stress. This view is supported by researchers who found that individuals having perception that they can control time or it is in their hands, are less stressful.

In summing up over the last two decades, researchers have identified that daily life hassles are better predictors of self-reported adjustment difficulties than the key life events, for instance, person get irritated due to daily life issues such as losing things or financial apprehensions. Academic success is usually measured by, Grade-Point Average (GPA) and course completion. It is observed that stress has a negative effect on students’ quality of life and also with students’ academic performance. Some researchers have explored the impact of stress on student’s performance with respect to change in time period and identified that initially there exists a positive relationship between stress and students’ performance to some specific limit after which stress impacts performance negatively. Cahir and Morris explored the impact of emotional, financial and academic stressors of graduate psychology training on students, and found that female students had

31 N. Shields, p.67.
higher stress scores than males\textsuperscript{35}. From literature, it is evident that stress has an impact on students' performance, and variety of factors creates stress among university students.

This paper explores stressors affecting students of management sciences in a developing country like Pakistan. Fig 1 illustrates the model depicting the relationship between stress and academic performance.

![Figure 1](image)

Independent variable of study is a stress among students, which is measured through four stressors including financial constraints, social support, time management, and academic load. Academic performance is affected by stress as shown in literature, so academic performance is dependent variable for this study, which is measured by GPA of students taken from exam cells of a university. On the basis of the above theoretical justification, the following logical conjectures were proposed:

**Hypothesis 1**: Students’ financial status has an impact on their level of perceived stress.

**Hypothesis 2**: Students’ social status has an impact on their perceived stress level.

**Hypothesis 3**: Students’ academic load affects stress level.

**Hypothesis 4**: Students’ time management capabilities have an impact on their stress level.

**Hypothesis 5**: The stress affects academic performance of students.

This is a basic research and nature of study is descriptive, as it is undertaken to understand the factors that create stress. It is correlational study, conducted to check relationship among variables. The researchers’ interference is minimal because questionnaires were given to the students and they filled them according to their own behaviour and choice. While conducting the study, there were no more disturbances in their normal work-routine than just spending some time in filling these questionnaires. The research has been done in the non-contrived and normal settings i.e. in the natural environment (environment of Business Administration Department). The unit of analysis is an individual student and the study is cross-sectional or one shot.

**Research Methodology**

The population is comprised of the students of higher education or university in twin cities of Islamabad and Rawalpindi. We have taken students from the departments of Business Administration or Management Sciences of three universities of the twin cities randomly including Bahria University, National University of Modern Languages and Preston University, as a case study for our sample. Sample size was 155 out of which 147 respondents gave back their filled questionnaires. So the response rate was considered as 94 per cent.

The questionnaires employed in this research, used the Likert’s five-point scale (Likert, R, 1967). The study used 26-item questionnaire and these items evaluate four main dimensions; the first is the financial stressors among students (4 items), the second is the social support (8 items), the third is the academic workload (11 items) and fourth is time management factor (3 items). The instrument used items from questionnaire earlier used by Ying Ming Lin (2009) and Burge (2009).

Thus this study uses a questionnaire with twenty-one items from academic stress inventory questionnaire (ASIQ) developed by Ying Ming Lin & Farn Shing Chen (2009), which fulfil the reliability and validity requirements. For reliability testing, researchers carried out the Cronbach alpha test and the $\alpha$ (alpha) value obtained was between 0.85-0.92. An alpha ($\alpha$) value of the overall academic stress questionnaires was 0.90. The reliability of the questionnaire achieved the levels required by the estimation standards of George and Mallery (2003). Pearson’s correlation analysis was also conducted to obtain the significant level of related coefficients of various factor components (Ying Ming Lin & Farn Shing Chen, 2009). Six items related to measure time management stressors and financial stressors have been taken from university stress scale developed by Burge (2009), which is also a reliable and valid instrument to measure university students’ stress and its impact on their performance.

Statistical Package for Social Sciences (SPSS) version 19 was used to conduct analysis of the data gathered. The 26 items in instrument were loaded
into SPSS for analysis to test correlation and regression as shown below in Table 3 and 4. Table 1 shows the demographic characteristics of respondents.

**Table 1**

Demographic Characteristics of Respondents n=147

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>104</td>
<td>70.7</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>29.3</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-21</td>
<td>14</td>
<td>9.5</td>
</tr>
<tr>
<td>22-26</td>
<td>115</td>
<td>78.2</td>
</tr>
<tr>
<td>27-30</td>
<td>16</td>
<td>10.9</td>
</tr>
<tr>
<td>31-35</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Over 35</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>GPA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5-2</td>
<td>30</td>
<td>20.4</td>
</tr>
<tr>
<td>2-2.5</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>2.5-3</td>
<td>52</td>
<td>35.4</td>
</tr>
<tr>
<td>3-3.5</td>
<td>51</td>
<td>34.7</td>
</tr>
<tr>
<td>3.5-4</td>
<td>12</td>
<td>8.2</td>
</tr>
<tr>
<td><strong>Course load</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;3 or 3</td>
<td>15</td>
<td>10.2</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>20.4</td>
</tr>
<tr>
<td>5</td>
<td>83</td>
<td>56.5</td>
</tr>
<tr>
<td>&lt;5</td>
<td>19</td>
<td>12.2</td>
</tr>
</tbody>
</table>

**Descriptive Statistics**

The descriptive statistics results for this study showed a neutral response of respondents to perceived stress and their academic performance. Mean values range 3.59 as highest value and lowest value of 2.97. The results for time management showed the highest concurrence (Mean 3.59 and standard deviation 1.05), course load (Mean 3.28 and standard deviation .74). Social-support with the mean of 3.15 and standard deviation .84, financial stressors with mean of 2.98 and standard deviation of .67 and GPA with the mean 3.299 and standard deviation of .89.
Correlation Analysis

Correlation among the constructs/elements of stressors has been checked through correlation analysis. The result indicated that most of variables have statistically significant relationship at (p<.01). Course load has strong positive significant relationship with social support. Time management has strong positive significant relationship with social support. Also time management has strong positive relationship with the course load. GPA has negative significant relationship with the social support, course load and time management.

Regression Analysis

The results of regression analysis based on independent variables (Financial stressors, time management, social support and course load) are
shown in Table 4. The overall model fit for regression equation was determined by F-statistics. This model has shown positive, and statistically significant results having $F=14.2$ and $p = .000$. The regression analysis results show that 28.9% of variance in dependent variable is due to these independent variables ($R^2 = .289$). Course load has highest beta of -.38 and social support the second highest beta of -.253 showing that they have negative relationship with students’ performance.

Table 4
Regression analysis of independent variables with students’ academic performance

<table>
<thead>
<tr>
<th>Constant</th>
<th>Standardized Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>-.253</td>
<td>.007</td>
</tr>
<tr>
<td>Financial stressors</td>
<td>.078</td>
<td>.280</td>
</tr>
<tr>
<td>Course load</td>
<td>-.380</td>
<td>.000</td>
</tr>
<tr>
<td>Time management</td>
<td>.054</td>
<td>.552</td>
</tr>
</tbody>
</table>

R square: 0.289
F-value: 14.204

Discussion

The results of study show that university students experience stress, which has impact on their grades. The two main factors, which lead to their stress, are course load and social factors. Students of Management Sciences perceive highest stress due to Business Administration course load. This finding is consistent with previous findings of Agolla, 2008\textsuperscript{36}. Students showed that they feel assignments and projects given to them are sometimes very difficult and excessive. One reason due to which students put high weight on academic load as stressor is that in Pakistani education system, up till college life assignments and quizzes carry no marks in final result or grade as according to Federal Board of Education of Pakistan Policy, and just the marks of final exam impact the students’ grade. But when they come into university they feel it very difficult to do a lot of assignments and prepare quizzes for each subject. Unlike their previous studies in universities internal evaluation carries 20-30 percentages of final grades. As they are not accustomed to doing these assignments and projects, they feel themselves under stress when they have to do multiple activities such as to go to the field to collect data for projects so on and so forth in order to complete set tasks. Students feel social support as another major factor, which affects their stress level.

The findings are consistent to earlier findings\(^{37}\), there can be different reasons for this as well e.g. in Pakistan up to college levels there is very little concept of co-education and in university they find it difficult to communicate with other gender. They feel shy to participate in class. Also up-to college life there is very little emphasis on grooming the oral communication skills of students. They are not in practice of giving presentations or participation in discussions while in university especially in Business Administration programmes the main emphasis and weightage is given on presentations and group discussions. So most of students become victim of stage fright, they feel that if they cannot speak well thinking their class fellows may laugh at them. They cannot communicate well with other fellows and even with teachers, so they cannot take extra counselling or guidance on topics or concepts from their fellows and teachers. Another factor, which leads to lack of social support, can be that some students come from different cities to complete their degrees and thus they have new relation and they face communication gap. In some families even parents set high expectations, which can be another source of stress. In the study, financial stressor has not been proven to have a significant impact on students’ performance. This finding is inconsistent with the finding of previous study by Fairbrother K, Warn J (2003)\(^{38}\). There can be multiple reasons for this. One factor can be that the study sample consists of universities of Islamabad, and in these universities most of students who come in Business Administration programmes are from middle or upper middle class having affordability to pay university dues and for them finance is not a main issue. Also time management was not found to have significant impact on performance.

**Conclusion**

University students’ academic performance is affected by the stress mainly by the two main sources as identified in this study, including course load and social support. By identifying these main factors, which lead to stress among business administration students of universities, the study could provide better insights to the academic administrators for initiating efforts to reduce the intensity of academic stress. The study can be furthered to other educational institutions in order to test the research model for generalization.

**Questionnaire**

**Instructions:** Respond to each item using the scale below, and indicate your response number on the line by each item.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>


1. I feel that the assignments and projects given by some teachers are too strict.
2. I feel that the assignments and projects of some teachers are excessive.
3. I feel that I do not understand a lot about some teacher's teaching content.
4. Some teachers provide too much data which causes me to be unable to finish studying and to understand the knowledge.
5. I feel a lot of pressure because all subjects use foreign language books.
6. I feel that I am not able to adapt to teaching methods of some teachers.
7. I feel that once I got in university, I could not keep up with the pace of the teachers’ Instruction.
8. I do not get good enough sleep at night because I worry about quizzes and exams.
9. I stay up late before all the big and small quizzes and exams.
10. I feel that the assignments and projects of some teachers are difficult.
11. I often face problems as how to share work with my classmates when some exercises or reports require group work.
12. When group work is required to complete a project, I worry that I will not be able to find a suitable group member.
13. When I give a presentation, I worry that my classmates will laugh at my inability to perform well.
14. I feel that my parents feel that I am not serious with my studies.
15. I worry that my academic results will not meet expectations of my parents.
16. When I want to study on my own in class, I am affected by my classmates' chatting.
17. I feel that there is open rivalry and veiled struggles among classmates due to academic performance.
18. I feel that I am unable to schedule the time between academic and social activities effectively.
19. I feel it difficult for me to find a balance between my academic and social activities.
20. I feel that the social activities and student association affect my academic work.
21. I feel confident about my ability to support myself financially.
22. I feel pressured as I can’t manage my weekly budget.
23. I can't get money I need to pay for my university dues.
24. I feel that it is difficult for my parents to earn enough money to pay for my university dues.
25. I feel difficult to give time for my family.
26. I feel a lot of pressure due to lack of clarity about assessment task requirements.