Perceived Academic Stress among Students

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1. Introduction

This study examined the perception of major sources of academic stress among male and female undergraduates. Academic stress has major implications for student retention and dropout intention (Elias, Ping, & Abdullah, 2011; Tinto, 1975). Results that indicate the impact of academic stress can provide students, teachers, and administrators information on how to deal with stress in the learning environment. Data were collected via a survey in which 131 students participated, with mean of age 18.14 and standard deviation of 0.893; and the statistical package for social sciences (SPSS) was used for data analysis. There was a non-significant difference between male and female undergraduate students on scores on the Perceived Academic Stress Scale (PAS). The findings from this study may be useful for further research on how these potential sources of stress influence the performance and the health of the students.

2. Literature Review

Stress is considered to be a part of students’ life and can impact the students coping strategies in accordance with the demands of academic life. This is so because academic work is always accomplished with stressful activities (Agolla & Ongori, 2009). Students reported their experience of high academic stress at predictable times in each semester which results from preparing and taking exams, class ranking competition, and mastering huge amount of syllabus in comparatively very small amount of time (Rawson, Bloomer, & Kendall, 1999).

Academic stress is a student’s perception of the pressure they face, time constraints to complete assignments, academic workload, and their academic self-perception (Bedewy & Gabriel, 2015). Symptoms of academic stress include anxiety, depression, decrease exercise, changes in eating habits, and sleep disturbance (Backović, Živojinović, Maksimović, & Maksimović, 2012; Schraml, Perski, Grossi, & Simonsson-Sarnecki, 2011). Among college students, a strong relationship is found between stressful life events and reduced academic performance as well as there is a link between health related quality of life and stress (Dusseliers, Dunn, Wang, Shelley & Whalen, 2005; Misra & McKean, 2000).

There are several factors that influence academic stress. Students who participate in more rigorous academic studies, such as the international baccalaureate at the high school level have higher amounts of academic stress compared to students in general education (Suldo & Shaunessy-Dedrick, 2013). However, in a comparison of on-campus and distance education, no difference was found in the academic stress of the students (Furlonger & Gencic, 2014). Therefore, the rigor of academics appears to have a stronger influence than the setting in terms of contributing to academic stress. Undergraduate students stated that stress was the most common factor among all health factors which impact their academic performance, as stress harmfully affects physical and psychological health (Dwyer & Cummings, 2001). Winter and Yaffe (2000) concluded that high level of stress during the first year of college forecast lower level of overall adjustment and can make the students more susceptible to many social and psychological problems, thus leading to a lower grade point average (GPA) in the final year. Many studies have addressed this issue and it was found that many psychological
problems, such as depression, anxiety, and stress have an impact on the student academic achievement. Williamson, Birmaher, Ryan, and Dahl (2005) reported that in anxious and depressed youth, stressful life events are considerably elevated which in turn lead to low performance in academics.

In a number of studies, authors found that the most frequently reported factors contributing to stress and anxiety around the examination periods were extensive course loads, lack of physical exercise, and long duration of exams, reported by the students (Harikiran et al., 2012; Hashmat et al., 2008; Sansgiry and Sail, 2006; Shah et al., 2010). The perception of extensive course load and long duration of examinations were found to be the most important sources of test anxiety in a number of research studies. For example, in a cross-sectional study, Hashmat et al. (2008) examined factors contributing to exam anxiety among the final medical students (n = 120), using structured self-administered questionnaire including questions about lifestyle, study style, psychological problems, and examination system. Authors found that the most frequently reported factors by the students, contributing to exam anxiety were extensive course loads (90.8%), lack of physical exercise (90%), and long duration of exams (77.5%). Authors also reported that most students had poor knowledge of exam-taking and anxiety-reduction (Hashmat et al., 2008). Medical students' performance in periodic examinations was the most frequently and severely occurring sources of stress (Shah et al., 2010).

Academic stress has been found to be related to academic performance (Pozos-Radillo, Preciado-Serrano, Acosta-Fernandez, Aguilera-Velasco, & Delgado-Garcia, 2014; Schraml, Perski, Grossi, & Makower, 2012). In general, as stress increases performance decreases. However, caution must be made in eliminating stress. It has been found that moderate amounts of stress improve performance (Sanders, 2013). Therefore, understanding stress and controlling it would benefit the academic performance of many students. Previous research suggested a modest prevalence rate of 10 to 35 percent of college students experience functionally impairing levels of test anxiety (Chapell et al., 2005; Naveh-Benjamin et al., 1997). However, not all students experience anxiety with the same severity. In the Social Survey of the German Student Union, it was estimated that approximately 15–20 percent of student's functioning become impaired by exam nerves in a "modest" to "high"degree (Neuderth et al., 2009). Also, it was demonstrated that the delay and the drop-out in university students occur significantly more often in students with test anxiety and is associated with psychiatric morbidity including suicidal behavior and high economic costs (Schaefer et al., 2007).

Based on the review of literature, the following questions have been developed:

1. What are the university students’ perceptions of academic stress?
2. Is there a difference in Perceived academic stress based on the gender of the participants of this study?

4. Hypothesis for the study

H0 : There is no significant different between mean scores of male and female undergraduate students.

5. Methodology

The purpose of this study was to analyse the perceived academic stress among undergraduate students and to explore the differences among male and female students. This study approached this phenomenon from a quantitative perspective involving the use of a survey.

Participants, Sample, Setting

The study was conducted in management colleges that offer undergraduate courses located in Delhi. The sample was derived using stratified sampling based on gender. In all, 131 undergraduate students participated in this study. In the sample, 65 of the participants were male students and 66 were female students.

Research Instruments

The academic stress scale was adapted from Bedewy and Gabriel (2015). This scale measures a student’s perception of stress they experience due to academics. Sample items from this scale include "I can make academic decisions easily" and "I fear failing courses this year."The Cronbach Alpha for the 18-item scale was 0.70.

6. Data Analysis

Descriptive data was collected in this study. Items such as the mean of the variables as well as individual items were derived from the observed data. In addition, t-test was conducted to see if there were any differences across subgroups in order to provide information of the perception of the students when divided on the basis gender.

For the t-test, the normality of data was tested with the Kolmogorov- Smirnov test (Table 1), normality of data was found significant at 0.065 . In addition, Q-Q plots were assessed to determine if the sample was normally distributed according to the variables of this study. A visual inspection of the Q-Q plots confirmed normality of the data.(Chart1)

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td>.075</td>
<td>131</td>
</tr>
</tbody>
</table>

Lilliefors Significance Correction

Table 1: Kolmogorov- Smirnov test of normality
7. Result and Discussion

Table 2 describes the descriptive statistics. Table 3 represents the demographics in the study. The results of students' responses are summarized in Table 3. The internal consistency reliability (Cronbach's alpha) was 0.7 for the 18 items of the PAS.

**Chart 1: Q-Q plot to visually check the normality of data**

**Descriptive Statistics**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SCORE</td>
<td>131</td>
<td>33.00</td>
<td>74.00</td>
<td>53.2824</td>
<td>7.42063</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>131</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SCORE</td>
<td>65</td>
<td>52.0154</td>
<td>7.54257</td>
<td>93554</td>
</tr>
<tr>
<td>FEMALE</td>
<td>66</td>
<td>54.5303</td>
<td>7.13651</td>
<td>87844</td>
</tr>
</tbody>
</table>
Even if I pass my exams, am worried about getting a job 131 1 5 2.65 1.260
TOTAL SCORE 131 33.00 74.00 53.2824 7.42063
AVG 131 1.83 4.11 2.9601 .41226
Valid N (listwise) 131

Table 3: Summary of student responses

For checking homogeneity of variance Levene statistic was used and the results indicated that the variance was same for gender for total score ($F = 0.879$, $p = 0.052$).(Table 4)

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.961</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.960</td>
</tr>
</tbody>
</table>

Table 4: Independent T test results

The result of Independent sample t test indicates that null hypothesis of no significant difference among mean scores of males and females is not rejected ($p = 0.52$). The result signifying that mean score of male and female undergraduate students are same for the said population.

8. Conclusion

In this study Students’ experience of academic sources of stress was found to be moderate, and most students reported confidence about their academic skills and confidence in their ability to succeed. There were no differences between male and female students in their perceptions of academic stress. Results from this study support the fact that there were positively reported scores reflecting that students were significantly confident about the success in their academic performance and their future career and were confident in making academic decisions.

Reference


