The Effect of Student Stressors in Academic Life on Their Performance

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Abstract: The available research indicates that the occurrence of stress is increasing among students studying in higher education. Issues such as student retention and student progression are becoming increasingly important for all universities and there are a significant number of studies that have examined stress. This paper critically reviews, researches and identifies several issues affecting student performance due to their stressors. Methodology utilized in this study was a questionnaire, followed by a focus group discussion. Full-time undergraduates were the subjects of this study and their reflections were also embedded in the analysis. Findings reveal that working as part time, family concerns, cultural and language issues along with financial worries were the main stressors faced by students which hindered their performance at the onset of the semester. However, this study reveals that none of the stress factors mentioned above has a significant effect on the overall academic performance of the students. Nevertheless, upon revealing student reflections, it was noted that students opt to settle for lower ambitions in grades to manage their stressors.

Key words: student stressors in higher education, issues affecting academic performance
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1. Introduction

The available research indicates that the occurrence of stress is increasing among students studying in higher education. Issues such as student retention and student progression are becoming increasingly important for all universities and there are a significant number of studies that have examined stress. This paper therefore critically reviews, researches and identifies several issues that affecting student performance due to their stressors.

The overwhelming research on factors leading to stress and its influence on academic achievements among university students, many of the studies were conducted in isolation without incorporating a comprehensive list of stress factors. There also arises a question of which stress factor(s) has/have substantial influential on the academic achievement of students. Many prior studies have either reported inconclusive or inconsistent results. Prior studies have also concentrated on collecting cross-sectional rather than longitudinal data. This paper thus attempts to address these gaps by incorporating a comprehensive list of stress factors and empirically test them against the academic performance of university students during the semester. Specifically, this study is conducted based upon the following research questions:

(1) Is there a statistical significant correlation between the level of perceived stress at the semester and academic performance of students?

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(2) What are the stress factors that statistical significantly influence the academic performance of students?

In the following sections, the methodology used in this study is described, followed by analysis of the results. The findings are then discussed and implications of the results are presented before concluding the paper.

2. Literature Review

Learning and memory can be affected by stress. Although an optimal level of stress can enhance learning ability (Kaplan & Sadock, 2000), too much stress can cause physical and mental health problems (Campbell & Stevenson, 1992) reduce self-esteem (Bressler & Bressler, 2007) and may affect the academic achievement of students (Watering & Rijt, 2006).

A review of literature indicates that university students might experience stress due to multitude of ways such as health factors — amount of exercise. It is generally associated with several vital individual physiological, psychological, and behavioural symptoms yet not a great deal is known about stress, either academically or organizationally. There exists no common definition or conceptualization of stress (Field, Diego & Sanders, 2003), sleeping habits (Ryan, 2004) and nutritional routines (Trockel et al., 2000), academic factors (Struthers, Perry, & Menec, 2000), social factors — family and social support, finance and problems with roommates (Trockel et al., 2000). A perceived lack of support from the school authorities also appeared to add to student stress levels (Ryan, 2004).

Social support operated as a resiliency factor between family stress and both parental and family coping. Child and family characteristics appeared to be the important predictors of perceived social support and parental coping. Although perceived social support appeared to be an important predictor of parental and family coping, neither the moderating nor mediating model was supported in full but partial causal relations were confirmed (Hudson & O'Regan, 1994).

3. Methodology and Research Procedure

The subjects involved in the present study comprise of undergraduate students of University of Ballarat (currently named as Federation University) those who were offered the core course titled "Managerial Skills" in their degree program. Out of the fifty (50) students, 32 complete responses were returned, yielding a response rate of 64%. In addition to that a focus group was conducted followed by revealing their rich accounts (in-depth analysis of stressors).

A structured, self-administered questionnaire was developed as a mode of data collection. In section 1, the respondents were asked to furnish demographic information such as name, gender and previous schools enrolled (international or local-Australia). This information is required to allow matching of data collection with the data on academic performance. The questions in Section 2 were intended to measure individual's perception of stress using the Perceived Stress Score (PSS) developed by Cohen, Kamarck, and Mermelstein (1983), using a five-point Likert-type scale ranging from 1 (Never) to 5 (Very Often). The 14-item self-report instruments have demonstrated reputable reliability and validity (Cohen et al., 1983). The PSS scores were obtained by reversing the scores on the six negative items (e.g., 1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1) and then summing across all items. Items 4, 5, 6, 7, 9, 10, 12 and 13 are positively stated items. Individual scores on the PSS can range from 14 to 70 with lower scores indicating lower perceived stress and higher scores indicating higher perceived stress at that particular point of time. The items can be easily understood and very general in nature that they are free of content

specific to any subpopulation groups. Therefore, they are easy to score and can be administered within a short period of time.

In Section 3, the Stress Factor Survey was used to determine the sources of stress that have been found to influence the academic performance of students. This section requires the participants to identify the factors of stress that they experience during the given period by answering Yes/No questions. Eleven factors of stress were developed and respondents may indicate more than one factor which they perceive as relevant to them. Descriptive statistics using percentage (%) was used to explain the percentage of each stress factor in the semester compared with its performance (exam results).

The questionnaires were delivered and collected personally by the researcher (me) during classes. The subjects involved were thoroughly briefed of the purpose and the implementation of the data collection process. Questionnaires were administered during the same week to minimize the effect of varying stress levels that may occur and also under the same basic conditions. Respondents were asked to read the instructions written in the questionnaire carefully. In addition, the subjects have been kept apart so as to minimize the problems of the subjects influencing each other's responses. They were required to complete the questionnaire during the given time. The students were not given any extra marks for participating in this survey.

The majority of students were female (67.9%) and international students (77%). This is a common scenario in higher institutions throughout the country whereby the percentage of female students tend to outnumber the male. It is also common for the majority of students are international students. The high numbers of respondents who came from international schools imply that they have no prior experience of staying away from their families and thus are assumed to be dependent on their parents and families.

4. The Findings

It was found that generally, the students experienced moderate stress levels throughout the semester, judging from the figures which are slightly more than half of the total score. It revealed by probing questions and in-depth focus group discussions that the level of perceived stress increases as the students move from beginning to the middle of the semester, but drops slightly toward the end of the semester.

According to the results, the majority of students claimed that contribute to stress include course load, language and cultural issues, class attendance, finance issues, and sleeping too much. Issues with girlfriends/boyfriends, and social activities seem not to contribute much stress to the students. The majority of students claimed that they were not getting enough sleep throughout the semester. In addition, the students also claimed that they did not have enough exercises. This is probably due to the limited sports and recreational facilities and activities available for the students within the campus.

In referring to the results in the final examination, 90% (approximately) passed the course and more than 50% got at least a credit. This implies that on an overall, the academic performance of the students is satisfactory. It was further confirmed by focus group discussions that their stress levels were reduced by the end of semester being used to the system and they could attend the lectures and tutorials on time than the beginning of the semester.

The Pearson Correlation Coefficient results between the level of perceived stress and the academic performance of the students (0.05) indicate that there is no statistical significant correlation between the level of perceived stress with their academic performance. However, a statistical significant correlation was found

between the perceived level of stress at the end of semester and the academic performance of students.

The results imply that although the students perceived a higher level of stress at the beginning toward the middle of the semester, it does not affect their overall academic performance. Therefore, it can be concluded that none of the stress factors significantly affect the academic performance of the students. Nevertheless, upon student reflections, it was noted that students opt to settle for lower ambitions in grades to manage their stressors.

5. Summary and Conclusions

The study has fulfilled the three objectives set forth. In general, it is revealed that students did experience stress at a moderate level even though they were in their transition period from school to university life and that the majority of them come from international schools. In fact, the majority of students have performed satisfactorily based on their overall results. In addition, the findings that none of the stress factors significantly affect the academic performance of the students allow us to safely conclude that to some extent, the moderate stress experienced by the students are desirable in attaining good academic performance.

Further, as revealed in the focus group discussions, there are few reasons in managing their stress level throughout the semester. Being the total number of students for this particular course was fifty, the relationship among themselves as well as with the lecturer was much closer and stronger. This close relationship has also motivated them to attend classes throughout the semester. Another reason was in relation to the course workload. They had been nervous during the beginning of the semester, but as they go along, the level of stress reduces due to the familiarization with the academic system and classmates/group mates along with the course content. Further, they were able to keep a balance between their academic and other activities as well as time spent on sleeping/relationships.

The more specific objective of the study was to find out if there was any statistical significant difference in the level of perceived stress among the students. The results imply that, the level of perceived stress increases as the students move to the middle but drops slightly towards the end of the semester. One possible explanation to this situation was perhaps students were not yet given any tests and assignments at the beginning of the semester. However, as more tests and assignments were presented to them at the middle of the semester, this probably contributed to higher stress levels among the students compared to the stress level experienced at the beginning of the semester even though they are used to the course load.

Finding out whether there was a correlation between the students' level of perceived stress on their academic performance based on the test results, it was revealed that there was no statistical significant correlation between the level of perceived stress at the beginning and middle of the semester with the students' academic performance although there are statistical significant differences in the levels of perceived stress. This finding is not surprising, given the fact that these students are normally school leavers and they are used to the school system where terms are used and only final exams are counted. As they enter the tertiary level, they still cannot see how the assignments held in between of the semester contribute to their overall grades. They still think that final exams are the most important criteria that make up their grades.

However, it was found out that there is a statistical significant correlation between the level of perceived stress at the end of semester and the students' academic performance yet it is important to note that the correlation was rather weak. The implication is that the stress level they experienced was not high to the extent that they could not cope with their academic activities. Hence, it was not surprising that more than half of them scored a

credit (65%-74%) and above.

The results have to be interpreted cautiously. Although no significant effects were found between the stress factors and academic performance, I strongly believe that this is merely an absence of evidence for the effects, not evidence that there are no effects at all. Further, the correlation is weak, suggesting that there are other possible factors that mask the relationship. These will have implications on the steps to be taken to moderate all the stress factors discussed and the role of future research in addressing this.

Based on the observations above, it could then be argued that the stress factors such as not getting enough sleep or sleeping too much, language and cultural issues, social activities, finance issues, course loads and problems with boyfriends/girlfriends should be addressed since these factors continued to pose major problems to the students even to the end of the semester which affect their academic performance in achieving better grades. This was proven upon student reflections, it was noted that students opt to settle for lower ambitions in grades to manage their stressors.

Based on the findings and discussions above, it is proposed to bring forward several suggestions and recommendations to the university. First, it is suggested that the current student: lecturer ratio available in the campus to be maintained. This is because the results show that this was one the possible reasons that contributed to the low level of stress experienced by the students.

It is also urged the university and the student services/Language Studies Unit to be consistent in planning suitable activities or programs for the students such as organizing talks on financial management, workshops on language improvement motivation, time management, study skills and probably topics on managing stress. These programs should be organized continuously, not only during the orientation week (Sirca & Sulcic, 2005). Such programs and activities would help the students to identify, understand and manage their stress levels.

Further, it is also timely embark on the idea of involving parents in some parts of the orientation programs. The financial problems of the students can be dealt with effectively if the parents have good understanding about financial planning. It is also important for the relevant authorities to disburse scholarships and loans on time to the university and to the students so that they do not have to worry about the financial burden shouldered by their parents. Besides enlightening the students in preparing them for university's life, parents must be involved in seminars on stress management. Many of the parents of these students have not attended universities and therefore, they do not understand how stressful their children are while in the university. By understanding the causes of stress facing their children, the parents are in better positions to advise and motivate them. This indirectly leads to better academic performance of students.

In addition, sports and recreational facilities or activities should also be upgraded to provide more opportunities for the students to get involved in sports and recreational activities. Obviously, getting involved in those activities is one of the possible ways to help students to reduce their stress. While the problems of boyfriends/girlfriends are inevitable especially for those who have already found the other half before or after joining the institution, it is probably timely for the policy makers and the university authorities to approach this issue with an open mindset. Special programs can be arranged for couples or individuals with boyfriends/girlfriends outside the institution on how they could maintain a healthy relationship and motivate each other in achieving better grades. Program such as emotional intelligence can also play a pivotal role in ensuring that these students are not emotionally disturbed when facing problems with their other halves (Hidi, 2006).

This study has addressed various important stress factors to the academic performance of graduate level students. It is hoped that the suggestions above shed some lights to the relevant authorities/university in planning

and conducting necessary programs for the students in ensuring that they continue to produce excellent graduates in this knowledge-based economy. Notwithstanding, the results would also benefit the parents. By knowing and acknowledging the causes of stress, parents are in better positions to give advice, motivation and/or moral support to reduce the stress factors which could enhance the academic performance of their children.

The most significant limitation of the study is the small sample size and that the study was confined to Melbourne. The small sample size might have contributed to the weak correlation and the absence of evidence on the effects of the stress factors on academic performance. A larger sample size from different institutions and geographical locations might yield different yet interesting results. The statistical techniques used might also influence the results. Since this is an exploratory study, it is hoped that more advanced analyses could be used in future studies in order to reach general conclusions about the perceived stress factors, stress levels and academic performance of students. This study can be used as a basis for further exploration on the influences of stress level on academic performance of students at diploma, degree or even postgraduate levels. The level of difficulties inherent in the coursework and exams may present different stress levels to the students. For instance, studies on the pattern of stress they experience in a different environment with different student population, facilities, subjects taught and others. Besides that, other possible factors which may contribute to stress that were not examined in this study such as environmental factors, family background, previous academic achievement and detailed background of the students could be further explored by future researchers. This might help to overcome the weak correlation found in this study.

Finally, while this study posited that the amount of stress experienced by the students are desirable in attaining good academic results, it is equally important to identify what constitute good and bad stress and how good stress can be enhanced and bad stress can be eliminated while identifying "students at risk" at the beginning of the semester in order to intervene appropriately toward their issues.

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