Perceived Stress Factors and Academic Performance of the Sophomore IT Students of QSU Cabarroguis Campus

Lauro S. Aspiras, and Emma D. Aspiras

Abstract----This paper deals with the perceived stress factors and academic performance of the sophomore Information Technology students of Quirino State University, Cabarroguis Campus. The study aimed to assess the perceived stress factors of the respondents and to identify the sources of their stressors. Significant differences on the respondents' perceived stress factors in terms of their course, gender, age, and ethnic affiliation were determined and the correlation between the perceived stress factors and Grade Point Average (GPA) were also evaluated.

A descriptive-correlation method and Perceived Stress Scale developed by Cohen and Mermelstein in 1983 was used to evaluate the amount of stress that the respondents perceive during the past semesters. There were 65 sophomore IT students involved in this study. The data gathered were statistically analyzed using the Statistical Package for Social Science (SPSS).

Findings of the study showed that among the perceived stress scales, the respondents “fairly often” feel that they cope with the changes that were occurring in their lives and feel confident about their ability to handle personal problems. Moreover, the respondents “sometimes” feel angry because of the things that happened outside their control and sometimes feel that they could not cope with all things that they had to do. On the other hand, it was found out that among the stressors identified, “Finances” is the major stressor of the respondents. “Not getting enough sleep”, “Social activities”, “Nutrition” and “Class attendance” follow respectively. The study also revealed that the perceived stress factors has a significant bearing on the course, gender, age, and ethnic affiliation of the respondents.

Thus, awareness and knowledge on the causes and effects of stressors among the sophomore students is of help in the conceptualization of coping mechanisms in alleviating stress and could lead them to a better if not the best performance in their academic performance. Hence, further study about stress factors of college students is also recommended for a better understanding of the phenomenon.

Keywords----Academic performance, sophomore students, stress factors, stressors

I. INTRODUCTION

A. Rationale

Stress is a word that is regularly used today but has become progressively more difficult to describe. Stress usually describes a negative idea that can have an effect on one’s mental and physical well-being. Evidently, stress can have an effect on student’s academic performance. Different types of stressors such as time management, financial problems, health problems, personal problems, assignments, etc. create pressure to the academic performance of the students[1].

In the educative process, students experience stress due to several reasons like examinations, subject requirements and projects, competitive nature within their chosen field, financial worries about school and future job prospects. These justify that stress really a common element in the lives of every individual regardless of race or cultural background [2].

Likewise, college life has become a lot more competitive--it’s much harder to get into schools, it is more expensive and it is a new and exciting time, but it can be overwhelming. Among all new experiences, and learning and growing opportunities available in college environment, many may lead to unhealthy levels of stress which hinder students’ abilities to socialize and to achieve their academic goals[3]. These ideas suggest possibility of damaging the impact of unmanaged stress on the academic well-being of college students.

Researchers have been trying to identify the correlation of many stress factors that were experienced by college students and the effect on their GPA. Thus, it was found out that there are varied stress factors that can lower the academic performance of the students. These are fraternity & sorority activities, job responsibilities and having a boyfriend or girlfriend [4]. While academic-related issues certainly contribute, a significant number of non-academic-related factors also contribute heavily to the stress levels of students [5]. In fact, there are also issues with the way in which academics view student workload. High workloads are common expectation of academics; with this comes the fear that students will rate an instructor lower on teaching evaluations as a result. Study also shows that the quality of instructional techniques can be more important than the level of workload in determining student satisfaction; however the challenge of balancing student workload and satisfaction
remains [6]. Further, a study on sources and levels of stress reveals that there are significant positive correlation between locus of control and academic stress, suggesting that students with external beliefs are more stressed than those with internal. It was also found out that students of high esteem are less stressed than those with low [7].

Additionally, the main problems affecting student academic performance include inadequate background, working long hours, lack of time to study and seek advice, lack of time management skills, bad study habits and skills, lack of self-confidence. Many students are also faced with various impediments in their pursuit of higher education and career objectives, including financial problems, family responsibilities, and social and extracurricular activities. Some of these activities do not only take away from the time needed for sleeping, attending class and studying, but they also cause considerable stress resulting in negative effects on academic performance as measured in terms of GPA [8].

It is on the foregoing that the researcher delved on the study of assessing the perceived stress factors and the academic performance of the Information Technology students at Quirino State University, Cabarroguis Campus.

Finally, it was found out that stress factors and academic performance of the sophomore IT students in the province of Quirino has not yet been surveyed and thus the study was conducted.

B. Objectives of the study

Generally, this study aims to assess the perceived stress factors and the academic performance of the sophomore IT students of QSU, Cabarroguis Campus.

Specifically, this research study focused on the following objectives:

1. To identify the demographic profile of the sophomore IT students as to course, gender, age, and ethnic affiliation.

2. To evaluate the perceived stress factors of the respondents.

3. To identify the sources of stress factors of the sophomore IT students.

4. To determine if there is a significant difference on the respondents’ perceived stress factor scales in terms of their course, gender, age, and ethnic affiliation.

5. To determine if there is a correlation between the score on the perceived stress scale and the Grade Point Average (GPA) of the respondents.

C. Research Methodology

This study employed the descriptive-correlation method in obtaining the essential data. The descriptive design was used to describe the demographic profile of the respondents such as course, gender, age, ethnic affiliation, and the perceived stress factors. The correlation method was also used to establish the relationship between the score on the perceived scale and the Grade Point Average (GPA) of the respondents.

Slovene’s Formula was used in the selection of the respondents, where sixty five sophomore students from the College of Information Technology and Computer Science (CITCS) of Quirino State University, Cabarroguis Campus were involved.

In order to acquire reliable information, the researcher used a survey questionnaire as a mode of data collection. Perceived Stress Scale was used to evaluate the amount of stress that the respondents perceive during the past semesters [9].

Likewise, the data gathered were statistically analyzed using the Statistical Package for Social Science (SPSS) software, whereas the following statistical tools were used:

1. Frequency counts, percentages. These were used to describe the demographic profile of the respondents.

2. Chi-Square Test. This was used to determine differences among respondents’ perceived stress factor when they are grouped according to their profile.

3. Pearson-r. This was used to identify whether there is correlation between the academic performance and the score on the perceived stress scales of the respondents.

II. Results and Discussions

The results of the assessment on the perceived stress scales and academic performance of the sophomore IT students of Quirino State University, Cabarroguis Campus are shown in the following tables:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Technician Course</td>
<td>24</td>
<td>36.92</td>
</tr>
<tr>
<td>Bachelor of Science Computer</td>
<td>10</td>
<td>15.40</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Secretarial Course</td>
<td>31</td>
<td>47.70</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19 years old</td>
<td>48</td>
<td>73.80</td>
</tr>
<tr>
<td>20-24 years old</td>
<td>14</td>
<td>21.50</td>
</tr>
<tr>
<td>25-30 years old</td>
<td>3</td>
<td>04.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Mean age = 19.20

<table>
<thead>
<tr>
<th>GENDER</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24</td>
<td>36.90</td>
</tr>
<tr>
<td>Female</td>
<td>41</td>
<td>63.10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ETHNIC AFFILIATION</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ifugao</td>
<td>17</td>
<td>06.20</td>
</tr>
<tr>
<td>Ifugao</td>
<td>17</td>
<td>06.20</td>
</tr>
<tr>
<td>Ilocano</td>
<td>44</td>
<td>67.70</td>
</tr>
<tr>
<td>Tagalog</td>
<td>4</td>
<td>06.20</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>00.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>100.00</td>
</tr>
</tbody>
</table>

http://dx.doi.org/10.15242/ICEHM.ED1214125
The data shows that majority of the respondents are taking up Computer Secretarial Course. Most of the respondents belong to the age range of 15-19 years old with a mean age of 19.20. Among the 65 respondents most of them are females and majority of them are Ilocano.

<table>
<thead>
<tr>
<th>Table II</th>
<th>PERCEIVED STRESS SCALES OF THE RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEIVED STRESS SCALES</td>
<td>MEAN</td>
</tr>
<tr>
<td>1. During the last semester, how often had you been upset because of something that happened unexpectedly?</td>
<td>2.0615</td>
</tr>
<tr>
<td>2. During the last semester, how often have you felt that you were unable to control the important things in your life?</td>
<td>2.0769</td>
</tr>
<tr>
<td>3. During the last semester, how often have you felt nervous and stressed?</td>
<td>2.4000</td>
</tr>
<tr>
<td>4. During the last semester, have you dealt successfully with irritating life hassles?</td>
<td>2.2923</td>
</tr>
<tr>
<td>5. During the last semester, how often have you felt that you were effectively coping with important changes that were occurring in your life?</td>
<td>2.5846</td>
</tr>
<tr>
<td>6. During the last semester, how often have you felt confident about your ability to handle personal problems?</td>
<td>2.9385</td>
</tr>
<tr>
<td>7. During the last semester, how often have you felt that things were going your way?</td>
<td>2.2154</td>
</tr>
<tr>
<td>8. During the last semester, how often have you found that you could not cope with all things that you had to do?</td>
<td>2.1077</td>
</tr>
<tr>
<td>9. During the last semester, how often have you been able to control irritations in your life?</td>
<td>2.2153</td>
</tr>
<tr>
<td>10. During the last semester, how often have you felt you were on top of things?</td>
<td>2.1846</td>
</tr>
<tr>
<td>11. During the last semester, how often have you been angered because of things that happened that were outside of your control?</td>
<td>2.4462</td>
</tr>
<tr>
<td>12. During the last semester, how often have you found yourself thinking about things that you have to accomplish?</td>
<td>2.8462</td>
</tr>
<tr>
<td>13. During the last semester, how often have you been able to control the way you spend your time?</td>
<td>2.6000</td>
</tr>
<tr>
<td>14. During the last semester, how often have you felt difficulties were piling up so high that could not overcome them?</td>
<td>2.4154</td>
</tr>
<tr>
<td><strong>GRAND MEAN</strong></td>
<td><strong>2.3846</strong></td>
</tr>
</tbody>
</table>

Legend: 1.00 - 1.75 Never 2.51 - 3.25 Fairly Often 1.76 - 2.50 Sometimes 3.26 - 4.00 Very Often

It reveals in the table above that majority of the items on the perceived stress factor scales of the respondents described as “Sometimes”. It shows that sometimes the respondents feel upset because of something that happened unexpectedly, sometimes they were unable to control the important things in their lives, sometimes felt nervous and stressed, sometimes they dealt successfully with irritating life hassles, sometimes felt that things were going their way, sometimes they found that they could not cope with all things that they had to do, sometimes they have been able to control irritations in their lives, sometimes they felt they were on top of things, sometimes they have been angered because of things that happened that were outside of their control, and sometimes felt difficulties were piling up so high that they could not overcome them.

Further, It also shows that there are four items described as “Fairly Often”. It reveals in the table that the respondents fairly often felt that they were effectively coping with important changes, fairly often found themselves thinking about things that they have to accomplish were occurring in their lives, fairly often felt that they were effectively coping with important changes that were occurring in their life, and fairly often felt confident about their ability to handle personal problems.

The computed grand mean is 2.3846 which described as “SOMETIMES”. Therefore, the responses of the respondents indicate that their perceived stress factors do not vary greatly.

<table>
<thead>
<tr>
<th>Table III</th>
<th>SOURCES OF STRESS FACTORS OF THE RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCES OF STRESS FACTORS</td>
<td>FREQUENCY</td>
</tr>
<tr>
<td>1. Working a part-time job</td>
<td>13</td>
</tr>
<tr>
<td>2. Working a full-time job</td>
<td>7</td>
</tr>
<tr>
<td>3. Nutrition</td>
<td>32</td>
</tr>
<tr>
<td>4. Sleeping too much</td>
<td>17</td>
</tr>
<tr>
<td>5. Not getting enough sleep</td>
<td>46</td>
</tr>
<tr>
<td>6. Problems with boyfriend/girlfriend</td>
<td>12</td>
</tr>
<tr>
<td>7. Class attendance</td>
<td>23</td>
</tr>
<tr>
<td>8. Problems with roommate</td>
<td>11</td>
</tr>
<tr>
<td>9. Over exercising</td>
<td>6</td>
</tr>
<tr>
<td>10. Not exercising enough</td>
<td>18</td>
</tr>
<tr>
<td>11. Social Activities</td>
<td>34</td>
</tr>
<tr>
<td>12. Being a member of a fraternity or sorority</td>
<td>4</td>
</tr>
<tr>
<td>13. Having children</td>
<td>5</td>
</tr>
<tr>
<td>14. Being married</td>
<td>3</td>
</tr>
<tr>
<td>15. Finances</td>
<td>51</td>
</tr>
<tr>
<td>16. Course load</td>
<td>19</td>
</tr>
</tbody>
</table>

The table above presents the ranking made by the respondents on the sources of stress factors.
As revealed in the table, the highlighted items are the top five stressors identified by the respondents. It shows that “Finances” ranked as number 1 stressor with a frequency of 51 or 78.46 percent. Likewise, “Not getting enough sleep” ranked as number 2 with a frequency of 46 or 70.77. “Social activities” ranked number 3 with a frequency of 34 or 52.31 percent. “Nutrition” is number 4 with a frequency of 42 or 49.23 percent and “Class attendance” ranked number 5 with a frequency of 23 or 35.38 percent.

On the other hand, course load, not exercising enough, sleeping too much, working a part-time job, problems with boyfriend/girlfriend, being married followed respectively.

| TABLE IV | CHI-SQUARE TEST ON PROFILE OF RESPONDENTS AND THEIR PERCEIVED STRESS SCALES |
|-----------------------------------------------|---------------------------|----------------|-----------------|-----------------|
| PERCEIVED STRESS SCALES | COURSE | AGE | GENDER | ETHNIC AFFILIATION |
| 1. During the last semester, how often had you been upset because of something that happened unexpectedly? | significant | significant | significant | significant |
| 2. During the last semester, how often have you felt that you were unable to control the important things in your life? | significant | significant | significant | significant |
| 3. During the last semester, how often have you felt nervous and stressed? | significant | significant | significant | significant |
| 4. During the last semester, have you dealt successfully with irritating life hassles? | significant | significant | significant | significant |
| 5. During the last semester, how often have you felt that you were effectively coping with important changes that were occurring in your life? | significant | significant | significant | significant |
| 6. During the last semester, how often have you felt confident about your ability to handle personal problems? | significant | significant | significant | significant |
| 7. During the last semester, how often have you felt that things were going your way? | significant | significant | significant | significant |
| 8. During the last semester, how often have you felt that you could not cope with all things that you had to do? | significant | significant | significant | significant |
| 9. During the last semester, how often have you been able to control irritations in your life? | significant | significant | significant | significant |
| 10. During the last semester, how often have you felt you were on top of things? | significant | significant | significant | significant |
| 11. During the last semester, how often have you been angered because of things that happened that were outside of your control? | significant | significant | significant | significant |

The table above shows the Chi-Square test on the Perceived Stress Scales of the respondents and their profile. The results clearly show that course, gender, age and ethnic affiliation have direct bearing on the perceived stress factors of the respondents.

Therefore, this implies that the perceived stress factors of the respondents are dependent on their profile.

| TABLE V | CORRELATION BETWEEN THE PERCEIVED STRESS SCALE AND THE GRADE POINT AVERAGE (GWA) OF THE RESPONDENTS |
|-----------------------------------------------|---------------------------|----------------|-----------------|-----------------|
| QUESTIONS ON PERCEIVED STRESS SCALES | p-value | r-value | Result |
| 1. During the last semester, how often had you been upset because of something that happened unexpectedly? | .999 | .000 | ns |
| 2. During the last semester, how often have you felt that you were unable to control the important things in your life? | .051 | .244 | ns |
| 3. During the last semester, how often have you felt nervous and stressed? | .888 | -.018 | ns |
| 4. During the last semester, have you dealt successfully with irritating life hassles? | .356 | .116 | ns |
| 5. During the last semester, how often have you felt that you were effectively coping with important changes that were occurring in your life? | .036 | .260 | * |
| 6. During the last semester, how often have you felt confident about your ability to handle personal problems? | .140 | .185 | ns |
| 7. During the last semester, how often have you felt that things were going your way? | .145 | .183 | ns |
| 8. During the last semester, how often have you felt that you could not cope with all things that you had to do? | .189 | .165 | ns |
| 9. During the last semester, how often have you been able to control irritations in your life? | .251 | .144 | ns |
| 10. During the last semester, how often have you felt you were on top of things? | .137 | .186 | ns |
| 11. During the last semester, how often have you been angered because of things that happened that were outside of your control? | .116 | .197 | ns |
| 12. During the last semester, how often have you found yourself thinking about things that you have to accomplish? | .125 | .192 | ns |
| 13. During the last semester, how often have you been able to control the way you spend your time? | .024 | .279 | * |
| 14. During the last semester, how often have you felt difficulties were piling up so high that could not overcome them? | .971 | -.005 | ns |
Based from the findings of the study, the following factors, while the rest of the items are independent.

III. CONCLUSIONS

Based from the findings of the study, the following conclusions were drawn:

- Majority of the respondents are Computer Secretarial Course, most of them are females and have a mean age of 19.20. Majority of the respondents are Ilokanos.
- Majority of the items on the perceived stress scales described as “Sometimes” by the respondents. Four items described as “Fairly often.” Therefore, the respondents fairly often felt that they effectively cope with important changes that occurred in their lives, they felt confident about their ability to handle personal problems and found themselves thinking about things they have to accomplish; and fairly often felt difficulties on piled up problems that seems they can’t overcome.
- Top five stressors were identified by the respondents which include Finances, not getting enough sleep, social activities, nutrition, and class attendance.
- The perceived stress scales of the respondents are greatly influenced by their course, gender, age, and ethnic affiliation.
- Most of the perceived stress factor scales have no significant relationship on the academic performance of the respondents. Two items were significantly correlated on the academic performance of the respondents.

IV. RECOMMENDATIONS

The researcher recommends the following based from the result of the study:

- Based on the result of the study, “finances” is the top 1 stressor identified by the respondents. The researcher recommends that the university should come up with a financial assistance program for the students who are did not qualify in the scholarship grants offered by the school but has the desire of achieving their dreams.
- Class attendance probably affected by social activities, not getting enough sleep, and poor nutrition of the respondents. The researcher therefore recommends that the schools should design a flexible course of career education based on students’ future career development. This course must cover psychological, mental, social, and cultural contents and be incorporated into formal curricula of each department.
- Schools should provide more support and care to help students cope with various stressors and identify students having stress reactions. The school administration through the Guidance office should keep a close eye on students’ physical and mental conditions and provide consulting services to avoid development of physical or mental problems in students.
- Insufficiency of stress-related courses is a common problem among college schools. As modern people at all age levels are faced with increasing stress in life, how to pursue well-being and enhance stress management abilities has become essential knowledge for modern people and job-seekers. Hence, schools should design and offer stress-related courses to help college students understand the meaning of well-being and learn how to cope with stress-induced problems.
- Family support is helpful for students faced with stress, no matter how they are adaptable to the stress. While college students should take advantage of family support, their family members should try to understand their interests, specialties, and abilities so as to avoid having too high expectations of them and causing them additional stress.
- A follow up study on the stress factors and academic performance of the college students may be conducted for a broader and deeper understanding of the problem.

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REFERENCES