Role of Self Efficacy in measuring the relationship between Perceived stress and Happiness of students

S.L.L. Naga Shilpa, Dr. Rajiv Prasad
Amrita School of Business, Coimbatore
Amrita Vishwa Vidyapeetham
Amrita University
India

Abstract—Self-efficacy level of a person helps to perform and achieve his goals. If a person performs well in a stressful environment self-efficacy levels likely to be high. The self-efficacy levels of a person are influenced by various factors like performance accomplishment, vicarious experience, verbal persuasion and physiological states. In this paper, we are exploring the relationship between self-efficacy, perceived stress and happiness. The survey is being conducted among the students of Amrita School of Engineering, Coimbatore. As the stress in the environment would be equal.

Keywords: Self efficacy, Perceived Stress, Happiness

INTRODUCTION

The importance of graduates is becoming more these days in the corporate world. As a result, the educational institutions have started putting more pressure on the students so that they would easily handle the stress further in the corporate world.

The study is conducted in Amrita university, Coimbatore. Amrita university is a multi-campus and multi-disciplinary research university. Amrita is accredited A by NAAC and ranked as one of the top universities in India. It has total five campuses in three states of India – Kerala, Tamilnadu and Karnataka with 15000+ students, 5000+ publications, 15 constituent schools, 600+ PhD faculty and 1750 faculty members. It is one of the young university to be ranked top in India. The study is conducted in the university headquarters at Ettimadai, Coimbatore. The university is a researches universities conducted among the undergraduate students. The survey is conducted among all the engineering students of the university from 1st year to 4th year of various departments. The students go through very stressful program with two periodicals, every day lab exam and end term, every student should maintain 7.5 CGPA. Apart from this student participate in many different events. As part of my research I chosen this university to find out the student’s self-efficacy levels and how they perceive the stress and finally how happy they are with the course.

This study will help the university to know about their student’s self-efficacy levels and how much stress they can adapt. The university will be able to give guidance according to the various students’ performance levels under the stress full environment. Which further result into students becoming happy after doing a particular work under the stress full environment with improved self-efficacy levels.

I. Literature Review

A. Literature Review

Self Efficacy:

Bandura (1997) described self-efficacy as “the belief in one’s capabilities to organize and execute courses of action required to produce given attainments”. Bandura’s self-efficacy is used in different sectors like academic performance, work related performance, behavioral changes etc.

Literature on self-efficacy has explored the relation of the self-efficacy beliefs to the academic performance and assessed the extent to which efficacy beliefs, in concert with other relevant variables such as vocational interest, academic milestones, math SAT scores and high school GPA, predict the academic performance of the students enrolled in engineering programs (CL Huang - American Society for Engineering Education Gulf- 2003).

Studies have also examined the effects of academic self-efficacy and optimism on student’s academic performance, stress, health and commitment to remain in the school. Students who enter college with confidence in their ability to perform well academically do perform significantly better than do less confident students. Relations between predictor variables (high school grade-point average, academic self-efficacy, and optimism) and moderator variables (academic expectations and self-perceived coping ability) were studied and it was found that, confident and optimistic students are likely to result in successful adjustment. Such students hold higher expectations for themselves in part because they trust in their capabilities and they see the world, and their ability to respond to it, as less threatening. (MM Chimer, L Hu, BF Garcia - Journal of Educational psychology, 2001 - psy:net:apa.org Cited by 1207).

A study tested a model of college outcomes based on four theoretical constructs: academic self-efficacy, academic stress, social integration, and family support. According to the hypothesis the college self-efficacy was associated directly with stronger persistence intentions and associated indirectly
with better health. Contrary to expectations, self-efficacy associated directly with social and faculty integration, but social and faculty integration were not associated directly with persistence intentions. In addition, students who reported stronger availability of family support reported stronger self-efficacy. Results indicated that family support directly affected level of academic self-efficacy. Overall, the results indicated that self-efficacy served as an important determinant in educational outcomes. (JB Torres, VS Solberg - Journal of vocational behavior, 2001 – Elsevie Cited by 269).

Perceived Stress:
The stress among the undergraduate students is multifactorial arises from both academic and non-academic factors. The stress among the students will rise during test and examination period. Each student cannot perceive the stress in same manner even though the stress in the environment is equal. Young students will get impacted to stress due to competitive environment. (Brand and Schoonheim-Klein, 2009.)

Stress has been examined by measuring its physiological manifestations, the occurrence of major life events, the frequency of daily hassles, and its cognitive appraisal. Similar to the assessment of subjective well-being, the latter approach proposes that a person’s cognitive appraisal of stress is the most important factor in evaluating stressful events (Cohen et al. 1983).

According to the literature any level of unattended stress will result into sleeping disorders, burnout etc. Students reported top five sources of stress: sleeping habits, vacations/break, change in eating habits, increase in work load and new responsibilities. Among the engineering students stress included: heavy workload in engineering courses, high level of engineering curriculum, large amount of time required to complete assignments, lack of sleep and competition between students for grades. (Schneider, 2002).

Most of the students perceive stress due to physical, emotional and social factors. Higher stress levels among the students will result in poor academic performance.

Perceived stress incorporates feelings about the uncontrollability and unpredictability of one’s life, how often one has to deal with irritating hassles, how much change is occurring in one’s life, and confidence in one’s ability to deal with problems or difficulties. (Sheldon Cohen).

Happiness
According to Seligman’s (2002) definition happiness encountering positive feeling (the charming life), being occupied with life exercises (the drew in life), and finding a feeling of reason or importance (the significant life).

B. Hypothesis Development
Based on an extensive review of the literature, this study proposes the conceptual model to help understand the role of self-efficacy in moderating the relationship between perceived stress, and happiness of students.

Hypothesis (H1): Greater the self-efficacy lower the perceived stress level

The statement of hypothesis was framed after having more idea about the self efficacy and stress through the literature review. It is also known that a person who is having higher self efficacy levels will have less perceived stress levels. In a under graduation program everyone will work under equal stress levels. It depends on the students on how they perceive the stress. When a student is having higher self-efficacy levels, the way he perceives the stress will be in a positive manner. When a person is having greater self-efficacy levels he knows that he can manage the work under stressful environment and the perceived stress levels will be low.

Hypothesis (H2): Lower the perceived stress levels higher the happiness

When a student is having lower perceived stress levels he will finish the work without any trouble. Then the student will have the satisfaction as he completed the work which results into happiness.

Hypothesis (H3): Greater self-efficacy level higher the happiness

When a student is having higher self efficacy levels he will be confident in doing work under stress. The student can easily handle stress and as he completes his work in time he would satisfied and be happy.

II. METHODOLOGY

A. Questionnaire Development and Measures
A questionnaire was developed and online survey was conducted to understand this study. The questions measured the level of self efficacy, perceived stress and happiness among the students of amrita university.
Measures and Procedures

Self Efficacy Measure

General Self efficacy Scale (Schwarzer, R., & Jerusalem, M. (1995)) was used to measure the self-efficacy levels of a student. The scale contains 10 questions. The total score was calculated by finding the sum of all the items. In GSE the total score ranges between 10 and 40. The higher score indicates the higher self efficacy levels.

Perceived Stress Measure

Perceived Stress Scale (Sheldon Cohen(1988)) was used to measure stress levels among the students of undergraduate program. There were totally 10 questions in the scale. The scale includes questions about current levels of experienced stress. The scoring was done by reversing responses for certain questions (0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the positively stated items (4, 5, 7 & 8) and summing up all the items in the scale.

Happiness Measure

Happiness measure scale (Dr. Rajiv Prasad) was used to measure the happiness levels of students. There were total 26 questions in the scale. The scale includes questions about environment, family, work etc. The scoring was done by reversing responses for certain questions (7=1, 6=2, 5=3, 4=4, 3=5, 2=6, 1=7) and summing up all the items in the scale.

B. Sample Data

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Stress</td>
<td>-.2274975</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 1: Regression result between perceived stress and happiness

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Self Efficacy</td>
<td>-.1637234</td>
<td>0.095</td>
</tr>
</tbody>
</table>

Table 2: Regression result between general self-efficacy and perceived stress

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Self Efficacy</td>
<td>.4746145</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 3: Regression result between general self-efficacy and perceived stress

Linear Regression was performed to analyse the conceptual model as shown in figure-1. Correlations were established between perceived stress and happiness, self-efficacy and perceived stress and self-efficacy and happiness in accordance with the hypotheses. As shown in table-1 the perceived stress and happiness are negatively correlated and the result is significant at a 1 percent significance level. Table – 2 shows the linear regression result between general self- efficacy and perceived stress. General self-efficacy and perceived stress are negatively correlated and the result is significant at a 10% significance level. The relation between perceived stress and self-efficacy is weaker as we have used generalised self-efficacy scale for academic performance. There would many academic factors which results into stress on students and are not considered in the measurement. Table 3 shows the linear regression between self-efficacy and happiness. Self-efficacy and happiness are positively correlated and the result is significant at 1 percent significance level.

Overall the results of the analysis are as expected. The results show that among engineering students with higher self-efficacy perceived stress is lower and the students who perceive lower stress will experience higher happiness.

III. LIMITATIONS

Limitation

The relationship between general self efficacy and perceived stress was weaker than the expected results. As the research was conducted among the engineer students in future they can use a scale which is more specific to the students , like academic self efficacy scale to obtain more accurate relation between self efficacy and perceived stress.

REFERENCES