**Does Stress affect academic performance?**

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***A*bstract**― University life is one of the most stressful periods in a student’s life. As students struggle to cope with exam burdens, career decisions and social pressures, often at residential universities without the support of old friends and family, many students find themselves incapable of dealing with the situation. One of the leading sources of stress among university Students is the perceived need to do well academically, and if students are unable to do this it causes them a lot stress, in fact according to a psychology study of University students in the USA; Ross, Shannon and Bradley (June 1999), 73% of university students feel that difficulty to cope with their academic needs is their most important cause for stress.

The purpose of this study is to assess whether stress itself has an effect on academic performance of students. If a negative effect is proven to be true, this could mean that stress is both a cause and effect of academic failure, trapping students in a fierce spiral of depression/stress and academic failure.

According to the American College Health Association (ACHA) the suicide rate among young adults, ages 15-24, has tripled since the 1950s and suicide is currently the second most common cause of death among college students. Sabanci itself was saddened by a a suicide earlier this year. Over all stress levels on university campuses are on the rise, therefore, we feel that it is high time that the co-relation between stress and academic acheivement needs to be assessed so that universities can make policy decisions on how and on what scale to respond to the problem based on our findings.

When we discuss the role of stress in the context of academia, the psychological and physical impacts of the problem come into play. The Windsor Star (2013)[[1]](#endnote-1) has published an article that claims students of the University of Windsor and St.Clair College are finding it hard to cope with the stress involved in their academic lives. Cindy Crump, a director of student services at the college reported that more evidence for complications in students’ lives have been observed this year. In the case of the University of Windsor, the demand for counseling services has jumped from 15 to 20 percent when compared to the past year. A clinical psychologist Mohsan Beg, currently working over there has listed a variety of disorders bringing students to his centre: depression, anxiety, suicidal thoughts, eating disorders, sleep disorders, etc. He emphasized on how exam situations deprive students from pursuing the social aspects of their life properly, and that alone as an inducer of all the complications enlisted above.

Nevertheless, this is merely a claim and many university students say otherwise. A recent article published by The Guardian (2013)[[2]](#endnote-2) expresses the views of a university student who feels that academic environments provide ‘delight’ alongside ‘depression’, and therefore maintain a balance, since friends and family help the individual cope with the daily stress of his life.

And, that is where our main question comes in: Does stress effect Academic performance? The aim of our study would be the question itself and in the next section, we will review some case studies in order to highlight the necessity of carrying out this study.

***Index Terms―***Academics, stress-related environment, disorder, depression, sample size, case study.

1. **INTRODUCTION AND REVIEW OF LITERATURE (critique of previous studies conducted for this purpose)**

A compilation of some stress-related case studies carried out by IPDPS―Improving Provision for Disabled Psychology Students’ project, HEFCE Strand Two Project, Universities of York, Middlesex and Aston (2006)[[3]](#endnote-3) have concentrated on particular individuals as they tried coping with stress in the socio-academic aspects of their lives. The issue with these studies is that they target only students who have labeled disorders such as borderline personality disorder and acute anxiety disorder, and therefore cannot be used to generalize to students who do not have a diagnosed disorder as listed above. Furthermore, by disclosing their participants’ names, the studies themselves raise several ethical concerns. Also, being individual-based, they can’t be used to generalize for a larger sample size. However, by studying these individual studies, several important questions come into consideration. These questions have been listed below:

* What are the causes of stress in students’ lives?
* How do these stressors affect their ‘self-concept’ and ‘self-esteem’?
* How do they adjust to their stressful environment and does it matter if it’s negative or positive?
* Can a particular theory be used to explain the cause and consequences of the stressors on these students’ lives?
* Can positive adjustment to the stress-related situations through therapeutic advice or regular therapy sessions help maintain both stability and progress of the students from a social as well as an academic point of view?

Keeping these questions in mind, let us consider an article by the Globe and Mail (2012)[[4]](#endnote-4) which identifies challenges faced by counseling sessions aimed at helping stressed-out students. The problem is that being an article, it only identifies stress as a problem from an academic point of view, but doesn’t keep in mind the social context of the problem as well. It does, however provide some interesting facts such as a report released by the Queens’ University of 116 recommendations by students for having scheduling revised and the term extended. The report was released after the death of six students due to suicide in years 2010 and 2011.

The study we wish to conduct aims at having a sample that can be heavily studied, and also serve as a pre-cursor to consequent research afterwards. Having reviewed literature on stress, let us move towards the description of the procedure involved.

1. **PROCEDURE: LOCATION, DESIGN, PARTICIPANTS AND DATA ANALYSIS**

Sabanci University is where the case study shall take place, and the reason for this being that it is a multi-cultural university where not only Turkish students, but International ones also come to study. Furthermore, Sabanci university is one of the best universities in Turkey, which would help us find a proper cause and effect relationship of the stress factor involved in students’ socio-academic lives since not only academic activities, but several extra-curricular ones are also pursued here.

Firstly, we shall create a promotion plan for our study, and this we shall do so by pursuing various means―a setting of tables in the cafeteria with questionnaires to assess our sample’s stress level with respect to both social and academic aspects of their lives, and perhaps colorful posters along with an advert on mySU, so as to ensure that word of our study is spread all over the campus. We will however make sure that we do not disclose the aim of our study so as to not compromise validity of the data collected and our findings. The sample, being considered will be of a large number (≥400), since having a huge number will enable us to select what we think will be the best most thoroughly answered questionnaires. Also, it will be multi-cultural and for both Undergraduates as well as Graduates, in order to ensure that there is no ethnocentric bias[[5]](#endnote-5) involved upon the conclusion of the study. The reason we want all kinds of students of Sabanci is because of the variance in their stress levels due to their different cultural and ethnic backgrounds, since it would help when we attempt to generalize[[6]](#endnote-6) the results of our case study later onwards.

For the study, we need two main groups: the control[[7]](#endnote-7) and the variable group respectively. In the variable group, participants who have stress problems that are directly affecting their grades will be present, and these participants can have both good and bad grades, since the aim of this study is to find either a positive/negative correlation between stress and grades. The independent variable[[8]](#endnote-8) over here will be the elimination of stress through therapeutic sessions for the final sample, and the dependent variable will be their grades over the course of the study, with respect to the IV in order to establish a cause and effect relationship between the two, and conclude as to whether stress plays a huge role in determining academic performance or not. The control group, on the other hand shall have students with little or no stress problems, and also ones which have good grades with respect to those in the variable group. Again, this is to further validate our hypothesis, since both groups will be subjected to therapy over the course of this study and allow for a fair generalization as to whether removal of stress can enhance performance or not.

In the first stage of our study, we hand out the multiple choice questionnaires, which we shall present in the cafeteria along with some snacks to add as an incentive for filling the questionnaires out. The large sample of 400 shall be recorded and analyzed. This will be a quantitative approach, since it is easy to evaluate MCQs for such a large sample. And, for the next round of questionnaires, we’ll reduce it to approximately 120 people by identifying the main group of those with stress affecting their grades to be half of that sample, and the other half of those who think stress doesn’t affect their grades. The reason for picking 120 people is to get at least 80 attendees for the event. The next questionnaire will be a more qualitative one, and will be done in an auditorium (e.g. FMAN 1099) in order to allow for an in-depth analysis of these remaining participants from the previous sample. Again, snacks will be provided as an incentive for them to participate in the event. The questions will be more opinion-based, but easily attemptable in 10 minutes or so. A special question with verbs to identify the level of stress of the participants will be provided; where the participants will choose the verbs which best explain their stress levels (e.g. ‘overwhelmed’ or ‘insane’). After choosing a verb, another question will be asked with respect to the verb selected in order to facilitate an in-depth analysis of the particular participant. Afterward, a presentation will be given on ‘Coping Strategies for Stress’ and the second stage of the study will be concluded.

Next, we shall evaluate the questionnaires, and pick a sample of 45, since picking a much smaller sample might become a problem because there is a danger of some participants leaving the study before it is complete. And, also because we need at least 30 attendees in the case that some decide not to come. Then, we shall contact the participants after a month, and explain a bit as to what the study is about, and seek their consent to be participants to therapeutic sessions over the course of the study.

For the sessions, we will attempt to hire/get psychologists, since only they would be able to carry the study in the orderly manner. The sessions shall be around 15-20 minutes, and one psychologist for a group of four students in order to increase efficiency of the study.

**Team Responsibilities**: As a team we will work in an inclusive structure where every member is allowed and in fact facilitated to give his input on all aspects of the work. However, team members will have certain specialization that they will be expected to handle apart from their regular work

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| --- | --- | --- |
| Name | Job title | Work Description |
| Mohsin Hussain | Over-all supervisor | Planning, leading, |
| Imran Sharif | Proof Reader/Content Writer | Content Writing, Proof reading drafts from other departments |
| Raza Virani | Team Coordinator/Content Writer | Organizing, Troubleshooter, content writing |
| Muhammad Ammar | Finance manager, procurement manager | Budget Allocation, Procurement of good required. |

1. **BUDGET ALLOCATION FOR THE EXPERIMENT**

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| Date of expense | Amount (in TL) | Explanation/justification |
| 1st Week | 300-400 | Refreshments for 400 Questionnaire participants. |
| 1st Week | 200-400 | Miscellaneous (Transportation, Printing) |
| 4th Week | 450-500 | Lunch for 120 Questionnaire Participants |
| 6th Week | 50-100 | Arrangements for Presentation and feedback |
| 8th Week-16th Week | 1200-1600 | Therapy sessions of 30 participants with Professional Psychologist/Psychologists |

As discussed above in the earlier section, the need for presenting an incentive to the students for joining the study is all the more necessary, and we have as a group reached to a conclusion that providing adequate refreshments during the distribution of the 1st and 2nd questionnaires will facilitate that impression on the student body. Since the first sample is of a large number, the need to have approx.400 liras for supplying them with refreshments is to be deemed all the more essential. The next sample, which is smaller than the previous one, but nevertheless a huge number, would also require 400-500 liras as per their refreshments to ensure they stay throughout the stage and also perhaps feel more inclined to give their consent. We plan to give this sample better refreshment than the earlier one, since their participation is more significant than that of the earlier one (for e.g. Dominoes Pizza, as the final sample will be required for the final and actual stage of the study itself.

As far as miscellaneous costs are concerned, the amount we’ve asked for should be deemed reasonable, since we’ll be doing mass printing of questionnaires in order to ensure that our samples for the study don’t feel short of them. Also, we’ll be required to travel into the city more than occasionally to either get psychologists for study, or at times visit them to discuss the study when it’s ongoing, and later to get their input on the findings for our study in order to later form a proper report as a conclusive end to the result of our study. Since the frequency of our visits is unpredictable, the need to have the amount specified in the table is quite necessary. Also, the possibility of having professional meetings with these psychologists, or with other such members seems quite high, and the amount we’ve asked for shall be able to provide for the preparations involved in these kinds of gatherings.

Our last sample of 30 participants will be going through therapeutic sessions once a week by professional psychologist/s and therefore, the need to pay these professionals should also be kept in mind. We’ve concluded that the amount we’ve specified as their fees should be more than enough, and we plan on getting professionals who would be ready to contribute to such a beneficial case study as this. The fees is not high, considering the fact that psychologists usually demand for more, but if we believe that it would be sufficient for the ones who are dedicated to the profession, and who aren’t that famous, but are nevertheless significant members of the Psychological community.

1. "Student Stress at University and College Reaching All-time High | Windsor Star." *Windsor Star*. N.p., n.d. Web. 21 Apr. 2013. [↑](#endnote-ref-1)
2. Beswick, Katie. "Academia, Stressful? Not for Me!" *The Guardian*. Guardian News and Media, 08 May 0018. Web. 21 Apr. 2013. [↑](#endnote-ref-2)
3. "Case Study - Psychology and Anxiety / Stress." *— SCIPS*. N.p., n.d. Web. 21 Apr. 2013. [↑](#endnote-ref-3)
4. "The Globe and Mail." *The Globe and Mail*. N.p., n.d. Web. 21 Apr. 2013. [↑](#endnote-ref-4)
5. "Ethnocentric Bias." *Ethnocentric Bias*. N.p., n.d. Web. 23 Apr. 2013. [↑](#endnote-ref-5)
6. "Generalization." *Dictionary.com*. Dictionary.com, n.d. Web. 23 Apr. 2013. [↑](#endnote-ref-6)
7. "What Is the Control Group?" *About.com Psychology*. N.p., n.d. Web. 23 Apr. 2013 [↑](#endnote-ref-7)
8. "Independent and Dependent Variab." *Independent and Dependent Variab*. N.p., n.d. Web. 23 Apr. 2013. [↑](#endnote-ref-8)