

## The relationship between stress and academic performance with the Albanian students

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### Abstract:

*Stress can have an impact on a student's academic performance. This research aims to study the relationship between stress and academic performance. The research was conducted in the European University of Tirana and Faculty of Social Sciences of Tirana, two of the leading Albanian universities. 600 students were recruited from two universities. The basic measuring instrument of this research was the questionnaire for measuring Student Stress Scale. Within the questionnaire were incorporated the outcomes of a previous research on stressors in the Albanian context. The academic performance was measured through students' self-reporting of their average grade during the first semester of 2013-2014 academic year. This research resulted that there is a significant relationship between stress and academic performance. The outcomes of this research, being the first empirical data investigation the factors that stress students the most, will help the University develop ongoing programs on stress management and its reduction. A much larger survey would need to be conducted in order to provide an appropriate sample size.*

**Key words:** stress, academic performance, university, stress management

### Introduction

An important part of the mission statement of most universities is the education of students and preparing them for lifelong

learning. Stress is the foremost impediment to academic performance, outranking the other top 10 impediments to learning, including cold, flu, sore throat, sleep difficulties, concern for a troubled friend or family member, and relationship difficulties (Abid, H. C. 2006). Stress is defined as a special relationship between the person and the environment being evaluated by the individual as lack or excess of his/her inputs, endangering his/her welfare (Lazarus & Folkman, 1984). Hans Seley (1974, 1976) and the coping model (Lazarus & Folkman, 1984), focus on the interaction between people and their external environment and define that stress is an imbalance between requirements, external sources and the individual, this is becoming present when the pressure exceeds the perceived ability to confront it. In this context several efforts have been made to identify the types of stress most often experienced by college and university students (Abouserie, 1994; Dill & Henley, 1998; Edwards, Hershberger, Russell, & Markert, 2001; Hudd, 2000; Pengilly & Dowd, 2000; Ross, Niebling, & Heckert, 1999). Factors that stress out students should be evaluated and identified continuously and competently, to explore the patterns of the stress at students referring to social trends and cultural norms of the country. Stress is a part of students' existence and can impact how students cope with the demands of college life. Research shows that there is a relationship between stressful life events and poor health-related quality of life among college students. In the spring of 2003, the NCHA showed that respondents identified stress as the highest impediment to academic performance for the past school year. We can attribute many of the emotional and physical symptoms common in the college population, such as fatigue, hypertension, headaches, depression, anxiety, and an inability to cope to stress. Excessive stress reduces work effectiveness, contributes to bad habits, and results in negative long term consequences, including addictions, crime, absenteeism, poor academic performance,

school dropout, professional burnout, and, ultimately, career failure. (Kuhn, 2005).

Our purpose in this study was to examine the impact of stress that Albanian students experiencing in academic performance, where stress is categorized in academic stress, interpersonal, intrapersonal and environmental. We based the results of the study on a random sample of students at two largest, research-intensive, land grant institutions located in the European University of Tirana and Faculty of Sciences of Tirana.

### **Prior research on student's stress**

Stress is a major theme in the literature used by the social sciences, behavioral, and those who focus on the study of life. Sipas Cohen, Kessler & Gordon (1997) stress is defined as a process in which demands that comes from the environment or threaten the adaptive abilities of the the individual organism, derive psychological and biological changes, which may place the individual in front of various diseases.

A large number of epidemiological studies suggest that individuals who do not have social support have greater predisposition to be affected by problems of physical and mental health (Cohen, S, Janicki-Deverts, D, & Miller, G. E. (2007). Students of the University are subject to several types of stress related primarily to entering in a new phase of development, called early youth (Briere, J & Elliott, D. 2000). Erikson (1968) said at this stage, young adults are faced with issues such as intimate relationships, choosing a career, transfers from home, starting a first job, therefore, the transition from high school to college or university is often accompanied by positive and negative efforts to face high levels of stress (like drugs alcohol) etc.

However, studies have shown that not only these major life events (like the beginning of university, starting a new job,

etc.), but also the everyday concerns (the pressure of time, debates with colleagues, etc.) are very important stressor to students (Goff 2009, Ang, R. P, & Huan, V. S. 2006).

The reduction of stress is a goal for many persons stress can either hinder or motivate performance. The direction of its effect depends on the perception of the individual. When stress is perceived negatively or becomes excessive, it may become linked to physical and mental illness. The process of university education evaluates the student constantly and causes reevaluation of the self-image. As the term progresses stress rises with every paper and examination. Stress can affect both health and academic performance. Among other health risks, it may result in increased blood pressure, a stress-related condition leading to an elevated risk of disease (Talib, N & Ziaur-Rehman, M. 2012).

To avoid damage from stress, people learn to deal with the pressures they experience. Blake and Vandiver (1988) reported that university students often attempt to control their stress through avoidance, which can produce adverse effects on emotional and physical health. Other methods to reduce stress may include religion, social support, or positive reappraisal (Misra, R, McKean, M, West, S, & Russo, T. 2000).

### *Student's stress and academic performance*

Academic performance is the only indicator of the quality of time that a student spends in college. Over the years, academic performance at different levels of study is measured by the results of their exams (Kyoshaba 2009). Various studies have highlighted the fact that a good average grades always serves as an important indicator to open a new window in life for a better job opportunity, better pay, and a more educational opportunities (Ang & Huan, 2006). College students experience higher stress in predictable time each semester due to academic commitments, financial pressures and management capabilities to lack of time. When stress is perceived in a negative way or

becomes excessive, can affect academic performance and health. (Campbell & Svenson, 1992).

Students also face emotional problems, physical, and family issues, that may affect their ability of learning and their academic performance. Excessive stress can cause mental and physical health problems, can reduce self-esteem and can affect students' academic achievements.

Several studies examine academic performance in the general population of students at the university using their grades average to measure their academic performance (Mani,V. 2010. McKenzie, K&Schweitzer, R. 2001, McNabb, R, Pal, S&Sloane, P.2002).

In general, stress regarding university is revealed to be connected in reverse with student academic performance between traditional (Krause, K, Hartley, R, James, R&McInnes, C. 2005), and the students on their first year in particular (Sharma, N. Kaur, A. 2011).

## **Purpose of the Study**

This study aims at measuring the intensity of stress categorized under academic stress, interpersonal and environmental and their impact on student academic performance. This type of classification between academic stress and other kinds of stress (interpersonal, or environment) contains a significant benefit conception (Gurjeet Kaur, Jyoti Sharma, Tejveer Lamba, 2012). In summary field goals of this study will be constituted, measuring the level of stress to students referring stress classification into four categories: academic stress, intrapersonal, interpersonal and environmental him, and measuring student academic performance through self-report the average grade of the first semester.

Independent variable.

1. The level of stress among students.

Questionnaire to measure the level of stress to students: questionnaire built on the sources of stress identified by the questionnaire presented by identifying the sources of stress to students: *Student Stress Survey (Ross et al., 1999); the Student Stress Scale (Insel & Roth, 1985) and the Taylor Manifest Anxiety Scale (Taylor, 1953).*

The dependent variable

1. Academic Performance

Selfreport of the GPA:

- for the first year students, GPA first semester
- for the second year students, GPA first semester
- for third year students, the average grade of the first semester

## **Hypotheses**

1. The first hypothesis examined the relationship between academic stress and academic performance. It was expected that the low level of academic stress had a positive impact on the academic performance of students.
2. The second hypothesis examined the relationship between interpersonal stress and academic performance. It was expected that the low level of interpersonal stress was poztiv impact on the academic performance of students.
3. The third hypothesis examined the relationship between stress intrapersonal and academic performance. It was expected that the low level of stress intrapersonal have poztiv impact on the academic performance of students.
4. The fourth hypothesis examined the relationship between environmental stress and academic performance. It was expected that the low level of

environmental stress have poztiv impact on the academic performance of students.

*The following research questions guided this study:*

1. What is the relationship between academic stress and academic performance?
2. What is the relationship between interpersonal stress and academic performance?
3. What is the relationship between stress intrapersonal and academic performance?
4. What is the relationship between environmental stress and academic performance?

*Research question*

The main research question in this study examined the impact of all types of academic stress, intrapersonal, interpersonal, and environmental in academic performance to Albanian students.

## **Data and Methodology**

*Participants and Procedure*

The present study was conducted in two of the largest Albanian Universities, the European University of Tirana and Faculty of Social Sciences of Tirana. Convenience sampling was used, i.e., questionnaires were distributed to students who were having classes on the specific days (and time) during which the researcher visited the settings. Data were collected during a time period of fourteen days. Participants were briefed about the purpose of the study and their right to withdraw at any time without penalty. They also signed an informed consent to take part in the study. The anonymous questionnaires were completed in class.

The study reached out to 620 students. The response rate was 93.2%, i.e., 7.8 % of the students did not accept to become part of the study. Therefore, the final sample for

analysis consisted of 600 students, 180 men (%) and 420 women (%). The age of the participants ranged from 17 to 37 years with a mean age of 20.4 years ( $SD = 2.25$ ). In terms of level of study, 200 participants were first level students, 200 were second level students and 200 were third level students.

## **Measures**

### *Instruments*

The main version of this study of academic performance was measured through self-report of average grades of students from the first semester and was taken by the students participating in the site on demographic data.

Independent variable was academic stress, interpersonal, intrapersonal and environmental, which was measured by measuring the stress questionnaire to students. This questionnaire was built on the stressors that Albanian students reported in a previous study by applying the questionnaire: The measure used in the study was the Student Stress Survey (Ross et al., 1999). This survey was constructed based on two pre-existing surveys, the Student Stress Scale (Insel & Roth, 1985) and the Taylor Manifest Anxiety Scale (Taylor, 1953). The measure was translated into Albanian and back translated into English by certified translators proficient in both languages. Furthermore, prior to the actual study, a pilot study (fourteen participants) was conducted in order to make sure that the questionnaires were comprehensible to the participants. No problems were encountered during this procedure.

The questionnaire is a self-report including 42 items that assess academic, interpersonal, intrapersonal, and environmental stressors. The participants responded to 5 degrees by reference 1 = not at all agree, 2 = slightly agree, 3 = undecided, 4 = agree, 5 = strongly agree.



Academic stress was assessed with 21 items focusing on school-related activities. This category included items such as: The beginning of studies in University has caused me difficulties in adaptation; I get worried by the volume of academic obligations for each academic year; I feel stress and anxiety prior to the exam because I want to go well; Stay up late before every type of testing (test) that have at school; I feel that there is a big difference between my current results at the university and high school results.

Interpersonal stress was assessed with six items evaluating interactions with other people and include. Items included: It cause me stress my parents with their demands for my achievements; I feel that since I started high school, my social activities have changed, (I get out more with friends, spend more time on new recognition); Various conflicts with my roommates / friend of the room constantly irritate and cause me stress.

Intrapersonal stress was assessed with ten items evaluating internal sources of stress. Items included: I feel hopeless when I think of where to find a job after finishing studies; Living away from home causes more stress; Not enough sleep because I get stree out (due to the fulfillment of my academic, social activities with friends, lack of good management of time.) Environmental stress was assessed with four items evaluating problems in the environment (except for academic problems). This category included the following items: My parents' divorce makes me feel insecure about my future; Problems with the computer give me anxiety; Living in chaotic conditions causes more stress and distraction in general; unfamiliar situations makes to experience more anxiety and tension.

## Empirical Analysis

The relationship between each category of stress and academic performance. In response to the first research question, researcher examined the relationship between four categories of stress and academic performance of Albanian students. Pearson correlation was used to measure the degree of strength of the relationship between the independent variable of academic stress and the dependent variable of academic performance. Self-reported average grade at the end of the first semester, by which he measures the academic performance, ranged from grade 5 to grade 10 with a note measure ( $M = 7.69$ ). Table 1 shows the Pearson correlation between the independent variable of academic stress and the dependent variable, academic performance. Results show that the relationship is negative and statistically significant ( $r = -.088$ , or approximately  $r = .09$ ,  $p < .05$ ). Increased academic stress is associated with reduced academic performance. Although the association between the two variables is statistically significant, the correlation is weak.

**Table 1: Relationship statistics (Pearson correlation) between academic stress and academic performance**

Independent variable	Academic stress	
Dependent variable	Academic performance	$r = -.088^*$ $p < .05$

*Shenim:*  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$ .

Table 2 shows the Pearson correlation between the independent variable, interpersonal stress and the dependent variable, academic performance. Results show that the relationship is negative and statistically significant. ( $r = -.012$ ,  $p < .01$ ). Relationship between two variables is statistically significant and reference data, we can say that the bond strength is

average. Increased interpersonal stress associated with reduced academic performance.

**Table 2. Relationship statistics (Pearson correlation) between interpersonal stress and academic performance.**

Independent variable	Interpersonal stress	
Dependent variable	Academic performance	r=-.12** p<.01

*Shenim: \*p < .05, \*\*p < .01, \*\*\*p < .001*

Table 3 shows the Pearson correlation between the independent variable, intrapersonal stress and the dependent variable, academic performance. Results show that the relationship is negative and statistically significant. (r = -.014, p<.001). Relationship between two variables is statistically significant and reference data, we can say that the bonding strength is average. Increasing intrapersonal stress associated with reduced academic performance.

**Table 3. Relationship statistics (Pearson correlation) between intrapersonal stress and academic performance.**

Independent variable	Intrapersonal stress	
Dependent variable	Academic performance	r=-.014** p<.001

*Shenim: \*p < .05, \*\*p < .01, \*\*\*p < .001*

Table 4 shows the Pearson correlation between the independent variable, environmental stress and the dependent variable, academic performance. Results show that the relationship is not statistically significant. (p = .971), so the null hypothesis can not be rejected. Results conclude that environmental stress and academic performance are not related to each other. The data show that 0% of the variance of academic performance can be predicted based on the total stress (R<sup>2</sup> = .00) (or academic

performance variance not explained total stress at all).

**Table 4. Relationship statistics (Pearson correlation) between environmental stress and academic performance**

Independent variable	Environmental stress	
Dependent variable	Academic performance	r=.001 p=.971

*Shenim: \*p < .05, \*\*p < .01, \*\*\*p < .001*

## Discussion and Conclusions

The aim of the present study was to determine the stress among students at the European University of Tirana and Faculty of Social Science of Tirana. It was hypothesized that the four category of stress, academic, interpersonal, intrapersonal and environmental impact on academic performance of the students. Results showed that the three first of category of stress impact academic performance. For the academic stress results partially supported the hypothesis as negative relationships were found for the academic stress and academic performance. Results for interpersonal and intrapersonal showed that the relationship between two independent variables and academic performance (dependent variable) is negative and statistically significant. Relationship between two variables is statistically significant and reference data, we can say that the bonding strength is average. Finally, no significant relationships were found between environmental stress and academic performance.

For the three categories of stress, besides environmental stress, the results showed that there is a negative relationship between the three of them and the academic performance, which means that the increase the level of stress in these categories associated with decrease of the academic performance. Of course all the policies of universities are interested in continuously improving the programs that enable

increased of academic level, and therefore these results suggest that Albanian students experiencing the average stress level, which affect their academic performance and present the need for intervention in reducing stress that they experience.

Findings on a negative relationship but not so strong between academic stress and academic performance suggested anyhow, the need to direct for stress management programs not only towards first year students dealing with adaptation issues but also older students who are about to graduate. In considering academic stress among university students, first year students experienced the most stress from the perception of academic overload. This was attributed to the fact that these university students must deal with the transition into university life as well as meet the academic demands. Issues such as the graduation itself or what to do next (career counseling) might be of particular interest to these students; the specific Albanian context of an exponentially growing number of graduates from public and private universities on the one hand and the scarcity of jobs on the other, make this kind of issues even more pressing.

On the other hand, the fact that the results showed a negative average connection between interpersonal and the intrapersonal stress, shows that the urgent need for intervention through the application of psychological counseling or various programs of management of stress which are mainly focused on interpersonal and intrapersonal problems. The management of interpersonal relationships as well as self-management seems to be pressing issues at these earlier stages of the academic life. These findings are in line with studies suggesting adaptation and maturation effects (Erikson, 1968; Pillow, 2008; Ross, 1999). From a practical perspective, the results suggest that apart from individual level counseling, specific programs (group activities) might be designed which allow students to improve their interpersonal skills. Intrapersonal problems also need particular attention in these

early years; inability to control mood changes (depressive or anxious) seems to be particularly troubling for at least some of these students. Future research might examine further this particular aspect, e.g., by assessing the symptoms of these specific disorders (anxiety and depression).

In conclusion it must be mentioned that the present study also has several limitations. For instance, the findings cannot be generalized to other Albanian university students, apart from the European University and Faculty of Social Science of Tirana. Furthermore the fact that strong significant correlations among stress and academic performance were not found in the current study may be due to several limitations. Some students did not complete every question, creating gaps in data on both instruments, and further limiting the total amount of data available for final analysis. In addition, there may be limitations of using self-report GPA to measure academic performance in this sample. Despite the several limitations the findings of the study provide a first step towards the identification of stressor patterns among Albanian students. Future research might address these same issues, but with improved measures and a larger representative population of Albanian students.

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