

# THE RELATIONSHIP BETWEEN ACADEMIC STRESS OF STUDENTS AND THE FACTORS THAT AFFECT ON IT

**Petrit Taraj<sup>1</sup>**

<sup>1</sup>Lecturer in the Department of Education, University of Vlora Ismail Qemali,  
Full Address: L.Pavarësia, 9400 Vlora, Albania.  
Email: ptaraj2@gmail.com

## **Abstract**

This study seeks to investigate and identify relationships between students and academic stress factors that cause it. In carrying out this study was used a random selection of samples to conduct thorough and detailed interviews with students at the University of Vlora Ismail Qemali. The researchers adapted a questionnaire about these students' academic stress, which contained 69 questions. It is a pilot study to validate the reliability and validity of the requirements of a qualifying pre-examined study. The aim of the study is to see the level of reliability used to serve a broader study on a national scale. Through factor analysis it will be determinate which factors have had more impact on increasing students' stress. In the survey attended 130 students from the Faculty of Humanities of the University of Vlora Ismail Qemal. Statistical Package of Social Sciences (SPSS for Windows XP) was used to conduct surveillance of the data and the statistical analysis of the pre-examined factors. It is an ongoing study, where from the researchers is asked to evidence if whether certans factors such as: time management, self-management, the performance of teachers, overcrowding, academic programs, finances and relationships with society, have affected in the growth of academic stress of the students. Data 's analysis will identify if there is a correlation between the factors mentioned above and the academic stress experienced by students.

**Keywords:** *stress, stress factor, academic stress, academic performance, perceived stress.*

## I. INTRODUCTION

Stress in academic institutions can have positive and negative consequences if there are not well -managed (Smith, 2002; Tweed et al, 2004; Stevenson & Harper, 2006). Upon the causes of stress at the universities and the coping behaviors of the students have become and are becoming more studies (Stren, M. & Zevon, M., 1990; Plunkett, S.W., Radmacher, K.A. & Moll-Phanar, D., 2000). Studies have shown that stress is a significant catalyst and a precursor to depression (Price, J.H, 1985; Basch, C.E. & Kersch, T.B, 1986). A disturbing trend in the health of university's students is the reported increasing of the students' stress (Sax, 1997). Stressors that affect students can be categorized as academic, financial, related to time or health, and self-imposed (Goodman, 1993, LeRoy, 1988).

In study was used an appropriate ,controlled literature that served as an important base to explore the factors that cause academic stress to students. Students report experiencing stress during each academic semester and identify that the main sources of academic stress result the performance and study for exams, competition for grade and quantity of the content of the information that is required from academic staff to master for a short time (Abouserie, 1994, Archer & Lamnin, 1985; Britton & Tesser, 1991; Kohn & Frazer, 1986).

*The aim of the study* is to assess the stress factors that have an impact on increasing students' academic stress, through reliability assessment of the questionnaire developed and self-administered by the researchers. *The first objective* of this study is the adequacy of the instrument developed by researchers in the reliability and validity of the requirements of a qualifying pilot study. This study through the selection of the factors that cause academic stress to students seeks to bring and to handle a complete list of the factors of academic stress tested empirically. Specifically, this study seeks to answer the following research questions:

*Are the identified factors in this study because of the increased level of student academic stress?*

*Is there a statistically significant correlation between the level of student academic stress and factors identified in the study.*

The questions above converge in a second study objective: finding a significant correlation between academic stress and factors identified in the study. Starting from the intention in the study the following assumptions are highlighted:

***The hypothesis of the study:***

*H<sub>0</sub>*: There is no correlation between academic stress and stress factors.

*H<sub>1</sub>*: the stress factors identified in this study affect the growth of student academic stress.

In the literature review section, the study findings are presented in relation to contemporary academic stress experienced by university students. Factors identified in the literature that had impact on the growth of academic stress, are the subject of this study to analyze and evaluate. In the section of the methodology used in this study is described, the followed process by the researchers for the task research, the purpose and objectives of the study. Descriptive and statistical analysis of the data in the study describes step by step the process of research. An important aspect in the study is the discussion of their findings. In the study were also discussed the implications of the results and limitations of the study due to small sampling of the sample . Of course, that this study with the provided findings gives possibilities and opens perspectives for further studies with generalizing value.

## II. LITERATURE REVIEW

Stress has become an important topic in academic circles of our society. Many researchers in the field of behavioral psychology have conducted extensive research about

stress and the results is that this topic deserves more attention (Rees and Redfern, 2000; Ellison, 2004; Ongori and Agolla, 2008; Agolla, 2009). Stress occurs when an individual is faced with a situation they perceive as unaffordable. For academic stress among students has been a long time doing research and researchers have identified stressors that affects on it as redundant tasks, competition with other students, failures, lack of money in the pocket (Fairbrother and Warn, 2003), poor relations with other students or teachers, family or problems at home. For (Ongori, 2007; Awino and Agolla, 2008) the level of stressors in the institution (university) grows from overcrowded lecture halls, semester system, and inadequate resources to carry out academic work. Studies argue that stress shows up in important cases and when the results of these situations are not clear, then individuals form a kind of uncertainty itself. Cognitive-relational theory defines stress as a special relationship between the person and the environment, emphasizing on reciprocal nature of interaction between the person and environment (Lazarus & Folkman, 1984).

A review of the literature shows that university students can experience stress due to factors such:

- 1. health factors.**
- 2. academic factors**
- 3. social factors.**

Academic Stress permeates the lives of students, and tends to adversely affect their mental health and physical, and their ability to perform effectively in school. In their study (Agolla, E.J & H Ongori, 2009) found that the main causes of stress among students are academic workload, insufficient resources, low motivation and poor performance in academic work, overcrowded lecture halls, and job insecurity after graduating from university. This finding is consistent with previous studies (Erkutlu and Chafra, 2006). Seyle considers the lack of stress in life as something not very good and he has also active function. Stress can be divided into four main categories: a balance between under-stress and over-stress should be noted and positive stress should be obtained to reduce anxiety. Details are as follows:

1. *Over-stress*: When an individual's adaptive capacity is neglected then it is produced over-stress.
2. *Under-stress*: Inefficient needs and lack of self-realization of desires cause under-stress.
3. *Positive Stress*: Under the action of a certain stress individuals experience a feeling of joy and happiness.
4. *Anxiety*: The last one happens often and easily causes disease. Individuals create a feeling of sadness.

Based on the born character of the stress Karl and Anderson generalized stress in four categories:

- Stress review by external circumstances,
- Stress review by their own perception or assessment of the circumstances,
- Examination of stress as a kind of relationship between environmental needs and individual response abilities.
- Examination of stress as a kind of relationship between environmental needs and individuals.

The experience of stress among college students is considered normal, but “if the stress is severe and/or prolonged, it can reduce academic performance, affect the student's ability to participate and contribute to in the campus life, and increase the likelihood of drug abuse and other behaviors potentially harmful” (Richlin - Klonsky & Hoe, 2003). A form of stress that is constantly being experienced by college students is stress related to academic concerns. “Academic Stress is a product of a combination that it is related to academic requirements that exceed the adaptive resources available to an individual” (Wilks, 2008).

“Stress is a physical and mental answer for daily tasks, especially those related to the change” (Richlin-Klonsky & Hoe, 2003). Academic stress is a concern that should not be taken for granted because it adversely affects the overall arrangement of students (Hussain, Kumar, & Husain, 2008). Some studies have already documented the effect of stress on students (e.g. Agolla & Ongori 2009, Hussain et al, 2008;. Masih & Gulrez, 2006; Sheikh et al, 2004;. Sulaiman Hassan, Sopian and Abdullah, 2009). In 2005, Kumar Jejurkar “found that the academics factors were responsible for the high level of stress” among university students.

Students showed that academic workload is due to the short term where they have to cope with the tests and preparation for the final exam of the semester and the multiple tasks (Misra and McKean, 2000). They cited the need to perform more work within a short time to have a good academic performance, but this doesn't allow them much time to enjoy their social life. This finding coincides with other studies (Ongori, 2007; Agolla, 2009).

### **III. METHODOLOGY**

This study used a rich literature for studies about academic stress to build an academic stress gauge on the students of the University “Ismail Qemal” Vlora. Through interviews and free conversations researchers have asked students to give their opinions on factors that cause academic stress. Students' responses were analyzed based in other studies that have shed light on the factors that cause to student academic stress. From the analysis of students' responses were resulted that students suggested many factors that converged between them. The aim was to build an instrument for measuring the academic stress and the factors affecting in its growth. For this he used two sources:

*First Source:* A questionnaire used by Ying Ming Shing Lin & Farn Chen (2009), which contained 34 items (questions) included after factorial analysis in 7 (seven) factors.

*Second Source:* factors were selected from the responses of students of the University "Ismail Qemali" Vlora. After analysis and students' opinion was drafted a questionnaire that included 69 questions about academic stress.

#### **Subjects**

In this study used a random selection of samples to conduct assessment of the designed instrument. In this study were called about 150 students from the Faculty of Humanities at the University "Ismail Qemal" Vlora. 20 questionnaires were not fulfilled correctly and the researchers had thought to disqualificate them in this analysis. The used sample for this study is 130 students who were promised by the researchers the anonymity right.

#### **Respondents' Profile**

Respondents were selected at a random way. Most of the students were females (70%) with a frequency distribution 91 and (30%) were males with a frequency distribution 39.

#### **Procedures**

A survey of 7 pages divided into three sections was distributed to the students to report their academic degree of stress experienced during this academic year.

*Section One:* Students are required to report their sex and public university where they study.

*Section Two:* Students were asked to report the level of academic stress experienced, considering factors such as the performance of teachers, teaching overload, time and self management, curriculum, teaching and living conditions, relationships with friends, financial aspects. A five-point scale of Likert-type from 1(no Stress at all) to 5 (extreme Stress) was used by researchers to measure the level of stress experienced by students during this academic semester.

*Section Three:* A five-point scale Likert-type was developed by researchers that seek to the students reporting their opinions on 69 questions contained in this section of the questionnaire. The purpose of the survey is to meet the first objective of the study, which is a measure of the degree of reliability with 5 points of Likert-type, from 1 (Strongly disagree) to 5 (Strongly Agree) used and piloted for the purposes of a national study with values generalizing.

#### IV. STUDY RESULTS

##### Statistical Analysis.

Statistical Package of Social Sciences (SPSS for Windows XP) was used by researchers to analyze the data obtained from the survey application that used a self-administered instrument and designed to measure the impact that stress factors cause in increasing the level of academic stress of students. Factorial analysis in this study used the Bartlett test that aims to detect variables that are related between them. Bartlett test of this questionnaire is 4.874E3 similar to the Chi-square value (a test used to detect how appropriate is a theory by comparing with the studied phenomenon). Value (Sig) = .000 indicates that the questionnaire reached statistical significance level of  $p < 0.005$ . After statistical estimates, the value's size of monitoring compliance of Kaiser-Meyer-Olkin KMO was 0.689 and therefore coincided with the principle determinant of Kaiser statistical scale  $KMO > 0.6$ . This value demonstrated the appropriateness of applying the factorial analysis.

- Total Variance Explained analysis revealed 9 factors that have a powerful correlation  $> 1$  that in factorial analysis must be taken into account. In factorial analysis only factors with coefficient correlation that are under 0.30 are excluded from the analysis.
- (Table 1) clearly shows that the index (Kaiser-Meyer-Olkin Measure of Sampling Adequacy)  $KMO > 0.6$  and Bartlett's Test of Sphericity equal to the Chi-square test shows that (Sig).000 so  $p < 0.005$  confirms the standartization of piloted test and that it is statistically significant.

**Table 1**

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.689
Bartlett's Test of Sphericity	Approx. Chi-Square df	4.874E3 2346

Sig.	.000
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### Analysis of reliability

Study applied the reliability test of Chronbachut. The total value of Cronbach's Alpha (Table 2) of the acceptance scale that measure the level of academic stress was ( ) = 0.941 indicating that domestic consistence of the scale is excellent. This proved that the reliability of the various factors of academic stress's pre-examination questionnaire reached the required level from the standards of evaluation.

- Factor 1: The performance of teachers = 0.843;
- Factor 2: Results of the study = 0.868;
- Factor 3: Overload = 0.720,
- Factor 4: Time Management = 0.418;
- Factor 5: Self- Management = 0.734;
- Factor 6: Environmental factor = 0.686;
- Factor 7: Academic Programs = 0.795;
- Factor 8: Finance = 0.367;
- Factor 9: Relations with society = 0.753.

**Table 2**

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.941	.955	69

### Analysis of academic stress experienced

Descriptive analysis of academic stress shows (Table 3) that the average (Mean = 3.2) The Error of Mean is (0.08869) negligible. Std. Deviation (standard deviation) = 1.00344 negligible for the statistical analysis of the variable.

**Table 3**

### Statistics

#### Stresi i perjetuar

N	Valid	128
	Missing	2
Mean		3.2188
Std. Error of Mean		.08869
Std. Deviation		1.00344

Descriptive statistics of the dependent variable of academic stress columns (Valid Percent) introduces this statistical summaries of the data (Table 4)

- No stress 8.6%
- A little stress 10.2%
- Average stress 37.5%
- Many stress 38.3%
- Extreme stress 5.5% of respondent.

So 75.8% of respondents have experienced moderate stress and a lot of stress. The Cumulative Percent Column have to be interpreted (there are not calculated the losted values ) because it gives us a clearer picture of the distribution of rates of variable attributes.

- 18.8% of respondents say that they have experienced less or no stress at all.
- 94.5% of respondents say that they had experienced moderate stress and a lot of stress. So the data are significant: students have experienced high level stress.

**Table 4**

#### STRESI AKDEMIK I PERJETUAR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Aspak stres	11	8.5	8.6	8.6
	Pak stres	13	10.0	10.2	18.8
	Stres mesatar	48	36.9	37.5	56.2
	Shume stres	49	37.7	38.3	94.5
	Stres ekstrem	7	5.4	5.5	100.0
	Total	128	98.5	100.0	
Missing	System	2	1.5		
Total		130	100.0		

## Analysis of the product-moment correlation.

This study used the correlation coefficient of the product - moment to calculate the relationship between academic stress and the factors that cause it. The correlation coefficient was between 0.188 ~ 0.605 and showed that there was a significant moderated relationship between identified stressful factors on a scale of 5 points Likert-type and academic stress. To test the strength of the association between academic stress (dependent variable) and factors that affect in its growth: the performance of teachers, study results, overload, time management and self management, environment, academic programs, financial problems and relations with society (independent variable), was used by researchers bivariate correlation analysis (Bivariate correlations) seeing the value of coefficient  $r$  Pearson product- moment. The correlation coefficient of the product-moment between the dependent variable, stress experienced academic and 9 (nine) independent factors reached values:

1. Academic stress experienced and F.1 Performance of teachers  $r = 0.446$  (moderate).  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
2. Academic stress experienced and F.2 Results of research  $r = 0.600$  (substantial)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
3. Academic stress experienced and F.3 Academic overload  $r = 0.413$  (moderate)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
4. Academic stress experienced and F.4 Time management  $r = 0.299$  (Poor)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
5. Academic stress experienced and F.5 Self management  $r = 0.605$  (substantial)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
6. Stres of experienced academic and F.6 Environmental factor  $r = 0.487$  (moderate)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
7. Academic stress experienced and F.7 Academical programs  $r = 0.551$  (substantial)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).
8. Academic stress experienced and F.8 Finance  $r = 0.188$  (Poor)  
\*. Significant correlation is at the 0.05 level (2-tailed).
9. Academic stress experienced and F.9 Society relations  $r = 0.454$  (moderate)  
\*\*. Significant correlation is at the 0.01 level (2-tailed).

## V. DISCUSSION

According to the descriptive and statistical analyzes data in accordance with the test Cronbach's Alpha of reliability and validity of the scale Likert mentioned above, where ( ) = 0.941 conclude that the first objective of this study ; the suitability of the instrument design by researchers in the reliability and validity of the requirements of a qualifying pilot study was achieved. The statistical results of academic stress experienced by students showed satisfactory results. After Total Variance Explained factorial analysis (explanation of the total variance), 9 factors were identified as factors regarding to correlation , durable and strong to the extent used by researchers, our study also found that the main causes of stress among students are:

1. Management of self  $r = 0.605$  (substantial)
2. Results of the study  $r = 0.600$  (substantial)
3. Programs  $r = 0.551$  (substantial).

These are the three factors that have the value of the correlation coefficient  $r$  higher and statistically this relationship is significant. By analyzing even the other factors we see



that despite the strength of the connection and the impact they have had on students' stress, these factors should not be neglected. *Factor 1*: The performance of pedagogues  $r = 0.446$ , the relationship with students' academic stress is moderate, but is indicative that should be evaluated by teachers. So teachers need to improve the quality of course's content, realistic assessment of students and to reduce the pressure on students. *Factor 9*: Relations with friends and  $r = 0.454$  *Factor 3*: Overload  $r = 0.413$ , are in moderate relationship with students' academic stress, but they are factors that must be evaluated by the students in establishing interpersonal relations, as well as by pedagogues on handling information of the course content, and the release of students from inefficient excessive loads.

According to the positive relationship of the correlation we conclude that factors: self-management, research results and academic programs have had more impact on the growth of academic stress of the students. So  $H_0$  based on the results of Pearson correlation coefficient falls, and the study confirms  $H_1$  that was the purpose of this study. This result is quite consistent with earlier studies (Erkutlu and Chafra, 2006).

## VI. CONCLUSIONS AND RECOMMENDATIONS

Statistical analysis of academic stress to students of university "Ismail Qemali" of Vlora who participated in this study shows that when academic related problems, and the other problems that depends by the students if they are not considered seriously on time will be found problems to students as: disability adaptations, as well as displaying the sad phenomena and physical and mental problem. Instrument of academic stress of this study included 69 items as a result of statistical analysis were grouped into nine factors. Five-point scale of Likert-type was used ranging from 1(Strongly disagree) to 5 (strongly agree). The higher scores of a factor were, the higher degree of stress was experienced by students under the influence produced by this factor. Possible causes encountered in academic stress inventory compiled in this study was the inability of students to manage themselves, expectations and disappointment from the results of studies, and the instability of academic programs. Based on the results of the study is immediate task of academic staffs to assess students' academic stress, and to help to improve the quality of life for students. According to the results of the study also we suggest to the relevant authorities compiling the plans of the appropriate activities or programs for students such as organizing talks on financial management, motivation, time management, study skills and maybe even topics about stress management. These programs should be organized consistently. Departments also need to engage in developing coherent academic programs that respond to society's development, information and technology. The qualitative increase of academic staff in universitie is a immediate task for reducing negative effects of academic stress at students.

### Limitations

This study can be used as a basis for further exploration on the effects of stress level in students' academic performance. In addition, other possible factors that may contribute in increasing the academic stress at students that are not considered in this study such as: environmental factors, family background and previous academic achievement, they can be further explored by researchers in the future. This can help to find the strongest relationship between stress factors and students stress that has impact to academic performance of students. Perhaps the most important limitation of the study is the small size of the sample and the fact that the study was conducted closed at the university "Ismail Qemali" Vlora. The small size of the sample may have contributed to the weak link for some factors, which gave a small correlation coefficient. A sample with larger size that would have included other

universities in the study may give different results even more interesting. The used statistical techniques can affect in the results. In the future, hoping for a more advanced research study can be reached general conclusions about the stress factors that affect on the level of stress and academic performance of students.

## VII. REFERENCES

1. Agolla, E. J. and Ongori H.(2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educational Research and Review Vol. 4 (2)*, pp. 063-070.
2. Agolla,E.J(2009).“Occupational Stress among Police Officers”:Thecase of Botswana Police service, *Res.J.Bus. Manage.* 2(1):25-35
3. Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology*, 14(3), 323-330.
4. Archer, J., & Lamnin, A. (1985). An investigation of personal and academic stressors in college campuses, *Journal of College Student Personnel*, 26(3), 210-215.
5. Basch, C.E. and Kersch, T.B., Adolescent perceptions of stressful life events. *Health Education*, June/July, 4-7(1986).
6. Britton, B.K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405-410.
7. Goodman, E.D. (1993). How to handle the stress of being a student. *Imprint*, 40: 43.
8. Stren, M. and Zevon, M., Stress, coping, and family environment: the adolescent’s response to naturally occurring stressors. *J. of Adolescent Research*, 5, 290-305 (1990).
9. Sax, L.J. (1997). Health trends among college freshmen. *Journal of American College Health*, 45(6), 252-262.
10. Smith A (2002). “The scale of perceived occupational stress”, *Occup. Med.* (50): 294-8.
11. Schwarzer, R. (1998). Stress and coping resources: Theory and review. *Advances in health psychology research*, 1-24.  
[http://web.fu-berlin.de/gesund/publicat/ehps\\_cd/health/stress.htm](http://web.fu-berlin.de/gesund/publicat/ehps_cd/health/stress.htm)
12. Stevenson A, Harper S (2006). Workplace stress and the student learning experience, *Qual. Assur. Educ.*, 14(2): 167-1 78.
13. Tweed RG, White K, Lehman DR (2004). Culture, stress, and coping. Internally and externally- targeted control strategies of European Canadians, East Asian Canadians, and Japanese, *J. Cross Cult. Psychol.*, (35) 652-68.
14. Plunkett, S.W., Radmacher, K.A. and Moll-Phanara, D., Adolescent life events, stress, and coping: a comparison of communities and genders. *Professional School Counseling*, 3, 5, 356-366 (2000).
15. Kohn, J.P., & Frazer, G.H. (1986). An academic stress scale: Identification and rated importance of academic stressors. *Psychological Reports*, 59(2), 415-426.
16. Erkutlu H.V, Chafra J (2006). Relationship between leadership power bases and job stress of subordinates: example from boutique hotels, *Manage. Res. News* 29(5): 285-297.
17. Misra, R., & Castillo, L. G. (2004). Academic Stress Among College Students: Comparison of American and International Students. *International Journal of Stress Management*, 11(2), 132-148.

18. Calagua, M. Glenn (2011). College Academic Stress: Differences along Gender Lines: *Journal of Social and Development Sciences Vol. 1, No. 5, pp. 194-201.*
19. Wilks, S. E. (2008). Resilience amid Academic Stress: The Moderating Impact of Social Support among Social Work Students. *Advances in Social Work, 9(2), 106-125.*
20. Fairbrother K, Warn J (2003). Workplace Dimensions, Stress and Job Satisfaction, *J. Managerial Psychol. 18(1): 8-21.*
21. LeRoy, A. (1988). How to survive a nontraditional nursing student. *Imprint, 35(2), 73-86.*
22. Price, J.H., A model for explaining adolescent stress. *Health Education, June/July, 36-40 (1985).*