

## **R**OLE OF SEX, AGE DIFFERENCE AND LEVELS OF STUDY IN STRESS RESPONSE AMONG UNDERGRADUATES OF BENUE STATE UNIVERSITY, MAKURDI

**\*JOMBO-MBA AMARACHI; \*\*DANIEL BENJAMIN SAANYOL; & \*\*\*ANDOOR TERFA**

*\*Department of Education Foundation, Faculty of Education, University of Nigeria Nsukka \*\*Department of Community Health, IHSAN College of Health Science and Technology Azare, Bauchi State \*\*\*Government secondary school Luvu Madaki, Karu, Nasarawa State.*

### **ABSTRACT**

**S**tress is a natural phenomenon that human beings experience. People experience different level of stress in their life. This study was aimed at assessing the role of sex, age difference and level of study in stress response among undergraduate students of Benue state university, Makurdi. A random selection method was employed. A total of 126 (64%) males and 71 (26%) females took part in the study. Their ages ranged from 18-40 years with the mean age of 1.3604 and a SD of 48134. The statistical analysis involved the use of *t*-test; and Spearman's rho correlation; a Stanford acute stress reaction questionnaire designed in (1991) was used for data collection. The findings showed that there is a significant relationship between levels of study and response in stress. The findings also showed no statistical difference

### **Introduction:**

Stress is a natural phenomenon that human beings experience. People experience different level of stress in their life. This implies that Stress is a common element in the lives of every individual, regardless of race, cultural background or nationality (Garret, 2001). Stress is categorized into two perspectives: minimum stress and excessive stress. Lo (2002) rightly argues that all people have minimum stress; however, excessive stress may results to anxiety that is harmful to health.

*between male and female in response to stress among undergraduates; and no significant relationship between age and response in stress among undergraduates;. These findings were discussed within the framework of sex, age and levels of study.*

***Keywords:*** Age difference, Level of Study, Sex, Stress, Undergraduates

The study of stress among students of higher institutions of learning has received considerable attention in recent times. Numerous studies carried out were focused on the causes of stress in an academic environment (Deckro, Ballinger, Hoyt & Wilcher 2002) while other studies explored the effects of stress on students (Park & Adler, 2003; Pourrajab, Rabbani & Kasmaienezhadfar, 2014).

A general assumption exists in the literature that female students experienced higher levels of stress in academic environment (Misra, Mckean, West & Russo 2000; Goff, 2011; Zascavage, Winterman, Buot, Wies & Lyzinski 2012), reasons attributed to this are far-fetch. For Pourrajab, et al., (2014), experiencing stress is indeed normal for students because of the high competitive world, and as such makes them to adjust their academy life. Time and financial management difficulties, sleep deprivation, social conflicts, and dating and relationship uncertainty are considered as the students' stressors that are likely to jeopardise their academic performance (Womble, 2003). Others students' stressors identified by Fairbrother and Warn (2003) include, too many assignments, competition with other students, failures and lack of pocket money.

Stress in academic institutions can have both positive and negative consequences if not well managed (Stevenson & Harper, 2006; Chang, 2007). Acquisition of essential knowledge and skills how to manage stress are quite imperative to achieving high academic performance on campus. Apparently, it appears that gender plays a role in how stress is perceived by the individual. Scholars like Lighthall, Sakaki, Vasunilashorn and Nga (2012) argue that impact of stress differs depending on gender or sex. The findings were supported with evidence of using functional magnetic

resonance imaging (fMRI) to examine gender differences in response to reward-related decision making among individuals exposed to stress.

This underscores the above argument that both male and female students handle and respond to stress differently depending on the stress level. According to Fuente, López, Zapata, Vicente, Manuel, Solinas, and Fadda (2014), stress response has been proven to interfere with memory and attention processes, as well as with information recovery. Lee, Wuertz, Rogers, and Chen (2013) maintain that females' overall stress was associated with sleep disturbance, daytime sleepiness, depressive symptoms, morning fatigue, less nocturnal sleep time, and more physical symptoms. Poor sleepers experienced higher levels of stress, daytime sleepiness, and physical and depressive symptoms. Beiter, Nash, McCrady and Rhoades (2015) agreed with above findings and added that female students also have more sources of stress than their male counterparts due to academics, body image, and sleep.

Age appears to be a fundamental tool that individuals use to cope with stress. Studies show that older adults differ in terms of approaches to coping with stress as compared with younger adults (Hamarat, Thompson, Zabrocky & Steele 2001). It will be a hasty conclusion to assume that this position applies to all categories of people in the given location. Can this situation also be applied to university students?

It is view of the above discrepancies and research assumptions on the role of sex, age difference and levels of study as it relate to stress among students that necessitates or motivates the researchers to undertake this study at Benue State University, Makurdi to find out whether the present study will be in accordance with the volume of literature on this discourse. In addition, from the personal observations by the researchers, it appears that researchers are not interesting carrying out research on this discourse at this institution; by mere observation one will quickly notice that the undergraduates of this institution are experiencing academic stress.

### **Statement of the Problem**

There is no doubt that university students suffer from different kind of academic stress during their education experiences. Undergraduate

students are at a high risk for increased stress as a result of numerous academic stressors. For instance, the demand of academic pressure and limited social and personal time are capable of contributing to the normal stress of life which can begin to have a negative effect on the lives of undergraduates. It is also a known fact that undergraduate students of Benue State University, Makurdi are experiencing different kind of academic stress. Sadly to note, university managers are yet to take clear decisive steps to address serious psychological stress that their students experience during the period of their studies on campus. This study argues that roles of sex, age and levels of study on the university campus are predominant factors that undergraduate students experience stress.

### Objectives of the Study

- i. To find-out if there will be a significant difference between male and female in their response to stress among undergraduates of Benue State University, Makurdi.
- ii. To determine if there will be no relationship between age difference and stress response among undergraduates of Benue State University, Makurdi.
- iii. To uncover any significant relationship between levels of study and stress response.

### Research Questions

The following research questions were put forward to guide the study:

- i. Will there be a significant difference between male and female in their response to stress among undergraduates of Benue state University, Makurdi?
- ii. Will there be no significant relationship between age difference and stress response among undergraduates of Benue State University, Makurdi?
- iii. Will there be a significant relationship between levels of study and stress response?

## Research Hypotheses

The following hypotheses were postulated for the study:

- H<sub>01</sub> There will be no significant difference between male and female in their response to stress among undergraduate of Benue state University, Makurdi.
- H<sub>02</sub> There will be no significant relationship between age difference and stress response among undergraduates of Benue State University, Makurdi
- H<sub>03</sub> There will be no significant relationship between levels of study and stress response.

## Literature Review

A study of this nature demands a review of literature to fill the researcher vacuum. There is no doubt that much researches have been carried out on students' academic stress. Literature review here, show that researchers have not dwell so much on the variables under study in the single study to see the role that they play related to stress on the lives of university students. This study therefore, fills this exiting research vacuum.

Stress has been attributed as part of students' daily life on campus. Literature show that females experienced more time pressure, higher levels of depression, higher levels of stress in frustration, self-imposed stress, pressure, and psychological reaction to stress (Misra et al., 2000; Misra & McKean, 2000; Jogaratnam & Buchanan, 2004; Skowron, Wester, & Azen, 2004) .

Misra and McKean (2000) argue that students experienced stress due to pressure and self-imposed stress as well as emotional and cognitive reactions to stress. Female students experienced more self-imposed stress and psychological reactions to stress. The study revealed that female students had better time management skills than their male counterparts. The leisure activities and perceived control of time management reduced academic stress; also, students' trait anxiety was a good predictor of academic stress.

Jogaratnam and Buchanan (2004) found that full-time students had greater exposure to stressors, freshmen experienced the most stress, and stress

decreased by years in school. Dusselier, Dunn, Wang and Shelley (2005) argue that females experienced more stress than males, but also pointed out that the females in their study performed better academically than the males. According to the authors “women’s stronger academic performance might also be a signal of women’s increased determination to succeed academically, which clearly might give rise to a greater level of stress”.

Gadzella, Pierce, and Young (2008) found that females tend to cope with stress by going to sleep, taking pain killers, crying, feeling the need of moral support, wanting to take out their frustration on others, and praying. The study argues that females experience more emotional feelings and appraising stressful events. These findings were contrary to Hamaideh (2010) found that male students experienced higher behavioural and cognitive reactions to stressors than female students.

Goff (2011) found that personal and academic stress did not predict academic performance argues that majority of students who fell into the moderate stress range; with males have less stress than females. The top two stressors revealed in the study were pressure and self-imposed stress. The study argues that most students experienced emotional and cognitive stress reactions. The study showed a positive correlation between age and academic performance.

An empirical study carried out by Zascavage et al. (2012) showed that traditional students, students who took more than 17 credit hours, and students who worked four hours or more per week had higher levels of stress. Bataineh (2013) investigates the academic stressors experienced by the undergraduates and found out that academic overloads, course awkward, inadequate time to study, workload every semester, exams awkward, low motivation, and high family expectations were drive moderately stress among students. Fear of failure was discovered as the major source of stress among undergraduate students and the study established that there were no significant differences in academic stress among students, level of study and specializations.

Studies on academic stress in relation to age were carried out focusing on both full-time and part-time students with variance positions (Given, 2000;



Giancola, Grawitch & Borchert, 2009; Charles, 2010; Carroll & Patterson, 2011; Forbus et al., 2011). Charles (2010) discovers that age can bring strength and vulnerability integration (SAVI) in response to stress. The non-traditional students for Giancola, Grawitch & Borchert, (2009), have stressors relating to work/school life which are additional those experienced by traditional students. O'Callaghan (2014) studies the relationship of stress to gender, age, academic motivation on students' expectations and self-esteem. The study found stress in relation to age, gender and self-esteem. Mixed findings on the factors of academic motivation were also found.

Other studies carried out indicate that age is vital tool for coping with stress in an academic environment. Hamarat et al. (2001) found that perceived stress decreased with age and that middle-aged and older adults have more effective coping resources than younger adults. Also, for the two older adult groups, efficiency of coping resources was the best predictor of life satisfaction. This point to the fact that perceived stress was the best indicator for the younger adult group. Heiman (2004) examines students' psychosocial resources, perceived stress and coping styles and found that younger students employed more emotional strategies; having more social support from friends than older students. The study shows that women were more likely than men to use avoidant and emotional coping. The author suggests that stress, coping and social support are significant and interconnected facets of the environment in which students interact and develop.

Geng and Midford (2015) investigated the stress levels of first-year education students, found that the first-year education students had significantly higher stress levels than other years' education students. The study showed some of stressors: academic work commitment; completing placement and related performance assessments in schools and at university; having a good understanding of the requirements of professional teaching, such as classroom management, and working with mentor teachers; and conflicting work and family commitments.

Young (2017) found that students who work at least six hours per work have higher stress than students who work less than six hours per week. The study indicated no statistical significance found between the stress levels of students who are involved in at least one registered student organization (RSO) and students who are not involved in a (RSO). Similarly, Akacan (2017) also studies stress experience and reactions among first-year university students. The study aims to examine the reactions of university students in situations where they experience stress in order to create a psychological counselling program with a group based on Rational Emotional, Behavioural, Cognitive and Existential Approaches in order to improve their ability to cope with stress. It was found that the first year students produced negative thoughts against the stress experienced within the university life and their behaviours appeared in the form of falling academic performance and avoidance in social relations.

### **Methodology**

For the purpose of achieving the research objectives, the study adopted a survey design. The study population consisted of 27,000 Undergraduates of Benue State University, Makurdi. 200 students were randomly selected across the institution. The researchers distributed 200 copies of the questionnaire among the Undergraduates of Benue State University; only 197 copies of the questionnaire were returned and were found usable.

### **Research Instrument**

Data for this study was collected using a questionnaire with 35 items and two sections. The sections are tagged section A and B. Demographic characteristics was measured using five (5) item subscale, sample items of this scale include: information such as sex, age, marital status, faculty and level of study. While section "B" is design by Bryant R.A (1991) to measure participants stress response. It consists of thirty (30) items where participants responded to the items as it was applicable to them.

### **Psychometric Properties of the Instrument**

It has reliability Cronbach alpha value of 0.95. The items response format ranging from 0 (not experienced), 1 (very rarely experienced), 2 (rarely



experienced), 3 (sometimes experienced), 4 (often experienced), to 5 (very often experienced)

### Procedures for Data Collection

The researchers obtained informed consents of students who formed sample for the study. The researchers personally administered the questionnaires to the respondents at their various locations within the University, in keeping with ethical standard, the respondents were debriefed accordingly. The questionnaires were collected by the researchers after completion.

### Method of Data Analysis

The data obtained was analyzed using descriptive statistics (mean and standard deviations) and inferential statistics (independent t-test, and Spearman's rho correlation). These inferential statistical methods were used to test the hypotheses to see the level of significant relationship and difference between the variables.

### Results

The raw data used for the study were drawn from different cluster groups of male and female. The results indicate that 126 (64%) were males and 71 (36%) females. The descriptive analysis also shows that 35 (17.8%) are between ages 18-25; 123 (62.4%) are between ages 26-30 and 38 (19.3%) are between ages 31-40. 175 (88.8%) are single while 22 (11.2%) are married. The data further showed that 49 participants (24.9%) were drawn from faculty of social science, 21 (10.7%) were drawn from the faculty of science, 20 (10.2%) were drawn from the faculty of management science, 30 (15.2%) were drawn from the college of health science, 28 (14.2%) were drawn from the faculty of law, 31 (16.8%) were drawn from the faculty of education while 16 (8.1%) were drawn from the faculty of arts.

**Hypothesis One:** There will be no significant difference between male and female in their response to stress among undergraduate of Benue state University, Makurdi.

**Table1: Result of Independent T-test showing the Difference between Male and Female in their Response to Stress.**

VARIABLES	N	Mean	t	df	p	—
Male	126	47.70				
			0.547	197	NS	
Female	71	44.57				

**Source:** Field Data, 2014.

This result indicates that at the alpha level of 0.05 there is no significant difference between sex and stress response ( $t(197) = 0.547$ ;  $P > 0.05$ ). Therefore, the study rejects the alternative hypothesis and accepts the null hypothesis

**Hypothesis Two:** There will be no relationship between age difference and stress response among undergraduates of Benue State University, Makurdi

**Table2: Result of r showing the relationship between Age and Response in Stress.**

VARIABLES	Mean	N	r	df	P
Age difference	879.193				
		197	0.815	195	NS
Stress Response	1079.000				

**Source:** Field Data, 2014.

The Correlational result in Table 2 shows no significant relationship between age difference and response in stress among undergraduates of Benue State University, Makurdi. ( $r(197) = 0.815$ ;  $P > 0.05$ ). This finding indicates strong evidence for the null hypothesis. This means the study retain the null hypothesis and reject the alternative hypothesis.

**Hypothesis Three:** There will be no significant relationship between levels of study and stress response. This hypothesis was tested using Spearman's rho correlation and the result is presented in the table below

VARIABLES	Mean	SD	N	r	DF	P
Levels of study	2.54	1.04	197	0.040	195	Sig
Stress Response	46.67	32.69				

\*\* Correlation is significant at 0.05 level

Source: Field Data, 2014.

The result in table 3 above shows that there is a significant relationship between levels of study and stress response. ( $r(197) = 0.040$ ;  $P < .05$ ), to this end, the research hypothesis is accepted and the null hypothesis is rejected

### Discussions

This study reveals the role sex, age and level of study in response to stress among students of Benue State University, Makurdi. The study was restricted to undergraduates of the institution. The present study argues that stress hampers the academic activities of the undergraduates of Benue State University, Makurdi. This shows that everyone experiences psychological distress, or negative affect that are in response to actual or perceived stress (Mroczek & Almeida, 2004). It is closely to this premise that Passer et al. (2009) see stress as “a pattern of cognitive appraisals, physiological responses and behavioural tendencies that occur in response to a perceived imbalance between situational demands and resources needed to cope with them”.

The results from the first hypothesis indicate no significant difference between sex and stress response ( $t(197) = 0.547$ ;  $P > 0.05$ ). The findings of the study are in agreement with previous studies Watson (2002); Busari (2012) and Bataineh (2013) who found no significant difference in academic stress among male and female undergraduate students. The findings of the present study are contrary to the volume of literature on this discourse that argues that male and female response differently to stress (Misra & McKean, 2000; Dusselier et al., 2005; Goff, 2011). Misra and McKean (2000) point clearly that female students experienced more self-

imposed stress and psychological reactions to stress and they had better time management skills than their male counterparts. Dusselier et al. (2005) argue that females experienced more stress than males; also females in their study performed better academically than the males. Goff (2011) stress that academic stress did not predict academic performance argues that majority of students fell into the moderate stress range; with males have less stress than females. Other studies argue that female response to stress by going to sleep, taking pain killers, crying, feeling the need of moral support, wanting to take out their frustration on others, and praying (Gadzella, Pierce & Young, 2008). Contrary to the above views Prabu (2015) maintains that male students' academic stress is higher than female counterparts. It is quite surprising that undergraduates of Benue State University, Makurdi do not response differently based on gender difference related to academic stress.

The results from the second hypothesis show no significant difference between age and response in stress among undergraduates of Benue State University, Makurdi. ( $F(197) = 0.815$ ;  $P > 0.05$ ). The findings of the study are not consistent with the literature review. Hamarat et al. (2001) believe that perceived stress decreased with age and that middle-aged and older adults have more effective coping resources than younger adults. Charles (2010) maintains that age can bring strength and vulnerability integration (SAVI) in response to stress while O'Callaghan (2014) argues that there exist stress in relation to age.

The results from the third hypothesis reveal that there is no significant relationship between levels of study and stress response ( $r(197) = 0.040$ ;  $P < 0.05$ ). The findings are in line with some of the literature reviewed Geng and Midford (2015) and Akacan (2017) who separately argued that first-year students experienced higher stress levels than other years' level students. Other studies that are consistent with these findings include Tinto (2001); Harvey et al. (2006); Reason et al. (2007). Willcoxson, Cotter and Joy (2011) who affirm that stress is common among students in their first year of university that emanates as a result to financial management,

conflicting work commitment, family responsibility and other academic stressors.

### Conclusion

The study on academic stress shows that stress is part of students' daily life business. The study show moderate level of stress in the lives of the undergraduates of Benue State University, Makurdi. The study establishes that no significant difference between sex and stress response among the undergraduates of the institution. The study argues that there is no significant relationship between age difference and response in stress among undergraduates of Benue State University, Makurdi. The study maintains that there exists significant relationship between levels of study and stress response among undergraduates of Benue State University, Makurdi. Stress is a natural phenomenon that affects students' academic performance. Taking a decisive step to cope with academic stress is imperative to achieving high academic performance among undergraduate students.

### Recommendations

It is an established truth that stress is part of lifestyle for undergraduates all over the world. It is therefore, imperative educating students how to cope or manage stress during the period of their study time on campus. Based on the above findings of the study, the researchers have made the following recommendations:

1. Provision of information and strategies for coping and managing academic stress should be made available to all Undergraduates.
2. The University managers should employ professional counsellors to help undergraduates manage their stress.
3. The state government should intervene by establishing a wellness clinic and setting up student counselling centres within campus to be of help to mental health professionals to help affected students at early stage of their stress.
4. The University managers should conduct stress reduction sessions to the students, and lecturers too should be encouraged to advise their students where necessary.

## References

- Akacan, B. (2017). Stress experiences and reactions of university students studying in the education faculties. *EURASIA Journal of Mathematics Science and Technology Education*, 13(10):6883-6890.
- Bataineh, M. Z. (2013). Academic stress among undergraduate students: The case of education faculty at King Saud University, *International Interdisciplinary Journal of Education*, 2(1), 82-88.
- Beiter, R., Nash R; McCrady M & Rhoades D (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90-96.
- Busari, A.O. (2012). Identifying difference in perceptions of academic stress and reaction to stressors based on gender among first year university students. *International Journal of Humanities and Social Science*, 2(14), 138-146.
- Carroll, D. & Patterson, V. (2011). A profile of undergraduate mature students. Retrieved from [http://www.eurireland.ie/\\_fileupload/2011/HEA%20Reports/Mature%20Student%20Profile%20Authority%20Nov2011.pdf](http://www.eurireland.ie/_fileupload/2011/HEA%20Reports/Mature%20Student%20Profile%20Authority%20Nov2011.pdf)
- Chang, K. L. U. (2007). Characteristics of organisational culture, stressors and wellbeing: The case of Taiwanese organisations, *Journal of Managerial Psychology*, 22 (6): 549-568.
- Charles, S. (2010). Strength and vulnerability integration: A model of emotional well-being across adulthood, *Psychological Bulletin*, 6.
- Deckro, G. R., Ballinger K.M; Hoyt M. & Wilcher M (2002). The evaluation of a mind/body intervention to reduce psychological distress and perceived stress in college students. *Journal of American College Health*, 50, 281-287.
- Dusselier, L, Dunn B, Wang Y. & Shelley M.C (2005). Personal, health, academic, and environmental predictors of stress for residence hall students. *Journal of American College Health*, 54, 15-24.
- Fairbrother, K., & Warn, J. (2003). Workplace Dimensions, Stress and Job Satisfaction, *Journal of Managerial Psychology*, 18(1): 8-21.
- Forbus, P., Newbold, J. J., & Mehta, S. S. (2011). A Study of Non-traditional and Traditional Students in terms of Their Time Management Behaviors, Stress Factors, and Coping Strategies. *Academy of Educational Leadership Journal*, 15, 109-125.
- Fuente, J, López, M, Zapata L., Vicente J.M. M., Manuel M. V, Solinas, G. & Fadda S. (2014). Competency to study and learn in stressful contexts: Fundamentals of the *e-coping with academic stress* utility electronic, *Journal of Research in Educational Psychology*, 12(3), 717-746.
- Gadzella, B. M., Pierce, D., & Young, A. (2008). Development and analyses of the coping stress inventory. *College Student Journal*, 42(2), 254-264.
- Garret, J. B. (2001). Gender differences in college related stress, *Undergraduate Journal of Psychology*, 14.
- Geng, G., & Midford, R. (2015). Investigating First Year Education Students' Stress Level, *Australian Journal of Teacher Education*, 40(6), 1-12
- Giancola, J., Grawitch, M. J., & Borchert, D. (2009). Dealing with the stress of college: A model for adult students. *Adult Education Quarterly*, 59(3), 246-263.



- Given, L. (2000). Envisioning the mature re-entry student: Constructing new identities in the traditional, *Reference Librarian*, 33(69), 70- 79.
- Goff, A. M. (2011). Stressors, academic performance, and learned resourcefulness in baccalaureate nursing students. *International Journal of Nursing Education Scholarship*, 8(1), 1-20.
- Hamaideh, S. H. (2010). Gender differences in stressors and reactions to stressors among Jordanian university students, *International Journal of Social Psychiatry*, 58(1) 26-33.
- Hamarat, E., Thompson D; Zabrocky K & Steele D; (2001). Perceived stress and coping resource availability as predictors of life satisfaction in young, middle-aged, and older adults. *Experimental Aging Research*, 27, 181-196.
- Harvey, L., Drew, S., & Smith, M. (2006). *The first-year experience: a review of literature for the Higher Education Academy*. Retrieved from [http://www.heacademy.ac.uk/projects/detail/lr\\_2006\\_harvey](http://www.heacademy.ac.uk/projects/detail/lr_2006_harvey)
- Heiman, T. (2004). Examination of the salutogenic model, support resources, coping style, and stressors among Israeli university students. *The Journal of Psychology*, 138, 505-520.
- Jogaratnam, G., & Buchanan, P. (2004). Balancing the demands of school and work: Stress and employed hospitality students. *International Journal of Contemporary Hospitality Management*, 16(4), 237-245.
- Lee, S. Y., Wuertz, Rogers, & Chen. (2013). Stress and sleep disturbances in female college students, *American Journal of Health Behavior*, 3 7(6), 851 -858.
- Lighthall, N. R., Sakaki M. Vasunilashorn & Nga L (2012). Gender differences in reward-related decision processing under stress. *Social Cognitive & Affective Neuroscience*, 7(4), 476-484.
- Lo, R. (2002). A longitudinal study of perceived level of stress, coping and self-esteem of undergraduate nursing students: An Australian case study. *Journal of Advanced Nursing*, 39(2), 119-126.
- Misra, R., Mckean M, West S & Russo T. (2000). Academic stress of college students: Comparison of student and faculty perceptions. *College Student Journal*, 34, 236-245.
- Misra, R. , & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction, *American Journal of Health Studies*, 16(1), 41 -51.
- Mroczek, D., & Almeida, D. (2004). The effect of daily stress, personality, and age on daily negative affect, *Journal of Personality*, 72(2), 355-378.
- O'Callaghan, P. (2014). The relationship of stress to gender, age, academic motivation, student expectations and self-esteem among students. The project Submitted in Partial Fulfilment of the Requirements of the B. A. Hons. in Psychology at Dublin Business School, School of Arts, Dublin.
- Park, C. L., & Adler, N. E. (2003). Coping style as a predictor of health and well-being across the first year of medical school. *Health Psychology*, 22(6), 627.
- Pourrajab, M., Rabbani, M. & Kasmaienezhadfad, S. (2014). Different effects of stress on male and female students. *The Online Journal of Counseling and Education*, 3(3), 31-39

- Prabu, P. S. (2015). A Study on Academic Stress among Higher Secondary Students. *International Journal of Humanities and Social Science Invention*, 4(10), 63-68
- Reason, R. D., Terenzini, P. T., & Domingo, J. (2006). First thing first: Developing academic competence in the first year of college, *Research in Higher Education*, 47 (2), 149-175
- Stevenson, A., & Harper, S. (2006). Workplace stress and the student learning experience, *Qual. Assur. Educ.*, 14(2): 167-178.
- Tinto, V. (2001). *Rethinking the first year of college*. Higher Education Monograph Series, Syracuse University.
- Watson, R. L. (2002). A comparison of perceived stress levels and coping styles of junior and senior students in nursing and social work programs, Unpublished PhD thesis, Marshall University.
- Willcoxson, L., Cotter, J., & Joy, S. (2011). Beyond the first-year experience: the impact on attrition of student experience throughout undergraduate degree in six diverse universities, *Studies in Higher Education*, 36(3), 331-352.
- Womble, L. (2003). Impact of stress factors on college students' academic performance, *Undergraduate Journal of Psychology*, 16, 21-34.
- Young, T. (2017). Are students stressed?: A study of the impact of student engagement on Student Stress. Thesis submitted to Graduate School, Eastern Illinois University Charleston, Illinois.
- Zascavage, V., Winterman, K.G; Buot, M; Wies, J.R; & Lyzinski, N. (2012). Student-life stress in education and health service majors, *Higher Education Research & Development*, 31 (4), 599-610.