# EMOTIONAL INTELLIGENCE AND GENDER AS PREDICTORS OF ACADEMIC STRESS AMONG UNDERGRADUATES IN OWERRI, IMO STATE, NIGERIA

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## ABSTRACT

The study examined emotional intelligence and gender as predictors of academic stress among undergraduates in Owerri, Imo State. Five hundred and thirty-five participants, comprising of 286 males and 249 females between the ages of 17 to 36 years with a mean of 22.35years and standard deviation of 3.30, were selected through the convenience sampling technique. They were administered with two instruments; Emotional Intelligence Scale (EIS) and Students Academic Stress Scale (SASS). Cross sectional survey design was employed while Multiple Regression Statistics on SPSS Version 20.0 was used for data analysis. Three hypotheses were tested. Results indicated that: emotional intelligence significantly predicted academic stress; gender did not significantly predict academic stress and emotional intelligence and gender jointly predicted academic stress among undergraduates in Owerri, Imo State. The study recommends that higher institution authorities from time to time should organize variety of programs, seminars and conferences focusing on students' emotional intelligence development, and academic stress management training.

**Keywords:** Academic Stress, Emotional Intelligence, Gender, Owerri, Predictors, Undergraduates.

## INTRODUCTION

Stress is the body's response to every day demands which exceed one's adjustment resources (Mohammed, Tayyebe, Hoda, & Mitra, 2013; Stallman & Hurst, 2016).It is an unavoidable part of human life. Hence, every individual experiences stress in one way or the other at a particular time and space. Stress could be physical, social, psychological, physiological, mental, family or academic oriented (Conner, Pope & Galloway, 2010).

Undergraduate students face several new demands spanning from social to interpersonal and academic types during their study which can be stressful for them (Bhujade, 2017). Though institutes of learning can be quite exciting for most students; they can be overwhelming since academic activities are never stress free. Little wonder Bhujade, (2017) declared that it is easy to find students at their breaking point as they are constantly under stress. Stress experienced by students at any level of their education is simply termed academic stress.

The phenomenon of academic stress is not a new one since stress itself is part of life. Indira and Unita (2015) defined academic stress as a condition of emotional pressure

whereby a student perceives that academic related demands exceed the adaptive resources available to him/her. Academic stress can positively or negatively affect a student's physical, mental, emotional and social spheres of life. Bhujade (2017)stated that moderate level of academic stress is a normal one for students to excel in their academic works. This is to say that some academic stressors are not bad since they may enhance academic performance. According to Stallman and Hurst (2016), extreme stress and poor coping skills put students of higher institutions at risk. When academic stress is not managed effectively by students, it can lead to devastating consequences such as depression, nervous breakdowns, panic attacks, burnouts, anxiety, insomnia, aggression, school truancy, poor academic achievements and school dropout ((Bhujade, 2017;Stallman & Hurst, 2016; Monteiro, Balogun, &Oratile, 2014).

Many factors ranging from environmental to individual can play significant roles on academic stress among students (Garg, Levin, & Tremblay, 2016; Godati, Bhagyalakhmi & Hemalatha, 2015). One of the student-related factors that can influence academic stress is emotional intelligence**.** Stevens, Schneider, Bederman-Miller and Arcangelo (2019) conceptualized emotional intelligence as the ability to cope with different social situations and making the best decisions in the situations. Rehana (2018), explained that emotional intelligence is the potential to identify and understand one's own and others' emotions. Barrett (2015) described emotional intelligence as the ability of a person to regulate and identify emotions. The above definitions point to the fact that emotional intelligence helps one to be in control of both oneself and the environment. Mayer (2010) mentioned the overall dimensions of emotional intelligence such as using emotions, perceiving emotions, understanding and managing emotions.

Mohammed, Tayyebe, Hoda and Mitra(2013),expressed that emotional intelligence is a key to managing academic stress and creating pleasant environment for the students and support them to present their best. This is to say that students with high emotional intelligence are likely to perform well in their academics because they have the ability to carry out academic task and do not see it more stressful than their counterparts with low emotional intelligence and who lack abilities and competences in carrying out academic task.

Rehana(2018) carried out a study on the Relationship between Emotional Intelligence and Academic Stress of University Students in Rawalpindi and Islamabad. The target population included all public and private University students studying at Master, M Phil and Ph.D. level programs. 6 private and 6 public sector Universities were selected to gather data. Stratified random sampling technique was used to gather data from respondents. The population was categorized into two strata as public and private sector Universities. From both strata 504 university students were taken as a sample. The sample of 252 female and 252 male students were gathered from each stratum. Results showed that male university students experience higher level of emotional intelligence than academic stress, while female university students have higher level of academic stress than Emotional Intelligence. Rehana, (2018) observed a negative relationship between emotional intelligence and students academic stress. This implies that lower level of emotional intelligence leads to higher level of academic stress by university students. With this, Rehana, (2018) declared emotional intelligence as the

key determinant of academic success in today's highly stressed environment for learners at every level of education.

In another study, Stevens, Schneider, Bederman-Miller and Arcangelo (2019), investigated on exploring the relationship between emotional intelligence and academic stress among students at a small, private college using the sample size of 134 (47.8% were female; 52.2% male).The results provided enough evidence of moderate negative correlation between students' academic stress and student trait emotional intelligence (more stress indicates lower emotional intelligence).

Furthermore, another variable that may impact on academic stress among undergraduates is gender. It is sometimes referred to as the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between masculinity and feminity. As opined by Godati, Bhagyalakhmi and Hemalatha, (2015) gender relates to the differences in sex (i.e. male or female) and how these qualities affect their disposition and perception towards life and academic activities. According to Misra, Mckean, West, and Russo, (2000), gender differences have a way of influencing a student's perception and reaction to academic stressors. This assertion without mincing words support the public opinions that females more often let out their feelings whereas the males more often control their emotions, accepting the problem, not thinking too much about the situation and engaging in problem solving efforts.

Moreso, Godati, Bhagyalakhmi and Hemalatha, (2015), investigated on Emotional Intelligence and academic stress among adolescent boys and girls. A total of 100 participants (50 boys and 50 girls) from Sri Chaithanya junior college aged between 15 to 19 years were randomly selected for the study. The subjects who fulfilled in the inclusion criteria (Adolescent boys and girls between 15-20 years who were willing to participate in the study and who can understand Telugu and English languages) were selected. Result showed that among 50 adolescent boys, 29 (58.0%) had mild stress, 21 (42.0%) had moderate stress, and among 50 adolescent girls, 30 (60.0%) had mild stress, 20 (40.0%) had moderate stress. None of them had severe stress. This implies that statistically, there is no significant gender difference of academic stress among students.

In a more recent study conducted by Stevens, Schneider, Bederman-Miller and Arcangelo (2019), a significant difference was found in average academic stress between male and female students. The female student average was higher for academic stress than their male counterparts thus an indication that female students experience academic stress more on campus than the male ones. A study by Rehana (2018), on the relationship between emotional intelligence and academic stress of University students in Rawalpindi and Islamabad was carried out. One of the tested hypotheses which stated that there is no difference in the academic stress of male and female university students was rejected. This is because the result showed that female university students actually had higher level of academic stress than their male counterparts.

## Theoretical Framework

This study anchors on the Cognitive Appraisal theory of stress propounded by Lazarus and Folkman (1984).The theorists defined stress as resulting from the imbalance between perceived external or internal demands and the perceived personal and social resources to deal with them. In their theory, Lazarus and Folkman considered two major factors that can contribute in an individual's response to stress as (i) the threatening tendency of the stress to the individual and (ii) the assessment of resources required to minimize, tolerate or eradicate the stressor and stress it produces. The theory also explains primary and secondary cognitive appraisals of stress. In primary appraisal, an individual tends to perceive the nature of situation as normal, good, challenging, important or stressful. The secondary appraisal involves the shared feelings associated with the situation. If the situation is perceived as threatening, anxiety or depression sets in where perceived normal, calmness set in. Relating the theory to the present study, where undergraduates perceive academic activities as challenging, they tend to develop a stress response because of their cognition, but where they perceive academic activities as normal, no or less anxiety and stress are felt by them.

## Statement of the Problem

Academic stress is an experience that seems inevitable by students in higher institutions. The stress experience could come from individual student factors (such as emotional intelligence, IQ level, personality trait, gender differences etc) or school-related factors (such as strict time table, unconducive class rooms, accommodation problems etc). This research however, is carried out to ascertain the predictive factors of academic stress experience among undergraduates in Owerri, Imo state.

Studies have shown that high level of stress in students can lead to impaired thinking process and diminished decision-making power (Kazemmegad, Dehghani&Buraki, 2015)depression, nervous breakdowns, panic attacks, burnouts, anxiety, insomnia, aggression, poor academic achievements and school truancy ((Bhujade, 2017; Stallman & Hurst, 2016).Therefore, it is important to investigate academic stress among students to curb its negative effects.

Unlike intelligent quotient which has been widely researched, the concept of emotional intelligence is relatively new and research in this area is still ongoing. Precisely in Nigeria, fewer researches have tried to link academic stress to emotional intelligence. This study is therefore considered relevant as it attempts to provide Nigeria information on the area of the relationship between emotional intelligence and academic stress. Also, the consideration of gender in this study provides a rich data in this area. Hence, the study investigated emotional intelligence and gender as predictors of academic stress among undergraduates in Owerri, Imo State.

## Hypotheses

1. Emotional intelligence will not significantly predict academic stress among undergraduates in Owerri.

2. Gender will not significantly predict academic stress among undergraduates in Owerri.
3. Emotional intelligence and gender will not significantly interact to predict academic stress among undergraduates in Owerri.

## Participants

The participants in this study were undergraduates from three higher institutions; Federal Polytechnic, Nekede, Federal University of Technology, Owerri and Imo State University, all in Owerri, Imo State, Nigeria. A total of 535 participants comprising of 286 males and 249 females were drawn for the study, through the convenience sampling technique. Their ages ranged from 17-36 years with a mean age of 22.35 years and standard deviation of 3.30.

## Instruments

Two instruments were utilized for data collection; Students' Academic Stress Scale (SASS) and Emotional Intelligence Scale (EIS). The first instrument which is Students' Academic Stress Scale was developed by Busari (2011). It consists of fifty (50) items that measure the nature and extent of stress experience by students at university level. It is a self-assessment scale which includes various domains such as environmental, cognitive, behavioural, and physiological that might impact the student's life in the form of a stressor (like academic work). The scale used a 5-pointlikert format ranging from 1- none of the time, 2- little of the time , 3- some of the time, 4- a good part of the time, 5- all of the time. Busari (2011) provided psychometric properties for Nigerian sample. The scale has an alpha reliability of .93, an internal consistency of .65 to .96 and divergent validity of .05.The norm of the scale is 111.21, and higher scores indicate a greater stress response.

The second instrument is Emotional Intelligence Scale (EIS) developed by Schutte, Mallouff, Hall, Haggerty, Cooper, Golden and Dorhesim (1998), which is used to measure how stable an individual's emotions are. It is a 33-item questionnaire scored on 5-points Likert format; 1- (strongly disagree), 2 – (disagree), 3- (undecided), 4 - (agree), 5 – (strongly agree). All items of the scale are scored directly except for three items (5, 28 and 33) which are reversely scored. The scoring format by Schutte, *et al*., (1998) revealed adequate internal estimates for the scale at .87 and above and two test-retest reliability of .78. The scale was revalidated in Nigeria. Sydney-Agbor, Ebeh, Nwankwo and Agu, (2014) reported a Cronbach Alpha Reliability of .92. The norm for the scale is 58.64. High score reflects a high level of emotional intelligence and vice versa.

Each of the instruments used has a demographic section that measured participants' age and gender.

## Procedure

The study took place in Owerri, Imo State. The population of the study included all undergraduates of the tertiary institutions in Owerri. The institutions are:Federal Polytechnic, Nekede; Federal University of Technology, Owerri; Imo State

Polytechnic, Umuagwa; Alvan Ikoku College of Education and Imo State University, all in Owerri, Imo State.

A multi-stage sampling method was adopted for the study. Firstly, three higher institutions (Federal Polytechnic Nekede, Federal University of Technology Owerri and Imo State University, Owerri) were selected using simple random sampling technique out of the five tertiary institutions in Owerri. The five institutions involved were written on pieces of papers which were folded, and then the researcher picked three randomly for the study. Secondly, purposive sampling technique was employed in selecting two faculties (Engineering and Health Sciences) and six departments (Chemical Engineering, Electrical Engineering, Optometry, Medical Laboratory, Nursing and Pharmacy) from the institutions. The reason for choosing the faculties and departments was due to the facts that students from the faculties and departments do a lot of practical works as such they tend to complain about academic stress more than students from other disciplines. Thirdly, participants were selected using convenience sampling technique. Only students who were readily available and volunteered to participant were involved in the study.

On visit to the selected institutions for the study, the researcher first met with the students' course representatives, formal introductions were made and agreement reached. On the agreed day, the researcher met the full class, established a good rapport, and explained the purpose of the research before administering the questionnaires to them. With the help of research assistants, the copies of questionnaire were distributed to only the students who volunteered to participate in the study. The questionnaires were collected immediately from the participants, same place they were distributed. It took about 25 minutes for the participants to complete the filling of the questionnaire in each case and 3 weeks for the entire collection of data by the researcher.

Five hundred and seventy (570) copies of the questionnaires were distributed in all, thus190were shared in each institution visited for the study. Out of the 570copies of the questionnaire that were distributed and retrieved, 535 were used for data analysis because 35copies were discarded. After eliminating duplicates and surveys with missing responses, the sample size was 535with 286 number of male and 249 number of female participants. Ethical principles of informed consents, voluntary participation, confidentiality, non-injury, debriefing and beneficence were fully observed throughout the data collection process.

**Design and Statistics**

Cross-sectional survey research design was employed in the study. The design was chosen due to the fact that it enabled the researcher to collect data from a large population cutting across people from different fields of study, levels, ages and gender. Multiple regression statistics was employed for data analysis because it enables an easy accessibility of relatively predictive contribution of each variable (Pallant, 2005). The analysis was conducted using SPSS Version 20.0.

## RESULTS

**Table 1: Summary of Multiple Linear Regressions Showing Emotional Intelligence and Gender as Predictors of Academic Stress**

| Model | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std Error | Beta | t | Sig. |
| Emotional Intelligence | .455 | .065 | .292 | 7.015 | .000 |
| Gender | .846 | 2.980 | .012 | .284 | .776 |

From table 1 above, the standardized regression coefficient result above shows that emotional intelligence positively predicted academic stress (β = .292, P< .001, t= 7.015). Therefore, hypothesis 1 which stated that emotional intelligence will not significantly predict academic stress among undergraduates in Owerri is rejected.

Also from table 1 above, the standardized regression coefficient result reveals that gender did not significantly predict academic stress (β = .012, P = .776, t = .284). Therefore, hypothesis 2 which stated that gender will not significantly predict academic stress among undergraduates in Owerri is accepted.

**Table 2: ANOVA and Model Summary Result Showing Variance in Academic Stress as Predicted by Emotional Intelligence and Gender**

| Model | Sum of squares | df | Mean square | F | R | $R^2$ | Sig |
|---|---|---|---|---|---|---|---|
| Regression | 57826.55 | 2 | 28913.28 | 24.65 | .291 | .085 | .000 |
| Residual | 623930.17 | 5 | 351172.80 | | | | |

In table 2 above the model summary result shows a significant F-value, an indication that emotional intelligence and gender jointly predicted academic stress ($R^2$ = .085, F(2, 535) = 24.65, p < .001). The interaction gave $R^2$ value at .085 which means that 8.5% of the variance in academic stress is explained by a combination of the predictor variables. Therefore, hypothesis 3 which stated that emotional intelligence and gender will not significantly interact to predict academic stress among undergraduates in Owerri is rejected.

## DISCUSSION

This study investigated emotional intelligence and gender as predictors of academic stress among undergraduates in Owerri, Imo State, Nigeria. Three null hypotheses were postulated and tested.

The result of the first hypothesis revealed that emotional intelligence significantly predicted academic stress among undergraduates in Owerri, Imo State. A positive correlation was found between emotional intelligence and academic stress, meaning that increase in emotional intelligence resulted to increase in Academic stress of undergraduates in Owerri. Unlike this present study which found a positive relationship between emotional intelligence and academic stress, other researchers (Rehana, 2018; Stevens, Schneider, Bederman-Miller & Arcangelo, 2019) found a negative relationship between emotional intelligence and academic stress, meaning that high emotional intelligence leads to low academic stress.

The present finding however is in agreement with the conclusions of earlier researchers (Rehana, 2018; Stevens, Schneider, Bederman-Miller &Arcangelo, 2019) that emotional intelligence is a key predictor of academic stress among students. What differs is simply the direction of prediction. In the researcher's view, a student with high emotional intelligence will experience high academic stress because he/she may be working very hard academically and emotionally towards achieving his/her academic goals. The hard work however can be a real source of high level of academic stress. Again students who have high emotional intelligence have the tendency to perceive and interpret the feelings and emotions of significant others, like parents, siblings, teachers and friends, in their lives. The knowledge and understanding of what is expected of them, and the possible reaction of their family members if they do not succeed in their academics could be a source of stress to them.

The result of the second hypothesis indicated that gender is not a significant predictor of academic stress among undergraduates in Owerri, Imo State of Nigeria. The present study is in agreement with the study of Godati, Bhagyalakhmi and Hemalatha, (2015), who found no gender difference in academic stress experience of students. This follows the fact that when school environment predisposes students to academic stress, both male and female undergraduates feel the heat.

However, the studies of Rehana (2018) and Stevens, Schneider, Bederman-Miller and Arcangelo (2019), did not support the present finding because their findings revealed that female students experience higher academic stress in school than their male counterparts. The reason for the difference in the present finding and previous findings could be as a result of the location of these institutions. Since the study was carried out in different countries (Nigeria, Sweden and Iran) this may have a significant impact on the result in the sense that individuals in different countries may perceive things differently and the fact that some school environments may be more conducive than the others would influence the way participants would have responded to the questionnaire.

In addition, certain factors which were not investigated in this present study could have as well predisposedstudents to academic stress irrespective of gender. Such factors may include but not limited to; poverty, unconducive lecture halls and distance

from students location to lecture. Hence, these factors may go a long way to determine how students perceive, understand and cope with academic stressors.

The third finding of this study revealed that emotional intelligence and gender jointly predicted academic stress among undergraduates in Owerri. This result is as expected by the researcher. A possible explanation for this may be due to the fact that the participants (both males and females) that are emotionally intelligent and skilled tend to be potential achievers in any environment they may find themselves. Therefore, in an academic environment, these undergraduates tend to struggle for success as such their academic tension and stress may be increased.

Finally, the present finding also supports a growing body of research suggesting that emotional intelligence and other non-traditional measures are just as predictive of success as traditional IQ tests (Nasir & Masrur, 2010; Nelson & Low, 2005) and that emotional intelligence influences variables in students' achievement, retention and academic stress management during the transition period of high school graduates into the first year of college (Nelson and Low 2005). It is therefore not surprising in this study to observe that gender play a joint role with emotional intelligence in predicting academic stress of undergraduates.

**Recommendations**

Based on the findings of the study, the researcher recommends the following:

- Higher Institution Authorities should do well to organize different programmes, seminars and conferences focusing on emotional intelligence development for the students.
- School management should also organize special training on stress management and coping skills for the students, as this will help them feel self-confident instead of distressed with much academic activities.

**Conclusion**

The study focused on emotional intelligence and gender as predictors of academic stress among undergraduates in Owerri, Imo State, Nigeria. It was quite an interesting study as evidence of variables that either predict or not predict academic stress among undergraduates in Owerri was provided. The results so far have revealed that emotional intelligence significantly predicted academic stress; gender did not significantly predict academic stress and emotional intelligence and gender jointly predicted academic stress among undergraduates in Owerri, Imo State. In view of the study's outcome therefore, the present researcher states the need for the Authorities of Higher Institutions to organize variety of programmes, seminars and conferences focusing on students' emotional intelligence development and academic stress management training.

**REFERENCES**

Barrett, L. F. (2015). *Emotional intelligence: A Process Model of Emotions Representation and Regulation*. New York: Guilford Press Inc.

Bhujade, V. M. (2017). Depression, anxiety and academic stress among college students: A brief review. *Indian Journal of Health and Wellbeing, 8*(7), 748-751.

Busari, A.O. (2011).Validation of Student Academic Stress Scale (SASS),*European Journal of Social Sciences, 21*(1), 94-105.

Conner, J., Pope, D., & Galloway, M. (2010).Success with less Stress.*Health and Learning, 67* (4), 54-58.

Garg, R., Levin, E., & Tremblay, L. (2016). Emotional intelligence: Impact on post-secondary academic achievement. *Social Psychology of Education: An International Journal, 19*(3), 627-642. doi:http://dx.doi.org/10.1007/s11218-016-9338-x.

Godati, M, Bhagyalakhmi. M. &Hemalatha. S. (2015) Emotional Intelligence and Academic Stress amongAdolescent Boys And Girls.*Eastern Academic Journal.3, 46-51.*

Indira, D. and Unita, U. (2015). Academic Stress among Students: Role and Responsibilities of Parents. *International Journal of Applied Research 1*(100), 385-388.

Kazemmejad, E., Dehghani, F., &Buraki, S.(2015).Sources of Stress among Students in Gruilan University of Medical Sciences.*Journal of research development in nursing and midwifery 12*(1), 118-126.

Lazarus and Folkman, (1984). In S.M Sincero, Stress and Cognitive Apprasisal , (2012).Retrieved May 10, 2019 from https://explorable.com/stress-and-cognitive-appraisal.

Mayer, J.D. (2010). Emotional Intelligence: Theory, Findings and Implications. New York: Worth Publishers Inc. Pp. 197–215.

Misra, R. Mckean, M., West, S., & Russo T. (2000). Academic Stress of College Students: Comparison of Student and Faculty Perceptions. *College Student Journal35*, 236-245.

Mohammed, R.M., Tayyebe, K.; Hoda, K., &Mitra, M. (2013). Relationship between Students' Academic Stress and Emotional Intelligence, *Journal of Applied Psychology 27,* 18-22.

Monteiro, N.M., Balogun, S.M., &Oratile, K.N. (2014). Managing Stress: The Influence of Gender, Age and Emotions Regulations on Coping among

University Students in Botswana.*International Journal of Adolescent Youth 19*(2), 153-173.

Nasir, M. &Masrur, R. (2010).An Exploration of Emotional Intelligence of the Students of IIUI in Relation to Gender, Age and Academic Achievement.*Bulletin of Education and Research*.*32,* (1), 37- 51.

Nelson, D. and Low, G. (2005). Emotional intelligence: The role of transformative learning in academic excellence. *Texas Study of Secondary Education, 13* (2), 7-10.

Pallant, J. F. (2005). *SPSS survival manual: a step by step guide to data analysis using SPSS* (2nd Ed.), Crows Nest: Allen & Unwin.

Rehana, R. (2018). Relationship between Emotional Intelligence and Academic Stress of University Students.*Journal of Research in Social Sciences - JRSS 6* (2), 207-218.

Schutte, N.S., Maloutt J.M; Hall, L.E; Haggerty, D.J., Cooper, J.T., Golden, C.J. and Dorhesim, I. (1998).Development and validation of a Measure of Emotional Intelligence.*Personality and Individual Differences*, 25, 167-177.

Stallman, H. M. & Hurst, C. P. (2016). The University Stress Scale: Measuring domains and extent of stress in university students. *Australian Psychologist, 51*, 128-134.

Stevens, C., Schneider, E., Bederman-Miller, P., Arcangelo, K. (2019).Exploring The Relationshipbetween Emotional Intelligenceand Academic Stress among Students at a Small, Private College.*Contemporary Issues in Education Research 12*(4)93-102.

Sydney-Agbor, N., Ebeh, R. E., Nwankwo, B. E. &Agu, S. A. (2014). Influence of Emotional Intelligence and Gender on Job Satisfaction among Local Government Employees.*Research in Psychology and Behavioural Science, 2* (4), 86-89.