

Emotional Intelligence as a Predictor of Academic Stress Among Secondary School Students in Udi Education Zone of Enugu State

Amaka B. Ikechukwu-Ilomuanya & Felistas Chinaza Nnamani

Department of Counselling and Human Development Studies, Faculty of Education, University of Nigeria, Nsukka

Corresponding author: amaka.ikechukwu-ilomuanya@unn.edu.ng

Abstract

The study investigated emotional intelligence (EI) as a predictor of academic stress among secondary school students in Udi Education, Zone of Enugu State. The study was guided by two research questions and two null hypotheses. The research questions were answered and hypotheses tested at 0.05 level of significance. The study adopted a correlational survey research design. The population of the study was 1,616 SS 2 students in public secondary schools in the study area while the sample was 321 SS 2 students determined using the Taro Yamane formula of sample size determination. The sample was drawn using proportionate random sampling technique. Emotional intelligence questionnaire (EIQ) and Students' Academic Stress Questionnaire (SASQ) were used for data collection. The instruments were face-validated by three experts; two from Counselling and Human Development Studies and one from the Department of Science Education (Measurement & Evaluation Unit), all in the Faculty of Education, University of Nigerian Nsukka. The reliability coefficients of 0.83 and 0.79 were obtained for EIQ and SASQ, respectively. Linear regression was used to answer the research questions and t-test statistic was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed, among others, that self-awareness has a very low predictive power on students' academic stress while internal motivation has very high predictive power on academic stress among secondary school students.

Keywords: Emotional intelligence, Academic stress, Secondary school students

Introduction

In many parts of the world, academic stress is an unavoidable phenomenon in the educational journey of every child. Students at all age experience stress due to some factor such as family, academic, psychological, environmental and emotional stress factors. In Nigeria, academic stress is an issue of great concern to secondary school students in the journey of their academic pursuit and this can emanate in different ways such as poor learning environment, too much academic workload, assignments, pressure from peer groups, family chaos and bullying, too much labour in schools, health issues and more. The need for emotional resilience cannot be over-emphasized as it helps shield these young learners from the demanding rigors of academic world. Singh (2021) maintained that emotional intelligence may be vital in ensuring that these students emerge from their secondary school journey triumphantly and unmarred by the demanding

effects of academic stress irrespective of their secondary education attained.

Secondary education occupies a strategic position, as it lies between the primary and tertiary levels of education in Nigeria. The broad goals of secondary education, according to the National Policy on Education (FRN, 2014) is to prepare the individual for useful living within the society and higher education. Secondary education absorbs the graduates of primary level and prepares them for the tertiary education which is the manpower base of the nation (Ugwoke, 2021). These graduates of primary education absorbed for secondary education are referred to as secondary school students. This implies that secondary school students are the budding ground of future professionals as well as the foundation for the discovering and classification of the specific fields. They are also students who are receiving secondary education in secondary schools. (Tatbotndip, 2020).

Operationally, Secondary school students are individuals usually at adolescence age (14-17 years) who receive formal education that prepares them for higher education or entry into the workforce. Most of these students experience academic stress.

Stress is becoming a threat in Nigerian education system. Stress according to Lee, Jeong and Kim (2021) is a feeling of strain and pressure. On the other hand, Barbayannis, Bandari, Zheng, Baquerizo, Pecor and Ming (2022) viewed stress as a non-specific response of the body, an unpleasant feeling and reaction which occurs in the body. The author went further to maintain that stress can be caused by various factors like environmental, psychological, biological, academic and social. This could be negative or positive for secondary school students, depending on the intensity of the stress.

In Udi Education Zone, Enugu State, it appears that academic stress among students is on the increase. Evidently, in 2020, the performance of students in the senior secondary school examination (SSCE) released by National Examination Council (NECO) in Enugu State, recorded that Udi Education Zone performed poorly. There are evidences through researchers' observations that these students are being stressed academically. This stress originates from a non-conducive learning environment, too many assignments, work workloads, bullying and punishments. In 2020, the data released from the statistics division of National Examination Council. Enugu State Chapter showed that secondary school students performed poorly (NECO Chief Examiner's Report, 2021). Apart from 2017 and 2018, where 55. % and 53.5% of the students respectively obtained credit scores in Mathematics and English language. The assessment of their performance in other years till 2020 showed every poor performance where less than 30% obtained credit in Mathematics and English (NECO Chief Examiner's Report, 2021). This worrisome situation can be traced to academic stress.

Academic stress is the emotional and psychological distress associated with an individual's perception of academic workload, the perceived value of academic outcomes and the perceived ability to cope with academic demands. (Bonnie 2017). This implies that academic stress can lead to negative effects such as anxiety, depression, sleep disturbance, and even physical symptoms like headaches, low esteem, pressure from peer groups, lack of concentration in the classroom, fear and stomach aches and more. Academic stress reflects the experience of pressure, anxiety and

strain arising from academic demands such as schoolwork, examinations, assignments and a perceived ability to cope with these demands (Zittleman, 2019). Operationally, academic stress is the emotional, psychological, behavioural and physical strains experienced by secondary school students due to pressures associated with school work, competitions and assignments. Some students find it difficult to cope with home and school work, leading to stress and negative effects on the mental health of the students. There is need to find out if emotional intelligence would predict students' academic stress among secondary school students.

Emotional intelligence is the ability to identify and manage your own emotions and the emotions of others (Gonzalez et al, 2019). Emotional Intelligence is generally said to include: the following skills: emotional awareness; the ability to harness emotions and apply them to tasks like thinking and problem solving; and the ability to manage emotions, which includes regulating your own emotions. In operational terms, emotional intelligence refers to the capacity secondary school students for recognizing one's feelings and those of others, motivating oneself and for managing emotions well in others and relationships. Goleman, Boyatzis and McKee, (2010) outlined five major components of emotional intelligence namely: self-awareness, internal motivation, self-regulation, empathy and social skill. This study focused on self-awareness and internal motivation because they are the core components of emotional intelligence and seem mostly to be factors to students' academic stress in the study area.

Self-awareness refers to the ability to recognize and understand one's emotions, strength, weaknesses, values and motivations (Brene Brown, 2018). This implies that, self-awareness is the ability to see oneself clearly and objectively through reflection, and act with intention in their direct goals. It allows individuals to understand their own thoughts, feelings, and behaviours in relation to others, and to use this understanding to manage their emotions and interactions more effectively. It is the ability to accurately recognize one's own emotion, thoughts, and values and how this influence. On the other hand, Cal Newport (2019) asserted that self-awareness is the capacity to have knowledge of one's thoughts feelings, behaviour, mental stress and access one's own internal states and external actions as well as the information to guide behaviour and decision making. Operationally, self-awareness is the ability of secondary school students to

have knowledge of their inner states and how it affects their behaviour, relationships, decision-making and academic performance. The second core skill of emotional intelligence is internal motivation.

Internal motivation is the intrinsic drive that comes from within a person, rather than from external factors such as money, rewards, or recognition (Cain, 2017). Internal motivation is a skill, driven by a person's values, passions, and interests and can lead to more meaningful and sustainable achievement (Morin, 2018). Internal motivation is a skill which is influenced by a person's emotions and emotional awareness, as well as their ability to regulate and manage these emotions. (Young, 2020). Operationally, internal motivation is the ability of secondary school students to be aware of their emotions, develop skills as well as ability to regulate and manage their emotions.

Secondary school students in Udi Education Zone appear to be exposed to academic stress. Observations showed that most of the students find it difficult to adjust to the academic environment. Most of these students show a kind of nervousness to learning, some absent themselves from school. Some of them at every slight provocation, bully the students. On the other hand, these students complain bitterly about work overload, assignments that they cannot cope with. These are indicators that these students are academically stressed. The purpose of this study therefore was to investigate emotional intelligence (EI) a predictor of academic stress among secondary school students in Udi Education Zone of Enugu State. The study was guided by the following research questions.

1. What is the predictive power of self-awareness on academic stress among secondary school students?
2. What is the predictive power of internal motivation on academic stress among secondary school students?

Hypotheses

H₀₁: There is no significant predictive power of self-awareness and academic stress among secondary school students.

H₀₂: There is no significant predictive power of internal motivation academic stress among secondary school students.

Methods

This study adopted a correlational survey research design. A correlational research design is a study that

describes the degree to which the variables are related. Correlational method tries to determine whether and to what degree a relationship exists between two or more variables (Nworgu, 2015). The correlational survey research design is therefore considered the most appropriate research design for the study since it enabled the researchers to establish the relationship that exists among the variables of interest.

The study was carried out in Udi Education Zone of Enugu State, Nigeria which is made up of two Local Government Areas (LGAs) namely; Udi and Ezeagu. The population of the study comprised of 1,616 SS 2 students in the public secondary schools in Udi Education Zone. There are 54 public secondary schools in Udi Education Zone. Udi LGA has 25 schools with 1,137 SS 2 students and Ezeagu LGA has 29 schools with 479 SS 2 students (Statistics Office; Post Primary Schools Management Board (PPSMB) Udi Education Zone, 2024). The sample size for the study was 321 respondents comprising SS 2 students determined using the Taro Yamane formula of sample size determination. The proportionate random sampling technique was used in composing the students' sample size. This sampling technique was used to select 26 public secondary schools with 25 respondents each representing fifty percent (50%) of the 54 public secondary schools in the zone. This technique was also used to select the students' sample size from the 26 schools initially sampled from the two LGAs in the Udi Education Zone. The choice of this technique was made so as to balance up the proportion of attributes in each of the local government area and the 26 public secondary schools sampled.

Two researchers' made questionnaire were used as instruments for data collection for this study. They include: "Emotional Intelligence Questionnaire (EIQ) and Students' Academic Stress Questionnaire (SASQ). The EIQ has 2 clusters with 5 items each, totaling 10 items to elicit information from the students on their emotional intelligence. The SASQ has 14 items to elicit information from the respondents on their academic stress. The EIQ has scoring options of Strongly Agree (4 points), Agree (3 points), Disagree (2) and Strongly Disagree (1 point) measuring the students' emotional intelligence whereas the SASQ has scoring options of Often (4 points), Occasionally (3 points), Rarely (2 points) and Never (1 point) measuring the student's level of academic stress.

The instruments were face-validated by three experts; two from Counselling and Human Development Studies and one from the Department of

Science Education (Measurement and Evaluation), both in the Faculty of Education, University of Nigerian Nsukka. The instruments were trial tested on a sample of 30 SS 2 students in a secondary school in Awgu Education Zone, which is outside the area of the study but shares the same characteristics with it. To determine the internal consistency of the instruments, the scores from the 30 SS 2 students were used to establish the internal consistency reliability of the instrument using Cronbach Alpha method. This method was considered appropriate because the items of the instruments were non-dichotomously/polytomous scored (this is because the instrument provided a range of possible responses rather than a simple “No or Yes”). The reliability coefficients of 0.83 and 0.79 were obtained for Emotional Intelligence Questionnaire (EIQ) and Students’ Academic Stress Questionnaire (SASQ) respectively. These indices showed that the instruments are reliable and therefore, were used for the study

The researchers employed two research assistants that were briefed on how to administer the instruments, retrieve the instruments, and how the respondents were expected to respond to the

instruments. Direct delivery and retrieval method was applied to administer the instruments to the respondents which ensured a high return rate of the instruments.

The responses from the questionnaire were converted using co-efficient of determination (r^2) from linear regression to answer the research questions. The value of (r^2) from the regression analysis was used by the researchers because the use of (r^2) is a more scientifically helpful method which enable researchers to determine the degree of relationship that exists among the variables (Nworgu, 2015). Then the values were interpreted as low, moderate and high. The hypotheses were tested with t-test associated with linear regression at 0.05 level of significance with the help of Statistical Package for Social Science (SPSS) software

Results

Data on table 1 showed that the regression and regression square coefficients are 0.045 and 0.002 respectively. The coefficient of determinism of 0.2% derived from the regression square showed that self-awareness has a low predictive power on academic stress among secondary school students.

Table 1: linear regression of the predictive power of self-awareness on academic stress among secondary school students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.45 ^a	.02	-.01	4.97

0.80 and above (very high), 0.60-0.80 (high), 0.40-0.60 (medium), 0.20-0.40 (low) and 0.00-0.20 (very low)

Data on table 2 showed that the t-test value associated with simple regression is 0.810. The hypothesis is not rejected because the significant value of 0.45 is greater

than 0.05. Therefore, there is no significant predictive power of self-awareness on academic stress among secondary school students.

Table 2: t-test associated with linear regression of the predictive power of self-awareness on academic stress among secondary school students

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	32.98	2.76	11.95	.000
	Self awareness	.06	.08	.05	.42

Data on table 3 showed that the regression and regression square coefficients are 0.81 and 0.66 respectively. The coefficient of determinism of 65.7%

derived from the regression square showed that internal motivation has a low predictive power on academic stress among secondary school students.

Table 3: linear regression of the predictive power of internal motivation on academic stress among secondary school students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.81	.66	.66	2.88

0.80 and above (very high), 0.60-0.80 (high), 0.40-0.60 (medium), 0.20-0.40 (low) and 0.00-0.20 (very low)

Data on table 4 showed that the t-test value associated with simple regression is 24.70. The hypothesis is rejected because the significant value of 0.00 is less than 0.05. Therefore, there is a significant predictive power of internal motivation on academic stress among secondary school students.

Table 4: t-test associated with linear regression of the predictive power of internal motivation on academic stress among secondary school students

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
1	(Constant)	6.39	1.18		5.42	.000
	Internal motivation	.84	.03	.81	24.7	.000

Discussion

The finding of the study revealed that self-awareness has a very low predictive power on academic stress among secondary school students. The hypothesis revealed that there is no significant predictive power of self-awareness on academic stress among secondary school students. The findings indicate that self-awareness contributes very little to the explanation of academic stress. The weak correlation and the lack of statistical significance suggest that self-awareness does not play a meaningful role in influencing academic stress in this population. These findings highlight the complexity of academic stress and suggest that factors other than self-awareness may be more critical in determining stress levels among secondary school students. While self-awareness is an essential skill for emotional regulation and personal growth, the findings indicate that it may not directly mitigate academic stress in this context. This finding is consistent with studies such as Ragusa et al. (2023), which reported that self-regulation, closely related to self-awareness, had minimal direct influence on academic stress and anxiety among students. Similarly, Liu, Zhu, Dong, and Luo (2024). (2024) found that self-efficacy, a construct tied to self-awareness, did not significantly predict lower stress levels, suggesting that factors beyond self-awareness, such as external pressures and academic workload, play a more prominent role in contributing to academic stress. These

studies reinforce the importance of considering other determinants of academic stress, rather than focusing solely on self-awareness. On the contrary, the finding of this study is in opposition to the earlier findings of Adeyemi and Oyefoluke (2020) and Tang and Wang (2020) which revealed that self-awareness was negatively related to academic stress. This difference in finding may be attributed to cultural difference in the area of study. Parents should be able to know that education is a continuous process, it starts from birth and ends when an individual dies. This finding shows that while self-awareness is essential for emotional regulation and personal development, its limited impact on academic stress in this context suggests that other variables such as family environment, academic workload, or peer dynamics, may play a more prominent role.

The finding of the study also revealed that internal motivation has a very high predictive power on academic stress among secondary school students. The hypothesis revealed that there is a significant predictive power of internal motivation on academic stress among secondary school students. These results suggest that while internal motivation is typically associated with positive academic outcomes, in this context, it may also contribute to increased stress levels. This could be due to students feeling pressure to perform well, driven by their internal motivation. It highlights the complex nature of motivation in educational settings, where high

motivation can lead to higher expectations and stress. This finding is consistent with the finding of Mthethwa and Mallett (2020) and Nakamura (2020). Mthethwa and Mallett (2020) revealed that internal motivation was negatively related to academic stress. On the other hands, Tanaka and Nakamura (2020) revealed that internal motivation was negatively related to academic stress. The significant predictive power of internal motivation on academic stress reveals the dual-edged nature of motivation in academic settings. While internal motivation can foster academic success, it may also lead students to place excessive pressure on themselves to meet personal goals. This suggests that even positive traits, such as high motivation, can inadvertently contribute to stress if not managed properly. Therefore, it is essential for educators and counsellors to help students balance their internal drive with healthy coping strategies.

The theoretical implications of the findings extend our understanding on how James-Lange Emotion Theory can inform educational practices and interventions aimed at reducing academic stress. The findings highlighted the need for effective emotional intelligence development and thus emphasize its critical roles in shaping students' academic experiences and overall well-being. The significant predictive power of internal motivation on stress levels suggests that students who are internally motivated are likely to interpret their physiological reactions to stress more positively, fostering resilience. The findings on academic stress showed the importance of internal motivation in shaping students' responses to academic stress, emphasizing that how they perceive and react to physiological cues can promote or inhibit their emotional states and academic stress levels. Conversely, the non-significant role of self-awareness that while these factors are essential in managing academic stress, they may not always translate into effective emotional regulation.

Conclusions

From the above findings, the study concluded that self-awareness did not significantly predict academic stress. Therefore, support for students' internal motivation should be encouraged by counsellors and all those in psychological support services to mitigate academic stress among secondary school students. The following recommendations were made:

1. Counsellors should conduct guidance programmes on regular basis for the students to educate them on the need for self-discovering

and self-awareness in order to overcome academic stress.

2. Counsellors should conduct workshops and seminars for teachers, parents and other stakeholders educating them on the need curb academic stress among students.

References

- Abolarin, E. E. (2010). *Influence of stress on secondary school students*. Abuja: Petra Digital press.
- Adekeye, O. A., Alao, A. A., Adeusi, S. O., Odukoya, J. & Godspower, C. S. (2015). *Correlates between parenting styles and the emotional intelligence: a study of senior secondary school students in Lagos State*. Proceedings of ICERI2015 Conference 16th-18th November 2015, Seville, Spain.
- Adeyemi, B. A., & Oyefoluke, O. (2020). Self-awareness and academic stress in Nigerian university students. *Journal of College Student Development*, 61(3), 301-316.
- Banett, J.R. (2020). "A Review of Academic stress Among School-aged Students. *Frontiers in Psychology*, 11(6), 1-14.
- Bonnie, R. J. (2017). Academic stress and student well-being: A public health perspective. *The journal of American college of cardiology*, 70 (25), 2983-2984.
- Brene brown (2018). *Dare to lead: Brave work*. New York, NY: Penguin Books
- Cain, S. (2017). *Social and academic behaviour of students* New York. NY: Simon & Schuster.
- Cain, S. (2019). *Quiet Power: The Secret Strengths of Introverts*. New York. NY: Simon & Schuster.
- Cal Newport (2019) "Digital minimalism: Choosing a focused life in a Noisy World," https://www.ted.com/talks/cal_newport_digital_minimalism
- Eurich, C.C. (2017). Influence of emotional intelligence and stress among students. *Journal of Counselling*, 3(2), 27-38.
- Federal Government of Nigeria (2014). *National policy on education* (7th edition). Lagos: NERDC Press.
- Gonzalez, M. A., Pena Pan, L. & Arboleda, G. I. (2019). Emotional intelligence: Origins and theories. *Publicaciones Didacticas.co*, 103 (1), 34 – 39.
- Kai-Wen, J. (2014). Study of stressors in the college student population. *Health Education*, 11(4), 8-12.



- Lee, P. K., Jeong, S. X. & Kim, S. (2021). Academic stress and adjustment among High School Students. *Journal of the Indian Academy of Applied Psychology*, 3 (4), 70-73.
- Liu, X.; Zhu, C.; Dong, Z.; Luo, Y. (2024). The Relationship between Stress and Academic Self-Efficacy among Students at Elite Colleges: A Longitudinal Analysis. *Behav. Sci.*, 14, 537. <https://doi.org/10.3390/bs14070537>
- Lucas, J. A.(2020). The role of self-compassion in stress and anxiety among secondary school students, *Journal of child and family studies* 29 (4) 1809-1817.
- Maridaki-Kassotaki, A. I. K. (2011). Emotional Intelligence: conceptual statements, theoretical models, assessment and practical applications. *Journal of Educational Sciences*, 1 (1), 47-61.
- Mthethwa, S., & Mallett, R. (2020). Internal motivation and academic stress in South African university students. *Journal of College Student Development*, 61(3), 333-348.
- Singh, M. (2021). Examining the relationship between parental involvement and academic stress among secondary school students in India. *International Journal of Learning, Teaching and Educational Research*. 25 (3) 166-176.
- Tanaka, Y., & Nakamura, K. (2020). Internal motivation and academic stress in Japanese college students. *Journal of College Student Development*, 61(3), 349-364.
- Tang, Y., & Wang, L. (2020). Self-awareness and academic stress in college students: A mediation analysis. *Journal of College Student Development*, 61(3), 269-284.
- Tatbotndip, J. E. (2020). *Contributions of secondary education to national development of Nigeria*. www.globalacademicgroup.com.
- Volling,B. L., & Belsky, J.(2015). *Emotional intelligence and parenting: Implication for children's social and emotional development*. In J.J. Gross (Ed.), *Handbook of emotional intelligence* (pp.551-568). New York; NY: Guilford Press.
- William, J. & Carl, L. (1884). *James-Lange theory of emotion*. <https://explorable.com/james-lange-theory-of-emotion>, Explorable.com.