Emotional Intelligence and Test Anxiety Among Secondary School Students in Egor Locality of Edo State, Nigeria

Osenweugwor Ngosi Aihie (PhD)
Faculty of Education
Department of Educational Evaluation and Counselling Psychology
University of Benin, Benin City, Edo State, Nigeria
E-mail : Osenweugwor.aihie@uniben.edu

Adeyemi Florence Toyin (PhD)
Faculty of Education
Department of Educational Evaluation and Counselling Psychology
University of Benin, Benin City, Edo State, Nigeria
Email: florence.adeyemi@uniben.edu

Abstract

The study investigated the emotional intelligence and test anxiety in students at secondary school level in Egor Local Government Area of Edo State, Nigeria. Mixed method research design was adopted making use of both descriptive and correlation survey approaches. The target population consisted of 6069 (six thousand and sixty-nine) students in the 10 (ten) government-owned Senior Secondary Schools in Egor Local Government Area of Edo State. A sample size of 380 (three hundred and eighty) secondary school II students who were randomly selected from five randomly selected secondary schools in the study area. Two instruments; Schutte self-report Emotional intelligence test (Schutte et al, 1998) and Test Anxiety Questionnaire Nist and Diehl (1990) were validated and used to collect data for the study. Means, standard deviation, Pearson Product Moment Correlation and Students t-test were adopted to analyse data collected. Findings indicated a moderate level of test anxiety among the students which was not dependent on the sex of the students. A non-significant negative correlation was also found to exist between emotional intelligence and test anxiety. Based on the findings, it was recommended that school counsellors as a routine service should provide students with skills to improve emotional intelligence and strategies that would help to reduce test anxiety..

Keywords: - emotional intelligence, test anxiety, secondary school, students

Introduction

Anxiety is a universal human feeling, which can be experienced by an individual from time to time. It involves a sense of apprehension and unease about something or a situation the outcome of which bears some element of uncertainty. Among the symptoms associated with anxiety are nervousness, tense feelings, elevated heart rate, quivering, profuse perspiration, uneven breathing, poor concentration or thinking about anything other than the cause of the present worry. It is a

complex response to real or perceived threats. Anxiety in small amounts can be of benefit to an individual as it can serve as an alarm system alerting an individual's attention to potential dangers or negative outcomes, it can keep an individual motivated thus leading to greater productivity and positive change among others. Excessive anxiety however, is counterproductive as it can have a general negative impact on an individual. Aydin (2017) defined test anxiety as a negative emotional response to current or prospective situation involving evaluation. It is a psychological situation in which a person experiences distress in testing situations. Although many people experience some degree of anxiety before and during examinations, test anxiety impairs learning and performance in tests. One of the common worries of students is test failure and this could be because tests are anxiety-provoking situations. Test anxiety is a physiological over-arousal often referred to as "emotionality" along with dread, worry and expectations of terrible failure, which occurs before or during test situations (Liman & Yabo 2017). Test anxiety is often exhibited by learners at all levels of education and may be caused by inadequate preparation for the assessment exercise, among others. It has been found to predict academic achievement (Ilo & Unachukwu, 2020) as it interferes with concentration on the test, thus lowering academic achievement. Some researchers have found sex differences in test anxiety (Rezazadeh & Tavakoli, 2019; Onukwufor & Ugwu, 2018) while others found no significant sex difference in the exhibition of test anxiety among learners (Eruvenkai & Simon, 2021).

Another factor that may affect individuals in the academic setting is emotional intelligence. The concept of emotional intelligence describes a person's capability to accurately and effectively perceive emotional information, and process and regulate such information within a person and in relation to other persons. It also involves the capability to use emotional information as a compass to channel a person's line of thought and actions in harmony with those of other persons. Mayer and Salovey (1997) defined emotional intelligence as the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. Emotional intelligence also has influence on academic performance. Yahaya et al (2012) found that three elements of emotional intelligence: self-awareness, emotional management and empathy are significantly related to academic achievement while Sanchez-Alvarez et al (2020) found a significant effect of emotional intelligence on academic performance.

Regarding the relationship between emotional intelligence and test anxiety, Tom and Ansia (2017), Malik et al (2013) found a significant negative correlation between test anxiety and emotional intelligence among adolescents in secondary schools. Ahmadpanah et al (2016) also found that higher emotional intelligence was related to lower test anxiety. Eruvenkai and Simon (2021) however, found no significant relationship between emotional intelligence and test anxiety.

Rationale for the Study

Test anxiety is an emotional feeling that one experiences and expresses in a testing situation. It is an expression of fear and dread of the testing situation to the extent that it impairs academic performance. The fear may be due to internal factors

such as lack of trust in one's ability or capacity to overcome the situation or may be externally motivated by perceived difficulty of the subject or subjects in question, the testing condition among others. Ngwoke et al (2013) has observed that Nigerian students at all levels of education exhibit high levels of test anxiety in testing situations. Emotions affect behaviour of individuals and emotional intelligence covers interpersonal and intrapersonal skills of individuals, empathy, adaptability and stress management among others. Mshelia and Maina (2017) defined emotional intelligence as the subset of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them and use this information to guide one's thinking and actions. Some studies have shown negative correlations between emotional intelligence and test anxiety while some others have shown no significant correlation between the two. To be able to assist students who are underachieving due to test anxiety, it is important to understand the factors, external and internal that may elicit or aggravate the condition and factors that may help to reduce it. Literature regarding test anxiety among Nigerian students has been in the areas of its effects on academic performance (Azuike & Obieke,2012;Onyekwuru &Ibegbunam,2014;Ilo & Unachukwu, 2020), sex differences and relationship with levels of education (Oladapo & Ogungbamila, 2013; Onukwufor & Ugwu,2018) and effects of academic self-confidence (Lawal, Idemudia & Adewale, 2017) among others. There is however, a dearth in literature on the relationship, if any, that exist between the concept of emotional intelligence and the concept of test anxiety among students at the secondary school level in Nigeria. The aim of the study therefore, was to ascertain what correlation there is between emotional intelligence and test anxiety in students at the secondary school level in Egor Local Government Area of Edo State, Nigeria. Level of test anxiety and sex differences in test anxiety among the students were also investigated. Research Questions

1. What is the level of test anxiety among the secondary school students?

2. What is the difference in the level of test anxiety among secondary school students based on sex?

3. What is the relationship between emotional intelligence and test anxiety among the secondary school students?

Questions 2 and 3 were hypothesized as follows:

Hypotheses

1. There is no significant difference in the level of test anxiety of the students based on sex.

2. There is no significant relationship between emotional intelligence and test anxiety among the secondary school students.

Methodology

The study adopted a mixed method design, adopting both descriptive and correlational survey approaches. The target population consisted of six thousand and sixty-nine students (6069) in ten (10) public senior secondary schools in Egor Local Government Area of Edo State. The study was conducted using three hundred and eighty students in secondary school II which served as the sample for the study. This consist of one hundred and thirty-seven (137) male students and two hundred and forty-three (243) female students. The study employed simple random sampling technique to select five schools from the ten public

secondary schools in the Local Government Area. After due consent had been sought and obtained, eighty secondary school II students were randomly selected from each of the five selected schools and the research instruments were administered to them. Out of this number, three hundred and eighty questionnaires were correctly completed making up the sample of the study.

Two research instruments were used to collect data for the study.

(a). The self-report emotional intelligence test was adapted from Schutte et al (1998) and consists of ten items measuring appraisal and expression of emotions, regulation of emotions and utilisation of emotions and requiring responses on a 4-point scale of strongly agree to strongly disagree. The reliability of the instrument was determined using Cronbach alpha statistics which yielded a reliability coefficient of 799.

(b). The test anxiety questionnaire by Nist and Diehl (1990), which is a 10-item scale was adopted and revalidated using Cronbach alpha statistics which gave an alpha value of 0.82. The test was designed with response options on a 5-point scale of never, rarely, sometimes, often and always. Section A of the instrument sought demographic information of the respondents. For the level of test anxiety, means 10-19 were considered to represent low test anxiety, means 20-35 were considered moderate test anxiety while means above 35 were considered high test anxiety.

Means and standard deviation were used to answer research question 1 while research questions 2 and 3 were hypothesised and independent sample t-test and Pearson Product Moment Correlation served as the statistical tools for testing the two formulated hypotheses respectively. Both hypotheses were tested at 0.05 alpha level.

Results

Research Question 1. What is the level of test anxiety among the secondary school students in the study?

Table 1. Mean and standard deviation for level of test anxiety among senior secondary school

Students

N	Mean	SD
380	29.56	5.779

The result in Table 1 indicates that the mean of test anxiety of the respondents is 29.56. This falls within the range of 20-35 which indicates moderate test anxiety. The level of test anxiety among the students in the study is therefore moderate.

Hypothesis 1: There is no significant difference in the level of test anxiety among the secondary school students based on sex.

Table 2. Independent sample t- test of level of test anxiety among the students based on sex.

Sex	N	Mean	S D	df	t	Sig
Male	137	30.01	5.633			
				378	1.144	0.000
Female	243	29.31	5.855			

P=0.05

Results in Table 2 showed a computed t-value=1.144 and the p-value 0.000. The t-value of 1.144 is less than the critical t-value of 1.96 for the

distribution and is significant at p<0.05. The null hypothesis which states that there is no significant difference in test anxiety level of the students based on sex is therefore rejected and it is upheld that the test anxiety means for males (30.01) is significantly higher than that of the females (29.31)

Hypothesis 2: There is no significant relationship between emotional intelligence and test anxiety among secondary school students in Egor Local Government Ares of Edo State

Table 3 Pearson Product Moment Correlation of relationship between emotional intelligence

and test anxiety among secondary school students

Variables	N	r	sig(2-tailed)
Emotional intelligence			
	380	-.038	0.45
Test anxiety			

P =0.05

It can be observed from Table 3 that an r-value of -0.038 and a p-value of 0.458 were obtained after testing at 0.05 level of significance. The calculated p-value is greater than the alpha level of 0.05; therefore the null hypothesis that states that there is no significant relationship between emotional intelligence and test anxiety is upheld. There is a non-significant negative correlation between emotional intelligence and test anxiety among the respondents in the study

Discussion of findings

The findings of the study shows that there is a moderate level of test anxiety among the respondents in the study. This result may be due to the attention being paid to the phenomenon in schools in recent times. Learners' attentions are being drawn to the negative effects of test anxiety and how to overcome it. This result is at variance with the observation made by Ngwoke, Ossai and Obikwelu (2013) that Nigerian students at all levels exhibit high level of test anxiety in testing conditions. It was also indicated in the findings that there is a significant difference in sex in the level of test anxiety among students in secondary school. Male students have a significantly higher test anxiety means than the female students. This, however, may have been occasioned by high level of distractions of male students concerning schooling in Nigeria of today, whereby they are more attracted to mundane things than education with the common belief among most male children that education does not bring quick and enormous rewards. Boys are attracted to sports, music and betting and so on rather than focusing on schooling. Female students are less distracted while the boys wait for the 11th hour to prepare for examinations. Such situation could lead to higher pre test anxiety among the male students. Nowadays, most high flying students are female at all levels of education in Nigeria. Words like "book is scam" and " boko haram- book is useless" are common on the lips if male students. This result is at variance with Eruvenkai and Simon (2021) who found that among secondary school adolescents in Mumbai, India, there was no significant sex difference in the level of test anxiety. This finding is however, in consonance with the findings of Ahmadpanah et al (2016), Rezazadeh et al (2019), Onwukwufor and Ugwu (2018) who found significant sex differences in test anxiety between male and female students in their studies. The study also made findings indicating a non-significant negative correlation between emotional intelligence and test anxiety. The finding

corroborates Eruvenkai and Simon (2021) who had a similar finding while working with adolescent students in Mumbai, It is however, at variance with the findings of Malik et al (2013), Tom and Ansia (2017) and Elder (2019) who reported significant negative correlation between emotional intelligence and test anxiety among students in their various studies. Although the correlation between the two variables was not statistically significant in the present study, it was negative, an indication that enhancing emotional intelligence may be useful or beneficial in reducing test anxiety.

Conclusion

From the findings of the study it can be concluded that secondary school students are moderately test anxious irrespective of sex and that emotional intelligence may have a weak influence on test anxiety.

Recommendations

This study has shown that the students have moderate test anxiety which is not significantly related to emotional intelligence. School counsellors should, as a routine service in academic guidance and counselling, provide students with requisite skills needed to improve their emotional intelligence and strategies to reduce test anxiety which would enable them attain their full potentials in school.

References

1. Ahmadpanah, M., Kesharvarz, M., Haghyhi, M., Jahnangard, L., Bajoghli,H., Banmani, D.S.,

2. Holsboer-Trachsler, E.&Brand, S. (2016). Higher emotional intelligence is related to

3. lower test anxiety. Neuropsychiatric DisTreet, 12:133-136.

4. Aydin,U. (2017).Test anxiety : Do gender and school level matter? European journal of

5. Educational psychology, 6(2), 187-197

6. Elder, D.(2019). The priming of emotional intelligence on test anxiety. Thesis. B.A.Honors,

7. Tyndale University College and Seminary.

8. Eruvenkai,A. & Simon, S .(2021) Emotional intelligence and test anxiety among adolescents

9. students in Mumbai. International journal of Indian Psychology,9 (3),133- 138.

10. Ilo, D.C. & Unachukwu, G.C. (2020). Test anxiety as predictor of senior secondary school

11. students achievement in English and Mathematics in Anambra State. Socialscientia

12. journal, 5(1). https://journals.apub.com/index.php/SS

13. Lawal, A.M., Idemudia, E.S. &Adewale,O.P.(2017) Academic self-confidence effects on test

14. anxiety among Nigerian students. Journal of Psychology in Africa, 27(6)

15. DOI.1080/14330237:2017:1375203

16. Malik, M, Akhter, M., Fatima, G & Safder M, (2013). Emotional intelligence and test anxiety: a case study of unique sch. System. Journal of Elementary Education. 23(2), 49-56

17. Mayer, I.D.& Salovey, P. What is emotional intelligence? In Salovey,P. & Slayter, C.,

18. Emotional intelligence development: Implications for Education. New York: Basic

19. Ngwoke, D.U, Ossai, O.V., & Obikwelu, C.L. (2013). Influence of study skills on test anxiety of secondary school students in Nsukka Urban, Enugu state, Nigeria. Journal of Educational Practice, 4 (17), 162-165

20. Nist, P. & Diehi, M. (1990). PHCC text anxiety questionnaire. Retrieved Aug, 20, 2010 from http://phcc.edu/ods/questionaire.html

21. Oladapo, S.E. & Ogungbamia, A. (2013)Academic level and students' faculty as factors of test anxiety among undergraduates in Nigeria. International journal of development and sustainability, 2 (1), 704-710

22. Onukwufor, J.N. and Ugwu, C.J. (2018). Level of school and gender differences in test anxiety among secondary school students in Port Harcourt Local Government Area of Rivers State. Advances in Social Science Research Journal 5(2), 154-159

23. Onyekwuru,B.U. & Ibegbulam, J.O. (2014). Relationship among test anxiety, locus of control and academic achievement among College students. European Scientific journal, 10 913), 387-400

24. Rezazadeh, M. &Tavakoli, M (2009). Investigating the relationship among Test anxiety,

25. gender, academic achievement and years of study: A case of Iranian EFL

26. University Students, 2 (4), 68-74

27. Sanchez-Alvarez, N., Berrios-Martos, M.P.& Extremera, N. (2020). A meta-analysis of the

28. relationship between emotional intelligence and test anxiety in secondary

29. education: A multi-stream comparison. Frontiers in Psychology 11:1517.

30. DOI:10.3389/fpsyg.2020.01517

31. Schutte, N.S. Malouff, J.M., Hall, L.E, Haggerty, D.J, Cooper, J.T, Golden, C. J, & Dornheim, L. (1998). Development and Validation of measure of emotional intelligence. Personality and individual Differences, 25, 16-177.

32. Tom,A. & Ansia ,A.(2017) Test anxiety and emotional intelligence among adolescents. Indian   Journal of positive psychology, 8(3), 328-332

33. Yahaya, A., Juriah, N.S.E., Bachok, D.J., Yahaya, N., Boron, Y.,Hashim, S. & Lee,

34. G.M. (2012). The impact of emotional intelligence element on academic

35. achievement. Archives Des Sciences, 65 (4).