ACADEMIC SELF-EFFICACY AND ACADEMIC PROCRASTINATION AS CORRELATES OF SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN ANAMBRA STATE

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Abstract

This study investigated academic self-efficacy and academic procrastination as correlates of secondary school students' academic achievement in Anambra State. Eight research questions guided the study while four null hypotheses were tested at 0.05 level of significance. This study adopted correlation survey research design. The area of the study is Anambra State Nigeria. The population of the study consisted of all the 6,396 senior secondary year two (SS2) students in the 263 public secondary schhools in Anambra State. A sample of 1,800 SS2 English language students was used in this study using multi-stage sampling technique. Self-Efficacy Scale (SES) was adopted while Tuckman Procrastination Scale (TPS) was adapted by the researcher. The academic achievement test was measured by Mathematics and English Language examination scores derived from SS 2 English Language students' termly results for 2022/2023 academic session. The TPS was an adapted instrument and therefore subjected to face validation by three experts. The TPS questionnaire was trial-tested using 20 students from a public secondary school in Enugu State and a co-efficient of 0.83 was obtained. Pearson Product Moment was used to answer the research questions while t-test of correlational analysis was used to test the null hypotheses at 0.05 alpha level. The finding revealed that the low positive relationship between

academic self-efficacy scores and secondary school students' academic achievement in English Language and Mathematics is significant. The findings also revealed that the very low negative relationship between academic procrastination scores and secondary school students' academic achievement in English Language and Mathematics is significant. Based on the findings, it was recommended amongst others in as much as academic procrastination did not influence students' academic achievement, it is hoped that students practice to manage their time as precisely as possible, because good time management can be an antidote to their academic procrastination tendency.

Keywords: Procrastination, Self-efficacy, Academic self-efficacy, academic procrastination, Academic Achievement

Introduction

Series of examinations such as such as the Common Entrance Examination (C.E.E.), First School Leaving Certificate Examination (F.S.L.C.E.), Junior Secondary School Certificate Examination (J.S.C.E), Senior Secondary School Certificate Examination (S.S.C.E.), Unified Tertiary Matriculation Examination (UTME), and a host of others play a dramatic role in the lives of students. In other words, achievement in these high stakes examinations is crucial for moving from one level of education to another and also to gain access into prestigious careers. Academic achievement in teaching-learning means the attainment of set of objectives of instruction (Uwaleke & Okoli, 2019). Academic achievement can determine whether a student will have the opportunity to continue his or her education; it will define whether one can take part in higher education based on what he/she attains (Okoli & Onokpaunu, 2020). Academic achievement is therefore one of the major variables that is used to measure an individual success

or failure in school activities. Student's academic achievement is commonly measured through examination and continuous assessment.

Researcher such as Anyaegbuna, Nwodo & Enibe, (2015) has shown that there is apparent low academic achievement among secondary school students. Analysis of WAEC results from 2016-2018 revealed the level of students' general academic achievement to be inconsistent most especially in core subjects like English and Mathematics in Anambra State (Auwalu, Muhd & Muhammad, 2018). In 2018, the WAEC performance showed a little above average performance in their overall performances including Mathematics and English Language. The WAEC chief examiners' report (2022) on core subjects such as Mathematics and English Language revealed that students showed the following weakness; inadequate interpretation of questions and inability to apply mathematical principles correctly; inability to identify the principle or concepts to be used in solving a problem; failure to express answers to the required degree of accuracy; mother tongue interference which resulted in transliteration; inability to construct simple and correct sentences; poor knowledge of the basic rules of English grammar; use of text message abbreviations such as "u" for "you" "d" for "the", etc. (source: waeconline.org.ng/e-learning). This could be why in the ranking of public secondary schools Anambra State came fifth in the 2022 West African Examinations Council (WAEC) as to reports of first position they have upheld over the years.

The importance of core subjects like English Language and Mathematics in students' academic achievement cannot be over-emphasized. Despite this importance, the performance of candidates in Nigerian Senior School Certificate Examination (SSCE) has continued to fluctuate over the years. With regards to this, it could be that other variables such as academic self-efficacy and academic procrastination play major roles in students' academic achievement and influences it.

Academic procrastination is often described as "student syndrome" as many students often begin to engage themselves in a task just before deadline (Ariely & Werternbroch, 2017). According to Ozer, Demir & Ferrari (2018), procrastination affects 46 to 95% of students. Academic procrastination is considered to be the pervasive and permanent desire on the part of a student to postpone academic activities. It is the delaying of academic work that must be completed or the failure to complete an academic task within the expected time frame. Academic Procrastination has received many empirical attentions especially within the field of psychology. Research findings have generally linked procrastination to personal behavioural factors such as lack of motivation, deficiencies in self-regulation, external locus of control, perfectionism, disorganization and poor time management (Olaniyi, 2019). More so, academic self-efficacy has also influenced students' academic achievement.

Self-efficacy influences individual when they are reasoning and evaluating a situation and completing a task. Self-efficacy, also known as perceived ability, is a term used to refer to the confidence that people have in their abilities to succeed in a given task (Tenaw, 2019). According to Bandura cited by Li (2018), self-efficacy is defined as beliefs in one's capabilities to organize and execute the course of action required to produce given attainments. Operationally, self-efficacy defines a child's belief (personal conviction) that they can successfully achieve at a designated level on an academic task or attain a specific academic goal. In many activities, including academic ones, self-efficacy affects how people approach new challenges. It therefore contributes to performance since the beliefs influence thought processes, motivation and behaviour (Tenaw, 2019). The interpretation of the past successes and failures are responsible for subsequent success or failure in tasks. Therefore, fluctuations in performance may be explained by fluctuations in self-efficacy. Therefore, academic achievement is generally regarded as the outcome of learning.

Several studies have linked self-efficacy to academic achievement. For example, in a study of seventh grade Science and English classes, self-efficacy was positively related to cognitive engagement and academic performance (Li, 2018). Although previous studies have explained the relationship between self-efficacy and academic achievement, academic procrastination and academic achievement, this present study shifted attention to measuring

jointly academic self-efficacy and academic procrastination as correlate of students' academic achievement in Anambra State.

Statement of the Problem

Factors such as academic self-efficacy and academic procrastination are variable which seems to have great effect on the achievement of students. Despite the considerable research attention focused on these constructs, it appears that in Anambra State, the comprehensive/ broad nature of these constructs as well as their relationship to academic achievement has not been attained. This may be observed in the trend of academic achievement of students in external examinations especially in English Language and Mathematics which has not necessarily improved from what it used to be (WAEC, 2020).

Preliminary investigations revealed that the teachers always grumble because the students postpone the accomplishment of their academic duties (such as submitting of their notes for marking, failure or delay in submitting assignments), postponement of preparation for the test until the last moments despite urging them in advance to preparation and submitting the tasks on time without post pending and procrastination. More so, informal investigations with some teachers revealed that in secondary schools in Anambra State, academic procrastination and academic self-efficacy is a complex and problematic area where students display low academic

self-efficacy in their examination as a result of inadequate learning skills or insufficient preparedness, which on many occasions, results to weakened academic achievement.

In addition, some previous studies have shown that there was correlation between academic procrastination and self-efficacy and the variation in the results of studies regarding the variable of level of the study. In real sense, some researchers have either considered one of these constructs in relation to students' academic achievement but it appears that much attention has not been given on academic self-efficacy and academic procrastination as correlate of secondary school students' academic achievement in core subjects such as English Language and Mathematics. It is this problem that this study sought to solve.

Purpose of the Study

The main purpose of this study determined academic self-efficacy and academic procrastination as correlates secondary school students' academic achievement in Anambra State. Specifically, the study determined:

1. The type of relationship between academic self-efficacy and secondary school students' academic achievement in English Language.
2. The type of relationship between academic procrastination and secondary school students' academic achievement in English Language.

3. The type of relationship between academic self-efficacy and secondary school students' academic achievement in Mathematics.

4. The type of relationship between academic procrastination and secondary school students' academic achievement in Mathematics.

Research Questions

The following research questions guided the study:

1. What type of relationship exists between academic self-efficacy scores and secondary school students' academic achievement in English Language?

2. What type of relationship exists between academic self-efficacy scores and secondary school students' academic achievement in Mathematics?

3. What type of relationship exists between academic procrastination scores and secondary school students' academic achievement in English Language?

4. What type of relationship exists between academic procrastination scores and secondary school students' academic achievement in Mathematics?

Hypotheses

The following null hypotheses were tested at 0.05 alpha level:

1. The type of relationship existing between academic self-efficacy and secondary school students' academic achievement in English language is not significant

2. The type of relationship existing between academic self-efficacy and secondary school students' academic achievement in Mathematics is not significant

3. The type of relationship existing between academic procrastination and secondary school students' academic achievement in English language is not significant

4. The type of relationship existing between academic procrastination and secondary school students' academic achievement in Mathematics is not significant

Method

This study adopted correlation survey research design. The area of the study is Anambra State Nigeria. The population of the study consisted of all the 6,396 senior secondary year two (SS2) students in the 263 public secondary schools in Anambra State. A sample of 1,800 SS2 English language students was used in this study using multi-stage sampling technique. Self-Efficacy Scale (SES) was adopted while Tuckman Procrastination Scale (TPS) was adapted by the researcher. The academic achievement test was measured by Mathematics and English Language examination scores derived from SS 2 English Language students' termly results for 2022/2023 academic session. The TPS was an adapted instrument and therefore subjected to face validation by three experts. The TPS questionnaire was trial-tested using 20 students from a

public secondary school in Enugu State and a co-efficient of 0.83 was obtained. Pearson Product Moment was used to answer the research questions while regression analysis was used to test the null hypotheses at 0.05 alpha level.

Results

Table 1: Pearson r on academic self-efficacy scores and secondary school students' academic achievement in English Language

Sources of variance	N	Academic self-efficacy scores (r)	Eng. lang (r)	Remark
Academic self-efficacy scores	1750	1.00	0.21	Low positive relationship
English Language	1750	0.21	1.00	

Table 1 shows that there is a low positive relationship of 0.21 existing between academic self-efficacy scores and secondary school students' academic achievement in English Language.

Table 2: Pearson r on academic self-efficacy scores and secondary school students' academic achievement in Mathematics

Sources of variance	N	Academic self-efficacy scores (r)	Mathematics (r)	Remark
Academic self-efficacy scores	1750	1.00	0.36	Low positive relationship
Mathematics	1750	0.36	1.00	

Table 2 shows that there is a low positive relationship of 0.36 existing between academic self-efficacy scores and secondary school students' academic achievement in Mathematics.

Table 3: Pearson r on academic self-efficacy scores and secondary school students' academic achievement in English Language

Sources of variance	N	Academic procrastination (r)	Eng. lang (r)	Remark
Academic procrastination	1750	1.00	-0.19	Very low negative relationship
English Language	1750	-0.19	1.00	

Table 3 shows that there is a very low negative relationship of -0.19 existing between academic procrastination scores and secondary school students' academic achievement in English Language.

Table 4: Pearson r on academic procrastination scores and secondary school students' academic achievement in Mathematics

Sources of variance	N	Academic procrastination (r)	Mathematics (r)	Remark
Academic procrastination scores	1750	1.00	-0.39	Low negative relationship
Mathematics	1750	-0.39	1.00	

Table 4 shows that there is a low negative relationship of -0.39 existing between academic procrastination scores and secondary school students' academic achievement in Mathematics.

Table 5: t-test on the significant of Pearson r of academic self-efficacy and secondary school students' academic achievement in English language

N	Cal. r	Df	Cal. T	p-value	Remark
1750	0.21	1748	3.27	0.001	Significant

Table 5 indicated that at 0.05 level of significance and 1748 df, the calculated t 3.27 with p-value 0.001 which is less than 0.05, the first null hypothesis is rejected. This means that there is a significant correlation between academic self-efficacy and secondary school students' academic achievement in English language.

Table 6: t-test on the significant of Pearson r of academic self-efficacy and secondary school students' academic achievement in Mathematics

N	Cal. r	Df	Cal. t	p-value	Remark
1750	0.36	1748	11.04	0.000	Significant

Table 6 indicated that at 0.05 level of significance and 1748 df, the calculated t 11.04 with p-value 0.00 which is less than 0.05, the first null hypothesis is rejected. This means that there is a significant correlation between academic self-efficacy and secondary school students' academic achievement in Mathematics.

Table 7: t-test on the significant of Pearson r of academic procrastination and secondary school students' academic achievement in English language

N	Cal. r	Df	Cal. T	p-value	Remark
1750	-0.19	1748	9.66	0.12	Not significant

Table 7 indicated that at 0.05 level of significance and 1748 df, the calculated t 9.66 with p-value 0.12 which is greater than 0.05, the first null hypothesis is not rejected. This means that there is no significant correlation between academic procrastination and secondary school students' academic achievement in English language.

Table 8: t-test on the significant of Pearson r of academic procrastination and secondary school students' academic achievement in Mathematics

N	Cal. r	Df	Cal. t	p-value	Remark
1750	-0.39	1748	5.89	0.07	Not significant

Table 8 indicates that at 0.05 level of significance and 1748 df, the calculated t 5.89 with p-value 0.07 which is greater than 0.05, the first null hypothesis is not rejected. This means that there is no significant correlation between academic procrastination and secondary school students' academic achievement in Mathematics.

Discussion of Findings

The finding revealed that there is a low positive relationship existing between academic self-efficacy scores and secondary school students' academic achievement in English Language. This finding was in line with the finding of Mahyuddin, Elias, Cheong, Muhamad, Noordin and Abdullah (2016) that there exist a low positive correlation between several dimensions of self-efficacy and academic performance in English Language. This finding was agreed with the finding of Yongjin and Siti (2020) that Chinese university students have a low self-efficacy and their English Language performance. The corresponding hypothesis revealed that there is a significant correlation between academic self-efficacy and secondary school students' academic achievement in English language. This finding was in line with the finding of Mahyuddin et al (2016) that the dimensions of self-efficacy significantly predict their academic performance in English Language.

The finding revealed that there is a low positive relationship existing between academic self-efficacy scores and secondary school students' academic achievement in Mathematics. This finding was in line with the finding of Naz and Majoka (2016) that there is a weak relationship between mathematics self-efficacy and their relative academic achievement at university level.

Also, this finding was in line with the finding of Laranag and Bondoc (2020) that there is a low relationship between students' self-efficacy and mathematics. This finding agreed with the finding of Nwosu and Okoye (2014) that there is a low prediction between self-efficacy and undergraduate students' academic achievement in psychology course. The corresponding hypothesis revealed that there is significant correlation between academic self-efficacy and secondary school students' academic achievement in English Language and Mathematics. This finding agreed with the finding of Naz and majoka (2016) that a significant relationship exists between students' mathematics self-efficacy and academic achievement.

The finding revealed that there is a very low negative relationship between academic procrastination scores and secondary school students' academic achievement in English Language. This finding was in line with the finding of Joubert (2015) that a negative relationship exists between procrastination and academic achievement of high school learners in North West province, South Africa. This finding also agreed with of Desfindah (2020) that students' academic procrastination and their English learning achievement at Junior High School 40 Pekanbaru. The corresponding hypothesis revealed that there is no significant correlation between academic procrastination and secondary school students' academic achievement in English Language. This finding disagreed with the finding of Desfindah (2020) that there was significant correlation between students' academic procrastination and their English learning achievement at Junior High School 40 Pekanbaru.

The finding revealed that there is a low negative relationship between academic procrastination scores and secondary school students' academic achievement in Mathematics. This finding was in line with the finding of Asghar, Moein, Leila and Nasrin (2020) that there exist a negative relationship between academic procrastination and academic achievement among medical students at Shiraz University of Medical Sciences. Conversely, the finding

opposed the finding of Mojeed, Adedeji and Adeyinka (2007) that a positive relationship existed between academic procrastination and academic achievement of mathematics among undergraduate students. The difference between both findings could be as a result of varying levels of respondents as regards academic procrastination. The corresponding hypothesis revealed that there is no significant correlation between academic procrastination and secondary school students' academic achievement in Mathematics. This finding was in line with the finding of Asghar et al. (2020) that significant negative relationship between academic procrastination and academic achievement in medical students.

Conclusion

Based on the finding of the study, it was concluded that the low positive relationship between academic self-efficacy scores and secondary school students' academic achievement in English Language and Mathematics is significant. It was also concluded that the very low negative relationship between academic procrastination scores and secondary school students' academic achievement in English Language and Mathematics is significant.

Recommendations

Based on the finding of the study, the following recommendations were made:

1. Since academic self-efficacy did not influence secondary school students' academic achievement, it is recommended that teachers/parents should find other means of boosting students or their wards' desire to learn so as to achieve higher academically. Even at that, teachers may help the learners develop their high self-belief to perform in mathematics and English Language by employing creative teaching and learning strategies that will make the learners more interested to learn math concepts and theories.

2. Since academic procrastination has no relationship with their academic achievement of secondary school students in Mathematics and English Language, school counsellors should focus more on other factors such as emotional intelligence, birth order, study habit as they could be factors /constructs that may influence academic achievement of students in Mathematics and English Language.

References

Anyaegbunam,N. J., Nwodo, B. I., & Enibe, D. E. (2015). Effective application of constructivist theatre instruction (CTI) procedures for improving achievement and attitude of biology students. *56th Annual Conference Proceedings of STAN,* pp. 102-111

Ariely, D. & Wertenbroch. K. (2017). Procrastination deadlines, and performance: Self-control by pre-commitment. *Psychological Science, 13*(3), 219-234.

Auwalu, R.I., Mohd, E. T., & Muhammad, B.G. (2018). Academic achievement in biology with suggested solutions in selected secondary schools in Kano State, Nigeria. *International Journal of Education and Research, 2(11),* 215-224.

Desfindah, R. (2021). *Procrastination and their English learning achievement at junior high school 40 Pekanbaru.* A Thesis submitted at Faculty Of Education And Teacher Training State Islamic University Of Sultan Syarif Kasim Riau Pekanbaru

Joubert, C.P. (2015). *The relationship between procrastination and academic achievement of high school learners in North West province, South Africa.* University of South Africa, Pretoria, <http://hdl.handle.net/10500/19991>

Laranang, J.A. & Bondoc, J.M. (2020). Attitudes and self-efficacy of students towards mathematics. *International Journal of English Literature and Social Sciences, 5(5)* Sep-Oct 2020 |Available online: https://ijels.com/

Li, L.K. (2018). A study of the attitude, self-efficacy, effort and academic achievement of CityU Students towards Research Methods and Statistics. *Discovery SS Student E-Journal, 1,* 154-183.

Mahyuddin, R. Elias, H. Cheong, L. S. Muhamad, M. F. Noordin, N. & Abdullah, M. C. (2016). The relationship between students' self-efficacy and their English language achievement. *Jurnal Pendidik dan Pendidikan, 21*, 61 – 71.

Mojeed, K. A. Adedeji, T. & Adeyinka, T. (2007). Correlates of academic procrastination and mathematics achievement of university undergraduate students. University of Botswana, Gaborone Botswana. *Eurasia Journal of Mathematics, Science & Technology Education, 3(4)*, 363-370.

Naz S. & Majoka I. (2016). A study of students' self-efficacy and academic achievement in Mathematics at university level. *Journal of Arts and Social Sciences*, *3*(1), 5- 251.

Nwosu, K. C. & Okoye, R. O. (2014). Students' self-efficacy and self-rating scores a predictors of their academic achievement. *Journal of Educational and Social Research, 4*(3), 223 – 226.

Okoye, K.R.E. & Onokpaunu, M.O. (2020). Relationship between self-esteem, academic procrastination and test anxiety with academic achievement of postgraduate diploma in education (PGDE) students in Delta State University, Abraka. *ISJASSR, 3*(1), 37 – 48.

Olaniyi, B. (2019). Causes of academic procrastination among high pupils with learning disabilities in Ilorin State, Nigeria. *International Journal of Technology and Inclusive Education, 8*(1), 1 – 6.

Ozer, B.U., Demir, A., & Ferrari, J.R. (2018). Exploring academic procrastination among Turkish students: Possibe gender differences in prevalence and reasons. *Journal of Social Psychology, 149*(2), 241-257.

Tenaw, Y.A. (2019). Relationship between Self-Efficacy, Academic Achievement and Gender in Analytical Chemistry at Debre Markos College of teacher Education. *AmericanJournal of College Education, 3*(1), 2227-5835.

Uwakele, C.C. & Okoli, J. N. (2019). Effect of laboratory technique on secondary school students' acquisition of production skills in liquid soap making in Imo State. *UNIZIK Journal of STM Education, 3(1)*, 222 – 235.

Yongjin, Z. & Siti, M.M. (2020). The relationship between English self-efficacy and English Language performance among Chinese university students. *European Journal of Molecular and Clinical Medicine, 2*(1), 90 – 99.