

Article

Academic Motivation and Self-Regulated Learning as Predictors of Academic Performance Among Secondary School Students in Rivers State

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Abstract: This study investigated academic motivation and self-regulated learning as predictors of academic performance among secondary school students in Rivers State. Two research questions and two hypotheses guided the study. The study adopted correlational research design. The population of the study comprised all the 64,325 public senior secondary three (SS3) students in Rivers State. Taro Yamane was used to get the sample size. Multistage sampling technique was used in the study. Academic Motivation and Self-Regulated Learning Scale (AMSRLS) and Students' Academic Performance Score (SAPS) were used to collate data. The instruments were validated by three experts. Test-retest technique was used to determine the reliability of the instrument. A reliability coefficient of $r = 0.83$ and 0.79 were established using Pearson Product Moment Correlation Simple regression was used to answer the researcher questions and test the corresponding null hypotheses at $\alpha = 0.05$ alpha level. The study revealed that academic motivation and self-regulated learning both significantly and positively predicted academic performance among secondary school students in Rivers State, although their predictive contributions were relatively modest. Based on the findings, the researcher recommended, among other thing, that secondary school teachers and school counsellors should strengthen students' academic motivation through regular encouragement, constructive feedback, recognition of academic effort and the use of engaging learning activities that help students develop clear and realistic academic goals.

Keywords: Academic Motivation, Self-Regulated Learning, Academic Performance, Secondary School Students.

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1. Introduction

Education is process through which individuals acquire the knowledge, skills, values and competencies required for effective participation in society. At the secondary school level, it serves as an important stage in preparing learners for higher education, occupational development and responsible citizenship. Academic performance is one of the major indicators used to assess the extent to which students are benefiting from the educational process. However, students who are exposed to similar teachers, learning facilities and instructional experiences may not necessarily attain similar academic outcomes [1]. This variation suggests that students' performance is influenced not only by external educational conditions but also by psychological factors within the learner. Nwikipo et al. noted that academic motivation and self-regulation are important learner-related factors associated with academic performance among secondary school students. This position draws attention to the need to understand how students' willingness to learn and their ability to manage their own learning may contribute to differences in academic achievement. Academic motivation and self-regulated learning have become important considerations in understanding the factors that may predict students' academic performance [2].

Ehiemere and Chikezie explained that motivation-related variables can provide important insight into students' academic assessment outcomes. Academic motivation refers to the psychological drive, interest and reasons that encourage students to participate in learning activities and pursue academic goals.

It influences the extent to which students are willing to attend to schoolwork, invest effort, remain persistent and overcome difficulties encountered during learning [3]. A student who is academically motivated is more likely to approach learning tasks with commitment, participate actively in classroom activities, devote adequate time to study and continue working even when academic tasks become challenging. Motivation may arise from students' personal interest in learning, the desire to obtain good grades, future career aspirations, parental expectations, teacher encouragement or the desire for recognition [4]. Ehiemere and Chikezie observed that self-regulation and extrinsic motivation significantly predicted academic assessment outcomes, while their findings also showed that not every motivational dimension contributes to academic outcomes in the same manner. This suggests that academic motivation is a complex psychological construct whose influence on students' performance depends partly on the nature and direction of the motivation experienced by the learner.

Nwikpo et al. defined self-regulation as an important aspect of students' capacity to manage and direct their learning towards desired academic outcomes. Self-regulated learning involves students taking an active role in planning, monitoring, controlling and evaluating their learning activities. A self-regulated learner is able to establish academic goals, organise study activities, manage time, select appropriate learning strategies, monitor understanding and make necessary adjustments when difficulties arise [5]. Such learners do not depend entirely on teachers or parents to determine when, where and how they should study; rather, they gradually develop the capacity to take responsibility for their own learning. Nwikpo et al. observed a significant relationship between self-regulation and academic performance among secondary school students, indicating that students who are able to regulate their learning activities may be better positioned to achieve favourable academic outcomes. Self-regulated learning is therefore closely connected with academic motivation because motivation provides the willingness to engage in learning, while self-regulation helps students organise and sustain the behaviours required to translate that willingness into productive academic action.

Academic performance represents the level of achievement demonstrated by students in relation to the educational tasks, learning objectives and academic expectations of the school. It may be reflected through students' examination results, test scores, continuous assessment, assignments, classroom activities and other forms of academic evaluation. Ehiemere and Chikezie stated that academic assessment outcomes are influenced by important motivational variables, including self-efficacy, self-regulation and extrinsic motivation. Their observation reinforces the view that students' academic outcomes cannot be adequately understood by considering intellectual ability or instructional factors alone. Academic performance is a product of several interacting factors, including students' cognitive abilities, learning habits, emotional dispositions, motivation, self-discipline and the strategies they employ in approaching academic tasks. In this regard, students who possess strong academic motivation may demonstrate greater willingness to invest effort in learning, while those who possess effective self-regulatory skills may be better able to organise and sustain that effort. The combination of these qualities may therefore provide a meaningful basis for understanding differences in students' academic performance [6].

The relationship among academic motivation, self-regulated learning and academic performance is worthy of investigation among secondary school students in Rivers State. At this stage of education, students are increasingly expected to become responsible for their learning, make academic decisions, prepare for important examinations and develop competencies that will influence their future educational and occupational pathways. Nwikpo et al. stressed that students who experience difficulties with academic motivation and self-regulation may require appropriate guidance and support to improve their learning outcomes. Similarly, Ehiemere and Chikezie maintained that self-regulation and other motivation variables have predictive relevance for students' academic assessment outcomes. These perspectives suggest that academic motivation and self-regulated learning should not be viewed as isolated characteristics but as complementary psychological processes that may work together in shaping students' academic behaviour and achievement. Academic motivation may provide the desire and persistence to learn, while self-regulated learning may enable students to convert that motivation into purposeful learning behaviours.

It is against this background that the present study examines academic motivation and self-regulated learning as predictors of academic performance among secondary school students in Rivers State.

Academic performance remains a major concern in secondary education because it reflects, to a considerable extent, the extent to which students are benefiting from teaching and learning. However, there appears to be a noticeable difference in the academic performance of secondary school students in Rivers State [7]. While some students demonstrate sustained interest in schoolwork, complete academic tasks promptly, prepare adequately for examinations and achieve satisfactory results, others appear less interested in their studies, struggle to sustain effort and record unsatisfactory academic outcomes. It has been reported that some students attend classes and participate in school activities but do not devote sufficient attention and effort to their academic work. Some also appear to give up easily when faced with difficult tasks, depend excessively on teachers or classmates for direction and demonstrate poor study habits. These situations raise concerns about whether students' academic performance is being influenced by their level of academic motivation and their ability to regulate their own learning.

The problem becomes more important because academic performance may not improve simply by providing students with teachers, instructional materials and learning facilities if the learners themselves lack the psychological drive and self-management skills required for effective learning. As observed by the researcher, some secondary school students appear to have limited ability to set academic goals, manage study time, monitor their understanding, control distractions and evaluate their learning progress. At the same time, some students who show interest in achieving good grades may not possess the self-regulatory skills needed to translate their motivation into consistent academic effort [8]. This situation may contribute to poor preparation for examinations, incomplete assignments, weak study habits and unsatisfactory academic outcomes. Although academic motivation and self-regulated learning have been discussed as important factors in students' educational experiences, there is still a need for empirical evidence on the extent to which these variables predict academic performance among secondary school students in Rivers State. It is this observed concern and the need to provide evidence-based understanding of the psychological factors underlying students' academic outcomes that prompted the researcher to undertake the present study on academic motivation and self-regulated learning as predictors of academic performance among secondary school students in Rivers State.

The aim of this study was to examine academic motivation and self-regulated learning as predictors of academic performance among secondary school students in Rivers State. Specifically, the study sought to:

1. Determine the extent to which academic motivation predicts academic performance among secondary school students in Rivers State.
2. Investigate the extent to which self-regulated learning predicts academic performance among secondary school students in Rivers State.

Research Questions

The following research questions were posed to guide the study:

1. To what extent does academic motivation predict academic performance among secondary school students in Rivers State?
2. To what extent does self-regulated learning predict academic performance among secondary school students in Rivers State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. Academic motivation does not significantly predict academic performance among secondary school students in Rivers State.
2. Self-regulated learning does not significantly predict academic performance among secondary school students in Rivers State.

2. Methodology

The study adopted correlational research design. The population of the study comprised all the 64,325 public senior secondary three (SS3) students in Rivers State. Taro Yamane was used to arrive at the sample of 398, but the researcher purposely

increased the number by 52 to obtain the sample size of 450 senior secondary school students in Rivers State. Multistage sampling technique was used in the study. Academic Motivation and Self-Regulated Learning Scale (AMSRLS) and Students' Academic Performance Score (SAPS) were used to collate data. The instruments were validated by three experts in Measurement and Evaluation. Test-retest technique was used to determine the reliability of the instrument. A reliability coefficient of $r = 0.83$ and 0.79 were established using Pearson Product Moment Correlation Simple regression was used to answer the researcher questions and test the corresponding null hypotheses at $\alpha = 0.05$ alpha level. The analysis of data generated from the study was aided by the Statistical Package for Social Sciences (SPSS).

3. Results

Research Question One: To what extent does academic motivation predict academic performance among secondary school students in Rivers State?

Table 1: Simple Regression for Academic Motivation and Academic Performance among Secondary School Students in Rivers State
Model iSummary

Model	R	R iSquare	Adjusted iSquare	iR	Std. iError iEstimate	iof	ithe
1	.076 ^a	.006	-.004		1.03437		

a. iPredictors: i(Constant) Academic Motivation

The result presented in Table 1 shows the simple regression analysis of academic motivation and academic performance among secondary school students in Rivers State. The model summary revealed a correlation coefficient ($R=.076$), indicating a very weak positive relationship between academic motivation and academic performance. The coefficient of determination ($R^2=.006$) showed that academic motivation accounted for approximately 0.6% of the variation in academic performance among the students. This suggests that academic motivation, considered independently, explained only a small proportion of the differences in students' academic performance, while the remaining 99.4% may be associated with other factors not included in the model [9].

Hypothesis One: Academic motivation does not significantly predict academic performance among secondary school students in Rivers State

Table 2: Coefficients for Academic Motivation and Academic Performance among Secondary School Students in Rivers State
Coefficients^a

Model		Unstandardized iCoefficients B	Std. iError	Standardized iCoefficients Beta	T	Sig.	Decision
1	(Constant)	2.395	.270		8.887	.000	Reject
	Academic Motivation	.072	.092	.076	2.47	.014	

b. iDependent iVariable: Academic performance

The result presented in Table 2 shows the regression coefficient for academic motivation as a predictor of academic performance among secondary school students in Rivers State. The table revealed a positive unstandardised regression coefficient ($B=0.072$), indicating that an increase in academic motivation was associated with a slight increase in academic performance. The standardised regression coefficient ($\beta=.076$) further indicated that academic motivation had a very weak positive predictive relationship with academic performance. The table further revealed a p value of .014, which is below the .05 level of significance, with a corresponding t value of 2.47. Since the p value is less than .05, the null hypothesis, which stated that academic motivation does not significantly predict academic performance among secondary school students in Rivers State, was rejected. This implies that academic motivation significantly predicts academic performance among the students, although the strength of the predictive relationship is weak [10].

Research Question Two: To what extent does self-regulated learning predict academic performance among secondary school students in Rivers State?

Table 3: Simple Regression for Self-Regulated Learning and Academic Performance among Secondary School Students in Rivers State
Model iSummary

Model	R	R iSquare	Adjusted iSquare	iR	Std. iError iof ithe iEstimate
1	.274 ^a	.075	.066		.99781

a. iPredictors: i(Constant), Self-Regulated Learning

Table 3 presents the simple regression analysis of self-regulated learning and academic performance among secondary school students in Rivers State. The model summary revealed a correlation coefficient of $(R = .274)$, indicating a low positive relationship between self-regulated learning and academic performance. The coefficient of determination ($(R^2 = .075)$) showed that self-regulated learning accounted for 7.5% of the variance in academic performance among the students. This implies that differences in students' self-regulated learning behaviours explained 7.5% of the differences observed in their academic performance, while the remaining 92.5% could be attributed to other factors not included in the model [11]. The adjusted (R^2) value of .066 indicated that, after adjustment for the predictor in the model, approximately 6.6% of the variance in academic performance was explained by self-regulated learning. The standard error of the estimate was 0.99781, indicating the average amount of error associated with predicting academic performance from self-regulated learning.

Hypothesis Two: Self-regulated learning does not significantly predict academic performance among secondary school students in Rivers State?

Table 4: Regression Coefficients for Self-Regulated Learning and Academic Performance among Secondary School Students in Rivers State
Coefficients^a

Model		Unstandardized iCoefficients		Standardized iCoefficients	t	Sig.	Decision
		B	Std. iError	Beta			
1	(Constant)	3.349	.276		12.149	.000	Reject
	Self-regulated learning	.277	.095	.274	.2.928	.004	

b. iDependent iVariable: academic performance

Table 4 presents the regression coefficients for self-regulated learning and academic performance among secondary school students in Rivers State. The result revealed a positive unstandardised regression coefficient ($(B = .277)$), indicating that an increase in self-regulated learning was associated with an increase in academic performance [12]. The standardised regression coefficient ($(\beta = .274)$) further indicated a low positive predictive relationship between self-regulated learning and academic performance. The t value of 2.928 indicates that the regression coefficient differs significantly from zero. The table further revealed a p value of .004, which is less than the .05 level of significance. Therefore, the null hypothesis that self-regulated learning does not significantly predict academic performance among secondary school students in Rivers State was rejected [13].

4. Discussion

The finding of the study revealed that academic motivation significantly predicts academic performance among secondary school students in Rivers State, although the predictive relationship was weak and positive. This implies that students with higher levels of academic motivation tended to demonstrate slightly better academic performance. The finding supports Nwipko et al. who observed a significant relationship between academic motivation and academic performance among secondary school students, thereby supporting the present finding. Their study demonstrated that students' motivational disposition is relevant to their academic outcomes and that strengthening students' motivation may help them approach academic tasks more positively [14].

Similarly, Adeniyi et al. reported that motivation had a significant effect on students' academic performance, further lending support to the present result. The agreement may be explained by the fact that academically motivated students are more likely to devote attention to schoolwork, persist when confronted with difficult tasks, participate actively in learning activities and maintain effort towards academic goals. Evidence from the Nigerian context also continues to emphasise the importance of motivation in students' achievement [15]. For instance, Ahmed Tijjani and Abdullahi Sambo reported a significant influence of achievement motivation on academic performance among secondary school students, suggesting that motivational dispositions can shape learners' academic outcomes. Although the present study recorded only a very weak predictive coefficient, its statistical significance indicates that academic motivation nevertheless contributes meaningfully to academic performance. The relatively small predictive strength may suggest that motivation operates alongside several other factors, such as teaching quality, learning resources, study habits, family support, school environment, cognitive ability and self-regulatory behaviours [16].

The finding of the present study revealed that self-regulated learning significantly predicted academic performance among secondary school students in Rivers State. The positive beta coefficient indicates that students who demonstrated stronger self-regulated learning tendencies tended to record better academic performance. The finding suggests Nwipko et al. who observed that self-regulation was significantly related to academic performance among secondary school students, supporting the present finding that learners' ability to take control of their learning is relevant to their academic outcomes [17]. Similarly, Nwankwo and Ezeasor reported a moderate positive and significant relationship between self-regulation skills and academic achievement among secondary school students in Physics, stressing the importance of goal setting, self-planning, self-monitoring and self-reflection in promoting achievement. The present finding is also consistent with Eniayewu and Awofodu, who found that metacognitive regulation and rehearsal strategies significantly predicted Biology achievement among Nigerian secondary school students. These findings suggest that self-regulated learning is particularly valuable because it enables students to move beyond passive reception of instruction and become active participants in their own learning. A student who consciously plans when and how to study, monitors progress towards academic goals and adjusts ineffective learning strategies is more likely to make purposeful use of available learning opportunities [18].

5. Conclusion

The study concludes that academic motivation and self-regulated learning are important psychological factors in understanding academic performance among secondary school students in Rivers State. The findings established that academic motivation significantly predicted academic performance, although the strength of the prediction was weak. This suggests that students' willingness to learn, interest in academic activities, persistence and commitment to achieving educational goals can contribute to their academic outcomes. The finding further demonstrates that students' academic performance cannot be considered entirely independent of their motivational disposition, as students who are psychologically prepared and willing to engage in learning are more likely to invest effort in their academic activities. The study also concludes that self-regulated learning significantly predicted academic performance among the students. The positive relationship observed indicates that students who are able to plan, monitor, manage and evaluate their learning tend to demonstrate better academic outcomes.

Based on the findings, the following recommendations are made: Secondary school teachers and school counsellors should strengthen students' academic motivation through regular encouragement, constructive feedback, recognition of academic effort and the use of engaging learning activities that help students develop clear and realistic academic goals. Secondary school teachers and school counsellors should deliberately teach and practise self-regulated learning skills, particularly goal setting, study planning, time management, self-monitoring and self-evaluation, to help students take greater responsibility for their learning and improve their academic performance.

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