

**SELF REGULATION AS A PREDICTOR OF ACADEMIC ENGAGEMENT OF
SECONDARY SCHOOL STUDENTS IN ANAMBRA STATE**

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Abstract

The study investigated self regulation as a predictor of academic engagement of secondary school students in Anambra State. The study was guided by two research questions and two null hypotheses were tested at .05 level Of significance. Correlational research design was adopted. The population of the study comprised of 20,889 (9,411 males and 11,478 females) senior secondary two (SS 2) students. Stratified random sampling was used to draw a sample of 887 SS 2 students comprising of 444 males and 443 females. Two instruments adapted by the researcher were used for data collection. These were Self Regulation Questionnaire (SRQ) by Gauner and Nooman (2018) and Academic Engagement Questionnaire (AEQ) by Veiga (2016). The instruments were subjected to face validation by three experts. The reliability of the instruments was established using Cronbach Alpha. The results gave value of 0.73 and 0.70 for SRQ and AEQ respectively. The researcher administered the instruments with the help of three research assistants who were briefed on how to distribute and collect the instrument. The research questions were answered using Pearson Product Moment Correlation while simple regression analysis was used to test the hypotheses at .05 level of significance. The findings revealed among others that self regulation is a moderate predictor of academic engagement. Based on the findings, it was recommended that secondary school guidance counsellors should educate the students on the need for them to acquire self-regulatory skills which will enable them to tackle their day to day academic tasks.

Keywords; Self-regulation, Predictor, Academic engagement.

Introduction

Over the last seven decades, researchers and educators have exhibited a growing interest in the concept of academic engagement as a way to improve disaffection, avert student boredom, enhance students' motivation and involvement in school-related activities, increase successful student achievement levels, and understand students' positive development (Alrashidi, Phan & Ngu 2016, Li & Lerner 2011). Students' engagement in school is an important construct that has been associated with student's success. Engagement is a growth producing activity through which an individual allocates attention in active response to the environment. Thus students' academic engagement has become an important concept related to multiple educational outcomes.

Academic engagement is defined by various authors in different ways. According to Obikeze, Obi and Mmegbuanaeze (2018), academic engagement refers to the students' willingness, needs, desire, motivation and success in learning. Continuing, Obikeze et al also asserted that the yardstick for measuring academic engagement is therefore the willingness and commitment of the students towards their academic activities. It also denotes students' commitment to or effortful involvement in the context of academic learning throughout a student's entire school experience. Saris (2017) defined academic engagement as students' investment in and commitment to learning, belonging and identification at school, and participation in the institution environment and initiation of activities to achieve an outcome. The concept of academic engagement refers to the quality of the effort, which, students take on targeted educational activities to achieve desirable results directly. Sara, Mohamad and Hamid (2018) defined academic engagement as the motivation and behavioural processes allowing individuals to activate and sustain cognitions, behaviours and emotions in a systematic way towards the attainment of their own learning goals. From the above definitions, academic engagement is the extent to which a student values school-related outcomes and identifies with and participates in academic and non-academic school activities. Academic engagement therefore is an indicator that combined academic identification and participation which captures the student's school work effort and self regulation that determines hours spent on homework, meeting deadlines, not skipping classes as a result of peer pressure and so on.

Students' academic engagement has become an important concept related to multiple educational outcomes (for instance achievement, attendance, behaviour, drop out/completion). As a result of its demonstrated relationships with a variety of outcomes, it is postulated that an understanding of students' academic engagement might help educators prevent deleterious outcomes and promote positive ones for at risk students. In addition, both the individuals and the environment shape a student's level of engagement, thus there are many factors in the school environment (for instance interpersonal relationship, recognition) that may enhance it.

Students' academic engagement has been seen as the multidimensional construct of three major components: behavioural, cognitive and emotional engagement. The behavioural engagement consists of students' observable participation in, and contribution to, various academic activities, such as group work, interaction with friends, on-task behaviour, and access to learning resources. The cognitive engagement dimension includes students'

psychological efforts and investment in understanding the subject matter, acquiring skills, and implementing self-regulated strategies. Cognitive engagement includes investment in learning, value given to learning, learning goals, self-regulation and planning. Cognitive engagement has an important relationship with learning motivation. Cognitive engagement refers to students who invest in their own learning, who accordingly determine their needs and who enjoy the mental difficulties (Gunuc & Kuzu, 2014). The emotional engagement, on the other hand, refers to students' feeling associated with their institutions, teachers, peers, and academic tasks. Emotional engagement involves students' responses to the teacher, peers, course content and to the class which all include attitudes, interests and values (Gunuc & Kuzu, 2014). In addition, such emotions as sense of belonging to school, loving the school and feeling oneself to be a member of a group are also examined within the scope of emotional engagement.

Behavioural engagement includes students' participation in academic, their efforts, their attendance and their participation in class (Gunuc & Kuzu, 2014). The basic of behavioural engagement could be said to be related to class activities. The school (out-of-class) and social activities are also examined within the scope of behavioural engagement. Social and emotional environments in the classroom are to be among prerequisites to students' engagement with activities and tasks. In addition, in several studies, it was reported that emotional engagement, emotional support or positive emotions increase participation in activities or behavioural engagement (Li & Learner, 2011) Academic engagement or the lack of it has been shown to have a significant impact on educational outcomes. High levels of academic engagement have been found to be a predictor not only for student academic performance (Wang & Holcombe, 2010) but also for their well-being (Pyhältö, Soini & Pietarinen, 2010) and affirmative long term development in their academic lives. There is evidence that academically engaged students are willing to invest time and effort in their studies and are likely to be efficient and persistent in dealing with the demands of study (Wang & Eccles, 2012). This is likely to promote further engagement in academic activities and protect students from negative states, such as exhaustion, that might lead to study burnout. In turn, students who suffer from reduced engagement have been found to run a greater risk of alienation and dropout. The degree to which students intend to prioritize and engage in academic tasks could be influence by their level of self-regulation.

Self-regulation refers to the self-altering of own responses or inner states. This takes the form of overriding one's response or behaviour and replacing it with a less common but more desired response. Self-regulation refers to a regulation of the psychological state of an individual by the individual himself (Olasehinde & Olatoye, 2014). It also includes the ability to delay gratification. Although self regulation has typically implied regulation of behaviour by the self in pursuit of a conscious intention or purpose, some forms of self-regulation occur without conscious awareness or active intervention by the self. Self regulation is further defined by Carvier and Scheier (2016), as people's capacity to focus on their long term goals and resist temptations and impulses for immediate gratification. As such, self regulation involves the ability to alter thoughts, actions and emotions in a way that serves goal striving, whether the goal is set by self, the society or both. Self regulation in the school context, describes the ways students focus attention on achieving

success. In the school, students are expected to seek out challenges, ask for help and get excited about topics that relate to their lives. Self regulated learners find personal value in learning, develop effective study habits, welcome challenges, seek help and use failure as a learning tool, among other crucial skills faced with endless distractions, today's students need self regulation skills more than ever before.

Self-regulation involves controlling one's behaviour, emotions, and thoughts in the pursuit of long-term goals. More specifically, self-regulation refers to the ability to manage disruptive emotions and impulses, in other words, to think before acting. Nwankwo (2018) explained that self-regulation involves taking a pause between a feeling and an action - taking the time to think things through, make a plan, wait patiently. Okonkwo (2017) defined self-regulation as the control we have over our thoughts, feelings and actions. From the above definitions, self-regulation is the ability to monitor and manage your energy, states, emotions, thoughts, and behaviours in ways that are acceptable and produce positive results such as well-being, loving relationships, and learning. Students' self-regulation could depend upon environmental influences and interactions with peer according to their gender.

Gender can be seen as the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between the feminine and masculine (female and male) population. Gender is the psychosocial aspect of maleness and femaleness (Edebor, 2012). Nnamdi and Onyibe (2016) see gender as a specially constructed phenomenon that is brought about as society ascribes different roles, duties, behaviours and mannerism to the two sexes (male and female). It is a social connotation that has sound psychological background and it is used to refer to specific cultural patterns of behaviours that are attributed to human sexes. The differences according to him are anatomical and physiological. For instance male and female genitalia, both internal and external are different. Similarly, the levels and types of hormones present in male and female bodies are different. However, females have higher levels of estrogens and progesterone while males have higher level of testosterone.

Statement of the Problem

The rate of deteriorating academic engagement of secondary school students has become alarming and worrisome to parents, teachers and guidance counsellors. This trend of poor academic performance of secondary school students has been confirmed by the West African Examination Council (WAEC). The WAEC result analysis for the year 2016, 2017 and 2018 revealed the following statistics of the performance of Anambra State secondary school students in public examination. The percentages of students who passed and obtained credits in five subjects including English and Mathematics in WAEC during the years were reported to be for private schools 16.9%, 7.7% and 12.35% and for Public schools 70.3%, 71.53% and 51.40% percent respectively.

Several factors have generally been suspected to be luring secondary school students into engagement in negative habits such as excessive drinking, skipping of classes, smoking and engagement in unhealthy sexual behaviour, cult activities and other maladjustive

behaviours that distract them from academic pursuit. Secondary school students usually appear to have low self regulation consequently they appear easily lured into the above mentioned vices and others like truancy, inability to complete homework, lateness to school, examination malpractice, drug addiction, rape among others by members of their peer group. These vices appear to completely distract the student's attention from studies hence the zeal to excel may be diminished therefore resulting consequently in poor academic engagement.

The researcher is disturbed about the alarming degeneration of students' academic engagement and wonders if students are self-regulated as the skills would enable them to attain high academic engagement. Many researchers have attempted to respond to the problem by conducting a study on self regulation as a predictor of academic engagement in different geographical location. Some of the studies were also conducted few years ago. Therefore, the findings must have been over taken by the changes in the society. Thus, there is a paucity of empirical investigations on self regulation as a predictor of academic engagement in the area of the current study. This indicated a yawning need for this study to investigate self regulation as a predictor of academic engagement of secondary school students in Anambra state.

Research Questions

The study was guided by the following research questions:

1. What is the predictive value of self-regulation on academic engagement of secondary school students in Anambra State?
2. What is the predictive value of self regulation on academic engagement of male and female secondary school students in Anambra State?

Hypotheses

The following null hypotheses were formulated and tested at .05 level of significance.

1. Self regulation is not a significant predictor of academic engagement of secondary school students.
3. Self regulation is not a significant predictor of academic engagement of male and female secondary school students.

Method

The research design employed for this study was a correlation which set out to find out the predictive value of self-regulation on academic engagement of students. The study was carried out among senior secondary school two (SS 2)

in all the public secondary schools in Anambra State. The population of the study consisted of 20,889 (9,411 males and 11,478 females) SS 2 students. Stratified random sampling technique was used to draw a sample of 887 (444 males and 443 females) students.

Two instruments adapted by the researcher titled "Self Regulation Questionnaire" (SRQ) and "Academic Engagement Questionnaire" (AEQ). SRQ which was developed by Gauner and Nooman (2018) has two sections. Section A elicited personal information of the respondents. Section B which contained 15 items sought information on self regulation of the respondents. AEQ developed by Veiga (2016) contained 15 items which elicited

information on academic engagement of students. The items on the instruments were placed on a 5-point scale of Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). The instruments were duly validated. The initial draft of the instruments were given to two lecturers from Department of Educational Foundations from Chukwuemeka Odumegwu Ojukwu University. The lecturers reviewed the instruments and their corrections were reflected in the final version. The reliability of the instruments were established using Cronbach Alpha to determine the initial consistency of the items. They yielded Co-efficient values of 0.73 and 0.70 for Self Regulation Questionnaire and Academic Engagement Questionnaire respectively. The instruments were considered reliable and therefore used for the study. The copies of the instruments were administered to the respondents with the help of three research assistants who were briefed on the modalities of administering and collecting of the instruments. Out of 887 copies of questionnaire administered, 858 were returned, indicating 97% of return rate which is adjudged to be adequate for the study.

The research questions were answered using Pearson Moment Correlation Coefficient while the hypotheses were tested at .05 level of significance using Simple Linear Regression.

Results;

Research Question 1: What is the predictive value of self-regulation on academic engagement of secondary school students in Anambra State?

Table 1: Pearson r on Students' Self-Regulation and Academic Engagement in Secondary Schools

Variables	N	Self-regulation	Academic Engagement	Remark
Self-regulation	858	1.00	.475	Moderate Positive Relationship
Academic Engagement	858	.475	1.00	

Results in Table 1 show a Pearson's correlation coefficient (r) of .475. This suggests that students' self-regulation is a moderate predictor of their academic engagement, indicating that an increase in self-regulation may lead to a moderate increase in students' academic engagement.

Research Question 2: What is the predictive value of self regulation on academic engagement of male and female secondary school students in Anambra State?

Table 2: Pearson r on Self-Regulation and Academic Engagement among Male and Female Students in Secondary Schools

Variables	N	Self-regulation	Academic Engagement	Remark
Male Students:				
Self-regulation	415	1.00	.478	Moderate Positive Relationship
Academic Engagement	415	.478	1.00	
Female Students:				
Self-regulation	443	1.00	.479	Moderate Positive Relationship
Academic Engagement	443	.479	1.00	

As shown in Table 3, the Pearson’s correlation coefficients (r) between self-regulation and academic engagement for male and female students are .478 and .479 respectively. These suggest that self-regulation is a moderate predictor of their academic engagement of male and female students which is an indication that increasing self-regulation among students may led to about equal increase in both male and female students’ academic engagement.

Hypothesis 1: Self-regulation is not a significant predictor of academic engagement of secondary school students.

Table 3. Test of Significance of Simple Regression Analysis with Self-Regulation as Predictor of Academic Engagement

Predictor	R	R ²	F	P-value	Decision
Self-regulation	.475	.226	249.549	.000	*S

*Significant

As shown in Table 3 above, the simple regression coefficient (R) is .475 while the R² is .226 showing that self-regulation makes 22.6% contribution to the variance in students’ academic regulation. The $F(1/856) = 249.547$ and the p -value $<.05$; since the p -value is less than the stipulated.05 level of significance, it was decided that self-regulation is a significant predictor of academic engagement among students in secondary schools. Thus, the null hypothesis was rejected.

Hypothesis 2: Self regulation is not a significant predictor of academic engagement of male and female secondary students.

Table 4: Test of Significance of Simple Regression Analysis with Self-regulation as Predictor of Academic Engagement among Male and Female Students.

Predictor	R	R ²	F	P-value	Decision
Male Students:					
Self-regulation	.478	.229	122.411	.000	*S
Female Students:					
Self-regulation	.479	.230	131.573	.000	*S

*Significant

As shown in Table 4 above, the simple regression coefficient (R) for male and female students are .478 and .479 while the R² are .229 and .230 respectively. These show that while self-regulation makes 22.9% contribution to the variance in male students' academic engagement, it makes 23% contribution to the female students' academic engagement. Both contributions are significant, $F(1/413) = 122.411$ for the male sample and $F(1/441) = 131.573$ for female sample and $p\text{-value} < .05$. Thus, the null hypothesis was rejected. Therefore, self regulation is a significant predictor of academic engagement among male and female students in secondary schools.

Conclusion

This study focused on self-regulation as a predictor of academic engagement of secondary school students in Anambra State. It was observed that the independent variable; self-regulation, has positive relationship with the dependent variable; academic engagement. The study also reveals that an increase in self regulation will lead to increase in students academic engagement. The inculcation of self-regulation in students contributes to high academic engagement which will in turn lead to academic success.

Recommendations

Based on the findings, it was recommended among others that:

1. Government should post to schools trained Guidance counselors to assist the students acquire self-regulatory skills which will enable them tackle their day to day academic tasks.
2. Parents therefore, should be enlightened on the need to encourage self-regulatory skills on their children as well as supervise them to avoid distractions from home environmental factors.

This study also recommends that teachers should motivate and reinforce self-regulated students so as to encourage other students to acquire self-regulatory skills.

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