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PATTERNS OF SELF-REGULATED LEARNING AMONG SECONDARY SCHOOL STUDENTS IN IFE CENTRAL LOCAL GOVERNMENT AREA OF OSUN STATE

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Abstract

The study examined the level of self-regulated learning among secondary school students in Osun state and determined the influence of demographic variables on the levels of self-regulated learning observed among the students. It also investigated the differences in self-regulated learning on the bases of field of study. The study adopts a correlational survey research design. The population for the study comprised all secondary school students in private and public secondary school in Ife Central Local Government Area of Osun state. Two public and two private secondary schools were selected using simple random technique. In each of the selected schools, 100 students were selected with the use of simple random sampling techniques totally 400. Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich and DeGroot (1990) was adapted with Cronbach's alpha of 0.87 and used to generate data. The data collected were analyzed using percentages, Relative Significance Index (RSI), multiple regression and ANOVA. The results showed that 23.1% indicated possessing high levels while the largest percentage of the respondents (56.7%) possess only moderate levels of self-regulated learning and 20.3% indicated possessing low level of self-regulated learning. There was no significant difference in the self-regulated learning of the students on the basis of sex while significant differences were found in the self-regulated learning of the students on the basis of age. However, there was no significant difference among the students on the basis of field of study. The study recommended that self-regulated learning tenets should be taught early in schools and in particular public schools.

Keywords: Self-regulated learning, Age, Sex and Field of Study

Introduction

In today's learning environment, learners must actively involve in reorganizing and reconstructing their existing knowledge with

new ones as they cannot be mere passive recipients of information. In other words, rote learning and ritualistic manner in which learners have to follow prescribed answers and set of formulae as it is used to be the case in many Nigerian schools might no longer be sustainable. For students to discover new skills and knowledge, they must be curious and able to form their own pattern, opinions and direct their own learning. In short, students must become active and self-regulated individuals. Consequently, self-regulated learning skills become a necessary prerequisite for lifelong learning. Thus, understanding the concept of self-regulation in learning is important in the development of learners' capabilities for academic achievement.

Self-regulated learning has been identified as a key enabler of students' academic and social-learning-emotional competence (Wirth & Leutner, 2008). According to Pintrich (2000), self-regulated learning is a self-initiated action which involves goal setting and regulating one's efforts toward a goal, self-monitoring, time management, and physical and social environment regulation. Thus, students who self-regulate their learning actively and constructively engage in a process of generating meaning and adapt their thoughts, feelings, and actions as needed to affect their learning and motivation. One of the numerous factors that affect academic performance is cognitive matters. Cognitive matters have a significant effect on human behaviour, especially on learning. Increasingly, the idea has been reinforced by psychologists that learning is not a constant matter and however, the innate talent and intelligence as determinants of quality and quantity of human learning, there are other factors that along with

these innate and non-acquirable prerequisites are effective and important in learning. One of the effective factors in learning according to Jain and Dowson (2009) is the self-regulated learning strategies.

Furthermore, understanding students' capacity to direct their own learning in school and beyond has been a central topic of discussion among educators, policy-makers, and educational researchers alike. Researchers such as Ebulue (2006) and Omoteso (2011) argued that the capacity to self-regulate is central to assumptions about learning, decision making, problem solving and resource management in education. Other researchers like Anderson and Blair (2002); Zimmerman (2002) and Adepoju (1985) conceptualise self-regulation as the general disposition that students bring into the classroom, whereas others conceive of self-regulation as a property of the person-in-situation and attend to domain-specific self-regulatory skills that develop through experience within and across situations. The two perspectives are not compatible. A basic research problem is what is implied by the capability to self-regulate.

Since it has been established that learners should be able to self-regulate their learning activities if they are to maximize learning opportunities, it could be said that students might be different in several ways while forming their own pattern of self-regulated learning.

Several studies (Bronson, 2000; Perry, Phillips, & Dowler 2004; Donche et al., 2012; Coertjens et al., 2013b; Fryer et al., 2016) had been carried out on learning patterns of students which had led to the introduction of several intervention programmes through which they could moderate the students and inculcate the habit of self-regulated learning in them. Likewise in Nigeria, studies (Adeyoju, 1985; Ebulue, 2006; Omoteso, 2011) have examined self-regulated learning of Nigerian students from the perspective of its importance to various strategies employed in the process of self-regulation of learning.

Self-regulated learning is the ability to proactively monitor and evaluate one's performance. It is associated with the motivation by an individual to meet self-set academic goals. Difficulties experienced by many students can be attributed to their inability to self-regulate their learning and this might impede on their study effectiveness. Educators as well as professionally trained counsellors have adopted different strategies with little or no success.

Concomitant with this assertion is the belief that students who are generally expected to engage in more independent study time are usually assigned more homework, and must be able to manage various assignments from multiple teachers. To be able to meet these expectations, students need to have a repertoire of study and self-regulation strategies that they can access and utilize. Unfortunately, students who struggle in school not only have a poor knowledge base of effective strategies but also do not understand how to select, evaluate, and adjust several strategies including self-regulated learning strategy when they are not working effectively. However, extant literature has been silent on factors that may impede student pattern of learners' self-regulated learning. Therefore, there is a need to examine the level of self-regulated learning among secondary school students in Ife Central LGA, Osun State vis-à-vis the distinguishing demographic variables.

Research Question

1. What is the level of self-regulated learning among secondary school students in Osun state?

Research Hypotheses

- i. There is no significant difference in the self-regulated learning of the students on the basis of sex.
- ii. There is no significant difference in the self-regulated learning of the students on

the basis of age.

- iii. There is no significant difference in the self-regulated learning of the students on the basis of field of study.

Methodology

The study adopts survey research design. The population for the study comprised all secondary school students in Ife Central Local Government Area of Osun state. The study sample comprised 390 senior secondary school students selected using stratified sampling technique with school ownership used as the stratum. Two public and two private secondary schools were selected using simple random technique. In each of the selected schools, 100 students were selected with the use of simple random sampling techniques. However, responses of 390 students were eventually used as 10 copies of questionnaires contained incomplete responses and thereafter removed from the analysis. The adapted version of

Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich and DeGroot (1990) was used to collect for this study. There are 81 items on original version of the MSLQ and were reported of having a Cronbach's alpha ranges from 0.52 to point 0.93. The adapted version of the instrument has 49 items measuring students' pattern of self-regulated learning and yielded a Cronbach's alpha of 0.87. Data collected were analyzed using descriptive and inferential statistics. A descriptive statistics such as percentages was employed in answering the research question, while inferential statistics such as relative significance index (RSI), multiple regression and ANOVA was employed to test the hypotheses.

Results

Research question 1: What is the level of self-regulated learning among secondary school students in Osun State?

Table1: Level of self -regulated learning among secondary school students in I fe central LGA of Osun state

Level of self -regulated learning	Score Range	Frequency	Percent
Low	0-22	79	20.3
Moderate	23-39	221	56.7
High	40-49	90	23.1
Total		390	100.0

Table1 shows the levels of self-regulated learning among secondary school students in Ife Central Local Government Area of Osun state. It can be seen from the table that a considerable percentage (23.1%) were found to demonstrate high level of self-regulated learning, while the largest percentage of the students (56.7%) were found to demonstrate just moderate level of self-regulated learning, and another considerable percentage (20.3%) still demonstrate low levels. The findings from this study clearly indicated that the largest

percentage of the students in the secondary school had moderate level of self-regulated learning.

Hypothesis 1: There is no significant difference in the self-regulated learning of the students on the basis of sex.

To test this hypothesis, the differences in the students' scores on self-regulated learning were subjected to test of difference on the basis of sex. The result of the difference on the basis of sex was found through an independent samples t-test and the result is presented in Table 2.

Table 2: Difference in the students' scores on self-regulated learning on the basis of sex

Sex	N	Mean	Std. Dev.	t	df	p
Male	211	28.1469	9.89575	-.650	385	.516
Female	176	28.7841	9.23404			

Table 2 shows the result of the test of differences in the students' scores on self-regulated learning. It can be seen from the test that the t-value obtained in the test was -0.650 at p-value of 0.516. Since the p-value surpasses the 0.05 cut-point, the null hypothesis cannot be rejected and it can be concluded that there is no significant difference in the scores of male and female students in self-regulated learning and that sex cannot explain the differences in the scores. The findings from this study indicated that the self-regulated learning is not significant in sex among students. This result suggests that self-regulated learning is independent of sex. The result is therefore consistent with findings of Astleitner and Steinberg (2005.) that found that gender effects are not significant. This finding however,

disagrees with the findings of many researchers like Bidjerano 2005; Hargittai and Shafer, (2006), Lee (2002); and Zimmermann and Martinez-Pons (1990) that their findings suggested that gender has significant effect on self-regulated learning of students.

Hypothesis 2: There is no significant difference in the self-regulated learning of the students on the basis of age.

To test this hypothesis, the differences in the students' scores on self-regulated learning were subjected to test of difference on the basis of age of the students. The result of the difference on the basis of age was found through one-way ANOVA and the result is presented in Table 3

Table 3: Difference in the students' scores on self-regulated learning on the basis of age

Source of Variance	Sum of Squares	df	Mean Square	F	P
Between Groups	916.430	2	458.215	5.027	.007
Within Groups	34818.832	382	91.149		
Total	35735.262	384			

Table 3 shows the result of the test of differences in the students' scores on self-regulated learning on the basis of age. It can be seen from the test that the F-value obtained in the test was 5.027 at p-value of 0.007. Since the p-value fails to attain the 0.05 cut-point, the null hypothesis cannot be accepted and it can be concluded that there is a significant

difference in the scores of the students in self-regulated learning on the basis of age and that age can explain the differences in the scores. Efforts were made to explore the sources of the difference in the scores on self-regulated learning of the students. This was carried out via Tukey HSD Post-Hoc test. The result is presented in Table 4.

Table 4: Sources of difference in the students' scores on self-regulated learning

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
10-12yrs	13-16yrs	-2.49757	1.14457	.076	-5.1906	.1955
	17-19yrs	-6.00526*	1.99944	.008	-10.7097	-1.3008
13-16yrs	10-12yrs	2.49757	1.14457	.076	-.1955	5.1906
	17-19yrs	-3.50769	1.84089	.139	-7.8391	.8237
17-19yrs	10-12yrs	6.00526*	1.99944	.008	1.3008	10.7097
	13-16yrs	3.50769	1.84089	.139	-.8237	7.8391

*. The mean difference is significant at the 0.05 level.

Table 4 shows the source of the difference in the students' scores on self-regulated learning. It can be seen from the table that the only source of the difference is between students in the oldest age group (17 to 19 years) and the students in the youngest age group (10 to 12 years). It can be seen that the older students had scores higher than those of the younger students by a mean value of 6.005 in their scores of self-regulated learning. It can therefore be concluded that the older a student is the higher the self-regulated learning s/he will be able to demonstrate. Age has been a factor relevant to understanding the students' self-regulated learning. The students in this study showed self-regulated learning that increased with increase in age. Most of those at the late adolescents were found to be more engaged in self-regulated learning than those at the early adolescent. This may be as a result of the consciousness or awareness that any one

above the age of 18years has some kind of freedom and should engaged in self-regulated learning with little or no restrain from parents. This finding is in consistent with findings from earlier study by Vermunt (2005) that reported age as an important predictor of almost all aspects of meaning-directed learning pattern. The older the students were, the more they adopted a meaning-directed learning pattern.

Hypothesis 3: There is no significant difference in self-regulated learning on the basis of field of study

To test this hypothesis, the differences in the students' scores on self-regulated learning were subjected to test of difference on the basis of their field of study (Science, Commercial and Arts). The result of the difference on the basis of field of study was found through one-way ANOVA and the result is presented in Table 5

Table 5: Difference in the students' scores on self-regulated learning on the basis of their field of study

Source of Variance	Sum of Squares	df	Mean Square	F	P
Between Groups	381.717	2	190.859		
Within Groups	35444.189	381	93.029	2.052	.130
Total	35825.906	383			

Table 5 shows the result of the test of differences in the students' scores on self-regulated learning on the basis of their fields of study. It can be seen from the test that the F-value obtained in the test was 2.052 at p-value of 0.130. Since the p-value surpasses the 0.05 cut-point, the null hypothesis

cannot be rejected and it can be concluded that there is no significant difference in the self-regulated learning scores of students in sciences, commercial or arts fields of study and that fields of study cannot explain the differences in the scores. Another finding of this study is difference

in self-regulated learning on the basis of field of study. The results indicated that there is no significant difference in the self-regulated learning of students in sciences, commercial or arts fields of study and that field of study cannot explain the differences in self-regulated learning of students in sciences. There seems to be a dearth of empirical studies in this direction.

Conclusion

Based on the finding obtained from the study, it can be concluded therefore that students demonstrate just moderate level of self-regulated learning. Age was discovered to influence pattern of self-regulated learning while gender was insignificant to influence students' pattern of self-regulated learning.

Recommendations

The study recommends that students in the secondary schools should be taught skills on how they can self-regulate their learning activities. Also, the skills enhancement intervention strategies should be students' gender and fields of study independent but should put into consideration the age categories of the learners for effectiveness.

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