

## EFFECT OF SELF REGULATION STRATEGY ON STUDENTS' INTEREST IN READING COMPREHENSION

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### Abstract

*The study investigated the effect of self-regulation strategy on students' interest in reading comprehension. The influence of gender as well as interaction effects of teaching strategy and gender were also investigated. To achieve the purpose of the study, three research questions were posed and three null hypotheses were formulated and tested at 0.05 level of significance. Quasi experimental design of pre-test post-test non-equivalent control group was used for the study. The population of the study comprised 5,143 JSS 1 English students (2,533 males and 2,610 females) in Abaji and Kwali Area Councils/ Education zones of Federal Capital Territory (FCT) Abuja. The sample size of 332 JSS1 English students (164 males and 168 females) were used for the study. The sample was obtained using purposive sampling technique. Reading Comprehension Interest Scale (RCIS) was used to collect data for this study. The instrument was validated by one expert in Department of Science Education (Measurement and Evaluation), one in Art Education (English Unit) and two in Educational Psychology, Department of Educational Foundations, University of Nigeria Nsukka. The scores obtained from trial testing of the students were subjected to reliability analysis and reliability coefficient of 0.94 was obtained for RCIS using Cronbach Alpha reliability method. Mean and standard deviations to answer the research questions and analysis of covariance (ANCOVA) was used to test the hypotheses. The findings of the study among others revealed that self-regulation strategy significantly enhanced students' mean interest in reading comprehension. Based on the findings of the study, it was recommended among others that English Language teachers should adopt the use of self-regulation strategy in their lessons in order to enhance the students' interest in reading comprehension.*

### Introduction

Reading and comprehension are very crucial in the life of every learner. This is so because reading and comprehension provide the basis on which successful academic achievement hinges. Early in life, children are encouraged to spend time learning how to read in order to obtain information from print materials. The need to read permeates all the school subjects in Arts, Sciences and Technology. For students, therefore, reading is done not only for leisure but to be able to understand information for proper adjustment in the society (Mbanefo, 2009). In spite of this important position of reading, many students do not possess the necessary skills to read and comprehend written materials (Amao, 2005).

Reading is a complex cognitive process of decoding symbols in order to construct or derive meaning (reading comprehension). In the process of reading,

readers perceive written symbols (letters, punctuation marks and spaces) and use the mental processes to convert them to words, sentences and paragraphs that communicate something to them (National Reading Panel, 1998). Reading is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated (Durkin, 1993). The reading process requires continuous practice, development, and refinement. Comprehension is however critically important to the development of children reading skills and therefore their ability to learn.

Comprehension is a complex process because it involves the reader decoding meaning out of the material read. There exist as many interpretations of comprehension as there are of reading (National Reading Panel, 1998). This may be so because comprehension is often viewed as "the essence of reading" (Durkin, 1993). The basic goal of all reading tasks is to have a clear understanding of the theme and meaning of a text or passage. Chinweze (1995) advocated four levels of comprehension- *literal level*; this involves getting information that is directly stated in the text. The *interpretative level* deals with getting information that is not directly stated in the text. The third level, which the author called the critical level; involves getting judgment of both the value and validity of the context of the text. Lastly, the *creative level*; involves finding new way of viewing the ideas, incidents and characters in order to stimulate new thinking. Without comprehension, reading would be empty and meaningless (Cornelissen, Kringelbach, Ellis, Whitney, Holiday & Hansen, 2009).

Reading comprehension in the words of Adimora (2012) involves the process of understanding, decoding the writer's words and then using background knowledge to construct an approximate understanding of the writer's message. Reading comprehension is further defined as "intentional thinking during which meaning is constructed through interactions between the text and the reader" (Durkin, 1993). According to this view, meaning resides in the intentional, problem-solving, thinking processes of the reader that occur during an interchange with a text.

The success or failure of any learning lies on clear understanding of text. It is the ability to understand the unique message by the reader that is called reading comprehension (Mbanefo, 2009). In spite of the importance of reading comprehension to students' academic achievement generally, many students do not possess the necessary skills to read and comprehend as evident in their school achievement stated below. Thus, it is presumed that the students have poor reading comprehension that may be attributable to their inability to self regulate themselves. The inability of students to read and comprehend could be the reason behind the poor academic achievement of the secondary school students in general.

The truth is that English is a subject for all because virtually everybody, be they traders or farmers, tailors or carpenters, even market men and women make use of English in their daily inter personal relationships. Also in every other subject taught in schools apart from English. In other words English in the context of this study is seen as a process. English has therefore, emerged as Nigeria's official

language and is used in education, administration, commerce, politics, and law, among others. It is used in measuring the literacy level and determining to a large extent whether the quality of education is rising or falling (Egbe, Onyishi & Omeje, 2011).

In Nigeria today, there is a public outcry regarding the falling academic performance and rampant cases of examination malpractices among students in schools (WAEC Chief Examiner's reports, 2012, 2013, 2014, 2015). Okeke, and Ochuba (1989), Nwoke and Nateinyin (1995) observed that, the teachers' teaching method and mastery of the subject is the key determinant of students' academic achievement. In spite of teachers' efforts through various teaching methods and qualification, students' achievement in Nigeria, Federal Capital Territory in particular, their learning outcomes have continued to be very low. Evidence from the Universal Basic Education (UBE) Junior Secondary Schools Examination (JSCE) and school records in Abaji and Kwali Education zones of FCT have shown a consistent failure rate for some years compared to other area councils in Abuja (FCT Education Resource Centre Report, 2012, 2013, 2014 and 2015). For instance, in 2012, only 17% of the 5,212 candidates that sat for JSCE passed with five credits including English Language and Mathematics. In 2013, 16% of 6,012 candidates obtained credits in English, Mathematics and three other subjects. Also in 2014, out of 5,223 who sat for JSCE, only 22% of the candidates obtained credit in English, Mathematics and any other subjects and in 2015, only 19% out of 5,143 candidates who sat for JSCE obtained credits in English and about three or four other subjects in Abaji and Kwali education zones.

The West African Examination Council (WAEC) also shows evidence of consistent poor achievement in English, Mathematics and other school subjects generally. For instance in 2012, only 37.9% out of 1,543,683 candidates who sat for May/June SSCE conducted by WAEC passed with five credits including English and Mathematics (WAEC, 2012). In 2013, 29.17% passed with five credits including English and Mathematics out of 298,971 candidates who sat for November/December (WAEC, 2013). In 2014, only 31.28% passed with five credits including English and Mathematics out of 1,692,435 candidates who sat for May/June SSCE conducted by WAEC passed (WAEC, 2014). In 2015, only 38.68% passed with five credits including English and Mathematics out of 1,605,248 candidates who sat for May/June SSCE passed (WAEC, 2015).

Generally speaking, the implication of this is that less than 38% of the total 1,605,248 candidates that sat for the 2015 SSCE May/June qualified for admissions into higher institutions in Nigeria. This is so because, to gain admission into tertiary institutions in the country, a candidate must have five credits including English and Mathematics at SSCE. Adeyemi and Adeyemi (2014) attributed the mass failure in SSCE to include: "students' weak background, low intelligence, lack of achievement motivation and poor interest for school subjects. The consistent poor achievement of students as stated in WAEC above may be indicative of lack of interest in school subjects. This is observable through the researchers' experiences with students in secondary school, as they are being interviewed on why they don't understand what

they read from the teaching textbooks: some said it is the language vocabulary, some said it is the problem of distraction from domestic work at home, some complained about the method used in teaching the subjects, while others complained bitterly about the unwillingness to read. The attitude of unwillingness or willingness to read written materials by students in every school subjects could be termed interest.

Interest is described as a motivational force that involves the focused allocation of extra attention, leading to deeper processing, better comprehension, and longer recall (Schraw & Lehman, 2001). Kathleens (2012), for instance, asserts that if one is more interested in the topic of material read, one's comprehension of that topic will be improved. This refers to peoples' inherent tendencies and their psychological needs that motivate people to make choices devoid of external influences and interference. Hidi (2006:73) defined interest as "a unique motivational variable, as well as a psychological state that occurs during interactions between persons and their object of interest, and it is characterized by increased attention, concentration and affect". This means that interest is a motivational variable that involves not only the emotions but also the intellect, making it a powerful energizer.

Elliot, Kratochwill, Littlefield & Travers (2000) defined interest as an enduring characteristic expressed by a relationship between a person and a particular activity or object. Ngwoke (2005) explained interest, as something with which one identifies one's personal well-being. In this sense interest is a source of motivation. Deci & Ryan (2000) argued that since intrinsically motivated behaviour is a behaviour an individual undertakes out of interest, then clarifying the importance of interest would add to educators' understanding of the impact of intrinsic motivation in learning.

Obodo (2000) described interest as the attraction which forces or compels a child to respond to a particular stimulus. Thus, it point out, the fact that, a child develops interest if a particular stimulus is attractive and arousing or stimulating. Every interest satisfies a need. In activities that require reading for comprehension, interest leads one to know and learn more from the task. Interest adds enjoyment and makes the performance of activity or task more economical in terms of demand on limited cognitive resources. Regrettably, the consistent poor performance of students in English, Mathematics and other school subjects as was reported by Education Resource Center (2015) and schools records in JSS 1 schools for four years (17% in 2012, 16% in 2013, in 2014 22% and in 2015%) in Abaji and Kwali education zones may be indicative of lack of interest in reading comprehension.

In this study, interest is the willingness of a student to react towards or against any learning activity in a particular degree or intensity. It may serve to jumpstart the struggling reader-in any subject area-because when students are interested they are attentive and focused. Such focus often results from better strategy use, prompting inference facilitation, and yielding qualitatively deeper levels of comprehension and more reliable retrieval of information. A learner needs to have interest in the target reading comprehension to be effective. Many researchers have employed several strategies in reading materials in other to bring about effective

comprehension in all school subjects. But the issue of reading for comprehension remains unabated. However, students could be guided on how to read every school subjects and comprehend it for sustainable interest, through early application of self regulation strategy.

Self regulation is what helps students focus their attention on a lesson when they may be distracted by noisy classmates, a problem they had at recess, or excitement about an upcoming event (Zimmerman, and Kitsantas, 2005). According to Zimmerman (2001:67), self-regulation is Paget's term which describes an individual's mental process of changing his reasoning pattern to advance from one level of understanding to another. The definition of self regulation was further simplified by Man-Chih (2006:1), who defined self regulation as a teaching strategy that enables individuals to develop their own goal-directed learning processes. It does not only promotes individual learning, but also provides opportunities for students to actively engage in learning processes such as goal setting, self-monitoring, self-evaluating, self-reinforcement, and resource management (Man-Chih, 2006). Similarly, Zimmerman (2000: 34) defined self regulation as the capability of active participation in the learning process from the view point of meta cognition, motivation and behaviour. Self regulated learners have skills from the perspective of metacognitive knowledge and know how to direct their mental processes in the direction of achievement and personal goals (Cooper, 2006). Self regulation is the ability to monitor and manage emotions, thoughts, and behaviours.

The ability to self-regulate helps students get along better with teachers and other students. Students with good self-regulation skills get the most out of school, both in terms of academics and social interactions. This sets them up for being successful in life (Hong, Peng & Rowell, 2009). Self regulation refers to the modulation of affective, cognitive and behavioural processes throughout a learning experience in order to reach a desired level of achievement (Sitzmann, 2008). This definition encompasses the core features of most definitions of self regulation; it reflects goal oriented behaviour and includes multiple processes operating in concert.

Researchers such as Paris & Paris, (2001); Pintrich, (2000); Pintrich & Zusho, (2002); Zimmerman, (1998, 2000, 2001); Zimmerman & Schunk, (2001) have found that high-achieving students are often self regulatory learners. For example, compared with low-achieving students, high-achieving students set more specific learning goals, use more strategies to learn, self-monitor their learning more, and more systematically evaluate their progress towards a goal. The researcher applied the self regulation strategy model proposed by Zimmerman, Bonner & Kovach (2006) and is based on 4 phases, these phases are:-

Self- evaluation and monitoring: The student self-evaluates his/her studying and test- preparation by keeping a detailed record of them. The teacher gives the student some guidelines for keeping these records. After several weeks, the student turns the records in and traces his/her poor test performance to low comprehension of difficult reading material.

Goal setting and strategic planning: The student sets a goal, in this case of improving reading comprehension, and plans how to achieve the goal. The teacher

assists him/her in breaking the goal into components, such as locating main ideas and setting specific goals for understanding a series of paragraphs in her textbook. The teacher also provides the student with strategies, such as focusing initially on the first sentence of each paragraph and then scanning the others as a means of identifying main ideas. Another support the teacher might offer the student is adult or peer tutoring in reading comprehension if it is available.

**Putting a plan into action and monitoring it:** The student puts the plan into action and begins to monitor his/her progress. Initially, the student may need help from the teacher or tutor in identifying main ideas in the reading. This feedback can help the student monitor his/her reading comprehension more effectively on his own.

**Monitoring outcomes and refining strategies:** The student monitors his/her improvement in reading comprehension by evaluating whether it has had any impact on his learning outcomes. Most importantly: Has his improvement in reading comprehension led to better achievement?

Through self-regulation, the learner seeks to consolidate what he has learned and developmental changes that occur in the learner's construction of knowledge come about through the dialectical interplay of assimilation and accommodation. In this process of learning, the learner is the active operator and the primary generator of his psychological development (Pintrich, 1999). However, in order to gain equilibrium the learner must constantly either consciously or unconsciously strive towards the reduction of conflict. Conflict or disequilibrium (affective or organizational) is a necessary condition to strive toward self-regulation because if the learner is in an equilibrated state he will not tend to change (he will only change, if he feels that something is wrong). Thus, conflict or state of disequilibrium activates the individual to form new reasoning patterns or mental structures for the resolution of the contradictions between old ideas and new ideas (Gross, 2006).

In this study, self-regulation strategy is a process that assists students in managing their thoughts, behaviours and emotions in order to successfully navigate their learning experiences. Self-regulation is a teaching-learning strategy, a conscious plan, set of steps that good readers apply to make sense of passage. Self-regulation strategy, unlike conventional teaching method where teachers communicate ideas to learners mainly by lecture and copying of lecture notes is what has been in use in schools. This is not in consonance with the self-regulation perspective of learning. School learning itself is a human intellectual process which demands that pupils must be actively engaged in thinking if their understanding is to be secured. However, Self-regulation, Achievement Motivation, achievement and Interest are cognitive variables that may vary along gender attributes.

Gender as a psychological construct has been used to describe maleness and femaleness. Mboto & Basse (2004) looked at gender as a term that describes the behaviour and attitude expected of an individual on the basis of being born either male or female. The issue of gender differentiation in ability and achievement in life and education has been a problem for decades.

Some theories have tried to trace the gender differences to the origin of man. Linn & Peterson (1998) had traced it back to a black box proposition though its

mechanism for the effect is not well specified. He even traced it to environmental differences for the sex differences to have emerged at birth and continued through life span. Hacker (1999) illustrated in his gender differences that males are superior for visio-spatial tasks while females are superior in verbal performance. This implies that actually there is existence of differences between male and female achievements. He went on to explain that real gender differences cannot be explained fully in terms of the social environment. Obodo (2002) stated that the socialization of females inhibited them from competing actively with men and such communities do not expect female to achieve highly in life. It has a close link with the importance attached to the gender-related roles of the male and female children which is based on culture. Females culturally, are usually believed to be significant for child-rearing and home-keeping; hence both their education and aspirations for means of livelihood have often been directed and tailored towards this job (Rose, 2002). This discrimination against the female child usually starts from the early childhood when certain toys are decreed suitable for only males and others only for females. As this mentality continued in their up-bringing, their development into unequal life and education are encouraged and supported for the male and female differentiation (Anigbogu, 2002).

In this study gender is evaluated in the light of the difference between male and female interest in reading comprehension. All in all, the researchers do not know whether such differences in male and female students as mentioned in the above studies could be applicable to Nigerian students, especially, students in Abaji and Kwali Education Zones of FCT-Abuja. Some studies have revealed the effectiveness of self regulation strategy in enhancing reader's comprehension and interest in what is being read. But such studies are lacking in Nigeria, and specifically in Abaji and Kwali Area Councils of Federal Capital Territory, Abuja. Again, statements regarding the influence of gender on academic related matters are inconclusive. These call for the need to investigate the effect of self regulation strategy on interest of students in Abaji and Kwali ACs Education Zones of FCT-Abuja Therefore, posed as a question, the problem of this study is: what is the effect of self-regulation strategy on students' interest in reading comprehension in the Federal Capital Territory, Abuja, Nigeria?

### **Purpose of the Study**

The purpose of this study is to determine the effect of self regulation strategy on junior secondary school students' interest in reading comprehension. Specifically, the study will investigate:

1. The mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method.
2. The influence of gender on the mean interest scores of students in reading comprehension.
3. The interaction effect of treatment and gender on students' mean interest scores in reading comprehension.

### **Research Questions**

The following three research questions were posed to guide the present study and are posed thus:

1. What is the mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method?
2. What is the influence of gender on the mean interest scores of students in reading comprehension?
3. What is the interaction effect of treatment and gender on students' mean interest scores in reading comprehension?

### **Hypotheses**

Based on the research questions formulated, the following null hypotheses are put forward in this study to be tested at  $P < 0.05$  level of significance and are posed thus:

- H<sub>01</sub>.** There is no significant difference in the mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method.
- H<sub>02</sub>.** There is no significant difference in the mean interest scores of male and female students in reading comprehension.
- H<sub>03</sub>.** There is no significant interaction effect of treatment and gender on students' mean interest scores in reading comprehension.

### **Methodology**

The study was a non-equivalent control group quasi-experimental design, involving one treatment and one control group. A total of 332 JSS1 (164 males and 168 females) students from four public coeducational junior secondary schools in Abaji and Kwali Education Zone federal capital territory, Abuja, Nigeria formed the sample for the study. In each school, one intact class was randomly selected and the intact classes were also randomly assigned to experimental and control conditions. The reading Comprehension Interest Scale (RCIS) is a 25 item instruments developed by the researchers from information acquired through review of relevant literature. The instrument was divided into two sections; A and B. Section A provided information on demographic details of the respondents such as gender while section B is designed for the purpose of measuring and evaluating the level of students' interest in reading comprehension. The scale is measured on a four point scale of Agree (A), Strongly Agree (SA), Disagree (D), and Strongly Disagree (SD). The RCIS was also tested for internal consistency reliability using Cronbach Alpha. The reliability coefficient was 0.94. The Self-Regulation Strategy was used for the experimental group while the control group received training using the conventional teaching method. The content scope self regulation strategy taught were various skills in learning. The strategy has components that could teach the students practical means they can self regulate themselves in reading comprehension. The data obtained were

analyzed using mean scores, standard deviation and analysis of covariance (ANCOVA).

**Results**

What is the mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method?

**Table 1: Mean and standard deviation of students' interest in reading comprehension**

<i>Groups</i>	<i>N</i>	<i>Pretest</i>		<i>Posttest</i>		<i>Gain Scores</i>
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	
Experimental Group.	163	2.92	0.40	3.20	0.37	0.18
Control Group	169	2.92	0.49	3.02	0.40	

Table 1 shows that the mean interest scores of students exposed to self regulation (experimental group) and control group at the pre-test are 2.92 and 2.92 with standard deviation of .40 and .49 respectively while at the post test, the mean scores of 3.20 and 3.02 were obtained for experimental and control groups respectively. The result indicated that self-regulation strategy has a great influence on students' interest in reading comprehension.

What is the influence of gender on the mean interest scores of students in reading comprehension?

**Table 2: Mean and standard deviation of male and female students' interest in reading comprehension**

<b>Gender</b>	<b>N</b>	<b>Pre-test</b>		<b>Post-test</b>		<b>Gain score</b>
		<b>Mean</b>	<b>Std.dev</b>	<b>Mean</b>	<b>Std.dev</b>	
Males	164	2.97	0.49	3.12	0.40	0.02
Females	168	2.88	0.40	3.10	0.39	

Result of the analysis in Table 2 shows that male students obtained a mean interest score of 2.97 and a standard deviation of .49 while female students had a mean interest score of 2.88 and a standard deviation of .40 at the pretest. However, at the posttest, male and female students had mean interest scores of 3.12 and 3.10 with standard deviation of .40 and .39 respectively. Therefore, male students had a slight higher interest mean score than their female counterpart which was seen from slight mean difference (gain score) of 0.02. Hence, gender had an influence on students' interest in reading comprehension.

What is the interaction effect of treatment and gender on students' mean interest scores in reading comprehension?

**Table 3: Mean and standard deviation of interaction effect of treatment and gender on students' interest in reading comprehension**

Groups	Gender	N	Mean	Std. Dev.
Experimental Group	Male	77	3.26	0.36
	Female	86	3.15	0.37
Control Group	Male	87	3.00	0.40
	Female	82	3.04	0.40

Table 3 shows that male students exposed to self-regulation strategy (experimental group) and conventional method (control group) had a mean interest score of 3.26 and 3.00 with standard deviation of .36 and .40 respectively. On the other hand, female students that were exposed to self-regulation (experimental group) and conventional (lecture) method (control group) had a mean interest score of 3.15 and 3.04 with a standard deviation of .37 and .40 respectively. The result indicates that the mean interest score of male students in the experimental groups was higher than the mean interest scores of female students. However, female students in the conventional method show more interest in reading comprehension. Therefore, the effect of teaching strategy on students' mean interest scores is not the same for male and female students. Hence, there is an interaction effect between teaching strategy and gender on students' interest in reading comprehension.

#### **Hypothesis One**

There is no significant difference in the mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method.

**Table 4: Summary of analysis of covariance (ANCOVA) of students' mean interest scores in reading comprehension**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3.626 <sup>a</sup>	4	.907	6.143	.000
Intercept	64.855	1	64.855	439.476	.000
Pretest	.264	1	.264	1.792	.182
Gender	.087	1	.087	.591	.443
Method	2.899	1	2.899	19.646	.000
Gender * Method	.434	1	.434	2.940	.087
Error	48.257	327	.148		
Total	3261.769	332			
Corrected Total	51.883	331			

The summary of result in Table 4 shows that teaching strategy is a significant factor on students interest in reading comprehension;  $F(1,327) = 19.646, P = .000$ . Thus, the null hypothesis of no significant difference in the mean interest scores of students is rejected. This is because the exact probability value (.000) is less than level of significance set at 0.05. Therefore, the researchers concluded that there is significant difference in the mean interest scores of students taught reading comprehension using self-regulation strategy and those taught using conventional (lecture) method.

### **Hypothesis Two**

There is no significant difference in the mean interest scores of male and female students in reading comprehension.

Table 4 also shows that gender is not a significant factor in students interest in reading comprehension ( $F(1,327) = .591, P = .443$ ). Thus, the null hypothesis of no significant difference in the mean achievement motivation scores of male and female students in reading comprehension is upheld since the probability value (.443) is greater than the level of significance set at 0.05. Therefore, the researchers concluded that there is no significant difference in the mean interest scores of male and female students in reading comprehension.

### **Hypothesis Three**

There is no significant interaction effect of teaching strategies and gender on students' mean interest scores in reading comprehension.

Table 4 shows that there is no significant interaction effect of teaching strategies and gender ( $F(1, 327) = 2.940, P = .087$ ). Thus, the null hypothesis is accepted since the probability value of .087 is greater than 0.05 level of significance. Therefore, the researchers concluded that there is no significant difference in the mean interest scores of male and female students in reading comprehension.

### **Discussion**

The findings of this study as reported in Table 1 revealed that student in the experimental group had higher mean interest score than those exposed to the conventional (lecture) method. The result was further strengthened by analysis of covariance in Table 4 which revealed, that self regulation strategy was a significant factor on student's interest in reading comprehension. This shows that the use of self-regulation strategy boosted students' interest in reading comprehension. The findings of the study is in accordance with the findings of Alkhaldeh (2011) who reported significant difference on students' interest in reading comprehension in favour of the experimental group. The active involvement of students in the learning process may have been the reason for the overall high mean interest score of students exposed to self-regulation strategy. The strategy motivated the students and sustained their interest thereby evoking greater understanding in reading comprehension.

The result of the findings in Table 2 indicates that the interest mean scores of male students are higher than that of their female counterpart. Further analysis of

covariance (ANCOVA) in Table 4 shows no significant difference in the mean interest score of male and female students in reading comprehension. This indicates that the high mean interest score recorded by male students was as a result of chance factor. This implies that the use of self-regulation as an instructional strategy helped both male and female students to develop interest in reading comprehension. The finding is in agreement with the findings of Alkhwald (2011) who reported no significant influence between male and female students' interest in reading comprehension.

The result of the study also revealed that male students had higher mean interest score than their female counterparts in experimental groups while in the control group, there was a slight difference in mean interest score in favour of the female students. The interest differences were further confirmed by the analysis of covariance which shows no significant interaction of self-regulation strategy and gender on students' interest in reading comprehension. The implication of the findings is that interest for male and female students is consistent.

### **Conclusion**

The following conclusions are made based on the findings of this study;

1. The use of self-regulation strategy significantly enhanced students' interest in reading comprehension when compared to conventional (lecture) method.
2. Gender had no significant influence over students' interest in reading comprehension. This implies that the superiority of self-regulation in fostering students' interest in reading comprehension was same for both male and female students.
3. There was no significant interaction effect of teaching strategies and gender on students' interest in reading comprehension.

### **Implication of the Study**

The findings of this study have obvious educational implications for teachers, students, policy makers, teacher training institutions and curriculum planners. The findings of the study revealed that the use of self-regulation strategy can significantly enhance students' interest in reading comprehension when compared to the conventional (lecture) method. In addition to the above findings, it has also been established that the use of self-regulation strategy greatly bridged the often observed gender gap in students' interest in reading comprehension.

These findings have far-reaching implications for English Language. Since the findings of the study show that self-regulation provides an entirely new strategy to tackle the problem of students' interest in reading comprehension. Self-regulation strategy when adopted will allow teachers to present their lessons in such a way that the students will understand the concepts being taught without much difficulties. The study has also shown that the use of self-regulation will create uniform learning conditions for both male and female students. Another implication is that students will now show more interest in the study of English language (reading

comprehension), thereby increasing the overall achievement in reading comprehension.

### Recommendations

The following recommendations are made based on the findings of this study:

1. Teacher training institutions should structure and restructure the special methodology course to include self-regulation strategy.
2. Government in conjunction with other professional associations should organize workshops, seminars; conferences and in-service training on a regular basis to train teachers on the use of self-regulation since the strategy have been found to be effective in enhancing students' interest.
3. Curriculum planners should include self-regulation strategy as one of the necessary instructional strategy for teaching of all subjects in school.
4. Government should through appropriate agencies, sponsor further researchers into the possible application of self-regulation strategy in other subject areas.

### References

- Adeyemi, A.M. & Adeyemi, S.B. (2014). Personal Factors as Predictors of students academic achievement in colleges of education in south western Nigeria. *Educational Research and Reviews*, 9 (4) 97-109.
- Adimora, D.E. (2012). *Effects of comprehension monitoring strategy on achievement and interest of low achieving students in reading comprehension in senior secondary two (SS11)*. Unpublished Doctoral Thesis, University of Nigeria, Nsukka.
- Amao, T.O. (2005). Developing the reading skills of children with special needs. *Journal of national council for exceptional child*. 8(1)41-50.
- Anigbogu, M.A. (2002). Educating the girl child. *Psychology news*, 1 (3), 17-18.
- Chinweze, N.K. (1995). *Reading preferences and interests of junior secondary school students Enugu education zone*. Unpublished Ph.D. Thesis University of Nigeria, Nsukka.
- Cooper, H. (2006). *Homework*. White Plains, NY: Longman.
- Corneius, C. O. & Cristopher, S. U.(2013). Teacher gender and attitude of primary school pupils to schooling in uyo metropolis, Akwa ibom State. Nigeria. *Universal journal of psychology* 1(2): 53-58
- Deci, E.L., & Ryan, R. (2000). Promoting self-determined education. *Scandinavian journal of educational research*, 38, 3-14.
- Durkin, D. (1993). Reading ability and the performance of African-American graduate students in research methodology courses. *Journal of College Literacy and Learning*, 31, 39-52.
- Education Resource Centre (2011). *Annual JSSCE Report*. Abuja ERC.
- Egbe, C.I.; Onyishi, J.C. & Omeje C.J. (2011). Combined effects of mnemonics and gender on students achievement in English stress patterns. *International journal of educational research*, 11, (1), 48-58.

- Elliot, S.N., Kratochwill, T.R., Littlefield, C.J. & Travers, J.F. (2000). *Educational Psychology*. Boston: MacGraw Hill.
- Education Resource Center (2012). FCT Junior secondary schools examination report.
- Education Resource Center (2013). FCT Junior secondary schools examination report.
- Education Resource Center (2014). FCT Junior secondary schools examination report.
- Education Resource Center (2015). FCT Junior secondary schools examination report.
- Essien, O. (2009). Language and national development: The Nigerian paradigm. In E. Urua, M. Ekpenyong, & F. Ahoua (Eds) *Language development beyond borders*. Uyo: Emsel, pp.175-195.
- Gross, J. (2006). *Handbook of emotion regulation*. New York: Guilford.
- Hacker, R.G. (1999). Gender studies: Some Methodological and theoretical issues. *International journal of science education*, 14, (5), 29-539.
- Hidi, S. (2006). Influencing children's self efficacy and self regulation of reading and writing through modeling. *Reading and writing quarterly*, 23 (1), 7-25.
- Hong, E., Peng, Y., & Rowell, L. L. (2009). Homework self –regulation: Grade, gender, and achievement- level differences. *Learning and individual Differences*, 19, 269-276.
- Kathleens, S. (2012). The effect of topic interest on the reading comprehension of higher ability students. *Journal of educational research*. Vol.73, 1980. Retrieved from <http://www.questia.com/googlescholar.qst?docId=775034>. Northeastern Illinois University.
- Man-Chih, A. (2006). *The effect of the use of self regulated learning strategies on college students' performance and satisfaction in physical education*. An Unpublished Ph.D Thesis, Australian Catholic University, Australia. Retrieved on 8/12/15 at <http://fie.engrngptt.edu./fie.99/papers/1263.pdf>.
- Mbanefo, I.M. (2009). *Effects of training in metacognitive strategies on students achievement and interest in reading comprehension*. An unpublished Ph.D Thesis, University of Nigeria, Nsukka.
- Mboto, F.A. & Bassey, S.W. (2004). Attitude and gender in science, technology and Mathematics (STM) students' performance. *International journal of research in education*, 1 (2), 34-41.
- National Reading Panel (1998). *The language learning benefits of extensive reading*. New York: Newbury House.
- National Reading Panel (2003). *Teaching children to read: An evidence based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroup* Bethesda, MD: National Institute of Child Health and Human Development, National Institute of Health. Retrieved from <http://wik.ed.uiuc.edu/index.php/reading comprehension>.

- Obodo, G.C. (2000). *Mathematics: A language of computers in the new millennium. Implication for Nigeria*. Proceeding of annual conference of Mathematics association of Nigeria.
- Obodo, G.C. (2002). *Developing positive attitude and interest of Mathematics students in Nigerian secondary schools*. A paper presented at NMC Abuja during the summit workshop, 4-6<sup>th</sup> Oct.
- Ochuba, C.A. (1989). The level of understanding of selected Ecology concept among Nigeria school certificate candidates. *Journal of Science Teacher Association of Nigeria*. 25 (1) 90-101.
- Paris, S.C. & Paris, A.H. (2001). Classroom applications of research on self regulation learning. *Educational psychologist*, 36, 89-101.
- Peterson, K., Fennema, I.P. & Carpenter, A.E. (1988). The speech, language, or hearing-impaired child: At-risk academically. *Childhood education*, pp. 91-95.
- Pintrich, P.R. (1999). The role of motivation in promoting and sustaining self regulated learning. *International journal of educational research*, 31, 459-470.
- Pintrich, P.R. (2000). The role of goal orientation in self regulated learning. In M. Boekaerts, P.R. Pintrich, & M. Zeidner (Eds), *Handbook of Self Regulation*. San Diego: Academic Press.
- Pintrich, P.R., Wolters, C. & Baxler, G.P. (2000). Assessing metacognition and self regulated learning. In G. Schraw & J.C. Ampara (Eds.), *Issues in the measurement of metacognition* (pp.43-97). Lincoln: Buros institute of mental measurement, university of Nebraska press.
- Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: the role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 249–284). San Diego, CA: Academic Press.
- Rose, M. (2002). *From reality to Mathematical modeling approach: A proposal for using ethno-mathematical knowledge*. Greenwich: ISGEM.
- Schraw, G., & Lehman, S. (2001). Situational interest: A Review of the literature and directions for future research. *Educational Psychology Review*, 13(1), 23-52.
- Sitzmann, T. (2008). A meta –analysis of Self Regulation Learning in work-related training and educational attainment: What we know and where we need to go. *Educational Psychologist*, 28, 117-148.
- Umeano, E.C. & Adimora, D.E. (2010). Influence of self-regulated learning on self-esteem and self efficacy on academic achievement of university students. *Review of education, institute of education journal*, 21,(1) ,28-39.
- WAEC (2012). *Chief Examiner's Report*. Lagos: WAEC.
- WAEC (2013). *Chief Examiner's Report*. Lagos: WAEC.
- WAEC (2014). *Chief Examiner's Report*. Lagos: WAEC.
- WAEC (2015). *Chief Examiner's Report*. Lagos: WAEC.
- Zimmerman, B.J. (1998). Models of self regulated learning and academic achievement. In B.J. Zimmerman & D.H. Schunk (Eds.) *Self regulated*

*learning and academic achievement: theory research and practice* (pp. 1-25)  
New York: Springer Verlag.

Zimmerman, B.J. (1990). Self regulated learning and achievement. An overview. *Educational Psychologist*, 25, 3-17.

Zimmerman, B.J. (2000). Attaining self regulation: A social cognitive perspective. In M. Boekaerls, P.R. Pintrich, & M. Zeidner (Eds.), *Handbook of self regulation* (pp. 33-39). New York: Academic press.

Zimmerman, B.J. (2001). Becoming a self regulated learner: An overview. *Theory into practice*, 41, 64-72.

Zimmerman, B.J., bonner, S.,& Kovach, R. (2006). *Developing self regulated learners*. Washington, DC: American Psychological Association.

Zimmerman, B.J., & Kitsantas, A. (2005). Homework practices and academic achievement: The mediating role of self-efficacy and perceived responsibility beliefs. *Contemporary Educational Psychology*, 30, 397-417.