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# Effect of Constructivist-Based Learning Strategies on Students' Interest in Junior Secondary Social Studies Concepts in Nsukka Education Zone

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## **Article History**

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Abstract: This study examines the effect of constructivist-based learning strategies on student's interest in junior secondary social studies concepts in Nsukka education zone. A quasi-experimental research design was used. The population of this study consists of all the junior secondary co-education school students (4182) of Nsukka Education Zone of Enugu State. A sample of 260 students was drawn. The instruments developed for these studies were Social Studies Interest Inventory (SSII). The data obtained were analyzed using means and standard deviation to answer the research questions. The hypotheses were tested at 0.05 level of significance using analysis of covariate (ANCOVA). The reliability of SSII was determined using KR-20 reliability method. The internal consistency of SSII was ascertained using Cronbach alpha procedure. The result of the analyses indicated that the effect of treatment and gender was not a significant factor in students' interest in Social Studies. Students taught using constructivist-based learning strategies performed significantly better than their counterparts who were taught using lecture method in SSII. Based on the findings above, it can be concluded that Constructivist Approach is an effective strategy to make students interested in studying social studies.

**Keywords:** Constructivist-based learning strategies, Students' interest, Junior secondary, Social studies. Concepts.

#### INTRODUCTION

Interest is as an individual's predisposition in a particular context [1, 2]. That is, it provides the competence to carry out activities using one's skill, which enables him/her to perform effectively. Interest has to do with what an individual has acquired from a specific study in a given instructional sequence. Interest level of learners is one personality characteristic that influences students' academic achievement [4]. According to Eze [4], heterogeneity of this interest in the classroom is a common phenomenon.

The low academic interest in social studies has been labeled on different reasons. Teachers are one of the key elements in schools and effective teaching is one of the key propellers for student improvement. Teaching effectiveness is dependent upon the interaction between the instruction, subject-matter, knowledge and teaching (pedagogical/methods) ability [5]. This means for a proper learning to take place the teacher need to employ different method, strategies or techniques for smooth flow of learning. Different methods are used in teaching Social Studies. According to Adetoro [6] it ranges from lecture and demonstration methods are content driven and certainly not learnercentered. These methods are teacher centered which are based on behavioural learning theories and not learner centered they are based on cognitive psychological

learning theories. These methods which are predominantly used in Social Studies in the junior secondary schools according to Boyle, Duffy & Dunleavy [7], emphasize knowledge transmission from the teacher to passive students and encourage rote memorization of facts. The consequence of the use of non-constructivist strategy in teaching social studies in the junior secondary schools is that students are unable to retain their learning and apply it to new situation and may also account for poor performance of Social Studies students in both internal and external examination and the high level of social problems in the society [8].

The Federal Government of Nigeria have tried in different ways so as to reduce the rate of social problems in our society for proper attainment of the objectives of Social Studies in Nigeria through the introduction of Civic Education into the educational curriculum so as deal with some of those sensitive kidnapping, (examples are examination malpractices, raping etc.) and also the introduction of Information Communication Technology as a strategy of teaching thereby making the teachers going for training and retraining so as to adapt to the new strategy. In this vain, Egwu [9] stressed out the main reason for the introduction of civic education is to strengthen the Federal Governments' effort toward

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reinforcing democracy and democratic culture in Nigeria. According to the National council for Social Studies (NCSS) [4] identified that the introduction of civic education by the federal Government would help in inculcating in the citizens the right attitude towards doing things. All these reasons given above for the reintroduction of civic are parts of the aims Social Studies is trying to achieve. Based on these foregoing, due to the efforts made by the Federal Government, Social Studies teachers and also researchers in Social Studies in realizing the goals of Social Studies instead, those objectives still remains mostly unachieved and the social problems keep on increasing in our society.

Based on these foregoing, introducing civic education in the curriculum seems not to be the best approach in solving all these issues because the main problem of Social Studies is the poor implementation of the contents. Seweje [10] confirmed that the methods adopted by teachers in most cases include the talk and chalk (lecture) with very little concern for practical activities. Seweje [10] explained further that a teacher is expected to be a facilitator whose main function is to help learners to become active participants in their learning and thereby making meaningful connection between prior knowledge, new knowledge and the process involved in learning. That is why the researcher is introducing a constructivist based strategy which may be a way out of these problems for proper and meaningful learning of Social Studies concepts that are seen or pose as difficult topics hence, influencing the students' achievements and interest in the subject matter.

The constructivist model therefore consists of methods that foster learner's teaching participation during teaching and learning episode. Nwafor [11] described constructivism as a theory that rests on the inmate human drive to make sense of the world. Also Wikipedia [12] explained that the learner actively constructs knowledge by integrating new information and experience into what they have previously come to understand. Giving credence to the above, Oforma [13] posits that learner should not be spoon fed, instead, the learner should be left to discover solutions by him/herself. Oforma [13] further asserts that the message becomes effective when teaching and procedures involve that participation of learners, stimulate their imagination, provoke and guide their thinking.

#### Objectives of the study

The general objectives of this study were to find out the effects of constructivist-based learning strategies on students' interest in Social Studies in Nsukka Education Zone. Specifically, the objectives of this study are to;

• Ascertain the mean interest scores of students taught social studies using constructivist strategy and those taught using lecture method?

- Find out the interest scores of male and female students taught social studies with constructivist strategy.
- Determine the interaction effect between the instructional treatment and gender in students' interest in Social Studies.

## **Research Questions**

The following research questions guided the study

- What are the mean interest scores of students taught social studies using constructivist strategy and those taught using lecture method?
- What are the interest scores of male and female students taught social studies with constructivist strategy?
- What is the interaction effect between the instructional treatment and gender in students' interest in Social Studies?

## Hypotheses

The following null hypotheses were formulated for the study. They were tested at a 0.05 level of significance.

**H01:** There is no significant difference in the mean interest scores of students taught social studies using constructivist strategy and those taught using lecture method.

**H0<sub>2</sub>:** There is no significant difference in the interest scores of male and female students taught social studies with constructivist strategy.

**H03:** There is no significant difference in the interaction effect between the instructional treatment and gender in students' interest in Social Studies.

## LITERATURE REVIEW Conceptual Framework Social Studies

Social studies are the study of people in relation to each other and to their world. It is an issues focused and inquiry-based interdisciplinary subject that draws upon history, geography, ecology, economics, law, philosophy, political science and other social science disciplines. Therefore, Social Studies as a study of people, portrays the place of people in the subject or field of study. Thus Social Studies in its study considers people who lived in the past, the present and those who will live in the future. This depicts that Social Studies is a great unifying element, which is capable of connecting learners with other people in the globe.

The major aspiration of every country is the desire for rapid development which naturally depends on such factors like quality of leadership and followership, self-discipline and resource endowment etc. [6]. Therefore, the Social Studies Association of Nigeria (SOSAN) as reported by Bozima and Ikwumelu

[12] stated these general objectives of Social Studies as; to help the learners fit into the society to which he belongs; to create an understanding of environments man-made, natural, cultural and spiritual resources and the conservation of these resources for development; to develop an awareness and appreciation for the interrelatedness of human knowledge and human life; to develop capacity to learn and acquire skills essential to the formulation of satisfactory professional life and further studies; to develop capacity for logical thinking and sound rational judgment; to develop in the learners positive attitude to citizenship and desire to make positive personal contribution to creation of prosperous, united Nigeria and also to make the learners aware of the problems of his country and the world in general and a sympathetic appreciation of the diversity and interdependence of the local community and of the wider national and international community.

Social studies foster students' understanding of and involvement in practical and ethical issues that face their communities and humankind. Social studies is integral to the process of enabling students to develop an understanding of who they are, what they want to become and the society in which they want to live. Social studies develops the key values and attitudes, knowledge and understanding, and skills and processes necessary for students to become active and responsible citizens, engaged in the democratic process and aware of their capacity to effect change in their communities, society and world.

## Concept of constructivism

The constructivist teaching approach means encouraging the students to ask questions, actively involving them in the class activities, continuously reflecting on students' understanding and evaluating their performances [14]. The students construct their knowledge guided by the lecturer rather than just receiving the knowledge from the lecturer or directly from the textbook. The latter concept separates the main philosophy of informing science which breaks down information and transferring the knowledge to the clients, which in this case are the students [15]. Instead the constructivist approach compels the students to participate and engage in the classroom compared to traditional teaching approaches [14]. The study carried out by An, Parker, Trolian, and Weeden [16] shows that active learning plays a significant role in students' learning outcomes which is considered as one of major factor that contributes to good teaching practices. The research indicates that the constructivist approach has a positive effect on both students' performance and motivation, as they find learning interesting because it is carried out in a collaborative learning environment [17]. The constructivist teaching approach is based on learning 5E's (Engage - Explore - Explain - Elaborate -Evaluate) and is a student-centered approach rather than teaching centered approach, whereby the students are challenged more on their learning and consequently

produce improved meaningful learning [18]. Integrating technology into the curriculum and the classroom also has a positive impact on students understanding the content and engagement in their learning outcomes [18].

According to Draper [19], the basic difference between the traditional teaching approach and the constructivist teaching approach is that in traditional teaching approach the lessons usually start as a part of a bigger idea, whilst in the constructivist teaching approach, the bigger idea is conveyed at the beginning of the lesson and expanded further by including the parts. There are several benefits associated with the constructivist teaching approach. Those benefits include actively engaging students versus students who simply absorb the content by following the instruction of a lecturer. Rather than the lecturer disseminating the information to the students, in the constructivist approach, the students are constructing their knowledge with the lecturer acting as a facilitator who is helping them to build the knowledge [19]. This gives the students the opportunity to learn their way, interact with peers and the lecturer, and analyze, interpret, and evaluate their learning [19]. This approach helps the students enhance their learning experiences and promotes team work. According to Marzano, Pickering, and Pollock [20], this way of cooperative learning has a strong effect on student achievement. The constructivist approach also helps in building supportive, helpful, trusting relationships of the students with their peers and the lecturers, especially the disruptive students who experience social or emotional problems in school and find it difficult to connect with other students and lecturers [3].

The constructivist approach also acknowledges the social dimension of learning, wherein the students start their learning as students in the class with their classmates and their lecturer. This helps in developing the learning community in the social and personal reflective processes [21]. The formal process of reflection helps students as they develop into leaders in their field who learn from their mistakes [22]. Similarly, the stage of self-reflection in the constructivist approach may also help students to reflect on their learning with their peers or the lecturer in the class which help them learn better.

## According to Board [23], the constructivist process consists of the following stages

• Construction of new knowledge on the prior knowledge: The learning process is impacted by the prior knowledge. If the knowledge is built without the learner's prior knowledge, then learners can easily forget the new constructed knowledge. Hence, it is very important for the lecturers to construct the new knowledge into the students' existing mental framework.

- Concept development through real and authentic problems: The constructivist learning is based on the fact that the learners learn the concepts through real and authentic problems using class-room activities which enable them to be actively engaged and subsequently develop the ability to resolve the problems on their own.
- Constructivist curriculum: It is very important for the lecturer to present the materials based on the prior knowledge of learners, and what the learners are puzzled by. The constructivist curriculum is basically based on the idea of understanding the concepts more deeply and meaningful. The purpose is to generate the curiosity among the students, and so students start posing questions, and subsequently these results in deeper learning.
- Closure and reflection on students' learning: It is essential to give proper closure to the learning outcomes of the lesson, as it determines the organization and nature of what has been learnt. The stimulus for learning is cognitive conflict and puzzlement, and this involves discussion and attentive listening. The goal of the constructivist approach is to learn together by applying the concept and resolving the puzzling concepts with the help of the peers or the lecturer. In this way, the proper closure can assist the students to comprehend their learning outcomes, especially at the end of the lesson.

#### **Students' Interest in Social Studies**

Researchers have suggested that instruction may influence students' interest [24, 25]. Two types of interest are believed to exist: situational interest, defined as an affective reaction that is triggered by conditions in the learning environment, and personal

interest, defined as an individual's predisposition in a particular context [1, 2]. Situational interest was further defined as consisting of two phases: a triggered phase, defined as a psychological state of interest resulting from short-term changes in environmental features, and a maintained phase, defined as a state of interest following the triggered phase that involves focused attention and persistence [1].

In terms of Social Studies instruction, Mitchell [2] posited that using group work triggers personal interest, which may be maintained if the to-be-learned content is meaningful to students and they are provided with opportunities to be involved in the learning process. As such, it may be possible that a constructivist strategy affects personal interest to a different extent than those with non- constructivist strategy because the students who received a lesson with a constructivist based strategy engaged in cooperative activities whereas students who received a lesson with non-constructivist method of instruction worked in isolation. Thus, the current study included a measure of personal interest that was administered to both groups for the study.

#### **METHODOLOGY**

#### **Design of the Study**

The study adopted a quasi-experimental research design. Quasi-experiment is an experiment where random assignment of subjects to experimental and control groups is not possible. Researcher used two groups/streams of a class as experimental and control groups respectively [26]. Specifically, a pre-test posttest nonequivalent control group design was used.

## The Design of the Study

	Group	Pre-Achievement Test	Treatment	Post-Achievement Test	Interest Test
Experimental	X1	A1	CS	A2	A3
Control	X2	A2	L	A2	A3

#### Where

X1= experimental group

X2= control group

A1= pre test of both experimental and control group

A2= post test of both experimental and control group

A3= interest test of both experimental and control group

CS= treatment of first group with constructivist learning

L = treatment of second group with lecture method

This was 2×2 factorial design which involves independent variables; gender at two levels and learning strategy at two levels.

The study was conducted in Nsukka Education Zone of Enugu State which consists of three local Governments areas namely; Igbo-Etiti Local Government Area, Nsukka Local Government Area and Uzo-Uwani local Government Area.

## Population of the Study

The population of this study consists of four thousand one hundred and eighty two (4182) Junior Secondary School III (JSS) social studies students in fifty two (52) co-education Junior Secondary Schools in Nsukka Education Zone in the 2014/2015 academic session.

#### Sample and Sampling Technique

#### Area of the Study

The sample size was two hundred and sixty (260) JSSIII Social Studies students. Thirty eight (38) students from Community secondary school Obimo, one hundred and three (103) students from Community secondary school Aku, sixty nine (69) students from Community high school Ukehe and fifty (50) students from Uvuru secondary school Uvuru.

Purposive sampling technique was used to identify and draw mixed schools that have the following criteria; (i) have many JSSIII students; (ii) that have male and female students and also; (iii) have qualified social studies teachers. The four schools that satisfied these criteria were used for the study. The intact classes were used in each selected schools. In each school, one class was assigned to the experimental group while the other was assigned to the control group. Their normal class teachers were used in teaching the students.

#### **Instrument for Data Collection**

The instrument for data collection includes; Social studies Achievement Test (SSAT), Social Studies Interest Inventory (SSII) and also lesson plans was prepared for the study.

### Social Studies Interest Inventory (SSII)

This is a testing instrument designed for the purpose of measuring and evaluating the level of an individual's interest in, or preference for, a variety of activities; also known as interest test. This covered their level of interest in the subject matter Social Studies and also those constructivist methods used in teaching of Social Studies. The motive of this instrument was to find out their level of interest and if it made the students to achieve better in the cause of the study. It was used for the pre- and post-test. The researcher developed twenty items made up of 4-choice Likert type scale. This helped the researcher to find out how much interest students had in Social Studies and the various methods of teaching which interest the learners most. Strongly agree, agree, disagree and strongly disagree which was ranked 4,3,2 and 1 respectively to ascertain the students' levels of interest in Social Studies.

## **Preparation of Lesson Plan**

Three lesson plans was prepared based on the selected concepts which was prepared by the researcher, one for the experimental group and the other for the control group. The researcher developed a lecture method of lesson plan for the development of conventional lesson plan for the control group. The constructivist method was developed which contained the four Es; engagement; exploration; explanation; elaboration and evaluation for the teaching of the experimental group. The lesson plan contained the class, subject, duration, topic objective instructional materials, entry behavior, presentation, evaluation, summary, conclusion and assignment. It was based on the concept of conflict.

### Validation of Instrument

The research instruments were face validated by two experts in the Department of Education Social Science and one from measurement and Evaluation University of Nigeria Nsukka. These experts were requested to validate Social Studies Interest Inventory (SSII), items in terms of; clarity of instruction to the respondents; appropriateness to the subject and the study and proper wording of the items.

The comments and recommendations of these experts served as a guide to modification of items in the instrument. This was done to ensure that the instrument measure what they designed to measure. The instruments were also formatively validated using feedback from twenty (20) JSSIII students in one of the schools outside Nsukka education zone (Government Secondary School, G.R.A. Enugu).

## **Scoring of Instrument**

The instrument (pre-test and post-test) was scored by assigning figures or values to each response. SSII consists of twenty (20) items. Each item was rated according to the scale. That is, strongly agree, agree, disagree and strongly disagree which was rated 4, 3, 2 and 1 respectively. The addition of the total score for SSII was 80. Each items answered was added together to get the total score for SSII. To get the students' interest score percentage was used for the computation of the score. That is, where a student score 42 out of 80 in the interest score. The 42 was divided by 80 and the sum total of the division was multiplied by 100. SSII was  $42/80 \times 100 = 52$  respectively.

#### **Reliability of the Instruments**

The reliability of SSII was determined using KR-20 reliability method. The researcher administered SSII to twenty (20) Social Studies students in one of the co-education public schools outside Nsukka education zone (Government Secondary School, G.R.A. Enugu) which had similar characteristics as the sample schools to ascertain the test reliability and had been taught the lesson on conflict covered by SSII.

The internal consistency of SSII was ascertained using Cronbach alpha procedure. The researcher administered the final SSII to twenty (20) Social Studies students in one of the schools outside Nsukka Education Zone (Government Secondary School, G.R.A. Enugu). The student respondents were used to compute the coefficient of internal consistency of the SSII. (See appendix E and F).

## **Experimental Procedure**

On the first day of the experiment, the test instruments-Social Studies Interest Inventory (SSII) was typed in a white paper which was administered as pretest to all students in the sampled schools. Then, both constructivist learning strategy and non-constructivist learning strategy group was taught Social Studies for a period. The constructivist group was taught using

constructivist learning strategy. The regular Social Studies teachers were trained on how to use the constructivist learning strategy in teaching and learning process. After the training, the researcher observed the teachers in a practice session and necessary corrections was made.

The non-constructivist-based group (lecture method) was taught by the same regular Social Studies teachers at their normal lesson periods without the use of constructivist-based teaching and learning principles. The teacher used the lesson notes prepared by the researcher. The teachers also were trained on how to use the lesson plans for uniformity. The post-test was administered after the three weeks treatment and the scores obtained were used to answer the six research questions and also test the six hypotheses.

## **Experimental Condition (Control of Extraneous Variables)**

The following measures were adopted to control some of the extraneous variables in this study;

Experimenter's Bias: The teaching of the experimental and control groups was not done by the researcher. In order to avoid bias in the present study, the regular Social Studies teachers in each of the schools under study was trained and used. The researcher monitored these teachers so as to ensure that they effectively adhere to the instructions.

Control of Teacher effects: The Social Studies teachers that was used for the study was evaluated by the researcher to find out whether they understood and mastered the constructivist-based instructional strategy that they taught. Observation in a micro-teaching exercise was conducted in a class consisting of the researcher and the teachers that was trained so as to assess their mastery of the method. They were evaluated to avoid the effect of their per-existing teaching methods in the experimental exercise.

Control of inter-group interaction: The JSSIII students in the different treatment groups are located in different distance schools with almost the same learning conditions.

Control of School variables: All the sampled schools were drawn from the same neighborhood that is, from Nsukka Education Zone and why the researcher made use of purposive sampled technique was to ensure that the schools were comparable.

Control of effects of Pre-test on Post-test: In order to minimize influences of memory and forgetfulness, the time lag between the pre-test and post-test was three weeks. This period was long enough to disallow the pre-test from affecting the post-test score. The test items were reshuffled before administering the post-test to the respondents.

Control of initial group differences: It is possible to do complete randomization because of the administration set up in the schools. Intact classes were randomly assigned to the treatment conditions and statistical control was adapted to partial out this differences.

Control of instruction across all groups: All the schools that were sampled were taught by their regular Social Studies teachers who were trained by the researcher. The experimental group teacher taught with constructivist-based learning strategy and a typical lesson plans while the control group teacher taught with conventional lesson plans and lesson notes. The constructivist-based learning strategy, lesson plans and notes were prepared by the researcher and the researcher supervised all the regular teachers.

Statistical control: In each of the two groups, the initial group difference among the subjects was controlled by analyses of covariance (ANCOVA). ANCOVA was used to analyze the data generated from the study using pre-test scores as the covariates for post-test scores.

Control of Hawthorns effects: This happens when students' performance are affected because the students are aware that they are used for an experiment. To control this problem, their regular Social Studies teachers were used to teach both the experimental and the control groups.

#### METHOD OF DATA COLLECTION

One week intensive training programme was organized for the teachers that were involved in the study. The conduct of the study took place during the normal school lesson periods and the contents to be taught includes concept of conflict, conflict resolution and conflict management. The research lasted up to three weeks. On the first week SSII was administered to the students by the researcher and were collected on the spot. The student scores in the first administration served as the pre-test scores of the study. After this stage the second week, the students was divided into two groups the control and the experimental group. The experimental group was taught using constructivistbased learning strategy while the control group was taught using non-constructivist-based learning strategy (lecture method). Social Studies constructivist based lesson note was used by the researcher in teaching constructivist lesson while Social Studies nonconstructivist based lesson note (lecture method) was used to teach the control group. On the third week, items of these instruments was re-arranged and readministered to the students. The scores obtained from the second administration served as post-test scores in the study.

## METHOD OF DATA ANALYSIS

The scores obtained from the pre-test and posttest was analyzed using a mean and standard deviation to answer the research questions while analysis of covariance (ANCOVA) was employed to test the hypotheses. ANCOVA was used to test the main and interaction effects of categorical variables, on a continuous dependent variable, controlling for the effects of selected other continuous variables, which covary with the dependent and the marginal difference in mean gain score of the students was used in determining the effect of the teaching methods on students' achievement and interest. The hypotheses were tested at 0.05 level of significance. Statistical package for Social Science (SPSS) was used for the computation and analysis of data. Therefore, the decision rule of hypotheses testing includes; if the probability (p) value is less than or equal to alpha value of .05 at which it is been tested you reject the null hypotheses which means that there is a statistical significance but if the probability value is greater than the alpha value of .05 you do not reject the null hypotheses which means that there is no statistical significance.

Table-1: Mean Analysis Summary Table of the Difference between the Mean Interest Scores of Students Exposed to CLS and those Taught with Lecture Method

Groups	No. of Students	Teaching Method	Pre-test X	SD	Post-test X	SD	Mean Gain	Mean Gain Score
							Score	Difference
Experimental	130	CLS	33.578	8.168	71.55	8.119	37.972	23.962
Control	130	Lecture	40.38	8.299	54.39	7.245	14.01	

The data presented in Table 1 shows that the experimental group had a mean interest score of 33.578 and standard deviation of 8.168 in pre-test and a mean interest score of 71.55 and standard deviation of 8.119 in post-test while the control group had a mean interest score of 40.38 and standard deviation of 8.299 in pre-test and a mean interest score of 54.39 and standard deviation of 7.245 in post-test. The experimental group

had a post-test mean interest gain score of 37.972 higher than the post-test mean interest gain score of 14.01 had by the control group. Also, the experimental group had a post-test interest gain score difference of 23.962 above the control group. This implies that the effect of CLS in improving students' interest in Social Studies is higher than the conventional (lecture) method.

Table-2: Mean Analysis Summary Table of the Difference between the Mean Interest Score of Male and Female Students Exposed to CLS

Groups	No. of Students	Teaching Method	Pre-test X	SD	Post-test X	SD	Mean Gain Score	Mean Gain Difference
Male	65	CLS	32.86	7.386	70.43	7.552	37.57	0.81
Female	65	CLS	34.28	8.882	72.66	8.563	38.38	

The data presented in Table 2 shows that the male students had a mean interest score of 32.86 and standard deviation of 7.386 in pre-test and a mean interest score of 70.43and standard deviation of 7.552in post-test while the female students had a mean interest score of 34.28 and standard deviation of 8.882 in the pre-test and a mean interest score of 72.66and standard deviation of 8.563in the post-test. Female students had a

post-test mean interest gain score of 38.38 and mean interest gain difference of 0.81 higher than the post-test mean interest gain score of 37.57 had by their male counterparts taught Social Studies using CLS. This implies that there is difference in the mean interest score of male and female students but ANCOVA will be applied to determine whether the difference is significant.

Table-3: Mean Analysis Summary Table of the Interaction Effect of Instructional Treatment and Gender on student' Interest Scores in Social Studies

Gender	Method	Mean	SD	N
Male	CLS	70.43	7.552	65
	Lecture Method	54.75	6.297	65
	Total	62.59	10.483	130
Female	CLS	72.66	8.563	65
	Lecture Method	54.03	8.116	65
	Total	63.35	12.510	130
Total	CLS	71.55	8.119	130
	Lecture Method	54.39	7.245	130
	Total	62.97	11.525	260

The data presented in Table 3 revealed that male students taught using CLS had a mean achievement score of 70.43 while male students taught using lecture method had an achievement mean score of 54.75. Whereas the female students taught using CLS had a mean achievement score of 72.66 while female students taught using lecture method had a mean achievement score of 54.03. Female students' had higher mean achievement score than their male

counterparts in the experimental group. There is therefore no interaction effect of gender and method of teaching on students' achievement in Social Studies.

## **Testing of the Hypotheses**

H0<sub>1</sub>: There is no significant difference in the mean interest scores of students taught social studies using constructivist strategy and those taught using lecture method.

Table-4: ANCOVA Summary Table showing if there is no significant difference in the Mean Interest Scores of Experimental and Control group

	Experim	ciitui uiiu C	ontion group		
	Tests of 1	Between-Sub	jects Effects		
Dependent Variabl	e:PosttestSSII				
Source	Type III Sum	Df	Mean Square	F	Sig.
	of Squares		-		
Corrected Model	19127.596a	2	9563.798	160.919	.000
Intercept	48786.580	1	48786.580	820.873	.000
PretestSSII	1.058	1	1.058	.018	.894
Method	16210.313	1	16210.313	272.752	.000
Error	15274.157	257	59.433		
Total	1065334.000	260			
Corrected Total	34401.754	259			
a. R Squared $= .550$	6 (Adjusted R Squ	ared = .553			

The data presented in the Table 4 revealed that there was a significant effect of method on level of post-test after controlling for the effect of pre-test, F(1, 257) = 272.752, P = 0.000. The decision rule states that if the probability (p) value is less than or equal to alpha value of .05 at which it is been tested you reject the null hypotheses which means that there is a statistical significance but if the probability value is greater than the alpha value of .05 you do not reject the null hypotheses which means that there is no statistical

significance. Therefore, the probability (p) value is less than the alpha value (0.000 < 0.05) which means that the hypothesis is therefore rejected and that there is significance in the mean interest scores of students taught social studies using constructivist strategy and those taught using lecture method.

H0<sub>2</sub>: There is no significant difference in the interest scores of male and female students taught social studies with constructivist strategy.

Table-5: ANCOVA Summary Table showing if there is no significant difference in the Mean Interest Scores of Male and Female students taught Social Studies with Constructivist Strategy

Tests of Between-Subjects Effects							
Dependent Variabl	e:CLSPostestSSII						
Source	Type III Sum	Df	Mean Square	F	Sig.		
	of Squares						
Corrected Model	218.454a	2	109.227	1.674	.192		
Intercept	39515.827	1	39515.827	605.678	.000		
CLSPretestSSII	56.723	1	56.723	.869	.353		
CLSGender	177.535	1	177.535	2.721	.101		
Error	8285.769	127	65.242				
Total	673955.000	130					
Corrected Total	8504.223	129					
a. R Squared $= .026$							

The data presented in the Table5 revealed that there was no significant effect of CLSgender on level of CLSpost-test after controlling for the effect of CLSpretest, F(1, 127) = 2.721, P = 0.101. The decision rule states that if the probability (p) value is less than or equal to alpha value of .05 at which it is been tested you reject the null hypotheses which means that there is a statistical significance but if the probability value is

greater than the alpha value of .05 you do not reject the null hypotheses which means that there is no statistical significance. Therefore, the probability (p) value is greater than the alpha value (0.101>0.05) which means that the hypothesis is therefore accepted and that there is no significance in the interest scores of male and female students taught social studies with constructivist strategy.

H0<sub>3</sub>: There is no significant difference in the interaction effect between the instructional treatment and gender in students' interest in Social Studies.

Table-6: ANCOVA Summary Table showing if there is no significant difference in the Interaction Effect between the Instructional Treatment and Gender in students' Interest in Social Studies

the instructional freatment and Gender in students. Interest in Social Studies								
Tests of Between-Subjects Effects								
Dependent Variable	e:PosttestSSII							
Source	Type III Sum	Df	Mean Square	F	Sig.			
	of Squares							
Corrected Model	19312.599a	4	4828.150	81.594	.000			
Intercept	47391.226	1	47391.226	800.891	.000			
PretestSSII	7.337	1	7.337	.124	.725			
Method	15928.755	1	15928.755	269.189	.000			
Gender	33.247	1	33.247	.562	.454			
Method * Gender	148.949	1	148.949	2.517	.114			
Error	15089.155	255	59.173					
Total	1065334.000	260						
Corrected Total	34401.754	259						
a. R Squared = .561	a. R Squared = .561 (Adjusted R Squared = .555)							

The data presented in the Table 6 revealed that there was no significant effect of gender and method on level of post-test after controlling for the effect of pretest, F(1, 255) = 2.517, P = 0.114. The decision rule states that if the probability (p) value is less than or equal to alpha value of .05 at which it is been tested you reject the null hypotheses which means that there is a statistical significance but if the probability value is greater than the alpha value of .05 you do not reject the null hypotheses which means that there is no statistical significance. Therefore, the probability (p) value is greater than the alpha value (0.114>0.05) which means that the hypothesis is therefore accepted and that there is no significance in the interaction effect between the instructional treatment and gender in students' interest in Social Studies.

## **DISCUSSION OF FINDINGS**

## Effect of Instructional Treatment on Mean Interest Scores of Students in Experimental and Control Groups

The data provided in Table1 answered the research question one and the result revealed that students in experimental group exposed to CLS had higher mean interest score than the students in the control group exposed to lecture method and also the effect of CLS in improving students' interest is higher than that of the lecture method. The difference in their mean achievement score (23.962) is large. This means that method of teaching had a remarkable effect on the mean interest score of students. The data presented in Table 4 tested the hypothesis four and the result (p. value of .000 < .05 alpha value at which it is being tested) revealed that there is significant difference in the mean interest score of students in the experimental group and those in the control group. This means that constructivist-based learning strategies are more effective in improving students' interest in Social

Studies than the conventional (lecture) method of teaching. It can also be seen from the study that students' interest depends largely on the teaching strategy being adopted. This finding goes in line with Brookover, Thomas & Paterson cited in Nwoke 2004 which sees interest as one personality characteristics that influences students' achievement.

## Effect of Gender on the Mean Interest Scores of Students taught Social Studies with Constructivist Strategy

The data provided in Table2 answered the research question two and the result revealed that male students' had higher mean interest score than the female students. The difference in the mean interest score (0.81) of female and male students is a little bit high. Furthermore, the analysis in Table 5 tested the hypothesis five and the result (p. value of 0.101 > 0.05 alpha value at which it is being tested) revealed that there is no significance in the interest score of male and female students taught Social Studies with constructivist strategy. This finding disagree with Adegboye cited in Nwago and Obiekwe [6] which explained that many parents do not have interest in sponsoring their female education.

## **Interaction Effect of Instructional Treatment and Gender in Students' Interest in Social Studies**

The table provided in 3 answered the research question three and the result revealed that there is no interaction effect of methods and gender on students' interest in Social Studies. The data provided in Table6 tested hypothesis six and the result (p. value of 0.114 > 0.05 alpha value at which it is being tested) revealed that there is no significant interaction effect of gender and methods of teaching on students' interest in Social Studies.

#### **CONCLUSION**

The findings showed that students who were exposed to constructivist-based learning strategies in Social Studies class gained positive over those students who were taught using the conventional (lecture) method. These results suggest that such constructivist-based learning strategies may be useful for enhancing learning. Therefore, bringing constructivism into the classroom is an effective way to add vigor and interest to the class. By blending lectures and having students question and respond to primary source documents, an instructor can address the demands of covering material at the same time he encourages problem solving skills in the students.

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