

# RELATIONSHIP BETWEEN INTEREST IN SOCIAL STUDIES AND BASIC SCIENCE AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN OSUN STATE NIGERIA

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## Abstract

*This study is carried out to establish the relationship between interest in Social Studies and Basic Science among junior secondary school students in Osun State, Nigeria. It employs correlational research design. Three hundred (300) J.S.S. three students in Osun State constitute the sample for the study. Two research questions are asked and answered. Also, two hypotheses are raised and tested at 0.05 level of significance. The results among others, show that 173 (57.5%) of the respondents have moderate interest in Social Studies while 109 (36.5%) of the respondents have low interest in Basic Science. The results also indicate that there is no significant relationship between students' interest in Social Studies and Basic Science ( $r = 0.398$ ;  $p > 0.05$ ). The study recommends, among others, that students should have interest in their subjects as it is an avenue to build careers in later life.*

**Keywords:** Interest, Social Studies, Basic Science, JSS Students.

## Introduction

Social Studies, as defined by the National Council for Social Studies (2017), is the integrated study of the social sciences and humanities to promote civic competence. Social Studies is a discipline that exposes students to the content knowledge, intellectual skills as well as civic values necessary for fulfilling the right duties of citizenship in a participatory democracy. Social Studies education helps students to acquire a store of tested social theory and body of principles which are relevant to contemporary social issues. The subject came into being at the beginning of the 20th century and has gained increased relevance in many countries including Nigeria.

Adaralegbe (1980) defines Social Studies as the totality of experience students go through having been exposed to such a course based on man's interminable problem in

chosen environment with a full knowledge of some factors such as historical, traditional, geographical, social, political, cultural, religious, psychological, economic, scientific or technological that are normally responsible in man's web of interaction with his immediate environment. As Adeyemi (2012) put it, Social Studies provides man with understanding of their physical and human environments in order to act as responsible citizens. Social Studies' teaching in schools will lead to the realisation of the revised National Policy on Education's third objective which is "effective participation and contribution to the good of the society (FRN, 2014)" reiterated by Jekayinfa (2015).

Basic Science plays a vital role in the nation scientifically and technologically (Alebiosu & Ifamuyiwa, 2008). It is widely acknowledged that the gateway to the survival of a nation scientifically and technologically is science literacy. *Effective teaching and learning of Basic Science and Technology is achieved by building a solid foundation at the basic education level.* Basic Science as an integrated science course is taught at the primary and junior secondary school level so as to prepare the child for the core science subject. The importance of Basic Science in the school curriculum cannot be overemphasised as we live in a world of rapid and increasing technological development wherein there are recent advances in technology and its application (Geary & Hamson 2002). The exposure of students to Basic Science will help in achieving one of the cardinal objectives of the National Policy on Education (FRN, 2014) which is the "laying of a sound basis for scientific and reflective thinking.

Interest is also defined as the focusing of the sense organs on or art of giving attention to some persons, situations, activities, or objects. It is an outcome of experience rather than gift. It could either result or cause motivation. It could also be viewed as a condition in which an individual associates the essence of certain things or situation with his needs or wants. Schiefele (1998) maintains that one's interest is enkindled or killed through participation, experience, familiarity, study and work. It is what one perceives in these engagements that shape interest. McClernerney, Dowson Young and Nelson (2005) assert that genuine interest is the accomplishment of the identification, through action of the self with some object or idea. They further state that this is necessary because of the necessity of that object or idea for maintenance of a self-initiated activity. Interest, according to them, is a name for the fact that a course of action, an occupation or pursuit absorbs the power of an individual in a thorough way. Going by this definition, interest thus seems particularly useful as the relationship between identification, absorption and the maintenance of a self-initiated activity which offers a straight forward way to analyse classroom activities.

According to Shiefele (1991), interest is a content-specific motivation of characteristics composed of intrinsic feeling-related and value-related initiatives with an organised force. Shiefele has distinguished two conceptions of interest: Individual and situational interest. Individual interest is understood as a long-term direction of an individual

towards a type of object, activity or area of knowledge. It is defined as a relatively stable evaluative orientation towards certain domains (Shiefele, 1998:93) or towards particular classes of objects, event or ideas (Krapp, 2000). Individual interests have personal significance and are usually associated with high levels of significance and value, positive emotions and increased reference value (Krapp, Hidi & Renninger, 1992). Considering this framework, individual interest develops and then remains a stable and enduring factor in one's learning over an extended period of time. Development of student interest, in science, has long been considered and accepted as an objective for school science teaching by science educators and teachers alike. To this end, the term, "interest in science", has been employed to imply a range of meaning that extends from positive feeling toward science to complete absorption in scientific inquiry (Rennie & Parker, 1996). Schiefele (1991:302) conversely posits that the basis of situational interest is an external locus, and then defines it as an emotional state brought about by situational stimuli. This form of interest is also referred to as interestingness. Alexander and Jetton (1996) states that this type of interest is likely to be short-lived and superficial than individual interest and that it is generally aroused by specific features of an activity or task (Schiefele, 1998).

Hidi (1990), Hidi and Anderson (1992) submit that interest most often is directly tied to the content or instruction, which also directs and enhances learning. Most researchers like Krapp, Hidi and Renninger (1992) are of the belief that interest emerges from an individual's interaction with his/her environment. Many researchers now have adopted the distinction between situational and individual (or personal) interest. The personal interest approach tends to focus on individual differences whereas the situational interest approach centres on creating appropriate environmental settings to stimulate and motivate learning (Hidi & Baird, 1996; Mitchell, 1993). Though individual interest is considered more of a psychological trait, situational interest is by definition, more state-specific.

### **Statement of the Problem**

Studies in the past such as Akale and Usman (1993), Afuwape (2003), Aktamis and Ergin (2008), Adeyemi (2008), Adeneye, Awofala and Arigbabu (2013), Adeyemo and Babajide (2014) as well as Agboghoroma (2015) have focused much on poor performance in subjects, poor teaching methods, and attitudes towards various subjects. Little or no attention has been placed on how interest in disciplines could go a long way in establishing relationship among disciplines. It is on this premises that this present study seeks to investigate if there is the possibility of there being a relationship between students' interest in Social Studies as well as Basic Science; hence this study.

### **Objective**

The objectives of this study are to:

- (1) identify the level of Interest of Junior Secondary School students in the learning of Social Studies and Basic Science;
- (2) establish the relationship between students' interest in Social Studies and Basic Science; and
- (3) determine the influence of gender on students' interest in Social Studies and Basic Science.

### **Research Questions**

- (1) What is the level of interest of Junior Secondary School students in the learning of Social Studies?
- (2) What is the level of interest of Junior Secondary School students in the learning of Basic Science?

### **Hypotheses**

- (1) There is no significant relationship between students' interest in Social Studies and Basic Science.
- (2) There is no significant influence of gender on student's interest in Social Studies and Basic Science.

### **Methodology**

The study employs the correlational research design. The population for the study are all the J.S.S. three students in Osun State. A sample of 300 JSS 3 students are selected using simple random sampling technique from 30 junior secondary schools that participated in the study. Multi stage sampling procedure is employed. From three Senatorial Districts in the State, one Local Government Area (LGA) is selected from each of the three Senatorial Districts using simple random sampling technique. Ten schools are then selected from each LGA using simple random sampling technique. Ten students are selected from each school using simple random sampling technique to make a total of 300 students. Two self-constructed questionnaires are used for data collection. They are: Interest in Social Studies Questionnaire (ISSQ) and Interest in Basic Science Questionnaire (IBSQ). ISSQ has two sections, where section A is on bio data of students such as name of school, sex, class; and section B consists 20 items that elicit information

on students' interest in Social Studies. IBSQ also has two sections where section A is equally on student's bio data while section B equally elicits information on students' interest in Basic Science. Both ISSQ and IBSQ are validated before use. Both instruments are administered on the same set of students. The reliability of the two instruments yield 0.78 and 0.76 respectively using Cronbach alpha. The data collected are analysed using simple percentages, Pearson product moment correlation and multivariate analysis of variance (MANOVA).

**Results**

**Research One:** What is the level of interest of junior secondary school students in the learning of Social Studies?

In order to answer this research question, the 20 items on the ISSQ with response option; strongly agree with 4 points, agree with 3 points, disagree with 2 points and strongly disagree with 1 point are coded which gives maximum score of 80. Based on this, the overall level of students' interests in Social Studies is decomposed into three-point scale such that scores below 39.0% are rated Low; scores between 40.0%-59.0% are rated Moderate and between 60.0%-100.0% are rated High. The descriptive analysis and the results are presented in Table 1.

**Table 1:** Descriptive Statistics of the level of interest of junior secondary school students in Social Studies.

S/N	Students' level of interest in Social Studies	Frequency (f)	Percentage (%)
1	Low	35	11.6
2	Moderate	173	57.5
3	High	92	30.9
<b>Total</b>		<b>300</b>	<b>100.0</b>

Results in Table 1 provides the level of junior secondary school students' interest in Social Studies within the study area. It can be observed from the table that 35(11.6%) of the respondents have low interest in the subject while 173(57.5%) of them have moderate interest in Social Studies which actually represents the largest percentage of the respondents. 92(30.9%) of the students have high interest in Social Studies. This result implies that majority of the respondents have moderate interest in the subject.

**Figure 1:** Bar chart representing level of students' interest in Social Studies.

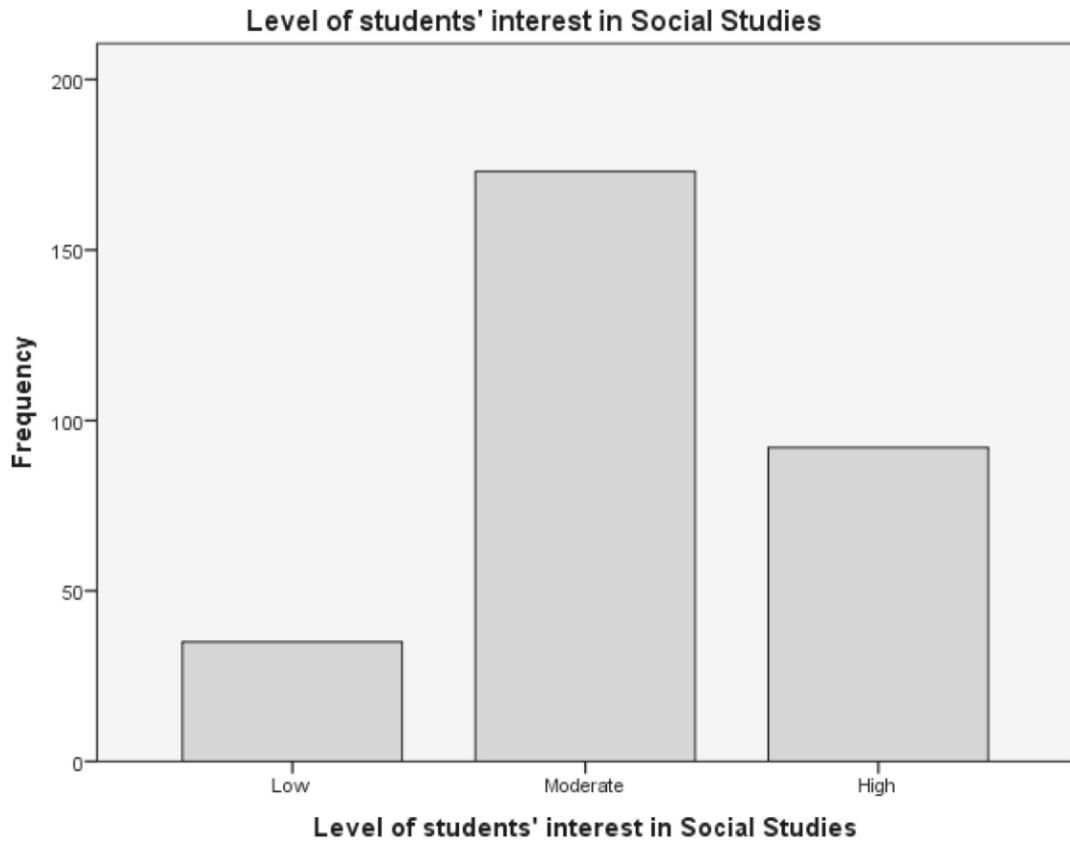


Figure 1 simply shows that “moderate” has the tallest bar indicating that junior secondary school students have moderate interest in Social Studies.

**Research Two:** What is the level of interest of junior secondary school students in the learning of Basic Science?

To provide answer to this research question, the 20 items on the IBSQ with response option; strongly agree with 4 points, agree with 3 points, disagree with 2 points and strongly disagree with 1 point are coded which gives maximum score of 80. The overall level of students' interests in Basic Science is decomposed into three-point scale such that scores below 39.0% are rated Low; scores between 40.0%-59.0% are rated Moderate and scores between 60.0%-100.0% are rated High. The descriptive analysis and the results are presented in Table 2.

**Table 2:** Descriptive Statistics of the level of interest of junior secondary school students in Basic Science.

S/N	Students' level of interest in Basic Science.	Frequency (f)	Percentage (%)
1	Low	109	36.5
2	Moderate	149	49.5
3	High	42	14.0
<b>Total</b>		<b>300</b>	<b>100.0</b>

Results in Table 2 provides the level of junior secondary school students' interest in Basic Science within the study area. It can be deduced from the table that 109(36.5%) of the respondents have low interest in Basic Science whereas 149(49.5%) of the students have moderate interest in the subject even as 42(14.0%) of the respondents have high interest in Basic Science. Without inference, it can be drawn out that most of the respondents within the study area have moderate interest in Basic Science.

**Figure 2:** Bar chart representing level of students' interest in Basic Science.

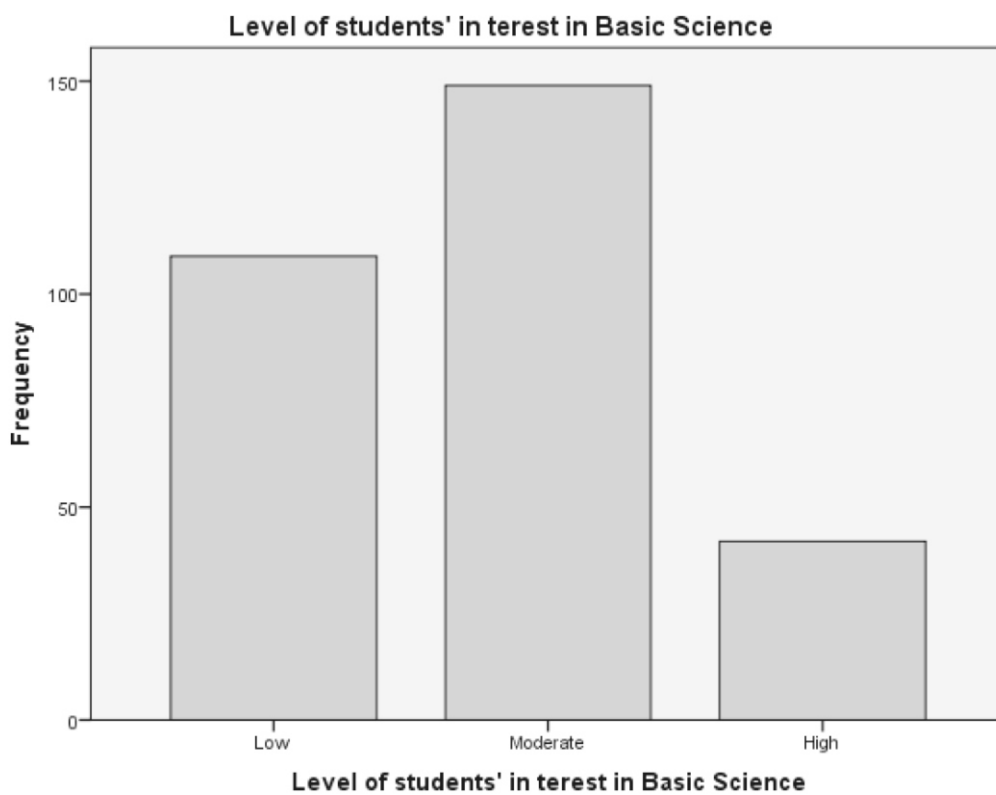


Figure 2 simply reveals that “moderate” has the tallest bar indicating that junior secondary school students within the study area have moderate interest in Basic Science.

### Hypotheses

**Hypothesis One:** There is no significant relationship between students' interests in Social Studies and Basic Science.

To test this hypothesis, data collected on interests of students in Social Studies and Basic Science are subjected to Pearson Product-Moment Correlation to point out whether a relationship exists between them.

**Table 3:** Pearson Product -Moment Correlation of students' interest in Social Studies and Basic Science.

Group	N	Mean $\bar{X}$	Standard Deviation	R	Sig. (2-tailed)
Social Studies	300	15.55	2.27	.398	.557
Basic Science	300	10.87	1.95		( $p > 0.05$ )

The result in Table 3 shows that there is no significant relationship (correlation) between students' interests in Social Studies and Basic Science at (N=300,  $r = 0.398$ ,  $p > 0.05$ ). Hence, the null hypothesis that states there is no significant relationship between junior secondary school students' interests in Social Studies and Basic Science is hereby not rejected. This result implies that junior secondary school students' interests within the study area in the two subjects have no significant relationship.

**Hypothesis Two:** There is no significant influence of gender on students' interest in Social Studies and Basic Science.

To test the hypothesis, data collected on interests of students in Social Studies and Basic Science based on gender in the two subjects are subjected to descriptive statistics and multivariate analysis of variance (MANOVA).

**Table 4:** Descriptive Statistics of the influence of gender on students' interest in Social Studies and Basic Science.



## Descriptive Statistics

	Gender in Social Studies	Gender in Basic Science	Mean	Std. Deviation	N	
Interest in Social Studies	Male	Male	22.91	3.99	143	
		Total	22.91	3.99	143	
	Female	Male	21.72	2.30	18	
		Female	23.06	3.94	139	
	Total	Total	22.91	3.81	157	
		Total	Male	22.78	3.85	161
Interest in Basic Science	Male	Female	23.06	3.94	139	
		Total	22.91	3.89	300	
		Total	Male	17.72	3.28	143
	Female	Male	17.72	3.28	143	
		Male	20.33	3.75	18	
		Female	18.18	2.90	139	
	Total	Total	18.43	3.07	157	
		Total	Male	18.01	3.43	161
		Total	Female	18.18	2.90	139
			Total	18.09	3.19	300

Results in Table 4 show the descriptive statistics of the influence of gender on students' interest in Social Studies and Basic Science. It can be deduced from the table that male students' interests in Social Studies have a mean score of ( $\bar{x} = 22.91$ ) while female students' interests in Social Studies have a mean score of ( $\bar{x} = 23.06$ ). In the same vein, male students' interests in Basic Science have a mean score of ( $\bar{x} = 17.72$ ) whereas their female colleagues' interests in the same subject have a mean score of ( $\bar{x} = 18.18$ ). These results imply that junior secondary school students' interests in Social Studies and Basic Science are slightly different considering their close interests mean scores.

**Table 5:** Multivariate analysis of variance (MANOVA) of the influence of gender on students' interest in Social Studies and Basic Science.

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Interest in Social Studies	28.723 <sup>a</sup>	2	14.362	.948	.389	.006
	Interest in basic science	111.255 <sup>b</sup>	2	55.628	5.640	.004	.037
Intercept	Interest in Social Studies	115051.838	1	115051.838	7597.057	.251	.962
	Interest in Basic Science	75585.542	1	75585.542	7663.535	.000	.963
Gender	Social Interest in Social Studies	22.521	1	22.521	1.487	.224	.005
	Interest in Basic Science	109.164	1	109.164	11.068	.001	.036
Gender	Basic Interest in Social Studies	28.723	1	28.723	1.897	.169	.006
	Interest in Basic Science	73.904	1	73.904	7.493	.007	.025
Gender	Social Interest in Social Studies * Gender	.000	0	.	.	.	.000
	Interest in Basic Science	.000	0	.	.	.	.000
Error	Interest in Social Studies	4497.847	297	15.144			
	Interest in Basic Science	2929.315	297	9.863			
Total	Interest in Social Studies	161987.000	300				
	Interest in Basic Science	101215.000	300				
1Corrected Total	Interest in Social Studies	4526.570	299				
	Interest in Basic Science	3040.570	299				

a. R Squared = .006 (Adjusted R Squared = .000)

b. R Squared = .037 (Adjusted R Squared = .030)

Results in Table 5 reveal the multivariate analysis variance of the influence of gender on students' interest in Social Studies and Basic Science. Inferentially, it can be observed from the table that there is no significant influence of gender on students' interests in Social Studies and Basic Science at the intercept value of ( $p > 0.05$ ) with partial eta squared value of 0.962. Hence, the null hypothesis stating that no significant influence of gender on junior secondary school students' interests in Social Studies and Basic Science is hereby not rejected. This result implies that gender does not significantly influence students' interests in both subjects within the study area.

### **Discussion**

The study examines the relationship between interest in Social Studies and Basic Science among Junior Secondary School Students. The findings show that there is no significant relationship in junior school students' interest in Social Studies and Basic Science. This reveals that students in both Social Studies and Basic Science have virtually the same interest in the subjects. This result contradicts the earlier findings of Rolftthus and Ackerman (1999) who found that there is a positive correlation between the knowledge and interest of students in Mathematics and Physical Sciences.

The finding of hypothesis one reveals that no significant relationship exists between interest in Social Studies and Basic Science among Junior Secondary School Students. This is in agreement with the findings of Shiefele (1991) who notes that interest is a content-specific motivation of characteristics composed of intrinsic feeling-related and value-related initiatives with an organised force. He has distinguished two conceptions of interest which are individual and situational interest. Individual interest is understood as a long-term direction of an individual towards a type of object, activity or area of knowledge. It is defined as a relatively stable evaluative orientation towards certain domains or towards specific classes of objects, events or ideas. Those individual interests do have personal significance and are associated with high levels of significance and value, positive emotions and increased reference value.

Furthermore, results from hypothesis two indicate that there is also no significant influence of gender on students' interest in Social Studies and Basic Science. The results imply that gender is not a predictor of students' interest in Social Studies and Basic Science. This result contradicts the findings of Godpower-Echie & Ihenko (2017) who established the fact that gender does have a significant influence on students' interest in Integrated Science but does not have any influence on students' achievement. However, the findings are in consonance with the earlier work carried out by Adeniyi (1999); Babalola & Fayombo (2009) and Adigun, Onihunwa, Irunokhai, Sada & Adesina (2015) who found out that there is no statistical significant difference in students' achievement based on gender.

### Conclusion

Based on the findings of this study, it can be concluded that students' interest in Social Studies and Basic Science significantly relate to their academic achievement in the subject.

### Recommendations

1. The teachers/facilitators should explain subject matter in a way that each student can assimilate in order to arouse their interest in the subject.
2. The teacher should devise a means of making the lesson interesting to the students by using variety of methods while delivering the lesson.
3. There is need for students to be self-motivated and derive joy in learning.
4. Students should be encouraged and provided with their essential needs to make learning interesting to them.

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