STUDY HABITS AND ACADEMIC ACHIEVEMENT IN CORE SUBJECTS AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN ONDO STATE, NIGERIA

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Abstract. This article investigates of the relationship between study habits and students' academic achievement in core subjects at the junior secondary school level. The aim was to determine the relationship between various aspects of study habits including homework and assignments, time allocation, reading and note taking, study period procedures, concentration, written work, examination and teacher consultation and students' achievement in English language, Mathematics, Integrated Science and Art. This was meant to provide clearer understanding of the phenomenon. The descriptive research design of an ex post facto approach was used in the study. A sample of 300 JS2 students was drawn using simple random sampling technique. A major hypothesis was raised leading to the application of correlation and stepwise linear regression analysis. Findings reveal that of all the study habits' subscales, 'teacher consultation' was most influential while the 'time allocation'

exercise, concentration, no taking reading and assignments were regarded as less integral to students' academic performances. Therefore, regular counseling services to train students on study skills strategies were advocated in order to boost their study habit and enhance their academic achievement.

Keywords: study habits, academic achievement, junior students, school subjects

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Background to the study

In recent times, reports of large scale educational failure among Nigerian school going adolescents has raised more attention and greater concerns among stakeholders in Nigerian education. Isangedighi (1999) observed that indiscipline, drug addiction, poor socio-economic background of the parents, inadequate motivation on the part of students, lack of information couple with teachers' nonchalant attitude to work and students' negative self-concept have often resulted into students' inconsistent and poor academic performances. Yoloye (1999) submitted that theories of educational disadvantages and social cultural pathology have been most prominent in the explanation of this failure. A growing number of scholars, however, have rejected this latter view and have suggested that many of the problems of learning are the artifacts of discontinuities which are brought about by the separation of learning from real life functions and situations (Fagbemi, 2001) and by the exclusion of the child's language, values and mode of cognition from the school environment (Ugodulunwa, 2007). It seems that causes of low academic achievement are diverse and cannot be associated with a single major factor alone. For instance, proponents of self-concept have found that self-concept and its variables may be a paramount factor in academic failure. Causes of fluctuating performances among students have also been attributed to teacher-student interactions, (Adamu, 1998), intrinsic and extrinsic motivations, (Tukur & Musa,

2001) and classroom behaviour[1)] (Tukur & Musa, 2001) and other extraneous variables. However, it has been observed that studies on the relationship between study habit and students' academic achievement in Nigeria cannot be said to be exhaustive (Ugodulunwa, 2007).

Successful achievement in any form of activity is based upon study, interpretation and application (Yoloye 1999); and that study should have a purpose. It therefore depends on individual to decide why he or she wants to study, either to gain new ideas or to find out relationship between two different things. What one learns as a result of study depends on the degree at which one succeeds in achieving that aim or purpose. As one studies, it is possible, of course to value other than one's primary desire at the moment. Isangedighi (1997) reports strong correlation between study habits and academic achievement of high school students. The importance of study skill training as a component in test-anxiety treatment programme was demonstrated by Abba[1)] and in another study by Tukur & Musa (2001). These researchers concluded that "a reduction in test-anxiety is no guarantee of subsequent improvement in academic performance when the level of study habit competence is ignored". Some researchers have found note taking activity as study habits variable to be beneficial to students. While Abba[1)] and Tukur & Musa (2001) found that note taking leads to overall superior performance and retention of new materials. Several investigations have suggested that less skilled reading is characterized by a limitation in short-term memory capacity in addition to inefficient word-identification (Isangedighi, 1997; Yoloye, 1999). But according to (Fagbemi, 2001) the degree of learning depends on the amount of time the child is actively engaged in learning. The time spent on studying helps students to retain the materials learnt, which will eventually boost the students' performance outcome during tests or examinations. Therefore, this study investigates the relationship between undergraduates' study habit and their academic achievement.

Significance of the study

The purpose of the study was to find out the relationship between study habits and academic achievement of junior secondary school students in Ondo State, Nigeria. The study believed that if students' study habits are improved and made consistent, academic performance would definitely improve. The knowledge of student degree of study would of course help the teachers and the school counselors to select appropriate techniques of helping students during teaching and learning procedures.

Hypothesis

In trying to focus on the degree of relationship between study habits and academic achievement of undergraduates, a major hypothesis was raised. Hence, it was hypothesized that there would be no significant relationship between students' study habits and their academic achievement.

Methodology

Subjects and sampling techniques

The population from which the subjects for the study were drawn comprised of male and female undergraduates attending public junior secondary schools in Ondo State, Nigeria. Participants were drawn from the six junior secondary schools (two schools from each of the three senatorial districts) using simple random sampling technique. In each school, 50 JS2 students were randomly selected thus a total of 300 JS students constituted the participants for the study. The ages of the subjects ranged between 12 and 16 years with an average age of 13.5 years.

Research instruments

Two major research instruments were used for the study. These were: (a) The Study Habits Inventory (SHI) and (b) The Junior Secondary School Performance Test (JSSPT).

(a) The Study Habits Inventory (SHI)

The Study Habits Inventory is a self reporting inventory which enables the individual student to describe the situations, habits and conditions which affect his use of study time and his subsequent performance on tests and examinations (Bakare, 1977). The inventory which consists of 45 items in form of direct questions to which the students is required to provide answers includes sections on: (i) homework and assignments; (ii) time allocation; (iii) reading and note taking; (iv) study period procedures; (v) concentration; (vi) written work; (vii) examination; (viii) teacher consultation.

According to Bakare (1977), a number of investigations were conducted to investigate validity of the inventory using high performing students and a group of "failing" students.

Test-retest reliability of the SHI was established by administering it twice to a group of students (N = 58; 30 boys 28 girls); mean age = 14.5 years S.D. = 1.73 years with a time interval of 3 weeks. The test-retest reliability was 0.83, P < 05.

(b) The Junior Secondary School Performance Test

The Junior Secondary School Performance Test (JSSPT) was a government organized test. The test has been approved for use as a way of assessing students' performance at the end of the Junior Secondary School. The JSSPT was trial tested with two administration of two weeks interval using a set of 20 JS2 students selected from a public secondary school in Ijebu-ode,

Ogun state. The two sets of scores were correlated using Pearson product moment correlation which yielded 0.87 co-efficient of reliability.

Procedure

The major instrument (SHI) was administered on the subjects by the help of the class teachers. Students were giving a short orientation on how to respond to the items of the instruments. Students were allowed to complete the inventory (SHI) at their own pace. The questionnaire was administered during the students' free periods so as not to disrupt the school time-table. Participants also took the JSSPT the administration of which lasted 1hour in each school.

Analysis of data

In order to determine the relationship between the students' academic achievement and study habits, stepwise linear regression analysis was used. Complete correlation matrix of the study habit subscales was established to aid interpretation of the test scores.

Result of findings

The complete correlation matrix of study habits variables (Table 1) was shown in this study reflecting the relationship between the subscales of study habits and students' academic performance variables. Stepwise linear regression analysis was also done to show the interactive effect of the study habits subscales on each variable of academic performance in the investigation.

Table 1. Complete correlation matrix of study habits variables and academic performances measures

	3	4	5	6	7	8	9	10	11	12	13
3	1.00										
4	.46	1.00									
5	.18	.12	1.00								
6	.67	.49	.38	1.00							
7	.29	.17	.04	.30	1.00						
8	.16	.15	.05	.12	.28	1.00					
9	.37	.18	.20	.37	.25	.27	1.00				
10	.27	.27	.11	.32	.39	.22	.29	1.00			
11	.14	.09	.16	.24	.18	.35	.37	.39	1.00		
12	.30	.25	.09	.32	.40	.22	.35	.44	.22	1.00	
13	.21	.17	.17	.25	.37	.29	.43	.48	.47	.47	1.00
14	.24	.25	.21	.30	.20	.18	.36	.28	.20	.21	.44

3 = English; 4 = Mathematics; 5 = Science; 6 = Art; 7 = Homework and Assignments; 8 = Time Allocation; 9 = Reading and Note taking; 10 = Study Period Procedures; 11 = Concentration; 12 = Written work; 13 = Examination; 14 = Teacher Consultation; all measures are significant at $P \leq .05$

The correlation between performances in English language and Homework and assignment examines from Table 2 was r = .29. With English, reading and Note taking had the higher correlation (r = .37) followed by written work (r = 30). All the subscales ranged between .14 and .37. The correlations were significant at $P \leq .05$

Table 2. Correlation between Study Habit Variables and Academic Performance Variables Study Habit Variables

Home work & Assignments	Time Allocation		Reading & note taking			Study Period Procedures		Concentration
Written work	Examination		Teacher Consultation					
English (r)	.29	.16	.37	.27	.14	.30	.21	.24
Mathematics (r)	.17	.15	.18	.17	.09	.25	.17	.25
Science (r)	.04	.05	.20	.11	.16	.09	.17	.21
Art (r)	.30	.12	.37	.32	.24	.32	.25	.30

All measures are significant at $P < .05$

Table 3. Interaction of the Study Habits Variables and Performance in English Language

Step	Variables Subscales	B	Std Error B	F-cal	F-t
7	Homework & Assignments	0.38	0.23	*2.66	1.94
8	Time Allocation	0.05	0.25	0.03	
9	Reading & Note taking	0.53	0.19	*8.32	
10	Study Period Procedures	0.24	0.22	1.24	
11	Concentration	-0.10	-0.36	0.08	
12	Written Work	0.44	0.32	*1.94	1.94
13	Examinations	-0.27	-0.24	1.23	
14	Teacher consultation	0.71	0.60	1.41	

*All Bs are significant at $P \leq .05$ level.

The regression equation (Table 3) revealed that teacher consultation contributed highest with 0.71, followed by reading and note-taking with 0.53. Time allocation contributed lowest with 0.05. This revealed that reading, note-taking and Written work were important contributors to students performance in English language. Though all other subscales of study habits contributed positively to performance in English language, the two mentioned above contributed more. Furthermore, Table 3 revealed that Homework, Assignments, Reading and Note-taking contributed significantly to performance in English language.

In Table 2, it is observed that study period procedures had the highest correlation with mathematics (i.e. r = 27) among other subscale of study habits. This was followed by teacher consultation with r = .25. The correlation of study habit subscales and mathematics ranged between r = .09 and r = .27. All these were significant at $P \leq .05$. The regression table 4 further revealed that the study habits subscales 14 (i.e. teacher consultation) contributed highest 1.40 while homework and assignments contributed lowest with .05. The regression table also revealed that all the subscales of study habits were significant to mathematics at $P < .05$. All the subscales however jointly contributed 71% to students' performance in mathematics.

Table 4. Interaction of the Study Habits Subscales and Performance in Mathematics

Step	Variables Subscales	B	Std Error B	F-cal	F-t
7	Homework & Assignments	0.05	0.27	0.03	1.94
8	Time Allocation	0.23	0.29	0.63	
9	Reading & Note taking	0.10	0.22	0.19	
10	Study Period Procedures	0.44	0.26	*2.82	
11	Concentration	-0.22	-0.42	0.26	
12	Written Work	0.53	0.37	*2.05	
13	Examinations	-0.22	-0.29	0.57	
14	Teacher consultation	1.40	0.71	*3.94	1.94

*****All Bs are significant at p≤ .05 level

Table 5. Interaction of the Study Habits Variables and Performance in Science

Step	Variables Subscales	B	Std Error B	F-cal	F-t
7	Homework & Assignments	-0.12	-0.30	0.15	1.94
8	Time Allocation	-0.12	-0.32	0.15	
9	Reading & Note taking	.26	0.24	0.20	
10	Study Period Procedures	0.01	0.28	1.33	
11	Concentration	0.39	0.46	0.70	
12	Written Work	3.37	0.41	*6.84	
13	Examinations	0.08	0.31	0.07	
14	Teacher consultation	1.20	0.77	*2.42	

*All Bs are significant at P ≤ .05 level

From Table 2 one would observe that teacher consultation correlated highest with Science (r = .21) followed by reading and note-taking with .20 respectively. Homework and assignments had the lowest correlation (r = .04). While table 5 showed that concentration contributed highest to Science performance with .39 followed by written work with .37 Study period procedures contributed lowest with .01 to science. It was also noticed that homework, assignments an time allocation contributed negatively to science performance of students while all other subscales contributed positively to students performance in Science. Observations as to the contributions of the study habits subscales to science performance was that teacher consultation enhanced the

contributions made by other subscales with 46% after examinations 31%, while concentration also had a significant concentration with 18% after study habit procedures.

Table 6. Interaction of Study Habits Variables and Performance in Art

Step	Variables Subscales	B	Std Error B	F-cal	F-t
7	Homework & Assignments	0.38	0.22	*3.12	1.94
8	Time Allocation	-.20	-0.23	0.74	
9	Reading & Note taking	0.42	0.17	6.01	
10	Study Period Procedures	0.25	0.20	1.45	
11	Concentration	0.37	0.33	1.26	
12	Written Work	0.45	0.29	*2.33	
13	Examinations	-0.29	-0.22	1.62	
14	Teacher consultation	0.06	0.55	*3.66	

*All Bs are significant at P ≤ .05 level

In Table 2 above, it was found that time allocation had a low but positive correlation (r = .12) with Arts while the highest correlation was recorded by reading and note-taking (r = .37). The correlations ranged between (r = .12) and (r = .37). All these were significant at P ≤ .05. The regression table revealed that written work contributed highest with .45 followed by Reading and Note-taking which has a contribution of .42. Homework and Assignments had .38 while teacher consultation contributed lowest with .06. All the subscales had a contribution of 55% to performance in Art. Table 6 also showed that time allocation and examinations contributed negatively to performance of students in Art. It was further observed that homework, assignments, reading, note-taking, written work and teacher consultation contributed significantly to performance in Art.

Findings of the relationship between study habits and students' performance in English Language revealed that Reading and Note-taking had the highest correlation; it also has a high significant positive relationship. This indicated that students' performance in English Language was highly influ-

enced by their ability to read and take down notes. This was followed by written work. In the case of teacher consultation, there was contribution of .71 followed by reading and note taking. While time allocation contributed lowest with .05 From these findings one could deduce that teacher consultation had a great influence on students' English performance. Without teachers; it seems students may find it difficult to do any independent work. Since there was no initiative, on the part of the students, performance in English language indicated that students had little time for their academic work. It has been ob served that most contemporary Nigerian adolescents prefer to play and attend parties rather than face their academic work. This attitude of course may be closely connected with the unemployment wave in the country for the school leavers.

Teacher consultation contributed highest in Mathematics with 71% while concentration and examinations contributed low and negatively to students' performance in students were also found in the habit of neglecting their homework and assignments. This also may be caused by lack of interest and inadequate time for Mathematics as a result of domestic duties and other social activities at home. Most students are found depending on teachers when actually teachers may not be at the students reach always. While this study supports teacher consultation in Mathematics, it also submits that too much dependence on teacher consultation may be detrimental to students' success in Mathematics since it may lead to lack of initiative and resourcefulness. In the case of Science, the study also revealed that teacher consultation had significant influence on students' performance. Without teachers' it seems students may find it difficult to do any independent work. Since there was no initiative, on the part of the students, performance in English language indicated that students had little time for their academic work. It has been observed that most contemporary Nigerian adolescents prefer to play and attend parties ra-

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have been observed to adopt the above pattern of behaviour. This dependent attitude had also been revealed by students' study habits which eventually had a negative effect on their performance outcomes. This study further supports Abba (1997); Tukur and Musa, (2001) who observed that the degree of learning depends on the amount of time the child is actively engaged in learning. Coupled with this is the time spent on learning (reading and learning exercise) which usually helps students to retain the materials learnt which in turn may buttress students academic performances.

Conclusion and recommendations

From the study's perspective, certain conclusions and inferences are hereby drawn: (1) There was a low positive correlation between study habits subscales and students' performance in English language. Despite this statistical relationship, students were mostly affected by their dependence on people as reflected by the regression table which revealed that teacher consultation had the highest contribution to students learning activities. (2) A low positive relationship existed between Mathematics and study habits subscales. Here again, teacher consultation contributed highest. This was a further reflection of lack of initiative on the part of the students. (3) The significant relationship between science and study habits subscales was low. Though high, positive and negative contributions were made by study habits subscales, it would be admitted that the subscales with negative contributions had little influence on students' performance while those with positive contributions had a significant measure of influence. (4) Out of the independent variables, Art recorded the highest correlations with study habits subscales as compared with other academic variables.

In addition to the above conclusions from the study, it could also be noted: (a) that students did not devote enough time to their academic work. This may be as a result of lack of interest or motivation either by the school or

by home; (b) that there was too much of teacher consultation on the part of students, a reflection of over dependence and lack of initiative and resourcefulness which may negatively affect brilliant academic performance. Therefore, regular counseling services to train students on study skills strategies are advocated in order to boost their study habit and enhance their academic achievement.

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