© Kamla-Raj 2012 J Psychology, 3(2): 113-120 (2012)
PRINT: ISSN 0976-4224 ONLINE: ISSN 2456-6292 DOI: 10.31901/24566292.2012/03.02.08

Psycho-social Factors Affecting the Teaching and Learning of Introductory Technology in Junior Secondary Schools in Ijebu-Ode Local Government of Ogun State, Nigeria

Anthony Oyetunde Oyenuga[1] and John Oladipupo Lopez

Department of Vocational and Technical Education, College of Applied Education and Vocational Technology, Tai Solarin University of Education, Ijagun, Ogun-State, Nigeria
[1]E-mail: tajeam@yahoo.com

KEYWORDS Home. School. Interest. Introductory Technology. Gender

ABSTRACT This study focused on to determining the psychosocial factors affecting the teaching and learning of introductory technology in junior secondary schools in Ijebu-Ode Local Government area of Ogun State, Nigeria. Three research questions and three hypotheses were formulated to guide the study. Two hundred students (one hundred males and one hundred and females) were used for the study. Data were collected through questionnaire. Mean, standard deviation and t-test were the statistical tools used for the analysis. The study established that the difference between the responses of male and female students on how the school, home and interest facilitates the teaching and learning of introductory technology was not significant. The study concluded that the school, home and the interest of the students facilitate the teaching and learning of introductory technology.

INTRODUCTION

The Federal Government of Nigeria in her National Policy on Education (2004) sees introductory technology as one of the core subjects to be offered at the Junior Secondary School level. Introductory Technology enables students to acquire knowledge and skills. Despite this, there are some psychosocial factors that are affecting the teaching and learning of Introductory Technology.

It should be noted that no great cornerstone of our understanding about the psychosocial factors affecting the teaching and learning of Introductory Technology is either erected or overthrown. Psychosocial factor is referred to the psychological and social factors that may or mar the study of a subject or course. The school, home background and the interest of the student stand out as strong variables in explaining variation in the teaching and learning of introductory technology. Again, it could not be established that differences among school related arrangements bear any direct simple universal relationship to teaching and learning of Introductory Technology performance especially when the home and interest factors are held constant.

Consequently, it should be noted that most students get a lot out of school, the highest variations in the teaching and learning of Introductory Technology is observed around that basic levels may be attributed more to home and interest than to school differences. Cultural and psychosocial learning theories have not been used to explain the factors affecting the performance of students in the teaching and learning of introductory technology. This is because no literature has been established in this area of study. However, in order to promote effective teaching and learning of Introductory Technology, the school, home and the interest of the students are pertinent factors that must be considered.

According to Cohen et al. (2003), school fees constitute an important for schools and represent potential for creating an enabling teaching and learning environment Cohen et al. further stated that school with few financial resources tend to perform poorly in relation to school with greater finances. Oyenuga (2007) linked poor teaching and learning to shortage of qualified teachers and this accounted for poor academics performances in secondary schools. Oyenuga (2007) also attributed the poor teaching and learning in secondary schools to inadequate material and infrastructural resources which are below expectation with some schools having few classroom accommodations without windows, poor spacing and crowded seats. Okonkwo (2010) attributed the students' poor academic performance to indiscipline in schools and low level of educational standard. From the above, it is pertinent to say that the school is a psy-

chosocial factor that may affect the teaching and learning of Introductory Technology in Nigeria secondary public schools.

On the issue of the home as a psychosocial factor in the teaching and learning which can also make or mar students' performance, Oyenuga (2007) argued that good home background and conducive environment tends to promote students academic performance. Ajila and Olutola (2007) viewed that the state of the home affects the individual since the parents are the first socializing agents in an individual life. This according to Okonkwo (2010) is because the family background and concern of a child affect his reaction to life situations and his level of performance. Okonkwo (2010) also sees the home as having a great influence on the students' psychological, emotional, social and economic state. However, one could deduce that the home is a recognized psychosocial factor having a lot of influence in teaching and learning of various subjects in which Introductory Technology is of no exception.

On the issue of interest, the home plays a significant role in this regard as many parents may discourage or encourage their children towards a particular subject or career. Teachers also play a significant role in the interest of a student in a particular subject. In a study carried out by Fakunade (1993), it was reported that students' hatred for some school subjects was a result of poor instructional strategies by the teachers. In order to facilitate teaching and learning of Introductory Technology, interest of the students is also a relevant factor (Oyenuga 2010). Chukwu (2002) stated that interest has been viewed as emotionally oriented behavioral trait which determines a student's whim and vigour in tackling educational programmes or other activities. Therefore, interest is an affective behaviour that can be aroused and sustained in teaching and learning through motivation and appropriate teaching technique. It has been widely acknowledged in technical and vocational acquisition research that the learning of Introductory Technology is an inseparable subset of technical education as the school; home and interest may influence the perception of the society on the subject.

Statement of the Problem

It is a known fact that there is a decline in the academic performance of secondary school students in the teaching and learning of Introductory Technology in recent times as many students fail in the Junior Secondary School final examination despite the strength of the rapid spread of technology around the world. The low performance of the students in Introductory Technology may be attributed to many factors such as school, home and interest. However, the extent to which these variables facilitate the teaching and learning of Introductory Technology is not certain. The study, therefore, examined the psychosocial factors affecting the teaching and learning of Introductory Technology in secondary schools in Ijebu Ode Local Government Area of Ogun State, Nigeria.

Purpose of the Study

The purpose of the study is to examine the psychosocial factors affecting the teaching and learning of Introductory Technology in junior secondary schools in Ijebu Ode Local Government Area of Ogun State, Nigeria. Specifically, the study sought to determine:

1. the extent to which the school facilitate the teaching and learning of introductory technology.
2. the extent to which the home facilitate the learning of introductory technology.
3. the extent to which the interest of the students facilitate the learning of introductory technology.

Research Questions

1. How does the school facilitate the teaching and learning of introductory technology?
2. In what ways does the home facilitate the learning of introductory technology?
3. How does the interest of the students facilitate the learning of introductory technology?

Research Hypotheses

1. There is no significant difference between the responses of male and female students on how the school facilitates the teaching and learning of introductory technology.
2. There is no significant difference between the responses of male and female students on how the home facilitates the learning of introductory technology.

3. There is no significant difference between the responses of male and female students on how the interests of the student facilitate the learning of introductory technology.

METHODOLOGY

Research Design

The research design for this study is a survey design.

Population and Sample

The population for this study covered all public junior secondary school students in Ijebu-Ode local Government Area of Ogun-State, Nigeria. Five junior secondary schools were randomly selected from the thirteen schools in the Local Government Area. Forty respondents were randomly selected from each of the five schools, totaled two hundred students (one hundred males and one hundred and females).

Research Instrument

The major research instrument used was a questionnaire developed by the researchers, the investigators made use of structured questionnaire where the respondents were required to select answers from the alternative given. The questionnaire consists of three (3) main separate sections. The first section (section A) consists of six questions on how the school facilitate the teaching and learning of Introductory Technology while section B consists of five questions on how the home facilitate the teaching and learning of Introductory Technology. Section C consists of six questions on how interest of the students facilitates the teaching and learning of introductory technology. The instrument adopted a modified four-point Likert scale with response ranging from Strongly Agree (4), Agree (3), and Disagree (2) to Strongly Disagree (1).

Validity of the Research Instrument

The instrument was subjected to face and content validation by two experts. One expert was from the Department of Vocational and Technical Education, Tai Solarin University of Education, Ijagun, Ogun State, Nigeria and the other expert was in Measurement and Evaluation of the same university. The experts were required to critically examine the items in the instrument and make useful suggestions to improve the quality of the instrument. The experts' suggestions and corrections were taken into consideration in the final draft of the questionnaire.

Reliability of the Research Instrument

The reliability of the instrument was determined by using Cronbach Alpha reliability technique. Cronbach Alpha technique measures the internal consistency of the questionnaire items. The questionnaire was administered to hundred (100) students in the schools not selected for the study. Their responses were used to determine the Cronbach alpha reliability coefficient of the instrument. The reliability coefficient was calculated to be 0.83.

Procedure for Data Collection

The questionnaire was administered in the classroom during school hours with the help of a research assistant in each school selected for the study. All the 200 copies of the questionnaire were collected after filing.

Method of Data Analysis

Mean and standard deviation were used to answer the research questions while the hypotheses were analyzed using t-test statistical techniques at a significance level of 0.05. A mean of 2.50 and above was taken as an index of agreement while a mean of below 2.50 was taken as an index of disagreement.

RESULTS

Research Question 1

How does the school facilitate the teaching and learning of introductory technology?

Table 1 shows the responses of male and female students on how the school facilitated the teaching and learning of introductory technology. Item 1 revealed that both male (Mean = 2.14) and female (Mean = 2.10) students disagreed with the statement that not all their introductory technology teachers are hardworking. On item 2, both male and female students agreed that their schools did not have adequate facili-

Table 1: Responses of male and female students on how the school facilitated the teaching and learning of introductory technology

S. No.	Items	Male		Female		Remark
		X	SD	X	SD	
1.	All my introductory technology teachers are hardworking and this motivates me during introductory technology class.	2.14	1.12	2.10	1.15	Disagreed
2.	My school did not have adequate facilities for introductory technology due to the school few financial resources which makes the students to perform poorly in relation to school with greater finances.	3.25	0.94	3.22	0.97	Agreed
3.	The students in my school are well supervised by the teachers in order to see what they do and what is expected of them thereby hindering my performance in introductory technology.	1.86	1.05	1.86	1.01	Disagreed
4.	My school is not equipped with qualified introductory technology teachers which increases my interest and understanding in introductory technology.	3.45	0.78	3.38	0.92	Agreed
5.	The atmosphere of the location of my school is not conducive enough thereby making my learning in introductory technology not very easy.	3.35	0.80	3.29	0.89	Agreed
6.	My introductory technology teacher has not been encouraging me in the learning of introductory technology and this deterred my performance in introductory technology.	3.45	0.91	3.39	0.99	Agreed
	Average	2.91	0.95	2.87	0.98	

ties for introductory technology due to few financial resources which makes the students to perform poorly in relation to school with greater finances with a mean of 3.25 and 3.22 respectively.

The mean responses of male and female students on item 3 were 1.86 and 1.86 respectively. This shows that the students disagreed that they have not been properly supervised by the teachers in order to see that they do and what is expected of them thereby hindering their performance in introductory technology. Item 4 revealed that both male and female students (Mean = 3.45 and 3.38 respectively) agreed that their schools were not equipped with qualified introductory technology teachers and this reduces their interest and understanding in introductory technology.

Item 5 shows that both male ad female students (Mean = 3.35 and 3.29 respectively) agreed that the atmosphere of the location of their schools are not other conducive thereby making the learning of introductory technology not very easy.

Item 6 indicated that the both male and female students (Mean = 3.45 and 3.39 respectively) agreed that their introductory technology teachers have not been encouraging them in learning introductory technology and this deterred their performances in the subject..

Research Hypothesis 1

There is no significant difference between the responses of male and female students on how the school facilitates the teaching and learning of introductory technology.

From Table 2, the t-calculated (t_c) is 0.29 which is less than the table value of 1.97 at 0.05 level of significance. This shows that the difference between the responses of male and female students on how the school facilitates the teaching and learning of Introductory Technology was not significant. Therefore, hypothesis 1 is accepted.

Table 2: t-test of significance on how the school facilitates the teaching and learning of introductory technology

Variable	N	X	SD	T_c	T_v	Df	Sf
Male	100	2.91	0.93	0.29	1.97	198	0.05
Female	100	2.87	0.98				

Table 3: Responses of male and female students on how the home facilitated the learning of introductory technology

S. No.	*Items*	*Male*		*Female*		*Remark*
		X	*SD*	*X*	*SD*	
7.	My home is very conducive for reading as we have a mini library which helps me to study introductory technology better.	3.08	1.06	3.15	0.93	Agreed
8.	My parents always teach me what I don't know in introductory technology assignment and this makes me to perform well in introductory technology.	3.26	0.90	3.43	0.85	Agreed
9.	My parents never provided for my educational needs such as textbooks resulting in my negative interest in introductory technology.	1.86	1.05	1.86	1.01	Disagreed
10.	My parents sometimes send me on an errand or hawking making it difficult for me to do my assignment thereby leading to my poor performances in introductory technology.	1.76	0.99	1.55	0.90	Disagreed
11.	My parents encourage me to watch JETS programmes on television so as to develop more interest in introductory technology.	3.35	0.90	3.38	0.92	Agreed
12.	My parents pay attention to the technical terms I use whenever I study at home and do correct my mistakes which positively influences my results in introductory technology.	3.42	0.87	3.44	0.80	Agreed
Average		2.72	0.92	2.75	0.89	

Research Question 2

In what ways does the home facilitate the learning of introductory technology?

Table 3 showed the responses of male and female students on how the home facilitated the learning of introductory technology.

Item 7 on Table 3 revealed that both male (Mean = 3.08) and female (Mean = 3.15) students agreed that their homes were very conducive for reading as they have mini libraries which help them to study introductory technology better. On item 8, both male and female students agreed that their parents always teach them what they do not know in their introductory technology assignment and this made them to perform well in introductory technology with mean of 3.26 and 3.43 respectively.

The mean responses of male and female students on item 9 were 1.50 and 1.56 respectively. This indicated that the students disagreed that their parents never provided for their educational needs such as textbooks resulting in their negative interest in introductory technology. Item 10 revealed that both male and female students (Mean = 1.76 and 1.55 respectively) disagreed that their parents sometimes sent them on an errand or hawking making it difficult for them to do their assignment thereby leading to their poor performances in introductory technology.

Item 11 shows that both male ad female students (Mean = 3.35 and 3.38 respectively) agreed that their parents always encourage them to watch JETS programmes on television so as to develop more interest in introductory technology. Item 12 indicated that the both male and female students (Mean = 3.42 and 3.44 respectively) agreed that their parents pay attention to the technical terms used whenever they study at home and do correct their mistakes which positively influences their results in introductory technology.

Research Hypothesis 2

There is no significant difference between the responses of male and female students on how the home facilitates the teaching and learning of introductory technology.

From Table 4, the t-calculated (t_c) is 0.23 which is less than the table value of 1.97 at 0.05 level of significance. This indicates that the difference between the responses of male and female students on how the home facilitates the learning of introductory technology was not significant. Therefore, hypothesis 2 is accepted.

Table 4: t-test of significance on how the home facilitates the learning of introductory technology

Variable	*N*	*X*	*SD*	t_c	t_v	*df*	*sf*
Male	100	2.72	0.92	0.23	1.97	198	0.05
Female	100	2.75	0.89				

Table 5: Responses of male and female students on how the interests of the student facilitate the learning of introductory technology

S. No.	Items	Male		Female		Remark
		X	SD	X	SD	
13.	I do not always feel happy when the introductory technology teacher is not around.	1.54	1.03	1.44	0.82	Disagreed
14.	I prefer any other subject to introductory technology because the teaching is not interesting.	1.73	0.86	1.57	0.91	Disagreed
15.	I do not like missing introductory technology.	3.51	0.82	3.46	0.92	Agreed
16.	I do not like the introductory technology period to be a double period because it leads to boredom.	2.17	1.11	1.84	1.02	Disagreed
17.	At my free periods I like studying introductory technology on my own.	3.42	0.76	3.36	0.91	Agreed
18.	I like participating in introductory technology class because I find it easier than any other subject	1.77	0.98	2.82	0.56	Agreed
Average		2.35	0.92	2.41	0.85	

Research Question 3

How does the interest of the students facilitate the learning of introductory technology?

Table 5 indicated the responses of male and female students on how the interest of the students contributed to the teaching and the learning of introductory technology

Item 13 on Table 5 showed that both male (Mean = 1.54) and female (Mean = 1.44) students disagreed that they were not always happy when their introductory technology teachers were not around. On item 14, both male and female students responses shows that they do not prefer any other subject to introductory technology because the teaching is interesting with a mean of 1.73 and 1.57 respectively.

Item 15 showed that the mean response of both male and female students were 3.51 and 3.46 respectively. This revealed that the students agreed that they do like attending introductory technology lessons.. Item 16 revealed that both male and female students (Mean = 2.17 and 1.84 respectively) disagreed that they not like the introductory technology period and the reason for their likeness is that the double period does not leads to boredom due to the practical work they engaged in.

Item 17 indicated that both male and female students (Mean = 3.42 and 3.36 respectively) agreed that they do like studying introductory technology on their own at their free periods. Item 18 showed that the male students (Mean = 1.77) disagreed that they do like participating in introductory technology class because they found the subject not interesting while the female students (Mean = 2.82) agreed that introductory technology is easy to learn.

Research Hypothesis 3

There is no significant difference between the responses of male and female students on how the interests of the student facilitate the learning of introductory technology.

From Table 6, the t-calculated (t_c) is 0.46 which is less than the table value of 1.97 at 0.05 level of significance. This reveals that the difference between the responses of male and female students on how the interests of the student facilitate the learning of introductory technology was not significant. Therefore, hypothesis 3 is accepted.

Table 6: t-test of significance on how the interests of the students facilitate the learning of introductory technology

Variable	N	X	SD	T_c	T_v	Df	Sf
Male	100	2.35	0.92	0.46	1.97	198	0.05
Female	100	2.41	0.85				

DISCUSSION

In Table 1, the responses of the students (both male and female) shows that they disagreed that their introductory technology teachers are hardworking and the consequence of this is that the students will loose interest in the subject couple with the fact that their schools did not have adequate facilities for introductory technology due to the school few financial resources which makes to perform poorly in relation to schools with greater finances. The students responses corroborates Cohen et al. (2003) that school with few financial resources tend to perform poorly in relation to school with greater finances. Item 3 in Table 1 reveals that the students have not

been properly supervised by the teachers in order to see what they do and what is expected of them due to the fact that their schools were not equipped with qualified introductory technology teachers. The responses corroborates Oyenuga (2007) that linked poor teaching and learning to shortage of qualified teachers and this accounted for students poor academics performances in introductory technology. Table 2 reveals that there was no significant difference between male and female students on how the school facilitates the teaching and learning of introductory technology.

In Table 3 the responses of the students revealed that their homes were very conducive for reading as this assisted them in their studies. This response agreed with Oyenuga (2007) that conducive environment tends to promote students academic performance. Table 3 as well reveals that parents' involvement in engaging in teaching their students at home, and assisting in putting the students through their various assignments given to them made some of them to perform well in introductory technology. The response agreed with Ajila and Olutola (2007) that the state of the home affects the individual since the parents are the first socializing agents in an individual life. Control of television programmes which are not educative made many of the students concentrate on their studies. Also, parents encourage their children to watch JETS programmes on television that made the students to develop more interest in introductory technology. Parents paying attention to the technical terms used by their children whenever they are studying at home and did correct their mistakes positively influenced their results in introductory technology. Table 4 shows that there was no significant difference between male and female students on how the home facilitates the learning of introductory technology.

Table 5 revealed that the students were not always happy when their introductory technology teachers were not around. This is an indication that they love attending introductory technology classes at all times. This made the students to prefer introductory technology to any other subjects because it was taught very well and as such, they do not like missing the period as it improves their knowledge technologically thereby preferring introductory technology period to be a double period. Again, the interest of the students in introductory technology made them to study the subject on their own during their free periods and this improved their participation in class. Table 5 also shows that the male students do not always find introductory technology very interesting like their female counterparts that were interested in the subject and found it easy to learn. This response did not agree with Ogbonna (2003) findings as cited in Musa (2006) on the effect of constructivist instructional approach on senior secondary school students' achievement and interest in mathematics. The result shows that the interest score for males was higher than the female. Finally, Table 6 reveals that there was no significant difference between male and female students on how the interests of the students facilitate the learning of introductory technology.

CONCLUSION

Based on the above, the study hereby concluded that the school, home and interest of the students facilitates the teaching and learning of introductory technology.

RECOMMENDATIONS

The study hereby recommended as follows:

(1) Adequate facilities such as introductory technology laboratory/workshop should be provided in the school.
(2) The teachers should be monitored so as to be regular in class to deliver their teaching and the students should be monitored in class as well to avoid truancy.
(3) Qualified introductory technology teachers should be employed.
(4) The home should have a mini library equipped with introductory technology textbooks to assist the students to study better.
(5) Parents should assist to put their children through in their assignment.
(6) Parents should provide educational needs such as textbooks as this can develop the study interest of the students in introductory technology.
(7) Parents should desist from sending their children on hawking and unnecessarily errand as well.
(8) More periods should be allocated to introductory technology classes.

REFERENCES

Ajila C, Olutola A 2007. Impact of parents' socio-economic status on university students' academic performance. *Ife Journal of Educational Studies*, 7(1): 31-39.

Chukwu A 2002. Promoting students' interest in Mathematics using local games. *International Journals of Arts and Technology Education*, 2(1): 54-56.

Cohen D, Raudenbush S, Ball D 2003. Resources, instruction and research. *Educational Evaluation and Policy Analysis*, 25(2): 1-24.

Fakunade O 1993. *Factors Responsible for Students Mass Failure in Mathematics*. M.Ed Project, Unpublished. Ibadan: University of Ibadan.

Federal Republic of Nigeria 2004. *National Policy on Education*. Lagos: NERDC Press.

Ogbonna CC 2003. *Effect of Constructivist Instructional Approach on Senior Secondary School Students' Achievement and Interest in Mathematics*. MEd Thesis. Unpublished. University of Nigeria. Nsukka.

Okonkwo EN. 2010. Child, family, school, society and government as predictors of a child's academic performance of some secondary school students. *Contemporary Humanities*, 4(1 and 2): 54-63.

Oladele C. 1997. Violence in divorced pioneer families. *The Family*, 4(1): 36-40.

Osuafor AM 2001. *Effects of Field Trip and Role Play on Pupils Achievement and Interest in Environmental Concepts in Primary Science*. PhD Thesis, Unpublished. Nsukka:. University of Nigeria Nsukka.

Oyenuga AO 2007. Factors Affecting Academic Performance of Secondary School Students. *Paper Presented in a Seminar Organized by the Students of Vocational and technical Education, Tai Solarin University of Education, Ijagun, Ogun State,* Nigeria, November 14, 2007.

Oyenuga AO 2010. *Effect of Models on Interest and Academic achievement of Technical College Auto-Mechanics Students in Lagos State.* PhD Thesis, Unpublished. Department of Vocational Teacher Education, University of Nigeria, Nsukka.