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Attitude and motivation as predictors of academic achievement of students in clothing and textiles

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This study investigated attitude and motivation as predictors of academic achievement of students in clothing and textiles. Three colleges of education in Edo and Delta States were randomly selected for use in this study. From each school, 40 students were selected from Year III using simple random technique yielding a total of 240 students. The instruments that were used to gather data for this research include clothing and textile attitude scale, clothing and textile motivation scale, and clothing and textile achievement test. Among the findings of this study is that attitude is capable of predicting academic achievement of students in clothing and textile. One of the recommendations of this study is that since attitude and motivation are predictors of academic achievements, all agents of education especially teachers or/lecturers should encourage students to develop the right/good attitude and create right atmosphere in lectures that will motivate students to learn.

Key words: Attitude, motivation, academic achievement.

INTRODUCTION

Education is the basis for nation building. Nations use education to inculcate knowledge, skills and attitude considered useful and desirable into its citizens. In consonance of this, Nigeria as a nation, equips its teachers at various levels of teacher education with knowledge, skills, and attitude to be able to transmit them to the school age children to live in the modern age of science and technology.

Vocational education according to Asoegwu (2004) is the education designed to develop skills, abilities, understanding, attitudes, work habits and appreciation, encompassing knowledge and information needed by workers to enter and make progress in employment. This means that vocational education is skill oriented. Most times when nations are faced with problem of unemployment, the first step towards providing solution is to introduce vocational education into the national education system (Uwameiye, 1999).

This being the case in Nigeria, Home Economics is one of the vocational programmes taught at the Colleges of Education in Nigeria. The College of Education is part of

the teachers' education programme, which provides exposure for prospective teachers at the level of the Nigeria Certificate of Education (NCE) in instructional methodology, theories of instruction and curriculum.

Home economics according to Anyankoha (1986) has the unique responsibility of equipping individuals for responsible and effective participation in life within the family. According to National Commission for Colleges of Education (2004), the philosophy of Home Economics Education borders on the improvement of the quality of life of the individual family specifically, and the society at large.

It focuses on the acquisition of knowledge, skills and competencies which family members require to satisfactorily improve family living. It identifies and classifies the roles, aspirations and abilities of each family member as well as determines strategies towards achieving them. It is a field of knowledge which draws information and skills from core subject areas of the art, sciences, humanities and other related subjects.

The objectives of Home Economics Education programmes are to:

¹⁾ Train Home Economics teachers with a sound basis for professional growth and personal development in Home Economics Education who will:

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- 2) Exhibit thorough knowledge of job skills and career opportunities in Home Economics;
- 3) Demonstrate positive human relationship and ability to work with people;
- 4) Prepare teachers to qualify them for a post NCE degree programme in Home Economics (NCCE, 2004).

Home Economics as a field of study includes among others: child development, home management, consumer education, foods and nutrition and clothing and textiles. At the college of education, clothing and textile component runs across the three years of the programme. It has many courses embedded in it, which include, pattern drafting, pattern adaptation, pattern manipulation, and tie and die. It is concerned with knowledge, attitude and skills needed to choose, design and sew clothes. It also involves knowledge of the different textiles, clothing selection and maintenances. Clothing and textiles equips individuals with skills. thereby preparing them for enormous employment opportunities in many clothing related occupations including fashion and design, modeling, fashion editing among others.

Despite the importance of clothing and textile, as a skill oriented part of Home economics, students' academic achievement in these courses are very low (Igbo,1997), especially if compared with other home economics courses. Factors responsible vary from lecturers handling the course, who sometimes are not well groomed in the area, thereby making clothing courses boring and difficult particularly in situation where lectures are not challenging, stimulating and result oriented. Also, assignments in clothing require patience, endurance and time for completion. Most often, this is a herculean task for students to accomplish. When they fail to achieve their expectations in a short time they become discouraged, which may influence their performance negatively.

In addition to the aforementioned factors, some internal variables may influence students' willingness to succeed. The overall effect of this is that students may develop negative self perception and see a given task as impossible; consequently they may not be motivated and may develop a negative attitude towards the subject. It seems that in clothing courses, students are not giving adequate encouragement to motivate them to achieve highly in the courses. Therefore, this study seeks to determine if attitude and motivation can predict academic achievement in clothing and textile courses.

LITERATURE REVIEW

Concept of attitude

Attitude is a feeling exhibited by an individual towards an object or a situation. Psychologists use it to describe human behaviour. A person's attitude is "the relatively stable overt behaviour which affects his/her status (Brain,

1928). An attitude is composed of three components which include: affective (feelings), cognitive (beliefs), and behaviour (actual actions) (Young, 1931). Also Eagly and Chaiken (1993) see attitude as tendencies to evaluate an entity with some degree of favour or disfavour expressed in cognitive, affective and behavioural responses. Attitude can change as a result of experience. This happens through persuasion and observational learning from ones' environment (Jung, 1966).

Attitude and academic achievement

Literature has it that attitude of either students or teachers affect the academic achievement of students. For example, Okpala (2001) investigated social psychological variables like attitude and found a correlation between attitude and academic achievement. In support of this, Ogbani (1997) conducted a study on attitude and achievement in bible knowledge and concluded that attitude was a very important factor in academic achievement in the subject.

Concept of motivation

Motivation as a psychological term, describes the force behind an action; it explains why human beings behave the way they do. Level (1978) explained that human motivation means, the driving energy or degree of activities that individuals display. Also Atkinson (1957) opined that people's motivation to achieve some things depend on their estimation of their chances of success (incentive of success). He also explained that motivation largely depends on the persons expectation of reward.

Motivation and academic achievement

Literature supports the fact that motivation and academic achievement are positively co-related. Berming (1986) carried out research in arithmetic and came up that to a large extent students' academic achievement corellate that of motivation. Also, Hernandez (1998) found out that there is co-relation on motivation of low achievers and their academic achievement. In addition, Egede (1984) and Erhunmwun (2004) showed that the students who have low motivation and poor attitude to studies performed poorly in their academic work than those who have higher motivational attitude to studies.

This research has become necessary and timely since clothing and textile, an aspect of home economics, an area that students have least interest in. This has been observed in the senior secondary students' choice of optional areas for career in home economics. Students seem to prefer other aspects of home economics such as foods and nutrition or home management to clothing and textiles. Despite these observed lapses in the educational

system in Nigeria, there seem to be paucity of research activities carried out in this area. It may seem also that for a long time the subject is gradually going into extinction. The findings from this research will help to enlighten all, about the possible predictors of low achievement in the subject.

Research questions

The study was guided by the following research questions:

- 1) To what extent are attitude and motivation related to academic achievement in clothing and textile in colleges of Education in Edo/Delta of Nigeria?
- 2) What is the relative contribution of attitude and motivation to students' academic achievement in clothing and textile in Colleges of Education in Edo/Delta of Nigeria?

Hypothesis

The hypothesis that was tested in this study is:

Attitude and motivation will not significantly predict students' academic achievement in clothing and textile.

METHODOLOGY

Research design

The design of this study was a descriptive survey of the relative contributions of attitude and motivation to students' academic achievement in clothing and textile and the extent of the predictably of attitude and motivation on students' academic achievement in clothing and textile.

Population of the study

The population of this study comprised of all Home Economics students in the three Colleges of Education in Edo/Delta states of Nigeria.

Sample and sampling technique

The three colleges of education in Edo and Delta States were used in this study. From each school, 40 students were selected from year III using simple random technique yielding a total of 240 students. The 240 students were used for the study.

Research instruments

The instrument that were used to gather data for this research are:

- 1) Clothing and textile attitude scale (CTAS)
- 2) Clothing and textile motivation scale (CTMS)

3) Clothing and textile achievement text (CTAT)

Clothing and Textile Attitude Scale (CTAS)

CTAS is a 20-item questionnaire (Appendix 1) deriving its content from attitude of students towards clothing and textile activities. It was designed to show how the students respond to the activities so as to establish their attitude towards clothing and textile. The instrument utilized the four point scale of 1 to 4 with a maximum score of 80 while the lowest score is 20.

The instrument is of the four-point type with 1 to 4 weighting scale where the figure indicates the following:

- 1) If dislike very much or very much disagree
- 2) If dislike or disagree
- 3) If like or agree
- 4) If like very much or very much agree.

Clothing and Textile Motivation Scale

CTMS is a 20-item questionnaire (Appendix 2). The items are derived from motivational activities in clothing and textile activities. CTMS is a four-point type scale ranging from 1 to 4 whose figures indicates the following:

- 4) If it is very true of you
- 3) If it is true of you
- 2) If it is untrue of you
- 1) If it is very much untrue of you.

Clothing and Textile Achievement Tests

CTAT consists of 50 multiple choice test covering the content of clothing and textile courses in Colleges of Education (National Commission for Colleges of Education (NCCE) Guidelines, 2004). The behaviour measured include knowledge, comprehension, and higher level of thinking .The area of coverage are the seven courses offered at the colleges of education. They are introduction to clothing and textile, pattern drafting and development, clothing construction and alteration, clothing selection and maintenance and advanced textile design.

Validity and reliability

The validity of CTAS and CTMS was certified by lecturers in Educational Psychology and Curriculum Studies at the University of Benin, Benin City. But, CTAT's validity was certified by a panel of four lecturers in Home Economics Education, in College of Education, Benin City. Based on their advice, some of the items were modified, while others were corrected.

To estimate the reliability of the instruments a test retest procedure was adopted. CTAT, CTAS, CTMS were administered on 30 students in a college of education drawn outside the target population. After two weeks interval, CTAT, CTAS and CTMS was re-administered to the same group of students and a reliability coefficient of 0.71, 0.68, and 0.73 were obtained using Kuder Richardson 20.

Table of specification

This is the table of specification (Appendix 3) of the items selected for the clothing and textile. This is done to cover the clothing and textile courses for the three years of their stay at the college of education.

The reliability was determined by using test retest method. From one of the colleges of education, 20 students were used. The test was applied to group of students twice, within the interval of two weeks. The reliability co-efficient was found to be 0.71.

Data collection methods

The instruments were personally administered by the researcher. The attitudinal scale CTAS was applied first followed by the motivation tests CTMS. After a space of one hour the achievement test was then applied. At the application of the tests students were encouraged to answer all the questions in CTAT and CTMS. In the achievement test, students were told to omit numbers they do not have solution to.

Data analysis methods

The data for analysis were obtained from CTAS, CTMS, and CTAT. statistical package for social sciences (SPSS) package was used for analysis of the data.

RESULTS

Research question 1

What is the relationship between the attitude and motivation of students and their academic achievement in clothing and textile?

Table 1 indicates the relationship between attitude and motivation of students and their academic achievement in clothing and textile. The finding shows that attitude and motivation were significantly related to academic achievement in clothing and textile.

Hypothesis 2

Attitude and motivation will not significantly predict' achievement in clothing and textile.

Table 2 shows that the co-efficient of multiple determinant, R^2 of 0.33 and R^2 (adjusted) of 0.038 were obtained for the study. This indicates that attitude and motivation accounted for 4.7% variation in academic achievement in clothing and textile. Table 2 also shows that the regression data yielded an f value of 7.72 and was significant at p<0.01.

Research question 2

What is the relative contribution of attitude and motivation to students' academic achievement in clothing and textile?

Table 3 shows the contribution of each of the variations to the prediction as reported in the values of the regression co-efficient from 0.144 to -0.172 and standard error from 0.066 to 0.065. The t-value ranging from 2.625 to -3.222 were found to be significant at P < 0.01.

DISCUSSION

The result from this study shows that attitude is capable of predicting academic achievement of students in clothing and textile. In the study those with positive attitude are more likely to do well in clothing and textile courses. This finding is supported by Egede (1984) who found out that attitude and motivation are predictors of academic achievements in school subjects. In like manner, in clothing and textile courses students with positive attitude are most likely to be attentive and score higher grades in examination than those with poor attitude.

The findings of this study also indicates that motivation can predict students' academic achievement in clothing and textile. This indicates that students that are motivated often show positive attitude towards clothing and textile courses and also perform better in clothing tasks. This finding is supported by Erhunmwun (2004) who found out that motivation is a predictor of academic achievement.

CONCLUSION AND RECOMMENDATIONS

The conclusion reached in this study is that attitude and motivation will significantly predict academic achievement in clothing and textile. That means students who are well motivated and have the right attitude towards clothing and textile are likely to do better in clothing and textile tasks. Based on the findings of this study, the researcher recommends as follows:

- 1) Since attitude and motivation are predictors of academic achievement, teachers/lecturers of clothing and textile courses should be well skillful in handling of the courses, able to use different methods of teaching to motivate students to learn.
- 2) Lecturers handling clothing and textile courses should be those who are interested and are practically oriented in the courses so as to be able to encourage and motivate students to learn and sharpen their attitude towards clothing and textile.
- 3) Equipment and materials for carrying out practical tasks in clothing and textile should be provided to students. Tasks assigned to students should be subsidized by the college so as to stimulate their interest in clothing and textile courses.
- 4) Colleges should always create conducive environment to the teaching and learning of clothing and textile related courses to avoid the stressful condition in the learning process.

Limitations of the study

Essentially, the study focused on attitude and motivation as predictors of academic achievement of students in colleges of education. Only home economics students

Table 1. Inter-correlation matrix among attitude and motivation.

Variation	Achievement	Attitude	Motivation
Achievement	1.00		
Attitude	0.186*		
Motivation	-0.172*	0.466*	1.03

^{*} Correlation is significant at p<0.01.

Table 2. Regression analysis summary for the prediction value of attitude and motivation for academic achievement in clothing and textile.

		Α	nalysis of varia	nce	
Sources of variance	Df	SS	Ms	F	Sig.
Regression	2	1176.142	727.111	7.720	0.01
Residual	228	21861.286	86.546		
		P	arameter estin	nate	
Sources of variance	В	SE	R	R²	R²(adj)
Constant	24,285	4.708			
Attitude	0 124	0.052	0.332	0.048	0.038

0.051

Table 3. Relative contribution of attitude and motivation in academic achievement.

50.165

Variation	Regression co-efficient	Standard error	
Attitude	0.144	0.066	2.625*
Motivation	-0.172	0.065	-3.222*

^{*} Significant at P < 0.01

Motivation

from the three colleges of education were used for the study, to the exclusion of students offering clothing and textile in secondary schools in the two states . This is as a result of difference in curriculum and administrative control. This is an obvious limitation, and this has made it a bit difficult to generalize the findings of the study.

The sample of the study consisted of home economics students of Edo and Delta States of Nigeria. Because of the study's small size and geographical area, national generalizability of results may be a limitation.

Implication for education and suggestion for further research

This study has provided a useful empirical basis for the improvement of students' performance in clothing and textile. In this study, attitude and motivation are predictors to academic achievement in clothing and textile. This has implication for education in that curriculum of schools should be developed with variety of methods to motivate

students to learn especially in courses students term difficult .The findings of this research also has implication for home economics education, since teachers of clothing courses will be aware that, they have to devise various means of motivating their students. In that way they will be relieved of the boredom of teaching students who are not interested in clothing related courses. Replicate the present study in other disciplines.

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Appendix 1

Clothing and textile attitude scale (CTAS)

Instrument: The following items are designed to show how you feel about these activities, so please tick $(\sqrt{})$ in your choice options.

Options:

- 1) If dislike very much or very much disagree
- 2) If dislike or disagree
- 3) If like or agree
- 4) If like very much or very much agree

S/No.	Subject	If I like very much or very much agree	If I like or agree	If dislike or disagree	If dislike very much disagree
		4	3	2	1
1	I like clothing and textile as a field of study				
2	I am happy in clothing/textile classes				
3	Attending clothing and textile class makes me think about its application in life activities				
4	Clothing textile is easier to understand than most other courses.				
5	Clothing and textile is an interesting subject				
6	Clothing and textile will give me my life expectation				
7	I am always very attentive in clothing and textile class because of the various kinds of teaching aids				
8	I like clothing and textile because it involves activities like sewing, dying, wearing and knitting				
9	Clothing and textile make me to be creative				
10	Being creative makes me to have more friends				
11	I will like to specialize in clothing				
12	I enjoy reading clothing textbooks				
12	Clothing courses give me a good knowledge of science and technology				
14	Clothing courses equip one with skills that are very useful in life				
15	Clothing course should be allocated more time in the school time table.				
16	Clothing and textile lessons are boring				
17	There are too many practicals in clothing and textile course				
18	Clothing and textile should be made optional in colleges of education				
19	I have never liked clothing courses				
20	Clothing is not a very important subject as people may think				
21	I feel discouraged to be doing courses in clothing and textile				
22	Clothing and textile course are the course I fear most in the time table				

Appendix 2

Clothing and textile motivation scale (CTMS)

Instrument: The following items reflect your thinking, your expectation. It may not necessarily be the way it is to you.

Tick (√) in: 4 – If it is very true of you

3 – If it is true of you

2 – If it is untrue of you 1 – If it is very much untrue of you

S/No.	Subject	If it is very true of you	If it is true of you	If it is untrue of you	If it is very much untrue of you
		4	3	2	1
1	Even when I feel that my clothing and textile lessons are difficult, I try to attend				
2	I work hard in clothing lectures so as to do better than other students				
3	I like to complete every assignment given to me and do it well				
4	I like to avoid clothing and textile lectures				
5	I usually keep working on clothing until, am able to do the task				
6	I particularly like the sewing aspect of clothing assignment				
7	Even after the lecturers have gone out of class I keep working on clothing tasks				
8	I turn away clothing task which my classmates regard as requiring a great efforts				
9	I feel discouraged when my clothing task is not yielding the desired result				
10	I have several times stopped sewing because I feel I do not have the ability to do it well				
11	I prefer other assignments than clothing ones				
12	Competing to the best in clothing is not important to me				
13	Even though an assignment is stressful, I stick to it until it is completed				
14	I have great difficulty in finding time to do my clothing assignment				
15	I do not border to have my own textbooks in clothing and textile				
16	I take special pain to improve my performance in clothing courses.				
17	I see task in clothing and textile as challenges, so I spend more time on them.				
18	I feel fulfilled when I see my product in clothing tasks				
19	I feel I will make a career out of clothing				
20	Clothing and textile lectures are very interesting				
21	I like my clothing and textile lecturers.				

Appendix 3. Table of specification

Content	Knowledge	Comprehension	Application	Higher order of thinking	Total
Introduction to textile	2	1	2	2	7
Introduction to clothing	3	2	2	2	9
Pattern drafting and devevelopment	1	1	3	1	6
Clothing construction and alteration.	-	-	2	2	4
Clothing selections and maintenance	1	1	1	2	5
Textile design	1	1	2	2	6
Advanced clothing design	1	2	1	3	6
Advance textile design	2	2	1	2	7
Total					50

Appendix 4

Clothing and Textile Achievement Test (CTAS)

Instruction: Answer all questions and fill the blank space with the best option.		
1) a) b) c)	The colour obtained by mixing equal quatity of two primary colours is Primary colour Secondary colour Tetiary colour	
2) a) b) c)	Batik Oxidation Caustic Soda	
3) a) b) c)	The use of more than one colour brings about colour Synthetic Complimentary Harmony	
4) a) b) c)	One of the methods of fabric printing is Resist Printing Yarn Printing Roller Printing	
5) a) b) c)	An example of a suitable fabric for a straight dress is Linen Cotton Wool	
6) a) b) c)	The weight and weave of a fabric must be right for the Choice Style Fashion	
7) a) b) c)	Bulky fabricsto size Add Reduce Increase	
8) a) b) c)	One should choose clothes that Flatter Increase Decrease	

9) a) b) c)	Horizontal lines height Increase Decrease Flatter
10) a) b) c)	Darts are used in one of the following areas Hem Shoulders Arm hole
11) a) b) c)	All the following is a method of controlling fullness except Tucks Darning Pleats
12) a) b) c)	A type of facing commonly used on children clothing is Shaped facing Crossway Facing Decorative facing
13) a) b) c)	Lace is made of many yarn but mostly Linen Cotton Wool
14) a) b) c)	Piping is often used as a finishing in these areas except Belts Necks Hips
15) a) b) c)	An example of an opening designed without a wrap is Slit opening Hem opening Overlapping hem
16) a) b) c)	Velcro is a type of Fastening Seam Opening
17) a) b) c)	Interfacings are put in the material to make the edges Flat Fat Firm
18) a) b) c)	Darts are used to a garment or figure Fix Shape Shift
19) a) b) c)	Yokes are frequently used for garments for Style Fitting Shaping
20) a) b) c)	is very important in the choice of clothes Texture Setting Facing

31)

a)

b)

c)

32)

a)

b)

c)

Stitch

Style

Figure Fashion

Hemline

Match section

Notches shows where to

In most cases, you choose patterns that suits your

33) A) b) c)	One of the ways to use Pattern pieces is to press with
34) a) b) c)	In fabric , printed designs are on the right side Smoother Sharper Weaver
35) a) b) c)	Directional fabrics are so called because they must be laid in direction One Two Three
36) a) b) c)	Grains indicate directions Garment Drapes Yarns
37) a) b) c)	Any diagonal that intersect two grains line is called
38) a) b) c)	As a rule in clothing, the crosswise is used only to achieve a certain effect Diagonally Vertically Lengthwise
39) a) b) c)	Finishing of necklines is usually achieved by the use of Patterns Openings Facing
40) a) b) c)	Pattern drafted by working from measurement to measurement in a surface is
41) a) b) c)	The goal of any pattern alteration is to make pattern better Hang Drape Fit
42) a) b) c)	When several alterations have to be made, the
43) a) b) c)	It is often better to buy a commercial pattern using the following measurement as a yardstick Hip size Waist size Shoulder size
44) a) b) c)	Good design must your bad parts of the body Emphasize Flatter Liberate

45)	Seam allowance is usually away from the stitching Line.
a) b) c)	1.5 inches 2 inches 3 inches
46) a) b) c)	The fasted method of straightening fabric ends is Tearing Cutting Drawing
47) a) b) c)	The most suitable method of straightening fabric ends is Tearing Cutting Drawing thread
48) a) b) c)	
49) a) b) c)	Before cutting, you must press fabric that have
50) a) b) c)	The following are methods of pattern drafting except Flat pattern Block pattern Modeling pattern

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