STUDENTS' ATTITUDINAL CHARACTERISTIC AND ACADEMIC PERFORMANCE IN DISTANCE LEARNING PROGRAMME AT THE UNIVERSITY OF IBADAN, IBADAN.

Segun Olugbenga Adedeji Department of Educational Management, University of Ibadan, Ibadan.

Maruff Akinwale Oladejo

Department of Educational Foundations, Federal College of Education (Sp), Oyo

Abstract

The emergence and acceptance of distance education as an alternative higher educational delivery has made it imperative to ensure the success of students in the programme for it to remain relevant in the educational system. This is contingent on the fact that the standard of the programme can be judged by students' academic performance. Attitude has been seen as very critical to the attainment of individual's endeavour. This study therefore explored the predictive power of students' attitudinal characteristic on academic performance. lt provided a causal explanation to distance learners' academic performance through the analysis of students' attitudes towards distance learning at the University of Ibadan, Nigeria. The study adopted the descriptive research design of 'ex-post facto' type. Simple random sampling technique was used to select 1500 participants while purposive sampling technique was adopted to select the University of Ibadan's Distance Learning Centre. Data were collected through questionnaire during the 2009 contact session. Two research questions and hypotheses each were answered and tested in the study. Pearson correlation, regression analysis and T-test were employed for data analysis. Students' attitude towards distance learning has significant contributions to academic performance. On students' attitudes towards distance learning, gender made significant difference while age did not. Students should always display positive attitudinal dispositions towards distance learning.

Key Words: Distance learning, Academic performance, Students' attitudes

Introduction

General interest in distance education, which is perceived as a convenient choice by many students and educators is increasing more and more in parallel with the advances in the information and communication technologies. High motivation level, maturity, self-discipline and positive attitude are seen as necessary general characteristics of successful students for the achievement of distance education programmes and for the continuity of students in the programmes (Willis, 1994). Thus, understanding how students react to learning in a class where members are separated by time and space has become one of the important issues in distance education (Oladejo, 2010).

The growth and acceptance of distance learning system as well as the recognition of the importance of distance education in providing students with the best and most up-to-date educational resources available in addition to the traditional teaching methods that they receive, has led to the transformation of several traditional single mode Universities to dual mode ones (Oladejo, 2010). The University of Ibadan, Nigeria is not an exception as she became a dual-mode University with the establishment of the then Centre for External Studies (CES), now Distance Learning Centre (DLC) in 1988. With the growth and acceptance of distance learning system, it is critical to ensure the success of students in the programme. This is contingent on the fact that the quality and standard of the programme can be judged by students' academic performance. It has however, been observed that the results achieved so far by this mode of study vis-à-vis distance learners' academic performance are not as successful and impressive as originally hoped, (Brindley, 1987), cited by Ojokheta, (2000).

The analysis of the summary of distance learners' graduation results at the Distance Learning Centre of the University of Ibadan, Ibadan during the selected years (1997, 1998, 1999, 2000, 2004, 2005, and 2006) respectively as shown in table 1 below, revealed that the numbers of those in the ordinary pass and third class honours are 34 and 43, that is, 1.31% and 1.66% respectively, while majority that is, 77.18%, which is 1993 are in the second class lower honour. Those in

the second class upper honour constitute 19.82%, that is, 512 and 0.03%, which is 01 distance learners are in the first class honour. It was also revealed from the table that since the inception of the programme more than twenty years ago, the Centre has succeeded in producing only one first class student.

of Ibadar	າ.								
Grade	1997	1998	1999	2000	2004	2005	2006	Total	%Share
1 st Class	-	-	-	-	01	-	-	01	0.03
2 nd Class Upper	98	62	37	29	73	-	201	512	19.82
2 nd Class Lower	470	275	204	155	327	12	562	1993	77.18
3 rd Class	5	1	2	1	12	-	16	43	1.66
Ordinary Pass	-	-	-	-	15	6	19	34	1.31
Failed	14	17	13	8	10	8	15	85	3.18
Total	586	355	256	193	438	26	813	2667	

Table 1: Analysis of the Summary of Distance Learners' Graduation Results in Selected Years at the Distance Learning Centre, University of Ibadan.

Source: Records Office, University Of Ibadan, Ibadan.

The reverse however is the case when compared with the graduation results of the regular full time students in the same faculty at the University of Ibadan, Ibadan, as shown in table 2 below. For instance, a total number of 8 regular full time students graduated with first class honours, this is 0.4%. 320 students, which is 19.08%, had second class upper division while 1190 students, about 71% fell within the second class lower division. Also, 7.69%, that is 129 students were in third class while 1.78%, that is, 30 students had ordinary pass. This is a better performance above that of the distance learners.

ibadaii.	1		1	1		
	2000	2004	2005	2006	Total	%Share
1 st Class	01	03	02	02	08	0.4
2 nd Class Upper	95	80	80	65	320	19.08
2 nd Class Lower	356	397	287	150	1190	70.96
3 rd Class	04	55	48	22	129	07.69
Ordinary Pass	-	03	14	13	30	1.78
Failed	03	05	14	10	32	1.87
Total	459	543	445	262	1709	

Table 2: Analysis of the Summary of Regular Students' Graduation Results in Selected Years at the Faculty of Education, University of Ibadan.

Source: Records Office, University of Ibadan, Ibadan.

The unimpressive academic performance of distance learners can be attributed to their attitudinal dispositions to distance learning. Attitude is a hypothetical construct that represents an individual's like or dislike for a programme or an item. Attitudes are positive, negative or neutral views of an object, a person, programme, behaviour or event. People can also be "ambivalent" towards a target. This implies that they simultaneously possess a positive and a negative bias towards the attitude in question. Attitudes are composed from various forms of judgments. Attitudes according to Shannon (1994) develop on the ABC model (affect, behavioral change and cognition). He maintained that affective response is a physiological response that expresses an individual's preference for an entity. Also, the behavioral intention is a verbal indication of the intention of an individual, while the cognitive response is a cognitive evaluation of the entity to form an attitude. Most attitudes in individuals are a result of observational learning from their environment.

4

Attitude, in the opinion of Klausmeuer (1935) in Olaleye (2003), influences how well students learn and behave. Therefore, attitude whether conceived as a process or a product of learning, has been found by some researchers to significantly influence students' performance in various subjects (Okwilagwe, 2002). The general contention from the researches so far conducted, according to Austin (1993), seem to suggest that favourable attitudes are important determinants of performance in various disciplines. In view of the importance of students' attitudes in any educational programme, distance learning inclusive, there is the need to explore students' attitudinal characteristic as it predicts their academic performance. The need to explore this student's characteristic is not unconnected with the fact that unimpressive academic performance of distance learners has serious implications for the programme, nation's educational development, employers of labour as well as distance learners themselves. For instance, distance learning programmes may run aground and its desirability and relevance in the Nigerian educational system may be questionable, if distance learners' unimpressive academic performance persists and the desired quality instruction is not encouraging.

Furthermore, persistent unimpressive academic performance of distance learners coupled with high drop-out rates can make the programme quite unacceptable as an alternative channel for providing standard and quality education to the people. Also, employers of labour may not be willing to release their staff to further education in distance learning programme if the desired objectives in terms of better productivity are not guaranteed. Finally, the yearnings, hopes and aspirations of the students may not be met, which may subsequently bring frustrations, untold hardships, disappointments and probably, suicide. Thus, the researchers were inclined to study the attitudes of distance learners towards distance learning programme with respect to their academic performance.

Problem Statement

One of the key criteria for judging educational standard and quality appears to be students' academic performance. From the background information however, it seems that distance learners' academic performance in the last one and half decades is unimpressive at the University of Ibadan, Nigeria. This study therefore, provides a causal explanation to distance learners' academic performance through the analysis of students' attitudinal characteristic with a view to improving distance learners' academic performance at the Distance Learning Centre, University of Ibadan, Nigeria.

Research Questions

The study provided answers to the under stated research questions and hypotheses:

- Is there any correlation between students' attitudes and academic performance at the Distance Learning Centre of the University of Ibadan, Nigeria?
- What is the contribution of students' attitudes (if any), to the prediction of academic performance at the Distance Learning Centre of the University of Ibadan, Nigeria?

Hypotheses

- There is no significant gender difference in students' attitudes towards distance learning at the University of Ibadan.
- Age has no significant difference in students' attitudes towards distance learning at the University of Ibadan.

Scope of the Study

The study covered the Distance Learning Centre of the University of Ibadan, Nigeria. Participants in this study were distance learners from 200, 300 and 400 levels during the 2009 contact year. The selected factor included in the study as predicting academic performance is students' attitudes towards distance learning programme.

Review Of Related Literature

The reviewed literature for the study was carried out under these headings:

- The Concept of Distance Education;
- Distance Learning at the University of Ibadan: Historical Development;

• Attitude and Academic Performance.

The Concept of Distance Education

The concept "Distance Education", otherwise globally known as "Distance Learning" or "Open and Distance Learning" by the International Conference on Distance Education (ICDE), provides the answers to such situations, (Ojokheta, 2000; Aderinoye, 2002), has shown a tremendous growth during the last few decades due to its unique nature of being a users' friendly system. (Sharma, 2002). It has been perceived as a fast growing international phenomenon. The terms "distance education" or distance learning" have been applied interchangeably by many different researchers to a great variety of programmes, providers, audiences, and media. Its hallmarks are the separation of teacher and learner in space and/or time (Perraton, 1988); the volitional control of learning by the student rather than the distant instructor (Jonassen, 1992); and non-contiguous communication between student and teacher mediated by print or some form of technology (Keegan, 1986; Garrison & Shale, 1987).

Distance education, a discipline within education, has been associated with various definitions and terminologies. Many terms have been used to identify distance education and it was debatable as to whether these terms were in fact synonymous with distance education. Some of the languages used included correspondence education, open learning, independent study, non-traditional education, technology-based education, and online learning. Early in the field of distance education, Peters (1973) defined distance education as a method of imparting knowledge, skills and attitudes, which are rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, specially, for the purpose of reproducing high quality teaching material which makes it possible to, instruct great numbers of students in the same time wherever they live. It is an industrialized form of teaching and learning.

According to Dohmen (1977), distance education is a systematically organized form of self-study in which students' counselling, presentation of learning materials and securing and supervising of students' success are carried out by a team of teachers each of whom has responsibilities. It is made possible at a distance by

means of media, which can cover long distances. In the submission of Holmberg (1981 cited in Keegan, 1996, p. 42), distance education refers to that kind of education which covers the various forms of study at all levels which are not under continuous and immediate supervision of tutors present with their students in lecture rooms on the same premises, but, which nevertheless, benefits from the planning, guidance, and tuition of a tutorial organization. Keegan (1986) made a synthesis of most of the definitions of distance education after reviewing similar definitions from other scholars. He then came up with a list of basic characteristics essential for a definition of distance education namely:

- the quasi-permanent separation of teacher and learners throughout the length of the learning process (this distinguishes it from conventional face-to-face education);
- * the influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programmes);
- the use of technical media print, audio, video or computer to unite teacher and learner and carry out the content of the course;
- the provision of two-way communication so that the student may benefit from or even initiate dialogue (this distinguishes it from other use of technology in education); and
- * the quasi-permanent absence of the learning group throughout the lensgth of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meeting for both didactic and socialization purposes. (Keegan, 1991 cited in Holmberg, 1995, p.2).

There have also been many definitions put forward in modern literature. Greenberg (1998:36) defines contemporary distance learning as "a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning". Teaster and Blieszner (1999:41) say "the term distance learning has been applied to many instructional methods: however, its primary distinction is that the teacher and the learner are separate in space and possibly time". Desmond Keegan (1995:7) gives the most thorough definition. He says that distance education and training result from the technological separation of teacher and learner which frees the student from the necessity of traveling to "a fixed place, at a fixed time, to meet a fixed person, in order to be trained". From these definitions, we can see that the student and teacher are separated by space, but not necessarily by time. This would include compressed video, which is delivered in real time.

Besides the afore discussed definitions of distance education, there is the need for further clarifications among other several terms that are not only closely related to, but also almost convey similar meanings. The terms "distance education", "distance learning", "open learning" and "open and distance learning" though, are synonymous words that represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners, slight differences could still be made among these terms as highlighted below:

- Distance education is any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print (The United Nations Educational, Scientific and Cultural Organizations (UNESCO) 2000).
- Distance learning refers to situations where learners are physically separated from the educational provider, communicating in writing, (using letter mail, email, fax, or computer conferencing); verbally (by telephone, audio conferencing, video conferencing); or in face-to-face tutorial sessions (The Commonwealth of Learning, (COL) 2003).
- Open learning refers to situations where learners use resources in a flexible way to achieve their goal. These resources may be print, audio- or computer-based; used at home, at a study centre or in the workplace; with or without the guidance of a tutor or mentor. Open learners' goals vary greatly, from completing formal accreditation, to learning a specific job related skill, to pursuing a leisure interest (COL, 2003).

Open and distance learning refers to education and training in which using learning resources, rather than attending classroom sessions, is the central feature of the learning experience (COL, 2003).

Distance Learning Programme at the University of Ibadan, Nigeria.

The history of distance learning system at the University of Ibadan, Nigeria, could be traced to the period of establishment of the then Centre for External Studies (CES) in 1988, through the Department of Adult Education. Its focus was initially on training teachers, particularly practicing teachers who needed to upgrade qualifications, as well as guidance/counseling training and development of adult educators. This focus has, however, recently been expanded to include two Arts Degrees (one in theatre and one in French), as well as an agricultural programme. There are approximately 1,500 students currently enrolled in programmes of the Centre. The specific objectives of the DLC are to:

- * Bridge the capacity gap by delivering programmes of global standards in areas of national needs;
- Deliver skills-based programmes in order to promote employment and productivity.
- * Collaborate with communities and private sector to create requisite synergy for quality and competitive education.
- * Collaborate with reputable foreign institutions in order to deliver global educational products to Nigerians.
- * Key into the global education market by positioning the University of Ibadan as an exporter of knowledge and intellectual resources.
- * Become the primary center for learning resources in Africa and provide a platform for reengineering the African consciousness, and
- Provide an avenue for forging global cooperation, harmony and understanding through education.

The main thrust of delivery in the Centre's programmes is through printed materials, developed by University lecturers. There is also a regular student newsletter. After registration, students take materials home to study, and then return to the University for a six-week residential session. At this session, they also write a final examination (which currently constitutes the only formal assessment within programmes). The Centre established six study centres to support students (where they are able to register, collect materials, and organize teacher practicals), but three of these centres have now been closed.

The Centre also used to run tutorials, but has had to discontinue these because of administrative problems (particularly due to lack of financing). It is expected to be financially self-sufficient, which means that - on most cases - the cost to students of studying in this way is the same as face-to-face education. Writing of course materials is done by University lecturers. It is generally initiated through writing workshops, at which training is provided and lecturers are accommodated in hotels for an intensive writing period during which they complete as much of their writing as possible. Lecturers are paid for this work, as well as for time they spend running face-to-face sessions. They also receive royalties on sale of materials (although copyright resides with the Centre). Editing of materials is undertaken by Centre's members of staff, who have been sent on courses in the United States of America. Each guide consists of around 15 lectures, meaning that there are approximately six guides for each full-year course.

Guides cost about ¥100 to produce, and are sold to students for between ¥150-200. Materials are made available to all students on campus at the University Bookshop. The Centre is interested in exploring use of multimedia resources – particularly audio cassettes – but finances currently make this Impossible.The University administration has recently become more interested in the work of the Centre, since it has demonstrated its ability to maintain educational standards and success rates of the face-to-face programmes. The University is particularly interested in the Centre's ability to generate income, to provide education to working people, and to absorb students who cannot currently be accommodated in face-to-face programmes. A Committee has been established to review the structures and operations of the Centre, with a view to expanding its operations (for example, in areas such Accounting and Business Administration).

Attitudes and Academic Performance

Research results have established a strong correlation between attitude and performance (Okebukola & Jegede, 1986; Fennema & Sherma, 1976; Aghaduino, 1992; Price & Williams, 1998; Olaleye, 2003). In fact, the relationship between both attitude and performance is so strong to the extent that the two have reciprocal effect on each other. Neale (1969) in Olaleye (2003) pointed out that "..... attitude and performance have a reciprocal effect in their relationship in that attitude affects performance and performance affects attitude.

Burstein (1992) in a comparative study of factors influencing students' academic performance found out that there is a direct link between students' attitudes and outcomes. He also found that 25% in England and 26% in Norway accounted for the variation in students' attitude towards mathematics that were due to student gender, maternal expectation, expectations of the students friends, and success attribution (belief about success in mathematics). Student beliefs and attitudes have the potential to either facilitate or inhibit learning. Gibbons, Kimmel and O'Shea (1997) opined that students' attitudes about the value of learning science may be considered as both an input and outcome variable because their attitudes towards the subject can be related to educational achievement in ways that reinforce higher or lower performance. This means that those students who do well in a subject generally have more positive attitudes towards that subject and those who have more positive attitudes towards a subject tend to perform better in that subject.

Also, studies in Nigeria (Alao, 1988; Odunusi, 1994) examined six attitudinal dimensions and their effects on students' performance in sciences. The dimensions examined were:

(i) social implications of science,

(ii) attitude towards scientific inquiry,

(iii) normality of scientists,

- (iv) enjoyment of science and science lessons,
- (v) leisure interest in science and career interest in science.

The result of the study revealed that students have positive attitudes towards sciences, Mathematics inclusive. Odunusi (1994) in assessing the attitude of some science students towards modern orientation in science, found out that students' attitude to science is negative while gender and class level of the students did not significantly influence students' attitude towards science. Obioha (1987) when describing Nigerian situation, opined that schools in Nigeria have come a long way from no science in schools to almost compulsory science programmes at all levels and yet, the younger generation do not particularly want to study science. The reason for this view is not far-fetched. The social values in the country nowadays have diverted students' attention and interest from learning science to other goodies of life. Onafowokan (1998) differs in her report of two separate studies carried out by Schunert (1991) and Einburg (1995) when she linked higher achievement in science to positive attitude on the part of the students.

A critical look into the above cited studies indicated that there are conflicting reports concerning the relationship between students' attitudes and academic achievement. It is against this background that the present study attempted to establish the relationship, if any, between students' attitude towards distance learning and academic performance at the Distance Learning Centre of the University of Ibadan.

Research Methodology

Design

Descriptive research design which is of the *"ex-post facto"* type was adopted for the study. This is because the researcher cannot manipulate any of the variables of the study.

Population

The target population for the study was made up of 200, 300 and 400 level distance learners studying undergraduate programmess at the Distance Learning Centre of the University of Ibadan, Nigeria. This was approximately 5,350 during the period under study.

Sample and Sampling Techniques

Stratified simple random sampling technique was used to select one thousand and five hundred (1500) participants during year 2009 contact session. This was 24.41 per cent of the total population. The subjects were first stratified into male and female. Eight hundred and forty-seven (847) female subjects and six hundred and fifty-three male

subjects were then selected simple randomly. On the other hand, purposive sampling technique was used in selecting the Distance Learning Centre of the University of Ibadan, Nigeria, one of the Nigerian Universities approved by the National Universities Commission to operate distance learning programme.

Instrumentation

A self designed questionnaire titled Students' Attitudes Towards Distance Learning Scale (SATDLS) was used as the instrument for the study. Cronbach's coefficient was computed for the instrument through a pilot study. The alpha value obtained was 0.84. This instrument is made up of 20 items, which the respondents indicated the extent to which they agreed or otherwise to each of the items on a four-point modified Liker scale namely Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). It was scored as indicated below:

 Table 1: Scoring of Students' Attitudes Towards Distance Learning

 Scale (SATDLS)

Responses	SA	Α	D	SD
Positive Attitude Towards Distance	4	3	2	1
Learning.				
Negative Attitude Towards Distance	1	2	3	4
Learning.				

The researcher used another self-designed distance learners' bio-data master sheet (DLBMS) to collect students' records on results (Grade Point Average) from the institution's records officers. It was scored as shown below:

Sheet (DLBIVIS)		
Range of GPA	Interpretation	Corresponding Point
4.50 - 5.00	First Class	5
3.50 - 4.49	Second Class Upper	4
2.50 - 3.49	Second Class Lower	3
1.50 - 2.49	Third Class	2
0.5 – 1.49	Ordinary Pass	1

Table 2: Scoring of Self-Designed Distance Learners' Bio-data Master Sheet (DLBMS)

Method of Data Analysis

Regression analysis was used to determine the contribution of the students' attitudes (x_1) in predicting distance learners' academic performance (x_2) . The criterion variable was therefore regressed on the explanatory variable. The study adopted t-test to determine the significant difference in students' attitudes based on gender and age.

Data Analysis

This section presents the analysis of the collected data basically to answer the two posed research questions and also, tested the two hypotheses in the study.

Research Question 1:

Do students' attitudes towards distance learning predict academic performance at the Distance Learning Centre of the University of Ibadan, Nigeria?

Table 3: Prediction of Students' Attitudes Towards Distance Learning to Academic Performance

N			GPA Performa	-	Sig (1-tailed)
1500	Students' Towards Learning	Attitudes Distance	.063		.007

P<0.5

Table 3 above shows the prediction of students' attitudes towards distance learning to academic performance (B=.063). From the table, it was revealed that students' attitudes towards distance learning predicted academic performance (B=.063). There was also a significant relationship between the two constructs (.007; P<0.5).

Research Question 2:

What is the contribution of students' attitudes towards distance learning (if any), to the prediction of academic performance at the University of Ibadan, Nigeria?

Factor	В	Std.	Beta	Т	Sig.
		Error	В		
(Constant)	2.921	.515		5.668	.000
Students' Attitudes Towards Distance Learning	1.131E- 02	.005	.070	2.480	.013*

 Table 4: The Contribution of Students' Attitudes towards Distance

 Learning to the Prediction of Students' Academic Performance

*Sig. (P<0.05)

The table above reveals that the beta (β) weights (contribution) of the paths (path coefficients) give the estimates of the strengths of the causation. It was revealed that students' attitudes towards distance learning at the University of Ibadan contributed significantly to the prediction of academic performance (β =.070; p<.05).

Hypothesis1: There is no significant gender difference in students' attitudes towards distance learning at the University of Ibadan.

 Table 5: Comparison of Students' Attitude towards Distance Learning

 on Gender Basis

Variable	Ν	Х	SD	Df	t-	Sig	Rmk	Decisio	n
					value				
Female	847	2.74	1.55	2199	.335	.743	Not	Do	Not
							Sig	Reject	
Male	653	2.86	1.64						

Not Significant at P> 0.05

Table 5 above represents information on hypothesis 1 as measured by t-test to determine the significance or otherwise of the difference between the students' attitudes of towards distance learning at the University of Ibadan based on gender. The result shows a mean of 2.74 from the female distance learners compared with a mean of 2.86 from the male counterparts. This finding indicates that gender makes no significant difference on students' attitudes towards distance learning (t = .33, df = 2199, P> 0.05). Hypothesis 1 is therefore retained.

Hypothesis 2: Age makes no significant difference in students' attitudes towards distance learning at the University of Ibadan.

based on Age									
Variable	Ν	Х	SD	Df	t-	Sig	Rmk	Decision	
					value				
Older	962	2.96	1.56	2199	2.394	.017*	Sig	Reject	
Students									
Younger	448	2.73	1.64						
Students									

Table: Comparison of Students' Attitude towards Distance Learning Based on Age

*Significant at P< 0.05

Table above revealed that there is a significant difference between the attitudes of students towards distance learning at the University of Ibadan on the basis of age (t = 2.39, df - 2199, P< 0.05). This was found to be significant at P< 0.05 level of significance. Thus, hypothesis 2 is rejected.

Discussion of Findings

Finding from this study, hypothesis one revealed no significant gender difference in students' attitudes towards distance learning at the University of Ibadan. This finding corroborates earlier studies like Chacon-Dugue (1985), Wang and Newlin (2002) and Ergul (2004) which established insignificant gender difference in students' attitudes towards open and distance learning. The attitudes of the male students towards distance learning were found to be better than those of the female students. However, the studies of Woodley and Parllet (1983) and Powell, et al, (1990) that found a significant gender difference in students' attitudes towards distance learning contradict the present finding. The established finding in the present study might be due to the fact that both the male and the female distance learning system.

Also, this study reported significant age difference in students' attitudes towards distance learning. The older students were even found to be more positively disposed towards distance learning system. This is in line with the work of Kumar, (1996; 2001) that found out a significant difference in students' attitudes towards distance learning

based on age. It however contradicts the study of Powell, et al. (1990) which reported that distance learners' attitude toward studying in distance learning system was not significant on age basis. The rationale behind this finding might not be unconnected with the fact that both the older and the younger students in the programme are properly motivated in the programme, and this enabled them to have positive dispositions to the programme.

Conclusion and Recommendations

The paper had underscored the need for distance learners to have positive attitudes towards their academic programme in distance learning system. This is to enable them perform well in the programme. Based on this fact, it is hereby recommended that:

- Students should always display positive attitudinal dispositions towards distance learning in view of its significant effects on their academic performance.
- Guidance Counselors, study centre Managers and other Administrative Staff should always focus on the development of positive image of the programme so that both the participating and the prospective students would be motivated towards the inculcation of positive attitudes towards the programme.

References

- Agbaiuno, M.C.K. (1992). A path analytic study of cognitive style, understanding of science and attitudinal variables as correlates of achievement in secondary school chemistry.
- Dissertation, Education., Teacher Education. University of Ibadan, Ibadan.
- Alao, E.O. (1988). Attitudes of secondary school students to the basic sciences in selected local government areas of Oyo State. Doctoral Dissertation, University of Ife, Ile-Ife.
- Austin, J. T. and Vancouver, J.B. (1996). Goal Constructs in Psychology: Structure process and content. *Psychological Bulletin*, 120, 338 – 375.
- Chacon-Duque, F. J. (1985). Building academic quality in distance higher education.
- Monograph in higher education evaluation and policy, Pennsylvanian PSU.

- Dohmen, G. 1977. Quoted Keegan, D. (1991). Foundations of distance education 2nd (ed). London: Routledge Limited.
- Fennema, E. & Sherman, J. (1995). Fennema–Serman mathematics attitudes scale instruments. Journal of Research in Mathematics Teaching. 14. 140 – 147.
- Garrison, D. R., & Shale, D. G. (1997). Mapping the boundaries of distance learning education: problems in defining the field. American Journal of Distance Education. 1(3)..7-13.
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: a construct validation. Educational Psychology, 76. 569-582.
- Greenberg, G. (1998). Distance education technologies: Best practices for K-12 settings. *IEEE Technology and Society Magazine*, (Winter) 36-40.
- Holmberg, B. (1995). *Theory and practice of distance education*. London: Routledge.
- Jonassen, D. H. (1992). Applications and limitations of hypertext technology for distance learning. Paper presented at the distance learning workshop. Armstrong laboratory. Scan Antonio, TX.
- Keegan, D. (1995). Distance education technology for the new millennium: compressed video teaching. ZIFF papiere 101. ERIC, ED 389931.
- Keegan, D. (1986). Foundations of distance education. London, Croom Helm.
- Kumar, A. (2002). An investigation into the India open University distance learners' academic self-concept, study habits and attitude toward distance education: A case study at the Indra Ghandi national open University in India. www.col.org/forum.PCFpapers/kumara.pdf.
- Kumar, A. (1996). An investigation into the distance learners' academic self-concept, study habits and attitude toward distance education in relation to the academic performance at the first degree level. Doctoral Dissertation, Meerut: CCS University.
- Neale, D. (1969). The role of attitudes in learning mathematics, arithmetic teacher. 1.6. 631-640.
- Obioha, N.E. (1987). Decline in students' choice of science and technology. *Annual Conference Proceedings of Science Teachers' Association of Nigeria*. 28, 16-23.

- Odunsi, T.O. (1988). A study of the attitudes of some Nigerian teachers towards science and science teaching. *Journal of Research in Curriculum* (692) 205-211.
- Ojokheta, K. O. (2000). Analysis of some predictors for motivating distance learners towards effective learning in some distance teaching institutions in Nigeria. Thesis. Education., Adult Education. University of Ibadan, Ibadan.
- Okebukola, P. A. O. & Jegede, O. J. (1986). The underachieving students in science: opinions and the actiology of the ailment. proceedings and the 27th annual conference of STAN. 57 – 63.
- Okwilagwe, E. A. (2002). "Patterns of undergraduates' attitude to academic work". Ibadan Journal of Educational Studies. 2(2), Pp. 551-562.
- Olaleye, O. O. (2003). Some psychological determinants of secondary school femalestudents' achievement in mathematics in Osun and Oyo states, Nigeria. Thesis. Education., Teacher Education. University of Ibadan, Ibadan.
- Onafowokan, B. A. O. (1998). A casual interaction of some learner characteristics with conception of heat and temperature among integrated science students in Lagos state. Thesis. Education., Teacher Education. University of Ibadan, Ibadan.
- Peters, O. (1973). "Distance teaching and industrial production. A comparative interpretation in outline". in Sewart, d; Keegan, D.; and Holmberg, B. (eds). Distance education: international perspectives, London: Croom Helm.
- Powell, R, Conway, C., & Lynda, R. (1990). "Effects of students' predisposing characteristics on students' success." Journal of distance education. 4.2. 26-39.
- Sharma, H. L. (2002). Student support services in distance learning system. a case of DDE, Maharshi Dayanand university. Turkish online journal of distance education. 3.4. 1-9.
- Teaster, P., & Blieszner, R. (1999). Promises and pitfalls of the interactive television approach to teaching adult development and aging. *Educational Gerontology*, *25*.8. 741-754.
- The Commonwealth of Learning (2001) Building Capacity to deliver Distance Education in Nigeria's Federal University System. A World Bank Report. Vancouver, Canada.

- The Commonwealth of Learning (2003) Tutoring in Open and Distance Learning: A Handbook for Tutors. Vancouver, Canada.
- The United Nations Educational, Scientific and Cultural Organizations (2000) Distance Education in the E-9 Countries, The Development and Future of Distance Education Programmes in the Nine High-Population *Countries*, Paris: UNESCO.
- Wang, A. Y., and Newlin, M. H. (2002). Predictors of performance in the virtual classroom. *The Journal Online* 29(10). Retrieved November 14, 2003, from: http://www.thejournal.com/magazine/vault/A4023.cfm
- Woodley, A. & Parlett, M. 1983. "Students dropouts" in Teaching at a Distance, No.23, Summer.