LECTURERS' CHARACTERISTICS AS DETERMINANT OF INFORMATION TECHNOLOGY SKILLS AMONG HEALTH INFORMATION MANAGEMENT STUDENTS IN CROSS RIVER STATE.

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ABSTRACT

This study investigated lecturers' physiognomies as determinant of Information Technology (IT) skills among health information management students in Cross River State. The research adopted a descriptive research design of correlational type. Students from health institutions in Cross River State were selected using multi-stage sampling technique and a total of 216 students were selected at random for the study (116 female and 100 male students). Lecturers' attitude scale (p=0.86) was used as a measure of the lecturers' characteristics factors, and student IT skills questionnaire in health information management. Four research questions were formulated to guide the study. Descriptive statistics and multiple regression were used as tools for data analysis at 05 level of significance. Majority of the respondents agreed that they have knowledge of how to use applications like power point (90.5), a good number (80.5%) have ability to work with data base management application and can create tables without any assistance. While, (54.5%) of the professionals do not have the ability to use electronic clinical coding as well as have access to health-related archives on the internet. result also shows that, there is significant relative contribution of the independent variables (lecturers' qualification, experience, attitude and gender) on student IT skills among health information management students (F (4,204) =23.760; p <0.05). Accounted for 30.5% of the total variance in IT skills among student in health information management in Cross River State. Out of the four (4) independent variables (lecturers' qualification, teaching experience, attitude and gender), lecturers' experience [β =.472, $t_{(204)}$ = 7.579, p< .05] and lecturers' attitude [β = .062, $t_{(204)}$ = 1.062, p< .05], are the most influential predictor variables on IT skills of students in health information management in Cross River State, also gender and qualification did not have any influence on student IT skills. Recommendations were made that workshops, seminar and conferences should be organized by government, professional agencies to enlighten lecturers on measures of improving IT skills among students.

Key words: Lecturer, qualification, experience, attitude IT Skills

Introduction

Education should be the largest industry in any country and should take first place among the duties of the state, family and teachers, since it directly concerns the whole nation. Accordingly, all citizens should take a close interest in educational problems via organisations of all kinds, including professional associations, trade unions, political parties and scientific bodies. Concern should be shown and responsibilities shouldered for the success of the educational service not only by governments, but by everybody who is interested in the future of country. It has become evident; that there are not only moral and social reasons but also direct economic justifications for allocating a privileged status to education. Sociologists and development economists in particular, have demonstrated the need for "the full utilisation of human resources" in economic development. The productivity of natural resources is no longer regarded as sufficient for economic development, and it has been "discovered" that the labour force needed to engineer, manage and operate large investments such as ports, dams, communications, transportation networks, and industrial systems can be trained in educational institutions using the information technology skills.

Information is a prerequisite in the development of any nation and is a driving force for development, whether economic, social, or political. Information is also an indispensable contributor to good health outcomes, and a critical element of well-functional health systems.
However, Information is knowledge communicated and / or received in relation to a particular subject (kodem, 2001). Information is perceives as one or more statements of fact that are received by a person and put to one use or the other (Uhegbu, (2000). White (2000) submitted that information is a vital resource, relating to specific events or situation which may be use as a basis for making decisions. Health information has been variously described as the "foundation" for better health, as the "glue" holding the health system together, and as the "oil" keeping the wheels of health system running *(*Murray and Frenk 2000, Health system performance assessment by W.H.O, 2000*)*.

Health information management system seems to be very complex due to the level of its scope, broad diversity and level of details involved. This therefore makes healthcare system different from other sectors such as the banks, education etc, they are limited in terms of tyransactions possibilities, sample information needed about clients as well as establish standard for data exchange among them. Although health is an information-intensive industry, and most people agree that information is power, it changes roles and the social order. This reaction may be offset by improving communication between the information community and the health providers. Health information management has emerged as a core capability for hospitals and physicians to achieve "meaningful use" and receive stimulus funding

Lecturers' characteristics refer to qualities of teachers that can be measured with tests or derived from their academic or professional records. It does not generally refer to the direct observation of their impact on students learning in terms of either student test performance or

teaching behaviors. The importance of lecturer qualities in filling student attitude gaps cannot be over underscored. Improving lecturer quality therefore must be a vital component of any school or educational improvement plan most especially in the health sector. Further, it appears that most persons in the society have wandered who and what is responsible for the failure or poor attitude of health students in their professional examinations. Most parents attribute the problem to the learner while others say the school and lecturers are responsible for the negative attitude students puts on during the teaching and learning process. In spite of their contribution, Micro-studies of the relationship between teacher characteristics as a school or state input and student disposition as an output have several limitations. They must rely on imperfect measures of student background characteristics in order to equate unequal condition, without substantial and realizable extensions, they cannot resolve the ambiguity in direction of the causal influence. According to Burning (1999), teaching characteristics such as personal teaching efficiency, enthusiasm, care and high expatriation promote learner motivation; these same characteristics are also associated with increase in student performance in professional school examination. High level of learning may occur as well as learners feeling good about themselves and the material they are learning when teachers use instructional time efficiently.

Lecturers have been recognized as indispensable human resources, and in fact, the single most important element in the system, more important than the quality and quantity of equipment, materials or level of financing. They need to be studied in relation to how they vary from one another and their contribution in bringing about effectiveness in students' performance. The lecturers play an important role in shaping the future of individuals as well as their entire generation. The role of lecturers can never be over emphasized, which is because they have influenced the students in various ways based on their qualification, specialization, teaching experience among others. Therefore, every society depends on the assistance of lecturers in actualizing its dream of molding the character of its students to expected standard.

Furthermore, the importance of lectures in meaningful education at all level is reflected in the national policy of education (2004) as it declares that; no educational system can rise above the quality of its lecturers. This declaration in the policy document underscores the need for lecturer's effectiveness in our schools. A lecturer that portrays good teaching characteristics enhances classroom control and disciple. It involves the use of their ability in resourcefulness and ingenuity to efficiently utilize the appropriate language, methodology and available instructional material to bring the best out of learner in term of their attitude towards their professional school examination.

To Abimbade, (1999), lecturers are said to bring out the best or to be effective when their teaching can lead to students learning. Hence nothing has been taught until it has been learnt and this happens when the lecturer succeeds at causing a change in behavior in the students. It is therefore important that the lecturer must see teaching as an attempt on his own part to transfer that he has learnt to this students. It is also important to note that the various dispositions that teachers display at work irrespective of their gender, positively or negatively betrays their devotion or enhance performance. This has greatly affected the attitude of the students toward learning

generally and in particular; performance in school examination. Hence, lecturers are looked upon as instrument of social progress and change.

Several factors necessitated this study among which is; to investigate the factors from which the yearnings of lecturer's variables are noted to have effect on student's attitude. These includes lecturers' attitude, qualification, years of experience gender among others. Ehimdero and Ajibade (2000) asserted that, " student's, who are curious stakeholders in Educational enterprise, have long suspected and speculated that some of their lecturers in colleges and Universities lack the necessary professional (not academic) qualification (skills, techniques, strategies, temperament etc) required to communicate concepts, ideas and principles in a way that would facilitate effective learning. They also believed that these deficiencies contribute significantly to the growing rate of failure and subsequent dropout of students in tertiary institutions.

Just as there is a significant growing rate of failure and subsequent dropout in the Nigerian health Institutions (Young, 1997) this thus, is making many students to abandon schooling at the end of their first year. It is important to note that the various dispositions that our lecturers display at work betray their devotion. This has greatly affected the attitude of students toward learning generally, hence their poor performance in professional examination. Many have no mastery of the new curriculum content and most lecturers' reactions to work are not as good as they should be in most of our health institutions.

According to Robert (2010), one area of concern new lecturers face is their inadequacy in managing classrooms, despite their clinical experience, teaching, and other observation in a classroom setting, this problem has persisted for decades. Effective teaching requires considerable skills in managing the myriad of tasks and situation that occur in the classroom each day. Skill such as classroom management is central in teaching and requires common sense, consistency, fairness and courage among the lecturer in health institutions. This skill also requires that, they understand in more than one way the psychological and developmental levels of their students. Sadly, this is often easier said than done, and part of this problem is that there is no practical way for most of the health students to "practice" their nascent skill outside of actually hospital settings.

Lecturer's area of specialization is one of the most significant and relevant variable use in this study. Glasman and Bashlit (2007), has it that, a lecturer is said to be competent if he or she is well knowledgeable in the area in which he/she teaches students in order to attained a high level of performance. Previous studies have compared the performance of subjects taught by male lecturers with that of the female counterparts. The effect of gender on students was investigated by Ogunwumi (2005), who found out that; gender has a direct influence on the performance of students, whereas, Martine, Kayson and Smith (2005) found out that; there was no significant main effect of gender based on classroom management, motivation among others.

Lecturers with many years of experience have contributed to an understanding of what work and what does not work in managing classroom and the behavior of students. Years of experience determine the ability to cope with difficult situation in class. However, most Nigerian lecturer like their counterparts elsewhere, and like human being do not operate in a vacuum. They live in and are influenced by their environment. They posses certain attributes that are endowed on them by

nature, experience and training. Past studies have been unable to account for why some lecturers are more successful than others in raising performance. They have not identified any direct links between student scores and specific lecturer's characteristics such as, experience, level of professional development, level of educational degrees, attitude, and gender. Meanwhile, it has been observed over times that, information on adult mortality and cause of death is not generally available, while the coverage and costs of many interventions are not measured properly, and the information needed to monitor equity is inadequate. Therefore; this study seeks to address how lecturer's characteristics influence Information and Technology (IT) skills among health information management students in Cross River state. Also, the following research questions will be addressed by the study.

1. What is the level of IT skills among the health information management students in health institutions in cross river state?
2. Are there significant relationships among the independent variables (lecturers' qualification, teaching experience, gender, and attitude) on IT skills among health information management students in Cross River state?

3. To what extent would the joint contribution of the independent variables ((lecturers' academic qualification, teaching experience, gender, and attitude) have on IT skills among health information management students in Cross River state?

4. What is the relative effect of each of the independent variables ((lecturers' academic qualification, teaching experience, gender, and attitude) on IT skills among health information management students in Cross River state?

METHODOLOGY

The study adopted descriptive design of correlational type. Purposive sampling technique was used to select two health institutions in cross river state with a total of 216 (116 female and 100 male) students. Students were selected for the study using simple random technique. Data were collected using a 30-item structured questionnaire titled "lecturers Test Administration Questionnaire" (LTAQ).

Lecturers Attitude to teaching (LAT) instrument was constructed by the researchers based on the variables of the study. The instrument consists of two sections A and B. section A consist of items meant to elicit demographic information from respondents such as; qualification, years of experience and gender, while Section B is made up of 20 items measuring the attitude of lecturers, with response format ranging from: Strongly Agree (SA) Agree (A) Disagree (D) and Strongly Disagree (SD), a tick (√) in a box depicts opinion, with 4, 3, 2, 1 point value attached to them respectively

The reliability was also determined using Cronbach alpha procedure which yielded high internal consistency values of .86. Correlation and multiple regression was used as tool for data analysis at 05 level of significance

Results

Research question 1

What is the level of IT skills among the health information management students in health institutions in cross river state?

S/N	Student IT skills	SA	A	D	SD	Mean	St.D
1	I have ability to work with data base management	120 (58.0)	49 (22.5)	33 (14.5)	114 (5.0)	3.34	.904
2	I can create tables without assistance	111 (53.5)	58 (27.0)	34 (15.0)	13 (4.5)	3.30	.884
3	I can explore any health information with my computer	72 (34.0)	41 (18)	52 (24)	51 (23.5)	2.63	1.18
4	I use software in analyzing most of the health information	105 (50.5)	55(25.5)	10 (3.0)	46 (21.0)	3.06	1.17
5	Use of internet helps the exchange of information among colleagues	85 (40.5)	65 (30.5)	23 99.5)	6 (1.0)	2.91	1.15
6	I have the ability to use power point slides	121 (58.5)	69 (32.0)	15 (5.5)	12 (4.0)	3.41	.914
7	I have the ability to search the internet	115 (55.5)	67 (31.5)	9 (2.5)	13 (4.5)	3.28	1.07
8	I have the ability to use electronic clinical coding	30 (13.0)	62 (29.0)	32 (14.0)	85 (40.5)	2.90	1.17
9	I have sufficient skills in analysis	65 (30.0)	86 (41.0)	24 (10.0)	32 (14.0)	2.79	1.15
10	I have access to health related archives on the internet	32 (14.0)	54 (25.0)	40 (18.0)	81 (38.5)	2.06	1.17

*percentages written in parenthesis

Table 1. Shows the level of IT skills among health information management students. The study reveals that, majority of participants have knowledge of how to use IT applications like power point (90.5). However, very few (9.5%) reported that they could skillfully use Microsoft Word, Excel and Access. It is important to note that the extent of their use was not determined in this study. Also, a significant percentage of the health professionals have ability to work with data base management (80.5%), (19.5 %) had no skill in data base management, (80.5%) can create tables without assistance, (87%) have the ability to search the internet and (76%) of the student agree to the use of software in analyzing most of the health information. While, (54.5%) of the professionals

do not have the ability to use electronic clinical coding as well as have access to health-related archives on the internet (56.5%). Thus, the study shows that student have good knowledge of information technology skills though adequate training is still lacking in the use of related achieves on the internet and electronic clinical coding. These findings differ with various studies that indicated that there was a low level of knowledge of IT skills

Research question 2

Are there significant relationships among the independent variables (lecturers' qualification, teaching experience, gender, and attitude) on IT skills among health information management students in Cross River State?

Table 2: Summary of Test of significant Correlations among Independent Variables and IT Skills among Health Information Management Students in Cross River state?

	IT Skills	Teaching Experience	Teacher Gender	Teacher Attitude	Education Qualification
IT. Skills	1.000	.536	.349	.055	-.005
Lecturer Experience		1.000	.365	-.006	.001
Lecturer Attitude			1.000	-.014	.033
Lecture Gender				1.000	.067
Education Qualification					1.000

The results from Table 2 showed that there was a positive and significant relationship between lecturer's qualification, lecturers experience, gender and attitude and IT skills among health information management students in Cross River state. Students' IT skills had significant correlation with teaching experience ($r = .536$, $p < 0.05$), lectures' attitude ($r = .349$, $p < 0.05$) and teacher's gender ($r = .055$, $p < 0.05$) of the respondents respectively.

Research question 3

To what extent would the joint contribution of the independent variables (lecturers' academic qualification, teaching experience, gender, and attitude) as predictors of IT skills have on health information management students in Cross River state?

Table3: Summary of Regression Analysis of the combined prediction of students' IT Skills in the four independent variables

R =.565*

R Square =.319

Adjusted R square =.305

Std. Error =5.59482

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2974.933	4	743.733	23.760	.000[a]
Residual	6354.297	203	31.302		
Total	9329.231	207			

a. Predictors: (Constant), Educational qualification, teaching experience, lecturers' attitude and gender.

b. Dependent: IT skills of students in health information management

Table 3: reveals a significant combined prediction of the independent variable teacher characteristics (lecturers' qualification, experience, gender, and attitude) and IT skills of students in health information management. The result yielded a positive coefficient of multiple regressions R= 565*, multiple R^2 = 319 and Adjusted R^2 =. 305. This suggests that the four independent variable combined accounted for 30.5% (Adj.R^2= .305) variation in the prediction of IT skills of students in health information management.

The ANOVA result from the regression analysis shows that there is a significant joint effect of the independent variables on IT skills at F (4,204) =23.760, P<0.05. Hence the independent variables jointly predicted the IT skills of students in health information management institutions.

Research question 4

What is the relative effect of each of the independent variables (lecturers' academic qualification, teaching experience, gender, and attitude) on IT skills of students in health information management institutions in Cross River State?

Table 4 Summary of relative effect of independent variables on IT skills of students in health information management institutions.

Model	Un standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	16.392	2.813		5.827	.000
Lecturer Experience	.530	.070	.472	7.579	.000
Lecturer Attitude	.352	.123	.179	2.867	.005
Lecturer Gender	.017	.016	.062	1.062	.290
Education Qualification	-.039	.149	-.015	-.262	.794

a. Dependent Variable: IT skills of students in health information management

Table 4 reports the standard beta (β) coefficients which give a measure of the contribution of each independent variable to the model as predictor of the dependent (criterion) variable. Hence, there is a change of one (1) SD in the independent (predictor) variable while controlling for the other predictors. It means that if each of the independent variables increase the dependent will increase by the beta values. Also, out of the four (4) independent variables (lecturers' qualification, teaching experience, attitude and gender), lecturers experience [β =.472, $t_{(204)} = 7.579$, $p < .05$], lecturers' attitude [$\beta = .062$, $t_{(204)} = 1.062$, $p < .05$], are the most influential predictor variables on IT skills of students in health information management institutions in Cross River State?

Discussion of Result

These results mean that students whose lecturers had higher academic qualifications (post graduate) performed academically better in school examination them their counterparts whose lecturers had lower academic qualifications (NC/OND and first degree). The result support an earlier finding by Rice 2003), who in his study using 125 students taught by 10 lecturers with masters and first Degree revealed that the students performed significantly high in the subjects taught by lecturers with higher qualifications. The result is also in line with the study of Wayne and young (2003) who posit that, highly qualified lecturers organize and teach their lesson in ways that assures diverse students' opportunity to learn those subjects and score high marks in school examination. Everton (1995) in support of the study compared well educated teachers with less educated teachers and revealed that achievement gain for students with well-educated teachers was significantly high.

Conclusion/Recommendations

Based on the findings of this study, the following conclusion is drawn. That; lecturers' teaching experience and attitude influence academic performance of students in IT skills among health information management student in collages of health institution in Cross river state. Lecturers with post-graduate qualifications were better than their counterparts with lower teaching experience in terms of their students' IT skills in school. The study also concludes that educational

qualification of the lecturers and gender does not influence IT skills of student. Moreover, Lecturers who are committed to their job (teaching) despite their length of years of service becomes more effective and help to increase the level of student's skills acquisition in health information management. This means that lecturer's gender does not make any difference to students IT skills. Hence both male and female lecturers are interested and committed in increasing student IT skills in health information management.

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