

INFLUENCE OF BRAIN DRAIN SYNDROME ON LEARNING OUTCOME AMONG UNDERGRADUATES IN NIGERIAN UNIVERSITIES: A CASE STUDY OF OLABISI ONABANJO UNIVERSITY

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ABSTRACT

The Nigerian education industry is surrounded with several problems, one of which is brain drain in the nations' ivory towers. This has resulted in a situation where the highly skilled and specialized individuals leave the universities for greener pastures in other highly paid sectors within and outside the country. In addition, another factor considered responsible for the exit of these professionals from the universities are inadequate resources for research, poor academic infrastructures and poor funding of the Nigerian education system which has resulted to increase in teaching load. This paper therefore examined the influence of brain drain syndrome on learning outcome among Nigerian undergraduates in Olabisi Onabanjo University and its implication for national development. The data for the study were through primary and secondary sources on brain drain and national development through higher education. The method of data analysis was chi-square. The hypothesis revealed that brain drain caused vacuum of intellectual knowledge in Nigerian Universities (with $\chi^2_{cal.} = 20.28$ and $\chi^2_{tab.} = 7.82$). The paper concludes by stating that Nigeria's developmental challenges demand that Universities should stand up as one leading place to prepare the nation for the expected forward leap, but the evidence seems to suggest that the institution remain ill-prepared due to poor funding. Recommendations were made based on the findings.

Keywords: University, Brain drain, Academic staff, Migration, Funding.

INTRODUCTION

The Nigerian education industry is surrounded by a mirage of problems, one of which is brain drain in the nations' ivory towers. The issue of brain drain in some key sectors of the economy is not a new phenomenon. Thus, brain drain is a situation where the highly skilled and specialized individuals leave low-paying jobs for highly paid jobs, usually outside the country. In addition, those leaving the universities do so as a result of inadequate resources for research and academic infrastructures to reduce teaching load (Daily Sun, 2009).

The case of brain drain seems to be overlooked within the Nigerian educational

institutions. In this context only those at the pick of their job prefer to be in the Universities while the middle and low class levels tend to leave the system. This has been reported Nwokolo, (2003) who reported that teachers of technology are likely to desert the classroom than non technology teachers. The available scientists and engineers shun teaching jobs for more lucrative jobs or self employment giving lack of training programmes, poor implementation of government policies and poor work conditions in the education sector, among others (Kahi and Ndokwo, 2009), as mere reasons.

The advancement of the developed countries since the end of the Second World War has been through an aggressive human capital development. Indeed, the globalisation phenomenon of the present age could not have been possible without the development and application of knowledge and the institutional capacity to sustain it. The examples of the United States of America and Germany, and of course, other developed countries reveal the critical role that universities play in national development. Universities in Europe and America demonstrate their social relevance not only through their esoteric research, but also through their contribution to meeting the needs of industry. An enabling environment for human capital development among the community of actors is important and the governments in these countries recognise their important role and have provided all what they need to meet their mandate.

The underutilisation of existing capacity and the loss of same through brain drain have made Africa to remain underdeveloped (Oni, 2008). The countries of Africa constitute most of the poorest societies in the world as they show the lowest indicators of socio-economic development (World Bank, 2008). While the level of poverty in the continent has been attributed to many interrelated causes by different social science researchers and other scholars, the low level of capacity building indicators has, in the last decade begun to emerge in research as a major cause of Africa's underdevelopment (World Bank, 2006). It is also argued that the recent rapid economic development of the countries of Southeast Asia in the 21st century has been due largely to their deliberate policy on capacity building through investment in human capital and institutional building. Development in Southeast Asia has been promoted through systematic and deliberate policies directed at capacity building both human and institutional. In contrast, most African countries including Nigeria, have displayed lack of attention to the

relevance and development of institutional capacity building, which have significantly affected the learning outcome of Nigerian Universities undergraduates. Thus, poor remuneration has been considered as being responsible for the outcome which has reduced the status of the university's academic staff and our institutions where more value is placed on material attainment rather than educational accomplishments. To recapture the worth of their intellectual achievements, many highly educated professionals move from their poor working condition, to those places where they think their worth is likely to be recognized and rewarded Tetley (2007). The situation is compounded in a culture where the academics, who are usually the better – placed members of their extended families are expected to provide economic and social support for other kin. In the face of the constant demand from family members, and in their ability to fulfil their cultural obligations to their keen, many staff seek better opportunities elsewhere with the hope of gaining the where withal to fulfil these obligations, leaving their institutions in the state of manpower shortage. In this situation the available lecturers on ground will be over- loaded with courses to teach. However, the brain drain effect on learning outcome of undergraduates in Nigerian universities as observed by Okeke (2007) and it includes:

- i. The inability of lecturers to cover all the course outline they taught as a result of heavy work load on them
- ii. Due to limited time, bulk of work which they carry within the semester, not all the courses allocated to them are being taught; rather students are given the course content to study for examinations. This in turn produces poor academic output due to inadequate guidance.

In such a situation, student's learning outcome will be affected due to brain drain syndrome in our institutions of higher learning.

RELATED LITERATURE

The concept of Brain Drain and its Contemporary Trends in the Global Context and Nigeria

The concept of brain drain used in the contemporary literature reflects emigration of highly skilled labour force. Traditionally, international labour migration is viewed as economic migration when people leave for better working and leaving conditions. In the literature, dealing with migration phenomenon, there is no precise definition of "brain drain". For instance, the Oxford dictionary gives a link to the loss of academic and qualified personnel because of their emigration (Oxford dictionary, 2006). The brain drain category embraces large scale of people from highly educated persons with the university degree of well-trained skilled workers (Korner, 2008; Iredale, 2009). Migration of scientist, academic personnel and other professionals is characterized as migration of talents. Highly skilled migration includes: managers, financial analysts consultants of special services, academics, scientists, engineers, computer specialists, biotechnologists etc (Castells, 2002)

Brain drain again is any process that leads to educational institutions losing some or a significant number of its academic staff to other sectors of the economy or to other countries. Brain drain in whatever perspectives, as it is being described, is the wide spread migration of academic staff from the universities in the country to overseas universities or its equivalent institutions where their services are better rewarded.

It could be noticed that the object of brain drain is practically related to the matters of great concern. In Canada recently brain drain is seen mostly as a loss of medical attendants. In Italy, attention is pointed mostly at scientist and Ph.D students (Cervelli in Fuga, 2005, Brandi, 2006). In Nigeria the phenomenon of brain drain has taken a large scale to an extent where highly educated

persons are usually considered potential migrants (Kuzmickaite, 2002).

"Brain Circulation" and "brain waste" are two other concepts related to the brain drain. "Brain circulation" characterizes both emigration (loss) and Immigration (gain) of highly skilled persons (Castells, 2006). In fact, the brain drain countries are usually highly developed ones and in recent time to emerging economies developing nations (eg. USA, Western Europe and South Africa). For Nigeria, brain loss is a typical feature of contemporary highly skilled migration from the nation's ivory tower to the shores of the developed and emerging world where their services will be rewarded. "Brain waste" on the other hand refers to the highly skilled people who pass from highly skilled positions to low-skilled or unskilled works due to dissatisfaction of their former job.

Migration of intellectuals emerges not only in the under developed or economically weak countries but also in developed countries. Currently, the problem of brain drain is also familiar to such countries as Canada, UK, Ireland, France, Italy, Germany etc. However, looking at the dimensions of the brain drain, Central America and pacific region countries are in the foreground (Docquier, 2007). The biggest pull centres of highly skilled labour are USA and Canada which has significantly increased the quota for Immigration visas. The United States differ from other pull countries by its excellent research centres, flexible and open career opportunities, strong entrepreneur culture and high living standards. It has been estimate that about 50% of the Europeans, who graduated from their doctoral studies, continue their further work in the United States. On the other hand, some EU member states (France, Germany, Ireland and UK) have launched similar programmes to attract highly skilled immigrant ((Docquier, 2006).

Nigerian university teachers are also affected by the general state of the anomaly and frustration. The lecturers are not happy with their

jobs. Labour turnover rates are high while strike actions are common occurrence, despite the Academic Staff Union of Universities (ASUU) and the Federal Government resolution to reposition the nations' ivory towers in 2013 the situation has not changed.

Causes of Brain Drain in Nigerian Universities

Several factors have been attributed to the widespread migration of academic staff of Nigerian Universities to other parts of the world, they include;

- i. **Poor Pay Package to the Lecturers:** It is not an understatement to say that lecturers in the nation's universities are not well remunerated, compared to their counterparts in other parts of the world. Utile, (2010) stated that in Nigeria, a professor earn a salary of about 6 million per annum (an equivalent of \$39,000USD) while his counterpart in south Africa earns R455,776 per annum (an equivalent of \$74,754.67USD) which is about N9.4 million. In a related development Akindutire, (2011) described the situation as unfortunate where a young graduate takes up a job outside the unified public service/ oil and gas industries and earn twice the salary of a professor per annum. The author posited that this does not portend a good image to the highly skilled personnel in the Nigerian university system.
- ii. Apart from the social environment that has not been conducive in the ivory tower, the physical working environment seems to be very unfavourable. Physical facilities are in state of disrepair, the laboratories are ill equipped, and libraries are full of empty shelves, while the few books are outdated, several capital projects are abandoned. More so, only a few of the universities can take advantage of modern information technology for example the electronic internet connectivity. This scenario according to Utile, (20012) has led to unprecedented strike actions which has made some of the universities ungovernable while many of the universities teachers have moved to other countries for better pay, thus, heightening the brain drain syndrome. Meanwhile, the inadequacy of resources in our institutions of higher learning is what Ajayi and Ayodele (2004) described as an offshoot of the endemic financial crisis in the sector.
- iii. Poor funding, epileptic power supply and infrastructural decay in Nigeria is an added obstacle to meaningful scientific research. Devaluation of the Nigerian currency has also resulted to poor research output which is also responsible for the high mobility of top flight academic. Most conferences and researches are conducted, attended and funded by individual academics or group of researchers which ordinarily ought to be funded through grant as is obtained in other parts of the world.
- iv. The financial embarrassing situation and the federal Government's failure to accord the Universities its pride of place in terms of allocation of funds has over the years generated an unpleasant discord between the Academic Staff Union of Universities (ASUU) and the federal Government. Odekunle, (2007) lamented that Nigerian Universities have been grossly under-funded and the consequence of the financial crisis is the loss of great deal of valuable manpower to overseas countries. However the underfunding of the system has manifested itself in the deficiency of infrastructural development in the Universities, institutional deterioration

which resulted to the exit of several intellectual from the system.

Effects of Brain Drain in Nigerian Universities

The consequences of brain drain has manifested in a number of ways which have seriously depleted the intellectuals in Nigerian universities. Some of the effects are discussed below.

i. Poor Educational Standards

The mass movement of academics from the nation's universities to other parts of the world has invariably taken its toll on the quality of outputs produced from the system. Oni (2008) stated that in this very depressing situation the process of teaching, research, publication and knowledge development has no relevance to the challenges of the next generation or even the present global market. He therefore, maintained that the quality of training given to students in African Universities fall short of the demands of the global market.

ii. Reduction in the Quality of Skilled Manpower in Nigerian Universities

While the academics leave the ivory tower for greener pasture in other sectors of the economy within and outside the country, it presupposes that the quantity and quality of academic staff in the system will be reduced Okebukola (2005).

iii. Increase in the Gross Domestic Product (GDP) of the Receiving Countries

There is no doubt that the flight of seasoned academics to overseas would increase the Gross Domestic Product of the receiving countries while their home countries are automatically the losers. Other factors such as increase in the dependence of foreign assistance by the Nigerian Universities will evolve and further retard the technological advancement of the home country.

Effect of Brain Drain on Academic Community

Education plays a big role in the growing problems of international migration of high level

educated individuals from poor countries to the rich ones causing the so called Brain Drain to the poor countries. Scientists, engineers, academics and physicians who have been trained with scarcely available resources at social cost in their home countries for the benefits and growth of their academic institutions and the nation at large. However, this has simply left helplessness to most of our institutions that have been losing thousands of their highly educated workers for the benefits of the rich countries and individuals themselves.

Other effects of brain drain remain the fact that it increases the dependency level of foreign assistance by Nigerian Universities; it also retards the technological advancement of the releasing country, as the enlightened population that would have contributed immensely to the technological development of the country, would have gone to the western world to add to their growth and development.

RESEARCH QUESTIONS

The study attempt to answer the following questions:

- i. How does brain drain affect the academic activities in the Nigerian Universities?
- ii. To what extent does brain drain affect the academic performance of Nigerian University undergraduates?
- iii. How does brain drain affect the management of University Education?

Research Objectives

The overall objective is to examine the influence of brain drain syndrome on the learning outcome among Nigerian undergraduates. The specific objectives are to:

- (i) Find out how brain drain syndrome affects Nigerian University system
- (ii) Identify the major causes of brain drain in Nigerian Universities

Research Hypotheses

In order to provide answers to the problems of the study, the following research hypotheses were formulated and tested.

- i. There will be no significant influence of brain drain on the vacuum of intellectual knowledge in Nigerian Universities
- ii. There is no significant effect of brain drain on students' academic performance in Nigerian Universities
- iii. Brain drain will not significantly influence the management of Nigerian Universities.

METHODOLOGY

Research Design

The design used for the study was the descriptive survey, this is appropriate because of its use to collect a representative sample on an existing phenomenon. Sample and Sampling Techniques

A combination of purposive and stratified random sampling was used to select eight faculties out of ten faculties in the university under study (Olabisi Onabanjo University) and the following academic strata: Professors, Associate Professors, Senior Lecturers, Lecturer I, Lecturer II, Assistant Lecturers, and Graduate Lecturers. Stratified random sampling technique was then used to select one hundred and fifty (150) students from eight faculties. This was done to ensure ease accessibility of sample and true representation in the university. These faculties include: Faculty of Science, Education, Art, Social Sciences, Pharmacy, Law, Agriculture and Technology.

Data Source

Primary and secondary data were used in the study. Primary data were used to quantify the physical flow of brain drain from the universities. Although the secondary data used for the study were quite few, they nevertheless were required to provide background information on the brain drain in Nigerian Universities, particularly on its influence on learning outcome of undergraduates.

Method of Data Analysis

The method of data analysis used for the study was the Chi square.

Findings and Discussions

In this section, the research hypotheses formulated were tested and the results are as presented below.

Hypothesis 1

There is no significant influence of brain drain on the vacuum of intellectual knowledge in Nigerian Universities.

Table 1.1 Chi square result on the influence of brain drain on the vacuum of intellectual knowledge in Nigerian Universities

Response	Frequency	%	χ^2 cal.	df.	χ^2 Tab	Remark
Agree	107	71.3				
Disagree	43	28.6	20.28	3	7.82	Reject the null hypothesis
Total	150	100				

df=3; $p < 0.05$

Form the above table, one hundred and seven (107) responses representing 71.3% agreed that brain drain promotes migration of

intellectual academics to other sectors in search of greener pasture thereby creating vacuum in the Institution where movement

occurred. While, forty three (43) respondents representing 28.4% disagreed that brain drain will not promote the migration of intellectuals to other sectors/abroad in search of greener pasture.

The critical value is 7.82 while, the obtained chi-square value is 20.28. Since obtained χ^2 value is greater than the table value; it therefore, implies that brain drain promote migration of

intellectuals to other institutions/sectors in search of greener pasture thereby creating vacuum in the home institution.

Hypotheses 2:

There is no significant effect of brain drain on students' academic performance in Nigerian Universities

Table 1.2: Chi square result on the effect of brain drain on students academic performance

Response	Frequency	%	χ^2 cal.	df.	χ^2 Tab	Remark
Agree	112	74.7	69.12	3	7.82	Reject the null hypothesis
Disagree	38	25.3				
Indifferent	-	-				
Total	150	100				

df=3; p< 0.05

It is evident from table 1.2 that one hundred and twelve (112) respondents representing 74.7% agreed that brain drain adversely affect the academic performance of the students which will invariably reduce the productivity of the potential labour force in the country, while thirty eight (38) representing 25.3% disagreed that brain drain does not in any way affect the academic performance of university students with regards to migration of intellectuals from the Universities.

The table value is 7.8, while the calculated chi-square value is 69.12. Since the obtained χ^2

value is greater than the table value, this therefore implies that the alternative hypothesis will be accepted, which states that there is a significant relationship between brain drain and students' academic performance in the Nigerian Universities.

Hypotheses 3

Brain drain will not significantly influence the management of Nigerian Universities.

Table 1.3 Chi square result on the influence of brain drain on the management of Nigerian Universities

Response	Frequency	%	χ^2 cal.	df.	χ^2 Tab	Remark
Agree	104	69.3	133.4	3	7.82	Reject the null hypothesis
Disagree	46	30.7				
Indifferent	-	-				
Total	150	100				

df=3; p< 0.05

The table above revealed that one hundred and four (104) respondents, representing 69.3% upheld the view that brain drain negatively affects the effective management of Nigerian Universities, while forty six (46) respondents representing 30.7 % disagreed that the exit of

academics in the university does not affect the management of Nigerian Universities. Table 1.3 shows that χ^2 calculated ($\chi^2_{cal} = 133.4$) is greater than χ^2 table ($\chi^2_{tab} = 7.82$). Hence, the null hypothesis is rejected.

The outflow pattern of Academic Staff of Olabisi Onabanjo University from 1997–2010

Table 1.4. shows the outflow of Academic Staff Faculty in Olabisi Onabanjo University.

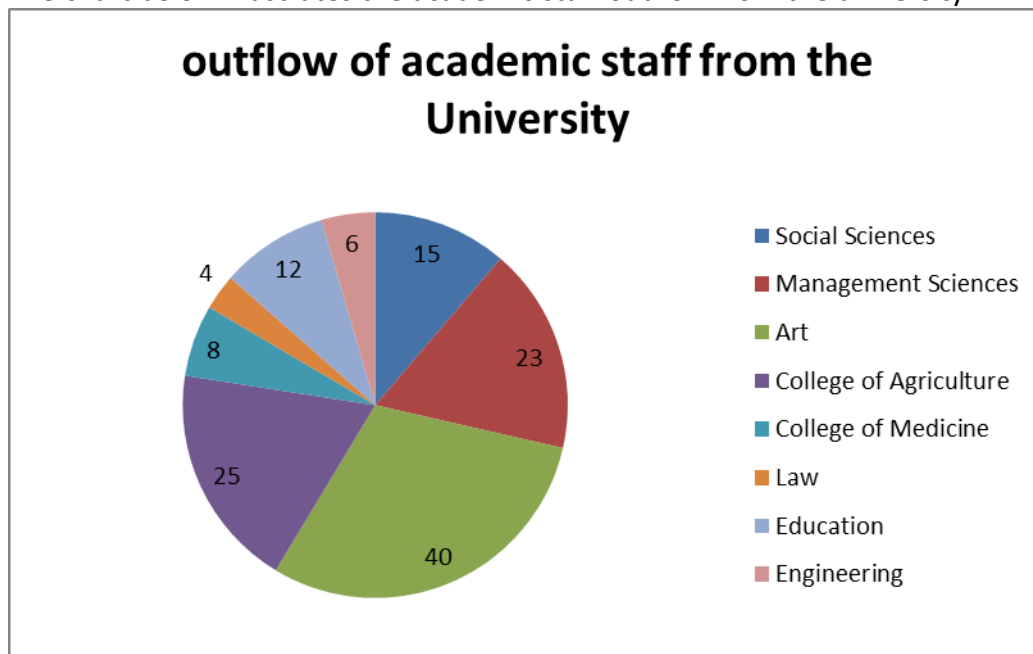
To corroborate the results of tables 1.1, 1.2 and 1.3, table 1.4 was generated to further demonstrate the extent of brain drain and the possible influence on the university.

Faculty	Number	%
Social Sciences	15	11.3
Management Sciences	23	17.3
Art	40	30.1
College of Agriculture	25	18.8
College of Medicine	8	6.0
Law	4	3.0
Education	12	9.0
Engineering	6	4.5
Total	133	100

Source: OOU Establishment unit

Chart 1.1: Outflow of Academic Staff from Olabisi Onabanjo University.

The chart below illustrates the academic staff outflow from the university.



The above table shows the outflow pattern of academic staff by faculty. It further revealed that 15 academic staff from Social Sciences left the academic system to other sectors, 23 academic staff representing 17.3% of the total number that left the system were from Management sciences. Furthermore, 40 academic staff left from the faculty of Art, while 25 staff representing 18.8% left the

college of Agriculture. 8 lecturers left the college of Medicine, 4 academic staff from the faculty of Law. In the same manner, 12 academic staff representing 9.0% of the total number that left the university within the same period were from the faculty of Education, while 6 staff representing 4.5% left engineering faculty. The danger of the exit of these skilled academics on the university is

that the management board of the departments, faculties and the university will be affected due to the departure of these key academic players. The most grave effect is that the vacuum created by these departed lecturers cannot be filled easily and such will affect the academic output of the students as

there will be some courses without lecturers, even where the institution tries to provide succour they end up engaging lecturers within who are not expert in that field of study thereby increasing academic workload on the existing lecturers.

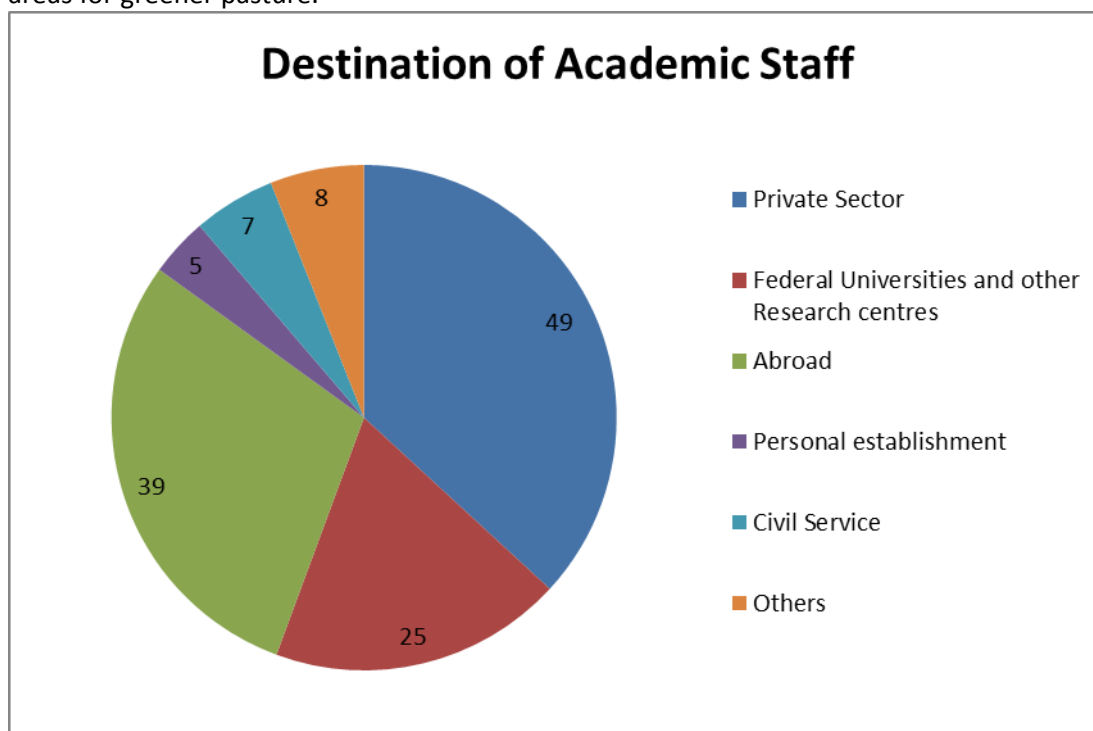
Table 1.5 Destinations of Academic Staff that Left the University

Destination	Number	%
Private Sector	49	36.8
Federal Universities and other Research centres	25	18.8
Abroad	39	29.3
Personal establishment	5	3.8
Civil Service	7	5.3
Others	8	6.0
Total	133	100

Source: OOU Establishment unit, 2010.

Chart 1.2: Destinations of Academic Staff who left the University.

The chart below illustrates the destination of the academic staff that left the university to other areas for greener pasture.



The above table and chart reflects on the outflow of the academic staff based on

different destinations they left to. It is evident from the table that 49 staff among those who

left the system moved to the private. 25 out of the total number that left went to federal universities and other research centres, while 39 staff representing 29.3% of those that left, travelled abroad. In similar situation, 5 of them went into personal establishment, while 7 staff representing 5.3% moved to civil service jobs. The table also revealed that 6.3% of the total academic staff that left the university was engaged in various activities within the country.

DISCUSSION

It is evident from the findings that brain drain syndrome creates a vacuum of intellectuals in Nigerian university as revealed by the first hypothesis. This is in accordance with Akindutire (2007) , that institutional deterioration and salary erosion during the last decade have prompted substantial “brain drain” of academic staff and impeded new staff recruitment. The Guardian Newspaper editorial comment of December, 4th (2006) also confirm this position, which states that in the past 20 years, a sizable number of Nigerian academic have migrated abroad into universities and research centres in America, Europe and Middle East due to poor academic infrastructures and salary dissatisfaction.

The analysis in table 1.2 revealed that there is a significant relationship between brain drain and students’ academic performance in the Nigerian Universities. This implies that brain drain syndrome in the universities affects the learning outcome of undergraduates. On this note, the World Bank (2006) observed that in today’s life-long learning framework, tertiary education provides not only high level skills necessary for every market but also the training essential for teachers, doctors, nurses, civil servants, engineers, entrepreneurs, scientist and a myriads of personnel. It is these trained individuals who develop the capacity and analytical skills that drive local economies,

support civil society, teach children, lead effective governments and make important decisions that affect the entire society. But when there is migration of these lecturers from our universities to abroad, the above stated goals will never be achieved and the academic performance of students in the nations’ universities will be greatly affected.

A strong relationship also exists between brain drain and management of Nigerian Universities, as table 1.3 upheld the view that brain drain negatively affects the effective management of Nigerian Universities. Nigerian Universities have witnessed a series of industrial conflicts over the failure of the employers to review their employee conditions of service and the progressive encroachment, on the power and authority of the governing council as well as day- to - day administration of universities through Government directives, (Tamuno ,2009). Ibukun (2007) observed that university governance in Nigeria is nothing but crisis management due to the problem of migration of university intellectuals and other crisis, affecting the management of our tertiary institutions. According to Oyeneye (2006) and Agbegbite (2007), the major challenges facing the management of university system in Nigeria is inadequate funding and migration of University lecturers to abroad for greener pasture.

Table 1.5 revealed that 133 academic staff left Olabisi Onabanjo University over a period of 13 years to other sectors, within and outside the country. This further indicated that 30 per cent of the academic outflow was overseas. What it implies, is that labour flow from one geographical location to another is due to discrepancy in salary structure (Stark, 2004).

CONCLUSION

Nigeria’s developmental challenges demand that Universities should stand up as one

leading place to prepare the nation for the expected forward leap, but the evidence seems to suggest that the institution remain ill-prepared. This is due partly to low morale of teachers, which has resulted to high rate of intellectual outflow from the system. It is justified to say that lecturers will put in their best only when the work environment is conducive, good welfare packages like good houses, adequate health insurance, training and development opportunities are put in place. Given their role in the society, there is the need to pay special attention to University academics in providing all the requisite academic infrastructures and basic welfare to function optimally.

Universities all over the world are recognized as centres of excellence, where knowledge is not only acquired but also disseminated to those who require it. The state of things in Nigerian Universities seems unsatisfactory thus, resulting to migration of lecturers in search for a better place.

It has been established in the course of this study, that brain drain is a virus that can destroy the entire university system and make it become a shadow of itself if proper attention is not given to it. On these bases, the entire stakeholders in the University education sector are advised to rise to the challenges and combat the menace facing the University system.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made.

1. One of the important measures to be taken at the national level is the re-orientation of the education system with a view to discourage migration of trained people. Educational planning need to be defined in conformity with social strategy, manpower needs and supply and the structure of skill required for national development. Educational policies must be in accordance with assessment of needs.
2. The wages and salary as well as other allowances and welfare packages of academic staff should be improved upon. This will keep the academic staff away from looking outward for better opportunities.
3. Efforts should be made at improving the overall academic infrastructures in Nigerian Universities, this will in turn improve the learning outcome of University undergraduates.
4. Universities should device means of given recognition to deserving lecturers, such that academic hard work will be rewarded while indolence and mediocrity are punished.
5. Promotion prospects should also be improved in order to enhance sense of achievement and advancement.

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