

**ADMINISTRATORS' LEADERSHIP SKILLS,
MANAGEMENT SUPPORT SERVICES AND
UNIVERSITY PRODUCTIVITY
IN NORTH-CENTRAL NIGERIA**

**BY
SALLEE, Kikelomo Wasilah
85/8589**

**A THESIS SUBMITTED TO THE DEPARTMENT
OF EDUCATIONAL MANAGEMENT, FACULTY
OF EDUCATION, UNIVERSITY OF ILORIN,
ILORIN, NIGERIA IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE AWARD OF
DOCTOR OF PHILOSOPHY (PH. D) DEGREE IN
EDUCATIONAL MANAGEMENT**

Supervisor: Dr. Y. A. Fasasi

April, 2018

CERTIFICATION

This is to certify that this study was carried out by SALLEE, Kikelomo Wasilah and has been approved as having met part of the requirements for the award of the Degree of Doctor of Philosophy (Ph.D.) in Educational Management, in the Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, Nigeria,

Fasasi

Dr.Y.A.

Supervisor

Prof. Afusat. T. Alabi

(Head of Department)

Prof. N. B. Oyedeji

(Dean, Faculty of Education)

Prof-----

External Examiner

DEDICATION

This research work is dedicated to the loving memories of my father and sister.

ACKNOWLEDGEMENTS

I am forever indebted to my awesome creator, Almighty Allah for seeing me through the vicissitudes of life and for giving me the courage to forge ahead despite all daunting challenges.

I am grateful to my supervisor, Dr. Y. A. Fasasi, for his patience, guidance, accessibility and efforts to see to the successful completion of this study. My gratitude

goes to the Dean, Faculty of Education, Prof. N. B. Oyedeji for his leadership. To my Internal /External Supervisor, Prof. (Mrs.) F. A. O. Olasehinde-Williams, I appreciate her brilliant and constructive contributions and guidance towards this study. I also appreciate Prof. Afusat T. Alabi, the Head of the Department of Educational Management for providing the enabling environment that made the study a success.

I am most grateful for the kind assistance of all lecturers and staff of the Department of Educational Management: Prof. D. O. Durosaro, Prof. (Mrs.) N.Y.S. Ijaiya, Prof. A. Y. Abdulkareem and Prof. A. O. Sofoluwe, Dr. (Mrs.) R. O. Oduwaiye, Dr. (Mrs.) P. A. O. Etejere, Dr. A. S. Omosidi, Dr. S. Oyeniran, Dr. (Mrs.) N. J. K. Abdullahi, Dr. A. A. Tijani, Dr. A. A. Atolagbe, Dr. H. A. Umar, Dr. A. A. Lawal, Dr. A. T. Murtala, Dr. A. A. Sheu, Dr. O. J. Ojo, Dr. R. L. Abdulkareem, Dr. D. J. Kayode, Dr (Mrs) N. J. K. Abdullahi, Dr. (Mrs.) I. J. Ogbudimkpa, Mr. B. A. Isiaka and Mr. O. M. Zubair.

I am indebted to Profs. Bayo Lawal, O. E. Abdullahi, H. O. Owolabi, Dr. Dorcas S. Daramola and my brothers and sisters in and out of the University of Ilorin who rendered selfless and unquantifiable support that made this study a success. I pray Allah reward you all and meet you at the points of your needs. I thank my colleagues on the Ph. D. programme for their words of encouragement.

I appreciate my research assistants in the sampled universities especially Dr. Abifarin, Unijos, Mr. Daniel, FUT, Minna, Mr. Terhemba, Uniagric, Makurdi, and Dr. (Mrs.) Idisi, Uniabuja.

My son, Tasleem, my nephews, nieces, aunties, staff of Retabrook Pharmacy and Stores are most appreciated for standing by me and for their words of encouragement.

ABSTRACT

Managing universities for improved productivity and overall growth and development of the nation requires administrators with appropriate leadership skills and adequate management support services. However, these requirements are perceived to be lacking, resulting in low educational output. Although previous studies have examined some factors that improve university productivity index, enough attention has not been paid to administrators' leadership skills (ALS) and management support services (MSS). This study therefore investigated the relationship among administrators' leadership skills, management support services and university productivity in North-central, Nigeria. The objectives of the study were to: (i) examine the level of leadership skills of university administrators (human, technical and conceptual); (ii) examine the adequacy of management support services (staff development, research and welfare); and (iii) determine the relationship among administrators' leadership skills, management support services and university productivity (teaching, research and community service).

A causal-correlation survey research design was used for the study. Multistage sampling technique was used to select five out of seven federal universities, 380 out of 1058 university administrators, 382 out of 5053 non-teaching staff, 383 out of 4259 lecturers, 383 out of 101, 821 students and 251 out of 658 beneficiaries of university community service programmes. Five validated researcher-designed instruments entitled Staff Assessment of Administrators' Leadership Skill Questionnaire (SAALSQ), Administrators' Assessment of Adequacy of Management Support Services Questionnaire (AAAMAAQ), Lecturers' Assessment of Research Productivity Questionnaire (LARPQ), Students' Assessment of Teaching Productivity Questionnaire (SATPQ) and Beneficiaries' Assessment of University Community Service Programmes Questionnaire (BAUCSPQ) were used for data collection. Reliability co-efficients of the instruments determined through test-retest method were 0.78, 0.76, 0.72, 0.64 and 0.68 respectively. Descriptive statistics were used to answer the research questions, while Pearson Product Moment Correlation statistics and Multiple Regression Analysis were used to test the hypotheses at 0.05 alpha level. The findings of the study were that:

- i. administrators' human, technical and conceptual skills were fairly adequate with mean values of 1.55, 1.14 and 0.97 respectively;
- ii. research, staff development and welfare support services were adequate with mean values of 4.47, 4.40 and 3.71 respectively;
- iii. MSS and ALS combined are significantly related to university teaching productivity with ($B=0.937$, $Se\ 0.017$, $t_c=54.33>t_t=1.69$ and $B=0.058$, $Se=0.0017$, $t_c=3.36>t_t=1.69$; $F_c=76.55$),
- iv. MSS and ALS combined are significantly related to university research productivity ($B=0.47$, $Se=0.05$, $t_c=9.33>t_t=1.69$ and $B=0.31$, $Se=0.36$, $t_c=6.13>t_t=1.69$; $F_c=751.97$); and
- v. MSS and ALS did not have significant relationship with community service productivity ($F=3.525$, $p>0.05$).

The study concluded that administrators' leadership skills and management support services are predictors of university productivity in North-central, Nigeria. The implication is that if university administrators' leadership skills and management support services are adequate, university productivity will improve. The study therefore recommended that universities should increase ALS and MSS to improve university productivity, especially community service productivity.

Word Count: 455

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CHAPTER ONE

INTRODUCTION

Background to the Study

University is a veritable universe and a steward of an endless chain of inquiry established to transform the host community into a city. It is an instrument of regional development and transformation, an agent of modernization, social mobilization and economic growth. Whether cited in a small town or a big city, a university is expected to attract the best minds from all over the world, project a universality of knowledge, transform the host communities through introduction of new knowledge and offering the community an opportunity to interact with the rest of the world. A university helps to develop a country's intellectual resources, produce a competent workforce and visionary leaders as well as fosters innovation and knowledge needed to inform policies, address challenges and enhance growth.

In Africa, universities are established to develop the expertise and strengthen institutions that will solve the problem of development deficit that manifest in poverty, insecurity, persistent hunger, uncontrolled diseases, lack of access to basic necessities of life, disregard for human rights, man-made disasters, unregulated exploitation of natural resources, insurgency, endemic corruption, low life expectancy, inadequacies in public health systems, income inequalities, high illiteracy rates and many other challenges that are threatening the existence of man (World Bank Report (1997). These high expectations are attested to by the (UNDP,

2016) which notes that African universities play a larger and more influential role in national development and society looks on to them to find solutions to their problems. According to the report, the success of Africa's development is very closely tied to the success of its universities. In Nigeria, this view has been expressed in the National Policy on Education and universities are expected to contribute to national development through teaching, research and community service. They are to build the political, socio-economic and intellectual capacities of citizens of the nation through the development of high level manpower (FRN, 2004). For this reason, Nigerian universities are expected to be supported to maintain high quality, having local contents while competing globally. Unfortunately, Nigerian universities have not been able to meet these high expectations and the Nigerian economy is scored low in all indices of development with the Nigerian nation subservient to nations with less natural resource endowment (UNDP, 2016).

The Nigerian education system is not spared the decline witnessed in other sectors of the economy. This decline manifests in low indices of qualitative education such as student performance in standardized tests, academic staff credentials, students and staff exposure to current knowledge and information as well as a mismatch between learning and labour market requirements (World Bank, 1997). Okebukola, (2010) painted a not-very-impressive picture of the Nigerian education system when he asserted that Nigerian universities were short of everything but students. There was acute shortage of staff to cope with increasing access. Funding inadequacies persisted, with poor instructional delivery. Nigerian universities have witnessed frequent strikes actions, with incidences of examination

malpractice, cultism and “sorting”. The battered image of the universities has been exacerbated with many students enrolling into degree programmes in illegal satellite campuses, unapproved universities, degree mills, and sandwich programmes. The situation has given a poor public image of Nigerian graduates as being half-baked as Afe (2008) rightly observed that they are despised by foreign schools and subjected to qualifying examinations at the point of entry. Many are rejected by local employers as they are said not to be employable.

The reason for this abysmal performance is not farfetched, the human capital development that is central to the harnessing of the other resources have not been fully developed. Knowledge development as against natural endowments determines a country’s global competitiveness (Fayemi, 2012). Leadership has been identified as one of the natural endowments, an instrument of power that drives performance and helps in the attainment of the goals of organisations (Edozien, 2011). The quality of leadership in organisations therefore to a large extent, dictates the level of the effectiveness of such organisations as McCormack, Propper and Smith (2013) likened good leadership to a good technology, it increases organisation’s productivity. A lot of approaches have therefore been adopted in understanding leadership in organizations especially in universities, and how best to tap the immense potentials of employees so as to drive productivity.

University administrators are leaders charged with the responsibility of harnessing the human, financial and material resources available in a university for the achievement of the tripartite mandate of teaching, research and community

service. University Administrators who provide leadership in the university play central roles; they manage the ever-evolving, large and heterogeneous teams, daily operations of the universities, and work closely with other university staff in order to achieve the broad missions and goals of universities (Goodall, McDowell, & Singell, (2014). As managers, they are responsible for the huge task of planning, organizing, coordinating, evaluating and reporting the affairs of staff and students in and outside the classroom, including managing the demands of the outside community, bringing synergies and making connections.

The important place of these Administrators in the achievement of the missions of universities requires that they must be well equipped and supported to position the universities for improved productivity. Unfortunately, these leaders are not well positioned to perform as expected as Davies, Pellert and Zechlin (2007) cited in a report carried out by the European Higher Education (2008) posited that university administrators who dictate the pace of development in universities lack the professional management experience that are in line with the requirements for public service management. Many have had to perform the challenging duties without adequate training and preparations for the challenges of the position (Chu, 2012). It is erroneous to think that academic expertise and a vested interest in the mission and standards of higher education can be substituted for competence in handling a sensitive position demanding different skill sets and dispositions in a higher education system. This is not so in many nations, as many have invested huge resources to equip university administrators with the necessary leadership and management competencies and knowledge to equip them for effective running of the

universities. Davies (1985), Pellert (2007) and Zechlin (2007) observed that Scandinavian countries, including some Anglo-Saxon nations, have avenues for imparting the necessary leadership skills in universities' leaders to build and improve qualifications for strategic leadership in universities. These efforts are geared towards safeguarding the traditional values of higher education against potentially detrimental effects of globalisation and its attendance massification (Pellert, 2007 and Zechlin, 2007).

While these European and Asian countries are making giant strides in responding to emerging challenges in the world, African nations, especially Nigeria are said to be lagging behind in societal expectations due to the nature and dynamics of their leadership (Megbo & Ahaotu, 2015). This problem is compounded by the government being the principal financier of education and the attendant demand for accountability by the government which is diminishing the priorities given to the well-being and development of workers (Tapper, Carter & Bak-Maier, 2007). Attention is recently being drawn to these anomalies, and stakeholders in the education industry are addressing the grand challenge of leadership deficit in Africa (Okebukola, 2015). Investment in leadership in the 21st Century University where the production process is gradually being taken over by intelligent machines has thus become a necessity (Boxall, 2016). University administrators or leaders are to be supported for the adoption of new techniques and innovative ways aimed at fostering the vision, mission and goals of the education system. This has called for improved acquisition of the right leadership skills. University administrators are to be supported to acquire the Katz's three-skill 1955 leadership skills, technical, human

and conceptual skills for improved performance (Mulhauser, 2014). There is also a need to adequately support university administrators so that they can harness the human, financial and material resources needed to achieve the missions of universities. An operating environment that fosters collaboration in the development of cutting-edge researches; where well-rounded graduates are produced to man the various productive sectors of the economy is imperative. These are to ensure that the universities' can better respond to the many problems that are diminishing the growth and development of nations. In addition, it is also to address the grand challenge of leadership deficit in the Nigerian universities so that they are repositioned for global competitiveness. This need has therefore prompted this study that examined the relationship among administrators' leadership skills, management support services and university productivity in North-central Nigeria. The research examined the various ways in which university administrators' leadership skills and management support services can improve the productivity and global competitiveness of universities in North-central Nigeria.

Statement of the Problem

Societal expectations of universities to provide world-class education and increase global competitiveness, in an era of information and communication technology cannot be overemphasized. Increased access to university education and resource constraints, the need to assess outcome in relation to resources utilized have challenged university administrators to adopt a new paradigm of management philosophies and operating principles. University administrators are expected to find

solutions to the problems that are preventing them from competing with their peers in world class universities. They must achieve their vision by providing world class environment where quality teaching and learning, research and community service will thrive.

Butt, Waseem, Rafiq, Khilji and Nawab (2014) examined some variables of leadership skills and their impact on employees' productivity in Pakistan. The study examined the impact of technical, emotional intelligence and interpersonal skills of administrators on increasing the productivity of employees. However, it focused only on sub-variables of leadership skills. Research conducted by Townsend and Rosser (2007) observed that efforts at determining university's output in Nigeria have always been marred by lack of synergy between universities and the industries. Similarly, Igbojekwe and Ugo-Ukoro (2015) carried out performance appraisal of academic staff in Nigerian Universities and Colleges. They investigated the various appraisal methods of lecturers and found that the present method is deficient as it is skewed in favour of research publication and paper presentation, placing less emphasis on outcomes of endeavours in teaching and community service.

Many of the studies did not focus on the university system with its unique and complex nature, providing heterogeneous outputs that are expected to solve the problems of the society (Flegg, Allen & Thurlow 2003). University administrators' leadership skills acquisition and support services that are central to the achievement of the missions and goals of universities have not been given the deserved attention. Empirical studies that addressed holistically the issues of reward, motivation and

the general condition of service in the Nigerian university system have left much to be desired. These issues have continued to be, flash points and Nigerian universities are said to be lagging behind in societal expectations, unable to compete favourably with their peers in developed countries.

To the best of the researcher's knowledge, these studies have not addressed the specific issues of leadership skills acquisition and the provision of the adequate support to university administrator for improved productivity of universities. This study was therefore an attempt to address the concerns of stake holders in equipping university leaders for improved performance of universities in North-central Nigeria. Specifically, the study examined the relationship among administrators' leadership skills, management support services and university productivity in North-central Nigeria. The study is therefore amply justified as it offered a research-based understanding of the skill requirement of university administrators and the support services needed to position them for improved service delivery to all stake holders in the Nigerian education system.

Purpose of the Study

This study is aimed at investigating the relationship among administrators' leadership skills, management support services and productivity of universities in North-central Nigeria using the under listed purposes:

1. ascertain the Leadership Skills of Administrators of Universities;
2. investigate the adequacy of Management Support Services to Administrators of Universities;

3. determine the relationship among Administrators' Leadership Skills Management Support Services and University Teaching productivity;
4. determine the relationship among Administrators' Leadership Skills Management Support Services and University Research productivity; and
5. determine the relationship among Administrators' Leadership Skills Management Support Services and University Community-service productivity in North-central Nigeria.

Research Questions

To achieve the purpose of this study, the following research questions were raised:

1. what are the leadership skills available to administrators of universities?
2. what are the management support services available to administrators of universities?
3. what is the relationship among administrators' leadership skills management support services and university teaching productivity?
4. what is the relationship among administrators' leadership skills management support services and university research productivity? and
5. what is the relationship among administrators' leadership skills management support services and university community service productivity in North-central Nigeria?

Research Hypotheses

The following research hypotheses were formulated to guide the study:

Main Hypothesis

Ho: There is no significant relationship among administrators' leadership skills, management support services and university productivity in North-central Nigeria.

Operational Hypotheses

Ho₁: There is no significant relationship among administrators' leadership skills, management support services and university teaching productivity in North -central Nigeria.

Ho₂: There is no significant relationship among administrators' leadership skills management support services and university research productivity in North -central Nigeria

Ho₃: There is no significant relationship among administrators' leadership skills management support services and university Community-service productivity in North-central Nigeria.

Scope of the Study

The study examined the relationship among Administrators' leadership skills, management support services and university productivity in North-central Nigeria.

In order to have adequate and relevant data for the years covered by the study

(2012-2017), five federal universities with similar funding and management

structures were purposely selected out of the seven federal universities in

North -central Nigeria. The other two federal universities were excluded because data was not available in the years covered. Respondents consisted of Vice Chancellors, Deputy Vice Chancellors, Registrar, Bursar, Librarian, Deans and Directors, Heads of Administrative and Academic Units, staff and students of the selected universities as well as beneficiaries of universities' community development programmes.

The researcher designed Questionnaires of Likert scale were used to gather first-hand information from respondents to determine the level of administrators' leadership skills, adequacy of management support services and the level of research and community-service productivity. Administrators' leadership skills (technical, human and conceptual) were measured using staff's assessment of administrators' leadership skills in the selected universities, while administrators' assessment of management support services (staff development, research and welfare support services) were used to determine the adequacy of management support services provided by universities. Teaching productivity was accounted for through students' assessment of teaching productivity. Research productivity was accounted for by lecturers' assessment of research support services. Productivity in university community-service was measured by the beneficiaries' assessment of the adequacy of community services programmes of the universities.

Descriptive statistics were used to answer the research questions, while Pearson Product Moment Correlation statistics and Multiple Regression Analysis were used to test the hypotheses at 0.05 alpha level.

Significance of the Study

The findings of the study were significant as the study examined the relationship among administrators' leadership skills, management support services and university productivity in North-central Nigeria. Given the high expectations of universities in an era of globalization, the study addressed the issues of leadership skill development and support services that are preventing university administrators from responding to the emerging challenges in managing universities for improved performance. The findings might guide government, education planners and policy-makers in finding solutions to the problem of leadership deficit that is preventing Nigerian universities from competing with their peers globally.

The study might create a frame of reference for the improvement of educational management, theories and practice and to assist universities in the implementation of policies and programmes that could aid the provision of world class support services and skills required by university leaders for effective discharge of mandates.

The research might guide future researchers in focusing attention on the gaps that may exist in providing adequate support and training to university administrators in an attempt to provide efficient services that cater for the needs of the Nigerian citizens.

Operational Definition of Terms

The following terms were operationally defined as they were used in the study:

University administrators are university leaders such as the Vice Chancellor, Deputy Vice Chancellors, Registrar, Bursar, Librarian, Heads of Administrative and Teaching Units.

Leadership Skills are administrators' technical, human and conceptual skills.

Technical Skill is specialized concrete knowledge of principles and proficiency of methods, processes, procedures and techniques of university administrators.

Human skill is analytical abilities and experiences used by administrators to effectively work with staff and build strong teams.

Conceptual skill is the critical and analytical skills of university administrators.

Management is the harnessing of the human and material resources available in a university for the achievement of the goals of teaching, research and community services.

Staff Development Support services are the management support services such as on-and off-the-job skills acquisition programmes.

Welfare Support services management support services in form of incentives, compensations and improved conditions of service.

Research support Services are the management support services available to carry out researches to improve scholarly activities.

University productivity is the teaching, research and community- services of universities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Relevant literature on major variables of the study were examined with a view to having an in depth knowledge of issues involved in acquiring the right leadership skills and the provision of adequate support to university administrators for improved university productivity in North Central Nigeria. The conceptualization and appraisal of existing literature on the variables were carried out under the following sub-headings:

Theoretical Framework of Administrators' Leadership Skills, Management Support Services and University Productivity

Administrators and University Productivity

Administrators' Leadership Skills and University Productivity

Management Support Services and University Productivity

Productivity in Nigerian Universities

Conceptual framework on Administrators' Leadership Skills, Management Support Services and University Productivity

Empirical studies on Administrators' Leadership Skills, Management Support Services and University Productivity

Appraisal of Literature Reviewed on Administrators' Leadership Skills, Management Support Services and University Productivity

Theoretical Framework on Administrators' Leadership Skills, Management Support Services and University Productivity

This study was situated within the framework of productivity Theories. The theories include- Katz's Three-Skill Leadership productivity and Maslow's Hierarchy of Needs for employees' improved productivity. An understanding of the study of leadership in organisations has led to a study of variables of leadership and how these variables affect the discharge of the functions of leaders in organisations. The studies offered fresh perspectives in the understanding of issue of leadership performance and determining what skill sets are required by leaders of universities for deploying the human and material resources for improved productivity in universities.

The Katz's leadership skills theory was an attempt to improve on past studies of leadership, i.e trait approach to leadership. It was discovered that the trait theory was "relatively fixed" (Burkus, 2010), dwelling mainly on some certain in-born traits that make leaders effective. The skill theory focused on the skills and abilities that leaders can acquire in order to make them effective. The theory hinged effective

leadership on skills that are acquired rather than on inherited or in-born traits, focusing attention on leadership behavior rather than on personality or character that was the major pre-occupation of earlier studies of leadership. Its main focus is on skills acquired by leaders for improved efficiency rather than on older theories which focused on traits and the belief that anyone who lacks such traits cannot be effective leaders (Amanchukwu, Stanley and Ololube, 2015). Perhaps this is responsible for the increasing attention that employers of labour devote to leadership training and development. Attempts have thus been made at conceptualizing and creating a structure of the process of leadership around the skills and competencies that are learned and acquired for effective discharge of leadership responsibilities.

The skills acquisition theory of leadership skills which is based on Katz's (1955) Three-skill approach to leadership development published in the Harvard Business Review of 1974 set the stage for conceptualizing leadership in terms of skills. According to Virkus (2009), the approach, which gained popularity in the 1990s, postulates that there are three categories of skills needed by different categories of staff of organisations, namely, technical, human and conceptual skills. These skills when included in the leadership skill development programmes will make leaders effective on their jobs (Burkus, 2010).

Technical skill, that is, work-specific knowledge and competencies in the work place are required at lower levels where actual operations are carried out for the attainment of goals of organisations. The higher an employee rises in an organisation, the less technical training that is required. Conceptual skills which are

termed the abilities to work with ideas and concepts are needed at the top level of operations. They are required by middle level and higher levels of employees in order to make informed decisions about actions and measures needed for performing assigned duties and responsibilities in organisations. Human skill is needed at both the lower and higher levels for understanding and dealing with people in organisations. It is required for getting along successfully with people. It is also used to communicate with staff in the work place and it is required at all levels of operations.

The theory of skills development outlined a general sequence of events in skills that can be learned and acquired. The first of this is to identify the specific knowledge and competencies relevant to the performance of a job. Training arrangements are then made to acquire such skills in order to make such leaders become strong and effective (Amanchukwu, et.al 2015). Effective leadership entails the acquisition of some specific skills that will expose the leaders to the required experience, knowledge, commitment and patience needed to engage team members for improved productivity of universities. These are to be acquired together with some related qualities such as perseverance, charisma, empathy, courage to strengthen knowledge and improve performance (Funk, 2016).

The Abraham Maslow's hierarchy of needs was developed in the human relations era of management (Denisi/Griffin, 2005). The era viewed staff as unique and germane to achieving objectives of organisations, for this reason, they deserve better treatment than what they got in the era of scientific management. According to

Maslow's hierarchy of needs, people's needs are complex and the behaviours of people in an organization are basically to satisfy those complex needs. He categorized the needs into two, the lower order needs (Deficiency needs) and higher order needs (Growth needs). The lower needs are those basic necessities of life such as survival and safety needs such as shelter, food, water, and freedom from physical and emotional threats. Employees will strive to fulfill these lower order needs and work towards the achievement of the goals of an organization. The satisfaction of these lower order needs is what motivates staff to aspire to meet higher order needs such as the need for belongingness, self-esteem, intellectual achievement, aesthetic appreciation and self-actualization. A staff whose lower order needs are not met cannot be productive in the work place. When the needs are met, they will operate at full capacity and increase the productivity of organisations (Marquis, 2016). Managers who are desirous of improving the organizational productivity must understand these needs and provide for them in order to ensure staff operate at maximum capacity. The productivity of organizations, the university system inclusive, is therefore hinged upon the adequate provision of adequate support services in order to improve productivity.

Administrators and University Productivity

The public sector organisation in which the university system is subsumed is a rapidly changing environment, demanding bright initiatives in order to navigate through the tough terrains of a 21st century work environment. A major prerequisite for the success of this dynamic work environment is to have good administrators

managing the day to day affairs of the university. University administrators are leaders charged with the responsibility of harnessing the human, financial and material resources available in a university for the achievement of the tripartite mandate of teaching, research and community service. They direct the activities of their teams and together they take responsibility for managing an ever-evolving, large and heterogeneous university system in order to achieve the broad missions and goals of universities (Goodall, McDowell, & Singell, 2014). The leaders are responsible for translating the mission into tangible objectives and ensuring all players have a clear knowledge of these objectives (through effective communication) of the part each has to play in achieving them. The leaders also communicate the mission and strategies for accomplishing the objectives in clear terms, ensuring all parties have a sense of ownership. This way, everyone is committed to achieving the stated objectives.

The challenging situation of university management has called for administrators of universities to device ways of unleashing the immense potentials of staff by ensuring that they have the right tools, resources, and training (Tredgold, 2013). Peter Drucker was quoted by Tapper, Carter & Bak-Maier (2007) as asking if organisations are using to its full extent, the talents available to them and offering ways of working that stimulate people to give the best of their potentials and abilities. A resounding “no” was the answer. To ensure this, administrators must have the necessary leadership skills, and management must support and provide a conducive work environment with a culture of trust and respect between all levels of

staff, a warm and friendly climate in which colleagues feel valued, and have a strong sense of loyalty to the organization (Tapper et al, 2007).

Ensuring a high quality leadership with the right skills and competencies are imperative for improved productivity in universities. University administrators must be engaged positively in order to adjust to a rapidly changing competitive and complex environment that the 21st Century University has become. Team members are expected to engage in open discussion that leads to resolution of conflicts, a measure of self -determination over how work is undertaken, where diversity is respected and valued, a lack of exclusive clubs and cliques, equal opportunities for personal development and career progression with a high level of creativity and job satisfaction, arising from teamwork and cooperation (Tapper et al. 2007).

Unleashing the hidden potentials of members of the team has thus become a serious business and care must be taken in selecting effective administrators for universities. Effective leadership entails doggedness, resilience and die-hard attitude. Obayan, (2010) posits that an effective leader is known for outcomes, outputs and enduring legacies. Great care must therefore be taken when choosing university leaders and primordial considerations should give way to hierarchy of managerial aptitude. Most importantly, visionary/transformational leaders with proven competencies are to be selected with university “headship” replaced with “leadership”. According to him, it is only a university leader with the requisite aptitude rather than requisite qualifications that can propel the innovations that fit into the new scheme of things. University administrators must be retooled through

acquisition of the right skills so that they can better respond to their individual needs and those of the universities.

The introduction of Information and Communication Technologies (ICT) has increasingly challenged the operational environment of universities. Managing universities has become more complex, requiring new paradigm of leadership and management methods (Ap and Rob, 2007). This is to ensure the delivery of world class services to staff and students and other stake holders thereby making the university system enjoyable, healthy, rewarding and productive.

Administrators' Leadership Skills and University Productivity

The subject of organisation leadership is an important issue and it has generated a lot concern from different quarters. It has dominated academic discuss and many writers have given their views on what leadership is and what it is not in trying to explain the complex moral relationship between people. Newman (2013) referencing Ciulla (1998) viewed leadership as a relationship based on trust, obligation, commitment, emotion and a shared vision. According to the writer, leadership is about innate traits and natural characteristics that set men apart from the others. It is about activities of the leader, what he or she does that makes others to want to follow him. Leaders and followers come together to accomplish some desired outcomes ensuring an effective organisation. A prerequisite for effective leadership is therefore to have the right followership that is willing to collaborate to achieve some predetermined objectives (Obayan, 2013). Summing up the essence of effective educational leadership and performance of Nigerian library staff, Yuki

(1998) referenced by Fatokun, Salaam and Ajegbomogun (2010) believed that leadership is about a process where an individual influences other members of a team in their interpretation of events, choosing objectives and fashioning out strategies for achieving the objectives of the organisation. It is about maintenance of cooperative relationships among team members, developing and impacting skills that engender confidence by members, enlisting the support and cooperation even from the people outside the team or organisation.

A leader's ability to effectively lead an organisation is influenced by some basic skills exhibited by such leaders. These skills are a set of knowledge, abilities, work habits and experiences acquired by leaders that enable them translate knowledge into action. The skills are used to motivate, inspire and propel staff to adapt to the changing landscape of the work place in order to attain organization objectives (Havard Business Review, 1992). Leadership skill is a term used for classifying the specific abilities acquired by leaders to coach, direct, motivate, evaluate and possibly influence the work of others. It refers to an array of skills that are particularly well-suited to the work environment (Geisler, 2012). These skills which are generally regarded as competencies that can be learned and developed for effective leadership are classified under three broad headings as technical, human and conceptual skills and are crucial to any human enterprise (Gupta, 2009). They are behaviours that are associated with leadership effectiveness in driving the desired change in an organisation (Kahn & Ahmad, 2012). The effectiveness of a university administrator in a complex, competitive, knowledge-based, an information-age society that is technologically-driven depends on knowledge and competencies of

such administrator (Abbot. Ed.2014). Leaders learn different skills which make them persevere and strive to make their organisations remarkable and achieve stated goals and objectives.

Human Skills- Working with humans has been adjudged as the biggest challenge of a manager. Building strong teams in the work place therefore requires special leadership interpersonal skills and abilities (Mackay, 2013). Building strong relationships and an understanding of the unique nature of staff, their peculiar needs and aspirations is aimed at enhancing their motivation for improved productivity. The ability of a leader to lead and inspire others, motivate and build teams that will help achieve organisations' objectives therefore require special skills, abilities and competencies (Khan and Wisal, 2012). Human skills are soft skills, abilities, knowledge and competencies required by administrators to interact and coordinate members of staff. It is the ability to work with others through building staff into effective teams for the achievement of the mission of universities. Human skill is vital to the working life of an administrator, a handy tool in the life of an effective administrator. With it, the administrator is able to master the views, perceptions and beliefs of members of staff for the overall good of the system. In addition, he is able to communicate the mission of the university and set out processes to achieve the mission. He is expected to harvest feed backs from staff on their alternative views and opinions as to how best to achieve the stated mission, taking into account all those factors that may hinder the effective implementation of the identified goals.

Sub-sets of human skills include social skills, people skills, soft skills, life skills, emotional intelligence and communication skills. They are non-job specific abilities that enable a person build relationships, interact positively and work effectively within a team in any organisation. Leadership's human skills and abilities enable leaders understand and motivate followers towards organisation goals and objectives. It is called people or human skill and it is a strategy used by leaders to get along with people in a team (Mackay, 2013). Human skill consists of soft skills of cooperation, dedication, enthusiasm and persistence which foster relationships between the leaders and the followers, thus giving the leader a competitive edge to lead successfully in an organisation (Igbojekwe and Ugo-Ukoro, 2015). According to the Harvard Business Review (2016), human skill must be naturally developed and consciously and consistently applied in every day action of team members in an organisation.

These human skills which include the analytical abilities and skills are relevant to understanding the inner workings of a leader as well as the emotions of followers, thus building a strong personality that can influence the members of a team positively (Mackay, 2013). It is an antidote for building individuals and relationships in a business environment. Leaders take advantage of opportunities that human skills offer to develop strong relationships that lead to effective teams in an organisation. Building a team's human skills by a leader is essential to the achievement of the aims and objectives of organisation. Human skills are used daily to communicate the vision and mission of an organisation. It is used to interact and build positive working relationships as well as to build teams through collaboration

of members with everyone working towards achieving shared visions of such organisations (Geisler, 2012). Human skills help build and strengthen leadership to stay calm even in time of crisis, exuding confidence, displaying charisma and earning the respect of members of staff.

According to Geisler (2012), leaders with human skills must have clearly defined goals which should be well communicated to the teams that are responsible for driving the goals. The teams must be mentored and motivated to facilitate goal development and achievement. The teams must be able to negotiate in difficult and crisis situations and manage stress emanating there from as well as make tough decisions that will move the organisation to its goal. University leaders with good human skills build competencies of staff in an atmosphere of camaraderie giving rise to purposeful life that engender growth of members of the team in the system, thus ensuring the achievement of goals of education.

Effective communication as a sub set of human skills include a variety of channels used to disseminate messages from one person to another using several skills such as verbal and non-verbal (Fasasi, 2011). It is a process where ideas and aspirations are processed into actions in order to better understand and connect with the people in the work place and build respect in the process. Communication is done through one-on-one conversation or meetings. It may be channeled through electronic means like telephones or e-mails. It may also be through the print media like newspaper reports. Communication skill is used to convey one's own feelings and opinions in clear and concise ways that will help sustain personal and working

relationships. When done effectively, it is used to build strong relationships and used to manage conflict situations in the work place. Communication is used to build the capacity of staff, increase efficiency for increased productivity, creating awareness; enabling teams know their roles in achieving the aims and objectives of the organisation. Feedbacks received from staff create an environment that solicits open communication and suggestions from subordinate and to strengthen them to work towards achieving the visions and missions of organisation. Leadership communication skills are the competencies that leaders use to interact clearly and disseminate information, concepts and attitudes to promote effective learning by creating effective learning environment (Gabedi, 2010). A good communication skill involves the ability to demonstrate enthusiasm, ability to motivate, capture and hold the interest and attention of the audience and create an overall conducive and appropriate environment. Skillful leaders learn to communicate the visions and missions of the organization clearly and practically in a variety of ways.

Effective communication is therefore fundamental to the success of an organization (Tapper et al. 2007). It is required by leaders to navigate through the complexity of leading a world class university. Leaders must acquire the right skills of communication so that all players in the system understand the vision and mission of education by having a shared vision and values (Tapper et al. 2007). Goals and missions that a university sets out to accomplish are expected to be communicated in clear terms so as to engage everyone's 'minds' and 'hearts'. Effective communication assists staff in identifying the gaps that must be filled and the tasks to be accomplished (Yahya, Osman, Mohammed, Gigrilla & Issah, 2014). University

leaders are to ensure that all forms of obstruction to effective communication like language differences, physical barriers, differences in perception and lack of attention in the system are reduced to the barest. The better the team's understanding of the organisation's goals, approach, and reasoning, the more engaged the team (Tredgold, 2013). Communication apparatus are to be coordinated from the center, the leader gets across to everyone through representatives who disseminate resolutions appropriately. Efficient communication gives staff the opportunity to influence the development of the system by efficiently engaging them as a team (Tapper et.al. 2007). The better a team understands the goals, the approach and the reasoning; the more engaged they will be. They are sure of the what, why, and how of activities, in order to get them fully engaged (Tredgold, 2013).

Emotional Intelligence (EI) skill is another subset of human skills. It is the ability to express intense inner feelings to guide interactions with staff in order to attain managerial effectiveness. It refers to an assortment of non-cognitive skills, capabilities and competencies that influence a person's ability to succeed in coping with environmental demands and pressures (Singh, 2016). It is a soft skill set which enables one display appropriate emotions needed to regulate relations in the work place. It involves concepts like self- awareness, self- management, self -motivation, empathy, social interaction skills (Singh, 2016).

The concept which evolved from a growing concern for a healthy interaction between leaders and staff of organisations is used to describe the skills used for recognizing and managing one's emotions and those of others. Nourizade et.al

(2014) defined EI as the intelligent use of emotions to influence decisions and interactions in organisations. EI as a theory was developed by Salovey and Mayer in 1990 and it gained wider use in 1995 with works of Goleman, (2006) cited by Nourizade & Mohseni, (2014). According to the writers, EI involves the ability of a person to monitor his or her and other people's feelings and emotions, to discriminate among them and to use the information gathered to guide one's thinking and actions. It is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. It is the ability to motivate oneself and persist in the face of frustration, to control impulse and delay gratification, to regulate one's moods and keep distress from swamping the ability to think, to emphasise and to hope (Goleman, 2006 in Singh, 2016). Owoseni (2014) opined that EI is an individual's capacity to appropriately regulate his or her emotions, and to use information to guide one's thinking and actions. It is used to describe the traits and abilities that guide workplace relationships leading to successful outcomes in organisations. It is described as non-cognitive skills, capabilities and competences of a leader to cope with and manage feelings towards staffs, and allowing these feelings to guide actions and work place relationships (Nourizade & Mohseni, 2014).

In the opinion of Ladipo (2009), EI is a healthy portion of skills of self-awareness, self- management, social awareness and relationship management which are critical to the success of organisations. Every successful leader is expected to have it in order to have control over emotions, show poise under pressure and make

urgent decisions in the heat of deadlines in an organisation. A leader with emotional intelligence is more liked, cooperative, trusted, resilient, intrinsically motivated, optimistic and better at dealing with conflicts (Ladipo, 2009). Writing further, Ladipo, (2009) referred to EI as social competencies which contribute to workplace achievements. It is a social competency of a leader which involves intuition and empathy; it gives an intuitive sense of feelings, needs and concerns for other members of an organisation. It allows the leaders show interest in others, making them grow by developing their strengths, skills and competencies.

Emotional intelligence is a skill set which enable a leader build skill for understanding the feelings and emotions of employees or work team and manage such feelings for the overall good of the organisation. In times of crisis in an organization, emotional intelligence allows a leader to step in, identify the root cause of the problem and take appropriate measures to get the worker or team headed in the right direction, thus helping the staff develop and contribute immensely to the attainment of university growth and development (Yahya et. al, 2014). Emotional intelligence has attracted wide attention in industries as a predictor for organizational success (Goleman, 2006 in Owoseni, 2014). It is said to have induced performance that may not have been accounted for by a leader's intelligence Quotient (IQ). A leader understands the strengths and weaknesses of subordinates and knows when and how to delegate authority and responsibilities, trusting and creating loyalty and strength within the group for the overall success of the organisation. A leader with EI creates a healthy work environment. He builds a strong and healthy team where information is shared, trust is built and risks are taken leading to an effective

organisation. EI is valued as a major determinant of the success of a leader in his or her personal life and in the organization. It allows leaders to monitor personal feelings and emotions and those of others. It is a basic factor for establishing, maintaining and having interpersonal relations (Abdullahi, 2009).

Technical Skills- The advent of information and communication technology (ICT) into the world of work has exerted enormous pressure on workers to develop job specific practical, job-related skills and work habits that are in line with what obtains in world class work environment (Sweet, 2012). Technical skills are now been constantly re-invented in order to adapt to the ever- changing landscape of the organisation (Wallington, 2000). Technical skill entails an understanding of, and proficiency in a specific kind of activity. It is a manager's knowledge and proficiency in organisation's processes and techniques involved in a job or profession (Mulhauser, 2014). It is a hard skill set, an analytical tool or specialized knowledge and competencies required for the performance of a given job. They are usually acquired through training, either on or off the job. Technical skills are the knowledge of job specific skills which equips a leader for an in depth knowledge of the products and services of an organization (Gupta, 2009). It requires in depth knowledge of technical innovations in a work environment, making the worker an indispensable asset of an organisation. Butt, Waseem, Rafiq, Nawab & Khilji, (2014) described technical skills as the processes, methods and techniques involved in a specific job or problem that affect organisations' productivity. Technical skills call for a constant update and upgrade of knowledge and competencies that match job requirements in a constantly changing landscape of the work environment (Wright,

2007). This is to ensure that leaders have the knowledge and experiences needed to guide employees to adapt to specific work situations for accomplishing stated goals of an organisation (Havard Business Review, 1992). Technical skills enables workers work with inputs, putting in efforts to improve the output of the organisation, making such staff indispensable with a healthy level of job security that engender positive change (Sweet, 2012). Although technical skills help position leaders for professional advice to employees on how to solve specific work related problems to increase productivity in an organization, its importance diminishes as leaders move to higher levels in an organisation (Butt, Waseem, Rafiq, Nawab & Khilji, 2014).

Conceptual Skills- Conceptual skills involve the critical thinking ability of administrators to take a broad and holistic view of the future of organisations in a complex operational environment. It is the ability of leaders to have a future and far sighted view of the organization, have a mental abstraction of the organization and the complexity of forces that are playing out in the system, taking cognizance of the general environment that can influence the efficiency of the organization. It is essential in the decision making process that integrate group interests and activities into the overall interest of the organisation. An administrator is expected to possess the right cognitive knowledge and competencies that will enable him to develop and organize critical decisions and processes that lead to the attainment of organizational objectives. It is a critical ability to order and prioritise decisions and make choices among many critical and competing choices in critical situations (Butt, Waseem, Rafiq, Nawab & Khilji, 2014). A knowledge of conceptual skills involve tactical

planning, involving identifying problems, selection of alternative approach to solving them, implementation procedures and feedbacks to address failures to accomplish the desired objectives (Hoffman and Mehra, 1999).

Conceptual skills enable the leaders recognize the relationships among the units; coordinate the efforts of all players of various units into a single and effective organisation. The peculiarities of all the players in the system must be taken into account when critical decisions that impact all players are taken to advance the overall needs and desires of individuals and groups, all working towards an effective system.

It is important to strike a balance while using the skills. Placing too much emphasis on technical skills while downplaying the human or conceptual skills may affect the social well-being of employees and the overall productivity of organisations. Emphasis on social relations may lead to lack of cohesion and in the end affect productivity. A blend of all the skills is what makes for effective organizational leadership.

Management Support Services

The improvement of the provision of adequate support services to administrators has always engaged the attention of university management. This is with a view to providing world class work environment where staff can attain their personal goals and desires and work towards achieving organizational goals.

Essential management support services consist of a range of services such as staff development, welfare and research support services. They are necessary ingredients to ensure administrators achieve the change they desire in their personal lives and those of their staff.

Staff Development Support Services- Human beings have been identified as integral part of organisations and it is a popular belief that no organisation can rise above the level of its staff. Findings carried out by Davies, Pellert, and Zechlin, 2007 cited in a report of European Higher Education (2008) revealed that the leaders who dictate the pace of development in universities lack the professional management experience that are in line with the public sector management. This is because many are of the belief that academic expertise and a vested interest in the mission and goals of universities is an indication of competence for handling the diverse demands of staff, thereby paying little or no attention to the issue of leaders' skills acquisition. In order to prepare leaders for their roles in the organizations, a lot of resources is committed into building the capacity of leaders to enable them respond to emerging trends in their areas of endeavours. Inadequate training of staff makes improved productivity a big problem in organisations. Staff development programmes provide access to the necessary development programmes that prepare staff for their roles and to support them in achieving the vision and mission of education. On- and Off-the-job training and continuous professional development programmes tailored to the needs of university staff are critical if university productivity is to be improved.

Writers from the medieval age have written on the concept of staff development. Peretomode and Chukwu (2012) quoted the works of Aristotle and Confucius extensively, describing staff development not only as the development of one's intellect to reach a happy state, but also as a source of managing one's family and state. Armstrong (2009) believes that learning and development strategy represents the approach an organisation adopts to ensure that now and in the future, learning and development activities support the achievement of its goals by developing the skills and capacities of individuals and teams. It involves introducing, modifying, directing and guiding processes in such a way that all individuals and teams are equipped with the skills, knowledge and competences they require to undertake current and future tasks required by the organisation. According to Alabi (2011), staff development programme is associated with the general improvement of the employees in terms of behaviour, attitudes, skills, knowledge perception and in the performance of their duties. It is a strategic plan usually having a life span of 10-15 years (David and Ron, 1977). A staff development arrangement is a lifelong arrangement lasting till the end of the career of a staff in the work place. It is carried out to help staff to be up to date and be abreast of modern trends in their various areas of endeavours. It results in highly productive staff who will work to move the organisation forward (Oduwaiye, 2000).

Staff development programmes are knowledge and skills impacted with the aim of building the capacity of staff tailored towards meeting present and future needs of the individual and society. It is designed to enable staff with little or no professional qualification retool in order to make the working life of such a staff a

very challenging and interesting experience. Staff who experience difficulties adjusting to the working environment and their expectations may benefit from workshops and continuous induction programmes offered in the university. It is a thorough and a life- long learning process tailored to the needs of individual staff. Staff that attend staff development arrangements as observed by Leon (2011) are highly motivated. Supporting this assertion, Sallee (2010) observed that a well-planned staff development arrangement will ensure that the system is able to produce staff that will respond to human needs and in turn produce citizens who will contribute to the making of a great nation. Such trained staff will have a sense of fulfillment with their perceived success; they want to be known to be competent and skillful. The aim of any staff development arrangement is to build the capacities of staff to compete with their peers internationally as well as prepare such staff for likely changes in the universities. The central idea underlying manpower development in any sector of the economy as observed by Peretomode (2010) is how best to keep employees current, vibrant and versatile so that they can continuously perform their roles effectively in this age of rapid socio-economic, political, scientific and technological changes and globalisation. Employers are expected to provide supports in terms of information, finances and time off to ensure that members of staff are well trained so as to meet the performance standards set for them.

The University of Cambridge's purpose of personal and professional development as contained in the Hand book on human resources (CPD, 2015) is to provide practical, relevant training and development opportunities for members of

all University staff groups, in support of the University's mission and strategic objectives. The world declaration on higher education stressed the need for universities to foster a community of trained workforce in order to respond to the work requirements. Higher education systems and the world of work should jointly develop and assess learning processes, bridging programmes and prior learning assessment and recognition programmes, which integrate theory and training on the job (UNESCO, 2008). It advocates a vigorous policy of staff development as an essential element for higher institutions productivity. A well-coordinated staff development arrangement is aimed at educating staff to become active and contribute to improvement of the society. Staff development programmes are to help create and disseminate knowledge by acquiring cutting edge innovations in sciences and humanities, UNESCO (2008). Whatever Administrators' development plan a university management intends to put in place, a needs assessment of individual administrator should be carried out and the administrators given a degree of autonomy to make their choice of an appropriate staff development programme (Sallee, 2010). A good staff development arrangement will not achieve the intended outcome if the beneficiaries are not well motivated. Above all, an enabling environment where such plans will thrive is imperative.

Welfare Support Services- The role of incentives in promoting staff welfare has been understood since about the 18th Century, with the publication of Adam Smith's Wealth of Nations. Recent researches have also shown that the biggest challenge for management in any organisation is the issue of incentives or compensation to improve staff productivity. In the world declaration on higher education for the

twenty first century, universities are expected to aim at creating a new society, non-violent and non-exploitative, consisting of highly cultivated, motivated and integrated individuals inspired by love for humanity and guided by wisdom (UNESCO, 2008). While sharing the same view on the impact of adequate care on staff, Sharayi, et. al (2010) observed that people work hard if they feel cared for by the organization and recognition for hard work breeds self-fulfillment. Employees are said to be at their most productive stage when they have high morale. Corroborating this, Afe (2008) and Denisi & Griffin (2005) opined that compensation or adequate welfare arrangement are intended to satisfy the fundamental needs of staff who perform their jobs satisfactorily thereby giving workers the required peace of mind, this is a necessary condition for improved productivity. Alabi (2011) is of the belief that the issue of motivation is a complex phenomenon often driven by human needs. Some incentives identified by Alabi (2011) include: increased salary, transport and recreational facilities, free medical services, regular and prompt payment of salaries and provision of a conducive working environment where productivity thrives. Wakeling (2014) writing on staff motivation advised managers to be approachable, fostering a sense of honesty and trust. They are to inject fun into the working day where possible, putting less pressure on staff, they must be humane and show empathy towards all without discrimination.

Research Support Services- One of the missions of universities is to provide world class environment for research. An important criterion for judging universities is by their research outputs, while lecturers are considered for promotion using their

research outputs published in high impact journals published locally or internationally. Corroborating this, Ramseden (1994) wrote that a defining characteristic of a university is its commitment to scholarly activities leading to a production of knowledge and ideas. The World Bank's Report on revitalising universities in Africa also observed that capacity building in universities' research is fundamental for revitalising African universities. Universities without research activities run the risk of becoming glorified secondary schools. They are unable to produce the stream of academic staff candidates necessary to sustain the university enterprise; they are unable to teach students essential analytical and problem-solving skills needed to generate new knowledge for themselves, the academia, and the country.

Funding research has been identified as fundamental to the revitalisation of universities; to neglect or underfund research is a risk of future development possibilities (UNESCO Report, 1998). Musiige et.al (2014) quoting from Sanyal and Varghese (2006) revealed a high correlation between a country's level of investment in research and development and its scientific production. Universities' provision of financial support for research development activities, ensuring that the findings are presented at local and international conferences and the conference proceedings are published in high impact journals have been adjudged as key issues in management's support to universities' research activities (Sharayi et al. 2010).

Universities in Sub-Saharan Africa are unfortunately lagging behind the rest of the world in academic research output (Gordon and Peter, 2014). Many depend on

external donor agencies to fund the critical areas of research development needs. In 2014, the World Bank carved out Africa's Centers of Excellence (ACE) with many African Universities designated as Centers of Excellence receiving funding for research in some critical areas. According to Diop (2014), the Vice President of the World Bank in Africa, the rationale for funding the project is to offer a regionally integrated way to increase high quality research and development services, expand higher education and raise the quality of tertiary education programmes, which would tackle Africa's challenges in an efficient and economical way, given limited public budgets. The Center also supports lecturers on issues relating to proposal writing, research collaboration, patenting of research products, translating research findings as well as research products for community use (Gordon and Peter, 2014).

Nigerian universities depend mainly on funds from the federal government for its research activities. The Nigerian government established the Tertiary Education Trust Fund (TETFUND) in 2011 to manage, disburse and monitor the proceeds of the education tax to public tertiary institutions in Nigeria (TETFUND, 2011). The agency is expected to use the proceeds from a 2% Education Tax imposed on profits of all registered companies to improve the quality of education and, *inter alia*, provide funding for research and publications. At the 2016 Convocation of Usman Danfodio University, Sokoto, the Executive Secretary of Nigerian Universities Commission Prof. Julius Okojie announced that the Nigerian Government has set up a N3 billion National Research Fund to assist various universities to undertake researches in solar and other renewable energy sources in a bid to arresting the energy crisis been faced by Nigerians. These funding

arrangement in Nigeria is however negligible when compared to private sector investments in universities' research activities in the developed countries.

Productivity in Nigerian Universities

A consideration of the concept of productivity has stressed the relationship between output and input. It is a ratio of the volume of goods and services (outputs) produced relative to the volume of inputs- land, labour and capital employed in producing goods and services (Moore, 2002). This is represented as:

$P=O/N$ Where P is productivity

O is the outputs and

N is inputs

Fadipe (2000) Ruthven (2002) Sofoluwe (2000) in their various definitions of the concept have stressed the importance of maximising output from small unit of input. This, many refer to as efficiency. Efficiency of production means production's capacity to create incomes with minimum resources which is measured by the formula; real output value minus real input value. Productivity is the efficient use of resources- labour, capital, materials, energy, information in the production of goods and services. It is said to be the measure of output per unit of inputs, a ratio of outputs to inputs in the production system (Gates and Stone, 1997). Generally, inputs as factors of production include man, material and time used to produce goods and services. The output/outcome/impact is the end product. It is referred to by several concepts of quality ranging from effectiveness, productivity, efficiency, equity and responsiveness (Scheerens, 2004). In the education sector, effectiveness considers the end result, that is, the ability to meet stated goals of education, maximizing

outputs without much consideration for minimizing inputs, efficiency. The main aim is to increase what accrues to the society in terms of benefits from investment made in education (Gates and Stone, 1997). The two concepts must be considered for a productive university system.

Productivity has the connotation of minimising the use of inputs, that is, efficient production processes that minimises waste. (Dennise & Griffin 2005) looked at productivity as the economic measure of efficiency. It summarises and reflects the value of the outputs by individuals, organisations, industries or economic system relative to the value of the inputs used to create them. It is maximising output and it tends to reflect the use of resources in the production of goods and services that add most value. Increasing national productivity can raise the living standards because improved income translates to people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental programs. It is a supply-side measure, capturing technical production relationships between inputs and outputs, the production of goods and services that are desired, valued and in demand. Productivity involves improved trends in the components of a nation's workforce, wage levels and the rate of technological growth in an economy. It is the ratio of output to input within a given productive sector and it implies better ways of creating more output from given inputs. To improve productivity is to advance technologically in terms of growth in information and communication technology (ICT), logistics improvement and improved skills of the workforce. The key principles guiding the approach to improve public sector quality and productivity include identifying desired outcomes, setting targets and

developing a vision, seeking continuous improvements and ensuring transparency, which implies transparency in governance. The key steps for improving productivity in education as identified by Gates and Stone, (1997) are to define the unit of analysis, articulate the objectives of the higher education, identify measures of efficiency and effectiveness that relate to those objectives, and also to employ the right strategies for improving and monitoring productivity.

The concept of productivity in the service sector, public and private, has therefore gained wide use. It is considered when hiring labour for the production of outputs that will be of benefit to individuals. This is the case in the education system where learners acquire specific knowledge and skills. It is also considered in the entertainment world and other service industries like in the medical and legal services to mention a few. Productivity is thus essential to the survival of organisations in a changing world of work as to be productive is to increase output without increasing input (Shrestha, 2005).

Productivity in higher education is how much individuals and society get from the education sector, given the resources they put in (Gates and Stone, 1997). It is how well educational resources are combined and utilised to accomplish specific desired results to meet the goals of education. It is looked at in terms of the mission of teaching, research, consultancy and other educational services (Flegg et al. 2003). University productivity is measuring what society receives; that is, the output in return for what is given in terms of investment in education, the input (Gates and Stone, 1997 and Fadipe, 2000). The output/outcome/impact of the university

education refers to the quantity of undergraduate and postgraduate students that have obtained various degrees. It may also be the number of graduates that are gainfully employed (Scheerens, 2004). In a university's production process, the input is the labour and energy of staff as well as the finances and infrastructural facilities. The quality and quantity of these inputs to a large extent, affect the quality and quantity of output.

In a university system, productivity means engaging in teaching, learning and researches to create, preserve and transmit knowledge. It is producing well rounded graduates who can preserve and expand the cultural heritage as well as the molding of the characters and skills of individual students who, as graduates can discharge community leadership roles in all areas. A productive university will be seen to be doing more with less. According to Diamond (2011), productivity in education means a continuous reduction of operational costs while staying on top of infrastructural investment, and continuing to improve teaching, research and other front-line services. A university's productivity is also viewed in terms of the long term impact of research instead of the short term impact of maximising profit like in the industries (Scheerens, 2004). Universities' research productivity is viewed as a product of solutions found to an identified problem. Such finding is viewed as the statistics of scientific articles published in high impact journals or scientific papers presented at conferences as a measure of academic productivity (Kpolovie and Onoshagbegbe, 2017). The research endeavours are expected to result in increased income and improved living conditions of the citizens. Productivity of a university is

assessed based on the ability of universities to research and translate such research findings into finding solutions to societal problems.

Universities also interact with the community through community service in order to preserve and enhance cultural heritage and foster citizenship by graduating individuals capable of discharging leadership roles in society. They are equipped to contribute to policy formation by researching societal problems. They are also involved in pursuing economic goals to provide a stream of highly skilled and employable graduates, generate commercially valuable intellectual properties and contribute to their local community and the society at large.

Measuring of Productivity in Universities- The growing demand for higher education by the teeming youths without a corresponding increase in the allocation of resources to the sector have exerted pressure on players in the system to device cost- saving strategies. This is with a view to maximising the use of the available resources and increase output. The efforts at making the education system responsive to the increasing demands for education as well as high societal expectations have implied that programmes and policies of the sector must be seeing to be contributing to the achievement of mission and vision of education. Determining the contribution of the university in meeting the mission of providing quality education to its teeming masses, who are expected to man the productive sector is difficult as with most other service sectors. This is attributed to the fact that universities are not guided by the principles of profit maximization. Universities are challenged to look at their performance in terms of the services they provide in their

tripartite mandate of teaching, research and community service (Flegg, Allen, Field and Thurlow, 2003). This is in order to ensure maximum returns on investment in education and by extension, an assurance that the nation's industries have the best mix of labour for all sectors of the economy. Staff are expected to acquire the necessary skills and abilities to create high quality graduates who can render quality services to their immediate communities and improve the wellbeing of citizens.

Even though the task of measuring productivity in the service industry like the university is difficult and overwhelming, it is a desirable attempt as it will improve the education system (Moore, 2002 and Shrestha, 2005). The exercise of measuring productivity was often restricted to the private sectors, with the public sector, especially the university adopting a more relaxed, traditional stewardship approach where academics were considered to be stewards of the knowledge creation and teaching. Today, productivity improvement as well as effective evaluation and management of the Nigerian educational system has thus raised a lot of concern just like in the industries. Universities are coming under pressure to give account of their stewardship (Bourne and Franco-Santos, 2014). Universities in the 21st Century have thus moved away from the traditional stewardship approach towards a goal focused, measurement driven and agency approach. Universities are now adopting several approaches for gauging performance for increased productivity of the university system (Bourne and Franco-Santos, 2014). Comparative standards are often set internationally and this is used as benchmarks for setting targets and gauging performance in the tripartite mandates of teaching, research and community service (Scheerens, 2004). Even though not much has been

written on the formula for measuring productivity in the universities due to these challenges, measuring productivity in the education system has become desirable as the catch phrase “what gets measured, gets done”. This has made the exercise inevitable as it is expected to assist policy makers and guide resource allocation by various tiers of government. Measurement provides administrators with better tools for improving their institutions’ performance, and to give information to individual consumers and communities to whom universities are accountable (Sullivan, 2012). An approach at efficiency measurement of public sector services involves developing measures of both efficiency and effectiveness, and then to use these measures together to monitor productivity improvement (Susan and Stone, 1997). A multi factored approach to measure efficiency and effectiveness and using these measures as metrics for measuring outputs is expected to be adopted (Gates and Stone, 1997).

Measurement of universities’ productivity have often emphasized academically related variables of student and faculty demographics, enrollment, grade point average, scores on standardised tests, class rank, acceptance rates, retention rate, faculty-student ratios, graduation rates, faculty teaching load, counts of faculty publications and grants, and statistics on physical and library resources (Eltbogy and Radwan, 2012). Epstein in (Gates and Stone, 1997) enumerated that the strategies for measuring universities’ effectiveness involves benchmarking community or client’s conditions against standards or conditions in similar organisations. It includes the positive conditions such as the number of graduates produced or employed within six months of graduation. It may also be an adverse condition

needing a remedy like the number of complaints of sexual harassment received. Areas of weaknesses are improved and areas of strengths are improved or maintained. Identifying the number of clients served and their satisfaction obtained sought through interviews, questionnaires and surveys. Adverse impacts of programmes are also measured to determine the desirability or otherwise of such programmes.

The Annual Performance Evaluation Report (APER) which is used to evaluate lecturers in Nigerian universities for the purpose of promotion has however not placed very important premium on the assessment of teaching and other class room behaviors by students as important components of the evaluation process. Whereas students' assessment of lecturers ought to be given higher premium than other ratings as they are the direct consumers of the services of lecturers, this is not the case in Nigerian universities where the assessment of lecturers for teaching related exercise attracts only twenty points during the promotion exercise (University of Ilorin Revised Conditions of Service, 2014). According to Igbojekwe and Ugo-Ukoro (2015), the emphasis on research productivity rated as publications which attracts 40 points have not yielded enough in enhancing the quality of performance of lecturers in teaching, research and community service and by extension the credibility of graduates (Igbojekwe and Ugo-Ukoro, 2015). The measure of a lecturers' competence should consider some ethical issues that impact on teaching quality like: knowledge of subject matter, delivery of subject content, and intellectual development of students, assessment of students in an open, fair and

just manner and treat students' records and grades with strict confidentiality (Igbojekwe and Ugo-Ukoro, (2015).

Flegg et al, (2003) opined that a reasonable measure of universities' output should consider income from research and consultancy services, the number of undergraduate and postgraduate degrees awarded with considerations for quality. There is a need to identify the unit of analysis, whether department, faculty or the university put together. Next is to identify objectives, what are the outcomes expected of each unit of analysis. Third is to devise measures of efficiency and effectiveness. The peculiar needs and priorities of students are however expected to inform the methods/criteria to adopt. These are expected to lead to increased quality graduates, research outputs and community engagement.

Teaching Productivity- Teaching is described as a scholarly activity, an education process involved with the discovery, integration and application of knowledge which is transmitted from one generation to the other. Teaching takes place in an educational system, a service industry whose aim is to build and transmit knowledge and skills to learners in order to build capacities and capabilities. The teaching and learning process involves **inputs-** review of literature, development of course outlines, preparation of syllabus and resources as well as the **process-** method of instruction to be used, designing of instructional activities as well as the **output-** evaluation (assessment) of activities that took place between the teachers and the learners.

A long term objective of educational system which is to promote the welfare of the society may require a long term measure. Scholars measuring university productivity have often focused on non-instructional productivity, especially in researches, using measures such as the number of publications in reputable journals over a period. Measures adopted for assessing teaching outcomes should consider graduates' average academic grade reference obtained from assessment systems, waiting time for the first job, salary and opportunity for higher studies spelt out as short terms (Shrestha, 2005). The students are subjected to a long process of teaching to enable them understand certain subjects and to develop the ability to approach and solve real world problems effectively and efficiently. Several teaching aids and materials are employed to aid the teaching and learning process in a robust learning environment. Outcomes are measured indirectly in a qualitative manner using quantitative measures of inputs/outputs data and will lead to considerations of technical efficiency ratios (Gates and Stone, 1997). The number of graduates produced should be relatively large enough to service the productive sectors and sound enough to drive the productive capacity to meet the needs of the society at large.

Teaching effectiveness is ensured through students' assessments and ratings as well as peer ratings of observations in the classroom. Other methods are indirect ratings, using proxies and drawing inferences from data from students' outcome and publications on innovative teaching strategies. Berk (2005) listed twelve measures of teaching effectiveness as: student ratings, peer ratings, self- evaluation, videos, students' interviews, alumni ratings, employee ratings, administrator ratings,

teaching scholarship, teaching awards, learning outcomes and teaching portfolios. He singled out multiple sources of evidence such as student ratings, peer ratings and self-evaluation to provide an accurate and reliable base for formative and summative decisions. Multiple sources build on the strength of all sources, compensating for the weaknesses in any single sources. Employing one or more sources can compensate for the inherent shortcomings of the sources and they will provide accurate, reliable and comprehensive picture of teaching effectiveness.

Even though students' ratings of teachers in Nigeria is not given high priority in the measurement of teaching productivity as it is done in other developed countries, it still remains a very good source of measuring teaching effectiveness. This is because students are the direct consumers of teaching services; hence their experiences are essential to the effective measuring of quality of teaching (Igbojekwe and Ugo-Ukoro, 2015). Student's rating which is synonymous with faculty evaluation is a summative evaluation for assessing teaching performance. It is said to be the most valid single source of data for improving teaching in the classroom and the most influential measure of performance used in promotion and other decisions in an educational institution. Tools used in measuring effectiveness are tests, scales and questionnaires. Rating scale is mostly used for faculty evaluation. Despite these, students' evaluation is viewed with hostility and cynicism by lecturers and abused by students (Igbojekwe and Ugo-Ukoro, 2015).

Research Productivity- Measuring research outputs by academics is a herculean task. Townsend and Rosser (2007) were of the view that attempt to determine what

constitutes university research output in Nigeria has always been marred by lack of synergy between universities and the industries. Attempts at putting price tags on benefits accruable to nations from universities researches have not been easy either. This is coupled with the difficulty in determining if the accruals are to the individual researcher or to the university. Another problem is the absence of benchmarks for evaluating or gauging researches in order to determine university productivity as with judging an academic as productive based on his or her individual research output or the overall growth of the university.

Various methods used for measuring research outputs in order to improve productivity in universities range from mathematical, statistical and computer aids, citation analysis, peer and bibliometric evaluation, election to office in a professional association, success in raising research funds, invitation to read scientific papers at conferences and workshops among many others (Labuschagne, 2009). Cresswell, (2014) writing on what constitutes research productivity and how it can be measured defined research productivity as comprising research productivity (inquiry, investigation and discovery) in scientific journals, academic books and conference proceedings, gathering and analyzing original evidence, obtaining competitive research grants, carrying out editorial duties, obtaining patents and licenses, and producing monographs and papers presented at professional meetings. While some institutions have varying indicators such as chapters in books, research reports, conference proceedings and graduate supervision (Hardre, 2011). Some others use peer reviewed articles as a more generalized measure of productivity. Writing further, Musiige and Maasen, (2014) focused on publication of scholarly articles,

conference proceedings and graduate student supervision as components of research productivity.

Peer evaluation involves the evaluation of a scientific work over a period by scientists in related studies or fields. Labuschagne (2009) and (Igbojekwe and Ugo-Ukoro 2015) are of the opinion that research outputs are used to allocate research funds and reward researchers. A bibliometric evaluation refers to a researcher's written work. It is regarded as the most important proof of productivity with the researcher transmitting and disseminating new research findings to solve problems of a nation. The qualities of such publications are often times determined by the impact of the publishers of such research findings, whether local or international as well as other considerations like visible errors, originality, creative and critical thinking among others. However, the quantity of publication as a measure of research productivity is still being contested by some writers. Citation analysis is reference to scientific publications by writers. It gives considerations to the number of times a research work is referred to in research publications of other researchers. Data banks such as the Science Citation Index (SCI) are created for quantifying research citations. Quality Researchers are rewarded with election to offices; they attract research funding and are invited to present papers on outcomes of their research findings at conferences.

Research productivity in Nigerian universities incorporates components such as publications in recognized journals, chapters in books, conference proceedings and technical report/creative writings. Journal articles attract points based on

whether they are local, national or international publications for various cadres/ranks (Unilorin, 2014). Awards, Prizes, Scholarships and recognition of researchers like the Nigerian Universities Doctoral Theses Award Scheme (NUDTAS) are also indicators of Nigerian universities' research achievement and productivity. Adopting a single criterion may be prejudicial and misleading (Labuschagne 2010), instead, a more generalizable measure of research productivity across all academic fields such as the peer-reviewed articles is known to have yielded more results in determining research productivity (Hardre, 2011). The attempts are aimed at gauging a university's research outputs and in effect, improve productivity of universities.

Community Service Productivity- University community service or partnership is an effort by universities to further their third mandate through increased community engagement (Rubin, 2000). In a bid to further fulfill their corporate social responsibilities to their communities, universities engage with the real needs and aspirations of the society (Cherwitz, 2012), contributing to the social development, economic progress, cultural life and general health and well-being of their communities (Council of Ontario Universities, 2006). This definition is broad enough to include programmes that are voluntary or compulsory, programmes that involve youth or adults, and those that provide some form of payment or no payment. It includes activities such as general volunteer activities which do not require specific levels of skill or knowledge, and activities related to community outreach or extension services which demand different levels of knowledge and skills at higher education level. Consideration of University community service will however not include programmes whose primary purpose is job training or

placement and which are designed to serve their participants rather than the community. This is the case with the Industrial Training Fund (ITF), Students Industrial Works Experiences (SIWES) and the Students Works Experience Services (SWEP) designed to enable students have practical experiences in their various fields.

University community services are faculties' initiatives aimed at improving the living conditions of beneficiaries (Anderson, 2007). It is an educational development programme that is concerned with the delivery of real life experiences to communities in ways that engage beneficiaries to jointly work towards achieving a common goal. It is to help them acquire the knowledge and skills for identifying and assessing development needs and problems. The essence is to sensitise students to needs of communities, find solutions to the problems, thus empowering them and improving the general living conditions of people. University community service enables beneficiaries obtain information on new innovations and technologies for improved living conditions (Taye, 2013). This is the case of the Faculties' Agricultural Extension Service Programmes. Universities are able to engage with the real needs and aspirations of the society (Cherwitz, 2012), contributing to the social development, economic progress, cultural life and general health and well-being of their communities (Council of Ontario Universities, 2006).

The Universities' Community based experience services (COBES) programme is an innovation expected to expose students to situations outside the classroom, they identify with the real world where they can apply theories to real life

practice. Students are sent to their immediate communities on fact-finding and problem-solving missions; they develop and coordinate projects that are of benefit to the communities. Funding for the programme is provided partly by the universities, students and benefitting communities (University of Ilorin Academic Programme). University-community engagement involves students' volunteer service programmes, work study by students; on and off campus, community outreach and extension services, curriculum- related programmes, internship and placement programmes (Perold and Omar, 1997). It is programmes involving youths or adults designed to deliver social benefits to participants, which may be voluntary or compulsory, sometimes attracting payment or no payment by participants.

University community partnership has gained momentum in the 21st century with universities fashioning out synergies with their communities in order to revitalize and engage host communities positively, engender civic engagement and strengthen the core missions of universities (Seifer, 2003). The old notion of the ivory tower of universities is now being eroded, and universities are increasingly becoming committed to community partnerships in an enduring and sustainable relationship. The aim is to meet societal expectations of citizen's development and mobilization for community building and development. Universities mount academic programmes that provide qualified personnel with the education and skill sets needed to advance the competitiveness and productivity of business and industry (Council of Ontario Universities, 2006). This symbiotic relationship manifests in scientific meetings and conferences, number of consultancy services like service-learning, community based participatory research and partnerships focused on

continuous quality improvement in the local community, knowledge advancement and new partnership development through extension projects (Seifer 2003, Inua & Maduabum, 2014). Many universities have thus been able to justify societies' huge investment in them by building more relevant connections between academic and society in a town and gown relationship (Cherwitz, 2012).

The COBES programme is a student volunteer service which provides the organisational framework for student participation in community service and development. The essence is to address the service and development needs of communities with effective and legitimate programmes which involve students and the university's knowledge and expertise. Many Faculties are involved in service delivery and development projects including entrepreneurial development, primary health care programmes; Youth development programmes; Adult basic education and training; and community project development programmes (Unilorin Academic Programme, 2007-2013). These projects are funded through funds raised by beneficiaries, the university as well as the students. Even though the programmes are related to the students' field of study, they sometime do not carry academic credits. The programmes involving students of higher educational institutions in Nigeria are to allow students engage in tasks and services requiring greater expertise and experiences. The host communities and the students benefit in a symbiotic relationship through cross breeding of ideas flowing from the researches of the classrooms of universities and the practical experiences in the workshops of the hosts.

This is the case with the community radio programmes mounted by the Faculty of Communication and Information Sciences, University of Ilorin which is aimed at sensitizing communities in the rural areas on the knowledge and use of Information and Communication Technology (ICT) facilities to improve their general living conditions. The Teaching practice programme of the Faculties of education is an excellent example of the way in which community service can be thoroughly integrated into the curriculum to enhance learning. The programme is organized as a course requirement for students in the Faculty of education in Nigerian universities. When properly supervised, the programme adds benefits to teaching and learning by beneficiaries as well as further the knowledge of students. The Agriculture Extension Programmes of the Faculties of Agriculture of Nigerian universities are aimed at developing technologies and disseminating same to farmers. Research findings are demonstrated and tested before they are mass produced and adopted by benefitting communities. As laudable as these projects are, inadequate funding has been identified as hampering the frequency of the programmes and by extension the achievement of the goals of the projects. Lack of good education on the part of the benefitting communities is also affecting the effectiveness of the programmes.

In order to ensure that University-community services programmes bring closer working relations with the host communities, improve curricular and enhance students learning, as well as improve the general wellbeing of the host communities, a lot of attention is now being paid to evaluating what is accomplished by way of measuring intended outcomes and actual attainment within the framework of

University's community service engagements (Rubin, 2000). The evaluation is to allow for an understanding of the process by which remarkable changes in community service engagement can be managed and actualized. It is to determine whether the intended outcomes have been achieved.

Problems of Measuring Productivity- With the shrinking of public funds available to universities, tracking the performance of universities in order to minimise wastage and reduce cost while ensuring that quality and access are not comprised has called for increased attention to the issue of measuring university productivity (Sullivan, 2012). The efforts have not yielded much effort though, as the inputs and outputs in the education sector are difficult to define and quantify (Ojokuku and Akanbi 2015). Despite the difficulty, it is a desirable attempt at improving the education system (Moore, 2002 and Shrestha, 2005).

Having a single or generally accepted national metric to objectively quantify effectiveness of the university system has not yielded much success due to the diverse nature of the system's inputs- human and material resources and outputs in teaching, learning, research and community engagement (Diamond, 2011 and Moore, 2002). These diverse goods and services are heterogeneous (subject to variations) and are not determined by the forces of demand and supply. Governments in many developing countries fix prices of acquiring education in its institutions and subsidize the cost of education. Like-wise the issue of externalities where the benefits accruing from the prices paid to acquire such goods are not restricted to those who pay for such goods and services (private sectors and other

members of the larger society reap benefits they do not pay for when they enjoy quality services from graduates of government sponsored educational activities). Gates and Stone (1997) citing Sherwood (1994) as well as Dean & Kunze (1992) identified some factors militating against efficient tracking of productivity in the service sector as identifying the basic output unit, determining the value added, isolating the customers' contributions to the outcome, accounting for the many aspects of quality, and the issue of externalities and merit goods. Compounding the problems is inadequate data in many developing countries. This has frustrated the attempts at quantifying the level of inputs and outputs in the education industry.

Even though students' assessment has been adopted as a measure of teaching effectiveness in most developed countries, the practice is still viewed with skepticism in Nigerian universities. Lecturers view is as subjective and that students may hijack it to get back at some perceived difficult lecturers (Igbojekwe and Ugo-Ukoro, 2015). The present evaluation procedure which gives priority to research over teaching and community service for the purpose of promotion does not account for non-curricular achievement of students thus making it a lopsided exercise. With the shrinking of public funds available to universities, maximising outputs with equal or less inputs have become serious business. Tracking the performance of universities in order to minimise wastage and reduce cost while ensuring that quality and access are not comprised has called for increased attention to the issue of measuring productivity (Sullivan, 2012). Efforts aimed at tracking performance (measuring productivity) have however not yielded much effort as the inputs and outputs in the education sector are difficult to define and quantify. Effective use of

the inputs can only be ensured when there are increased qualified graduates who have carved niches in their various fields of endeavors and apply the knowledge so acquired to improve the fortunes of the nation.

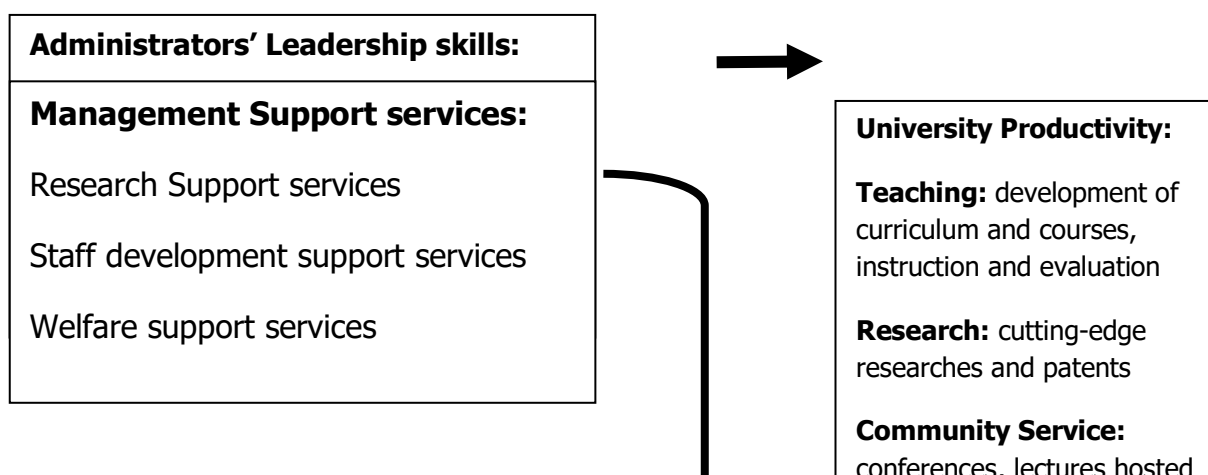
Conceptual Framework

The conceptual framework for this study as shown in figure 2 indicates a causal-correlation relationship among leadership skills, management support services and university productivity. The acquisition of leadership technical, human and conceptual skills contained in the first box are responsible for leaders' effectiveness and by extension improved productivity of universities. The effectiveness of university administrators in a complex, competitive, knowledge-based society depends on the knowledge, abilities and competencies acquired. The skills will help to effectively build strong teams that will assist universities achieve the missions of teaching, research and community service.

Adequate support services contained in the second box are expected to include a conducive work environment. The provision of adequate support services like research support, staff development and welfare arrangement that are in line with what obtains in other world class universities are to ensure that university leaders are equipped to provide for the material and emotional needs of other staff in the organisation. They are to ensure that university administrators can provide world class services that will help build the capacities of staff and students for global competition. When these services are provided in the right quantity and quality, they help attract the right mix of local and foreign staff and students from diverse cultures

from within and outside the country. A conducive working environment will usher in a process which evolves into a learning environment, where lecturers give opportunities to students with efficient administrative apparatus to staff in order to improve productivity. Administrator's support for staff with a degree of autonomy in decision-making by all players in the system leads to processes that stimulate the lecturers and students for the overall achievement of the goals of the university (UNESCO, 2005).

The third box represents the outcomes, reflecting functions, roles and performance in teaching and learning, research and community service. It is gauged by the quality and quantity of the end products or services (Inua and Maduabum, 2014). This is grouped into teaching, research and community service. For teaching to achieve its purpose, graduates must be qualified, skilled and unique in their niche areas and must be fully engaged in the labour market. They are expected to unleash their immense potentials, rendering services that help their immediate communities to solve problems confronting them. Lecturers are kept abreast of recent developments in relevant literature, laboratory and practical classes, making good use of instructional materials that can aid technological breakthroughs. There are cutting-edge researches that result in research break through and patents published in high impact journals (Inua and Maduabum, 2014).



Source: Designed by the Researcher, 2017

Figure 1: A proposed model of the causal relationship among Administrators'

Leadership Skills, Management Support Services and University Productivity

Empirical Studies on Leadership Skills, Lecturers' Support Services and Productivity in Universities

Researchers studied the relationships between Administrators' leadership skills, support services and productivity and have established that when university administrators have the right skills and are given appropriate support services, university productivity will increase. Khan and Wisal, 2012 analysed Leaders' interpersonal skills and effective leadership, the study examined how leaders' ability to motivate, communicate and build teams is important at different levels of management, and which of the skills are appropriate or required at each levels of management. The study established which of the skills (team building, motivation and communication) are associated with effective leaders.

To carry out the study, Questionnaire was administered on 150 respondents selected from top, middle and lower levels employees of a polytechnic in order to find out the most appropriate skills at each levels of management. The study established that a leader's ability to build teams was more appropriate for top level management as compared to middle level management but did not significantly differ as compared to lower level of management. The ability to communicate showed no significant impact

at middle level management, while motivation was more important at the lower level than at the middle level with no significant impact at the top level of management. The ability of a leader to lead and inspire others, motivate and build teams that will help achieve organisations' objectives requires special skills, abilities and experiences. The study, therefore recommended that a leader must possess interpersonal skills so as to generate ideas to motivate and inspire followership, thus building solid work relationships in an increasingly complex work environment. The study, a descriptive survey, targeted a small population of one institution with low respondents; the results may not be significant and generalizable as the present study will achieve.

Similarly, a study was conducted by Owoseni (2014) on emotional intelligence and perceived leadership behavior effectiveness in organisations. It investigated the impact of emotional intelligence on the perceived effectiveness of leaders in organisations. The study gathered samples from 232 respondents, using two instruments, a Multifactor Leadership Questionnaire which was used to determine leadership style within the organisation, while the Emotional Competency Profiler was used to determine the emotional intelligence of the leaders. Findings of the study showed that there was a joint effect of all the variables of transformational leadership on emotional intelligence. It therefore recommended that emotional intelligence tests should be designed to measure competencies associated with the understanding and management of staff. The study is similar to the topic of this research as it identified leadership as the most critical factor in university productivity and for the leader to be effective, he must possess certain leadership skills. Leaders must learn to master and manage their

emotions as well as those of subordinates in order to be successful. This study defers a bit from the study under review as it will combine survey research with a descriptive survey for better research findings.

To establish the place of leadership in a complex research unit such as the universities, a study on leadership and departmental research productivity was carried out by Goodall, McDowell and Singell (2014). The study was aimed at examining the statistical links between some characteristics of an incoming chair and the scientific productivity of their departments. Longitudinal data on 169 departmental chairpersons in 58 American universities were collected. Findings of the study revealed that the impact of university leaders in motivating an ever-evolving research teams with broader missions and management practices is enormous. The leader must provide the right quantity and quality of rewards and incentives in order to motivate and improve the performance of research teams in the universities. The study is similar to this topic as the variables of management support services of this study are known to have impact on university productivity.

Other scholars like Musiige and Maassen (2014) conducted a study on factors responsible for universities' research productivity in African universities. They sampled staff of two Colleges of Agriculture and Environmental Sciences in Makerere University. The choice was for comparative and validity reasons, the study is expected to allow for a balanced view on research productivity from the perspective of both social and natural sciences as disciplinary differences are said to have accounted for variations in research output. Semi- structured, open ended interviews

were conducted among staff from both colleges. This is to allow for freedom of responses by interviewees. Findings attributed increased research outputs to individual and organisation factors, funding and research culture. The findings are related to this research study as it intends to find the factors that are responsible for research productivity in the selected universities. This study defer from the study of Musiige et. al in coverage, as wider coverage is known to allow for generalisability of the research findings.

In the same vein, Butt, et. al (2014) carried out a study on the impact of productivity on employees: an evidence from Pakistan. The study examined the impact of technical, conceptual, interpersonal, emotional and social skills on increasing employees' productivity in Pakistan. Questionnaire was used to gather responses of staff from some Pakistani organisations. It revealed a positive impact of all the leadership skills on staff productivity and therefore recommended that skills of leaders in public organisations should be built so that productivity will improve.

Appraisal of Literature Reviewed

The various literature reviewed revealed that productivity is the ultimate goal of any organisation's endeavour. Organisations that are desirous of improving productivity must as a matter of necessity develop its human capital. This study focused attention on the specific skills that make effective university leadership. University administrators must possess leadership skills such as technical, human and conceptual skills. It is a deep knowledge of these skills that can aid administrators in the provision of the right support services to other members of staff so that they can

work to improve university productivity. Goodall, McDowell and Singell (2014) examined leadership and research productivity of university departments. Their findings differ from this study as only one independent variable was of focus. Musiige and Maason (2014) carried out a study on faculty perceptions of the factors that influence research productivity at Makerere University. The researchers examined individual and organisation factors responsible for university research productivity, focusing on only two colleges in the university. The results obtained may not be generalizable. This study hopes to cover many universities with larger population samples and will therefore have findings that may be generalized.

Similarly, Abdullahi (2009) studied emotional intelligence as a supplement to intellectual education. The study was not empirical. This study hopes to carry out an in depth empirical survey that cover samples from many universities. Khan and Ahmad (2012) examined leaders' interpersonal skills and its effect at different levels of management. The study considered the effects of leadership skills of motivation, communication and team building on different levels of staff. It covered only sub-variables of leadership skills. The author suggested that other studies should look at other hard and soft skills such as interpersonal and emotional that can impact the functions of university leaders.

There are other scholars who investigated leadership and productivity in higher education. Gates and Stone ((1997) in their study of understanding higher education productivity examined improved productivity as a strategy for meeting societal demands on higher education in the face of increased access and dwindling

allocation to higher education. It however failed to look at the most important factor of leadership in university productivity.

The literature reviewed did not give enough attention to the human factor which is the prime driver of the inputs in university productivity. It is obvious that a university that is desirous of improving productivity must look at the issues of leadership and incentives to staff if productivity of universities is to be improved. Leaders must possess the right emotional intelligence, interpersonal and technical skills in order to have the capability to provide the right support for staff to carry out cutting edge researches that will impact productivity in the university. It pointed to the correlation between skilled leaders and how they can work towards improving the services they provide to improve the productivity of lecturers for an effective university system. Their views on university-community relations have become diverse, focusing on the purpose for setting up universities in line with societal expectations, on how best all stake holders can derive mutual benefits when output is maximised to justify whatever may have been expended. They had however not been able to link the provision of adequate skills to leaders' response to meeting the emerging needs of staff in a globalized world in order to make universities respond to the yearnings of citizens of a nation.

From the reviewed literature, it appeared that scholars are of the humble opinion that university engagement in the 21st century must have clearly defined objectives, capable of being measured against acceptable standards/benchmarks to determine its desirability or otherwise. The bottom line of any university's

engagement should be for all players to be able to draw on the knowledge so generated from the university to find lasting solutions to the problems that confront humanity.

This study therefore examined administrators' leadership skills, management support services and university productivity in North-central Nigeria as complimentary to the existing studies as no research to the best of the researcher's knowledge has examined administrators' leadership skills, management support services and university productivity in the locale of this study.

CHAPTER THREE

RESEARCH METHODS

This chapter discussed the methods adopted for carrying out the study under the following sub-headings:

- (i) Research Design
- (ii) Population, Sample and Sampling Techniques,
- (iii) Instrumentation
- (iv) Procedure for Data Collection
- (v) Methods of Data Analysis

Research Design

The study was a causal-correlation survey research design that examined the causal relationship among administrators' leadership skills, management support services and university productivity in North-central. The research design allowed for the establishment of the relationship between an independent and dependent variable (Adebakin, 2013). Causal-correlation survey research design allows for the collection of data from a sampled population and for an accurate record of observation to give

meaningful information on the characteristics of the population of study. It allowed the researcher to establish whether administrators' leadership skills, management support services could lead to improved productivity of universities in North-central Nigeria.

Population, Sample and Sampling Techniques

The population consisted of 1058 university administrators, 5053 staff, 4259 lecturers, 101, 821 students and 658 beneficiaries of university Community-service programmes in five selected federal universities namely Universities of Abuja, Ilorin, Jos, Federal University of Technology, Minna and University of Agriculture, Makurdi. Federal Universities in Lokoja and Lafia were excluded from the study because data for the years covered by the survey (2012-2017) were not available.

A causal-correlation survey research design was adopted for the study. Multistage sampling technique was used to select respondents from five federal universities in North Central Nigeria. Purposive, stratified random sampling technique was used to select 380 out of 1058 university administrators, 382 out of 5053 staff of universities, 382 out of 4259 lecturers, 382 out of 101, 821 students and 251 out of 658 beneficiaries of university community service programmes.

Instrumentation

To gather data for the study, five set of questionnaires were designed by the researcher for the study; Administrators' Assessment of the Adequacy of Management Support Services Questionnaire (AAAMSSQ) was used to gather views of university administrators on the adequacy of the support services provided by university management. Staff Assessment of Administrators' Leadership Skills Questionnaire (SAALSQ) was used to gather data on staff's perception of the level of leadership skills of universities' administrators. Lecturers' Assessment of Research Support Services (LAARSS) was used to gather facts on the adequacy of support for research activities and was used as proxy to determine research productivity. The Students' Assessment of Lecturers Questionnaire (SALQ) was used to assess teaching productivity and Beneficiaries Assessment of Universities' Community Service Questionnaire (BAUCSQ) to assess university community service productivity.

Administrators assessment of adequacy of management support services Questionnaire had two sections; section A was on the personal data of respondents. Section B consists of questions on the variables of management support services available to administrators having response options of Very Adequate, Adequate, Fairly Adequate or Not Adequate. Staff assessment of administrators' leadership skills also had two sections. Section A was on the personal data of respondents, while section B had response options of Very Adequate, Adequate, Fairly Adequate and Not Adequate. The Students' Assessment of Lecturers Questionnaire (SALQ) designed by the Academic Planning Unit of the University of Ilorin and adapted for the study had two sections, section A was on the personal data of students, section B contained response options of Excellent, Very good, Good, Fair and Poor. Lecturers'

Assessment of Research Support Services (LAARSS) was used to gather facts on the adequacy of support for research activities. Section A was on personal data of respondents while section B contained response options of Very Adequate, Adequate, Fairly Adequate and Not Adequate. Beneficiaries' assessment of the adequacy of university-community service programmes also had two sections; section A was on the personal data of respondents, while section B contained response options of Very Adequate, Adequate, Fairly Adequate and Not Adequate. Respondents were requested to put a tick (✓) against their preferred options. The method of scoring for the study was:

0.91-1.59 Low

1.60-2.59 Moderate

2.60-5.00 High

The Questionnaires were validated for face and content validity by the supervisor and experts in the Department. Their opinions and suggestions were incorporated into the final instruments before they were administered on the respondents. The reliability of the research instruments was established through test-retest procedure in a pilot study. The instruments were administered to respondents from the Federal University of Technology, Akure on an interval of four weeks and the results obtained were analysed using the Pearson's Product-moment correlation statistics at 0.05 level of significance. Regression analysis was used to establish the causal relationship among the variables and the following coefficients were obtained: Staff Assessment of Administrators' Leadership Skills 0.78, Administrators' Assessment of Adequacy of Management Support Services 0.76, Lecturers'

Assessment of Adequacy of Research Support Services 0.72, Students' Assessment of Lecturers' Teaching Productivity 0.64 and Beneficiaries' Assessment of University-community Service Productivity 0.68.

Procedure for Data Collection

A letter of introduction was obtained from the Department to the selected universities. The researcher, with the help of trained assistants from each of the selected universities, administered the research instruments on the respondents. The questionnaires were sent to universities outside Kwara State and returned using courier services. The questionnaires were distributed to respondents in their various offices, while some respondents were available during staff meetings. Some returned the questionnaires immediately while some returned at later dates. The Students' Assessment Questionnaire was distributed to students during lectures. Beneficiaries of the selected university community service programmes were visited in their locations and villages.

Data Analysis Technique(s)

The data collected were analysed using the Statistical Package for Social Sciences (SPSS). The descriptive statistics of frequency counts, percentages, mean and standard deviation were used to analyse the demographic data and answer the research questions raised. Pearson's Product-moment correlation statistic was used to analyse the main and operational hypotheses at 0.05 level of significance. Multiple regression statistical method was used to establish the causal relationship among the independent and dependent variables.

CHAPTER FOUR

PRESENTATION OF RESULTS

This chapter presents the results of the analyses of the data collected in the study. The discussion is presented in the following order:

- Demographic distribution of respondents
- Answering of Research Questions
- Hypotheses Testing
- Findings

Answering Research Questions

Research Question 1: What are the leadership skills available to administrators of universities in North Central Nigeria?

To answer this question, a questionnaire tagged Staff Assessment of Administrators' Leadership Skills was administered to staff who worked directly with

university administrators. Data collected were subjected to descriptive analysis (Mean and Standard Deviation), and the results are shown in Table 1.

Table 1: Mean and Standard Deviation of Staff Assessment of Administrators'

Leadership skills	N	Mean	S.D
Human skill	382	1.55838	4.7252
Technical skill	382	1.14110	3.3962
Conceptual skill	382	0.97120	3.3069

Leadership Skills

Results in Table 1 show the highest mean of 1.55 (1.6%) for administrators' human skill, followed by 1.14 (1.1%) for technical skill and a least mean score of .97 (0.9%) recorded for conceptual skill. Administrators' human and technical skills recorded average scores while conceptual skills recorded a low score. This implied that the most available leadership skill to university administrators is human skill, followed by technical skill, while the least available skill is the conceptual skill. Human skill is considered the most sensitive and essential of all skills of university leaders who are interested in building strong teams that will help improve university productivity.

Research Question 2: What are the management support services available to administrators of Universities in North-central Nigeria?

The response of Administrators to the questionnaire tagged Administrators' Assessment of Universities' Support Services was subjected to descriptive analysis (Mean and Standard Deviation). The results are shown in Table 2.

Table 2: Mean and Standard Deviation of Support Services available to Administrators of Universities in North Central Nigeria

Support services	N	Mean	S.D
Research Support	380	4.47336	17.2895
Staff Dev.	380	4. 40424	16. 4053
Welfare	380	3.71092	12. 3237

Results in Table 2 show the highest mean score of 4.47 for research support, followed by 4.40 for staff development and a least mean score of 3.71 recorded for welfare support. Thus, the most available management support services available to university administrators in North Central Nigeria is research, followed by staff development while the least available support service is welfare. The results indicate a moderate level of support for research and staff development, with welfare support considered lowest.

Hypotheses Testing

Five hypotheses were formulated for the study, and Multiple Regression methods were used to test the hypotheses at 0.05 level of significance.

Main Hypothesis

Ho: There is no significant relationship among administrators' leadership skills, management support services and university productivity in North Central Nigeria.

Participants' responses to leadership skills and management support services were regressed with university productivity; which is the sum of responses on research, teaching and university community service productivity. The results are shown in Table 3.

Table 3: Administrators' Leadership Skills, Management Support Services and University Productivity in North Central Nigeria

Model	Sum of Square	Df	Mean Square	F	Sig	Decision
Regression	94947.72	2	47473.86	751.97	0.000	Ho Rejected
Residual	64079.61	1015	63.13			
Total	159027.336	1017				

***significant $P < 0.05$**

Results in Table 3 indicate that the calculated F- ratio was 751.97 with a DF of 2/1015, significant at 0.000 alpha level. The null hypothesis which stated “that there is no significant relationship among administrators' leadership skills, management support services and university productivity in North-central Nigeria” was rejected. The F-ratio of 751.97 indicated a strong relationship among administrators'

leadership skills, management support services and universities productivity in North Central Nigeria, significant at an alpha level of 0.05.

To examine the contributions of each of the independent variables (administrators' leadership skills and management support services), r-square was computed, and the output is shown in Table 4.

Table 4: Model Summary showing the Contribution of Administrators' Leadership Skills, Management Support Services and University Productivity in North Central Nigeria

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1.	0.773	.597	0.596	7.94560

Results in Table 4 show R-square of 0.597 which is the contribution of the two independent variables (administrators' leadership skills and management support services) to university productivity in North Central Nigeria.

To further assess the contributions of each of the independent variables (administrators' leadership skills and management support services) to the model (university productivity), Beta weight and t-values were computed for each of the independent variables, and the results are shown in Table 5.

Table 5: Contributions of the Independent Variables to University Productivity

Model	B	Std. Error	Beta	Calculated t-value	Sig
Constant	2.153	1.083		1.988	0.047
MSS	0.541	0.058	0.476	9.339	0.000
ALS	0.365	0.060	0.312	6.132	0.020

MSS = Management Support services

ALS = Administrators Leadership Skills

Predictors: Administrators' leadership skills and management support services

Dependent Variable: University productivity

The results in Table 5 show that the variable of Management Support Services had a Standard error of 0.05 and Beta weight of 0.47 and calculated t-value of 9.33 significant at 0.00 and administrators' leadership skills had a standard error of 0.36, Beta weight of 0.31 and t-value of 6.13 significant at 0.02 showing clearly that the subjective independent variables of management support services and administrators leadership skills were significant in predicting university productivity.

Ho₁: There is no significant relationship among administrators' leadership skills, management support services and university teaching productivity in North Central Nigeria

To examine the contributions of the independent variables (administrators' leadership skills and management support services) to teaching productivity, R-square was computed, and the output is shown in table 6.

Table 6: Model summary showing the contribution of Administrators' Leadership Skills, Management Support Services to University Teaching Productivity in North Central Nigeria

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1.	.990	.979	.979	1.56634

Result in Table 6 showed that R-square is (97.9%) which is the contribution of two independent variables (administrators' leadership skills and management support services) to teaching productivity in North-central Nigeria.

Participants' response to leadership skills and management support services were regressed with University teaching productivity only. The results are shown in

Table 7.

Table 7: Relationship among Administrators' Leadership Skills, Management Support Services and University Teaching Productivity in North Central Nigeria.

Model	Sum of Square	df	Mean	F	Sig.	Decision
Regression	43801.20	2	21900.60	8926.54	0.000	Ho Rejected
Residual	924.94	380	2.453			
Total	44726.14	382				

Results in Table 7 showed that the calculated F-ratio is 8926.54 with DF of 2/380, significant at 0.000 alpha level. This means that there is a significant relationship among administrators' leadership skills, management support services and University teaching productivity in North-central Nigeria. Therefore, H_{01} was rejected.

To further assess the contributions of each of the independent variables (administrators' leadership skills and management support services) to the model (teaching productivity), Beta weight and t-values were computed, and the output is shown in table 8.

Table 8: Contributions of the Independent Variables to Teaching Productivity

Model	B	Std. Error	Beta	Calculated t value	Sig
Constant	0.443	0.350		1.266	0.206

ALS	0.059	0.017	0.058	3.360	0.001
MSS	0.924	0.017	0.937	54.331	0.000

ALS = Administrators Leadership Skills

MSS = Management Support Services

Predictors: Administrators' leadership skills and management support Service

Dependent Variable: Teaching productivity

Results in Table 8 showed the Beta weight and the t-values of each of the independent variables. The Beta weight of Administrators Leadership Skills was 0.05 with a t-value of 3.36, while Management Support Services was 0.937 with a t-value of 54.33. This implied that both Management Support Services and Administrators Leadership Skills contributed significantly to teaching productivity at the alpha level of .001 and .000 respectively.

H₀₂: There is no significant relationship among administrators' leadership skills, management support services and University research productivity in North Central Nigeria.

To examine the contributions of the independent variables (administrators' leadership skills and management support services) to university research productivity, R-square was computed and the output is shown in Table 9.

Table 9: Model summary showing the contribution of Administrators' Leadership Skills, Management Support Services to University Research Productivity in North Central Nigeria

Model	R	R Square	Adjusted R	Std. Error of the Estimate
1.	.537	.289	.285	9.55638

Table 9 showed that R-square is 0.289 which is the contribution of two independent variables (administrators' leadership skills and management support services) to university research productivity in North Central Nigeria.

Participants' responses to leadership skills and management support services were regressed with university research productivity. The result is shown in Table 10.

Table 10: Relationship among Administrators' Leadership Skills, Management Support Services and University Research Productivity in North Central Nigeria.

Model Square	Sum of Square	df	Mean	F	Sig.	Decision
Regression	13981.708	2	6990.854	76.550	0.000	Ho ₂ Rejected
Residual	34429.290	380	91.324			
Total	48410.997	382				

Results in Table 10 revealed that the calculated F-ratio is 76.550 with a DF of 2/380, significant at 0.000 alpha level. This means that there is a significant relationship among administrators' leadership skills, management support services and University research productivity in North Central Nigeria. Therefore, Ho₂ was rejected.

To further assess the contributions of each of the independent variables (administrators' leadership skills and management support inputs) to the model (research productivity), Beta weight and t-values were computed and the output is shown in table 11.

Table 11: Contributions of the Independent Variables to university research productivity

Model	B	Std. Error	Beta	Calculated t-value	Sig
Constant	19.876	2.137		9.301	0.000
ALS	0.071	0.107	0.067	0.663	0.508
MSS	0.612	0.104	0.597	5.905	0.000

ALS = Administrators Leadership Skills

MSS = Management Support Services

Predictors: Administrators' leadership skills and management support Services

Dependent Variable: Research productivity

Results in Table 11 show the Beta weight of Administrators Leadership Skills was 0.067 at 0.508 significant level which is not significant at an alpha level of 0.05. Management Support Services has a Beta weight of 0.597 with t-value of 5.905 significant at .000. This implies that Management Support Services contributed more than Administrators Leadership Skills to research productivity. The Beta weight of Administrators' Leadership Skills was 0.06 which is not significant at 0.05, while that of Management Support Services was 0.59 and is significant at .000 alpha level. This implies that Management Support Services contributed more than Administrators Leadership Skills to research productivity.

H₀₃: There is no significant relationship among administrators' leadership skills, management support services and university community service productivity in North Central Nigeria.

To examine the contributions of the independent variables (administrators' leadership skills and management support services) to community service productivity, R-square was computed, and the results are shown in Table 12.

Table 12: Model Summary of Administrative Leadership Skill, Management Support Services and University Community-service Productivity in North Central Nigeria

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1.	.166	.028	.020	12.41754

Predictors: (Constant), Mngt. support, admin lead skill

Results in Table 12 show that R-square is 0.28 which is the contribution of the two independent variables (administrators' leadership skills and management support services) to University Community-service productivity in North-central Nigeria.

Table 13: Relationship among Administrators' Leadership Skills, Management Support Services and University-community Service Productivity in North Central Nigeria

Model	Sum of Square	df	Mean	F	Sig.	Decision
Regression	1087.215	2	5.43607	3.525	0.081	Not rejected
Residual	38394.638	249	1.54195			
Total	39481.853	251				

Results in Table 13 revealed that the calculated F-ratio is 3.52 with a DF of 2/249 and significant at 0.08 alpha level of 0.05. This means that there was no significant relationship among administrators' leadership skills, management support services and University-community service productivity in North-central Nigeria. Therefore, H_{03} was not rejected.

Summary of Findings

The study investigated administrators' leadership skills, management support services and university productivity in North Central Nigeria, with

administrators' leadership skills and management support services as the independent variables and university productivity, the dependent variable.

The findings of the study revealed that:

- i. administrators' human, technical and conceptual skills were fairly adequate with mean values of 1.55, 1.14 and 0.97 respectively;
- ii. research, staff development and welfare support services were adequate with mean values of 4.47, 4.40 and 3.71 respectively;
- iii. MSS and ALS combined are significantly related to university teaching productivity with ($B=0.937$, $Se=0.017$, $t_c=54.33 > t_t=1.69$ and $B=0.058$, $Se=0.0017$, $t_c=3.36 > t_t=1.69$; $F_c=76.55$),
- iv. MSS and ALS combined are significantly related to university research productivity ($B=0.47$, $Se=0.05$, $t_c=9.33 > t_t=1.69$ and $B=0.31$, $Se=0.36$, $t_c=6.13 > t_t=1.69$; $F_c=751.97$); and
- v. MSS and ALS did not have significant relationship with community service productivity ($F=3.525$, $p>0.05$).

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

The chapter presented the discussion of major findings, conclusion and recommendations.

Discussion of Findings

The first finding on assessment of administrators' leadership skills had variables of human, technical and conceptual skills. The mean scores obtained for the variables were 1.55, 1.14 and 0.97 respectively. Reasons for this might be that human skill with statements like transparency, reward of efforts of staff, taking responsibility for actions, empathy, and conflict management to mention but a few, largely characterized leadership of universities in many developing countries, the research area is not an exception. Generally speaking, the human skill in African society is very high, thus in the universities, especially in the University of study, human skill recorded the highest mean score which is a reflection of the larger society. Technical skill with a mean score of 1.4 can also be attributed to the low technical expertise of university administrators. Technical skill is viewed to be needed at the middle and lower levels of university management. This variable is made up of expert knowledge

and its application, meeting objectives under challenging situations, and adequate communication to carry out assigned duties. Generally speaking, it is evidently clear that technical skill is sparsely available in and out of the university system, a reason why African nations are largely termed developing nations. In the Nigerian university system with no exception of universities in North-central Nigeria, technical skill expertise is still a problem to overcome compared to the variable of human skill. In this light, conceptual skill that is closely related to technical skill could not but record the least mean score. If the technical expertise which is key to improved university productivity is low, conceptual skill would also be low. This is in line with the study of Hoffman and Mehra, (1999) when they established that a leader's knowledge of conceptual skills enables such a leader to identify problems, select alternative approaches to solving such problems, implement procedures and receive feedbacks to address failures. Khan and Wisal (2012) also carried out a study relating the variables of leadership skills to the achievement of organizational objectives. The findings of the study justified the findings of the present study that when leaders of universities have the right human, technical and conceptual skills, university productivity will also improve.

The findings of this study, however, contradicted the outcome of the report carried out by Davies, Pellert and Zechlin (2007) that Nigerian university administrators lack the professional management experience that is in line with the requirements for public service management. They observed that academic expertise and a vested interest in the mission and standards of higher education could never

substitute for competence in handling the diverse demands facing higher education system today.

The second significant finding concerned management support services available to university administrators. The results obtained indicated that the variable of research support services had a mean score of 4.47, staff development programmes had a mean score of 4.40 and administrators' welfare support services had a mean score of 3.71. In recent years, university research support has been identified as fundamental to the revitalisation of universities and had received funding mainly from the Nigerian Tertiary Education Trust Fund (TETFUND) and the World Bank. The TETFUND is used for research development activities and staff development grants and awards for training and development of staff. In this report, therefore, research support services recorded the highest mean score in order to increase high-quality research development to tackle the challenges that are diminishing the status of the nation. Staff development programmes which were rated next to research support services might be as a result of the concentration of efforts to research development activities at the expense of capacity building of staff. It was found that in many instances, support for capacity building of staff is skewed in favour of the teaching staff with a ratio of 70:30. The release of the 30% of the fund meant for capacity building of non-teaching staff is often subject to the good-will of the Vice-chancellors of universities. The third variable with the lowest mean score of 3.71 is staff welfare support services. This finding might not have come as a surprise as the attention given to the welfare of workers in Nigerian universities is grossly inadequate when compared with other world-class universities. This has often resulted in labour unrest

and incessant strike action that has characterized Nigerian universities. If universities are to rise above these problems and provide functional education to its teeming masses, adequate fund should be made available to fund the universities, especially to cater for the welfare needs of staff. This assertion was supported by the findings of Goodall, McDowell and Singell (2014) on the impact of rewards and incentives that are used to motivate and improve the performance of teams in universities.

The third major finding was on the impact of administrators' leadership skills and management support services on university teaching productivity. The results indicated that the Beta weight for administrators' leadership skills was 0.058, standard error of 0.017 and a $t_c = 3.36 > t_t = 1.69$, significant at 0.001 and an alpha level of 0.05. While management support services had a Beta weight of 0.93, standard error of 0.017, with $t_c = 54.33 > t_t = 1.69$ 54.33, significant at 0.00 and alpha level of 0.05. The result proved that administrators' leadership skills and management support services had a significant impact on university teaching productivity with an F- ratio of 76.55. This is an indication that administrators' leadership skills and management support services have contributed to the achievement of excellent teaching and learning in universities and to neglect either of them is to risk the provision of functional education to all. The findings of the study did not align with the present situation in the education industry where analysts are of the view that there is a mismatch between the skills acquired by graduates and labour market requirements.

However, the researcher is of the opinion that the findings of the study on teaching could be complimented with a consideration of research productivity. The

study therefore considered the impact of administrators' leadership skills and management support services on university research productivity. The results obtained indicated that: $B=0.47$, $Se=0.05$, $t_c=9.33>t_t=1.69$ and $B=0.31$, $Se=0.36$, $t_c=6.13>t_t=1.69$; $F_c=751.97$ and an F- ratio of 76.55 at 0.05 alpha level, with lecturers collaborating with other researchers both within and outside the country, attending and presenting papers at conferences and publishing such papers in reputable journals. Research development activities are given priority attention in universities in North-central Nigeria as funding partners like the TETFUND released funds for research activities. Support is given for publications of research findings in peer reviewed and high impact journals. They are sponsored to local and international conferences where research findings are presented to the world.

Despite the available funding for research activities in Nigerian Universities, research performance of Nigerian Universities when compared with performance of world class universities leaves much to be desired. For instance, the best researcher in Nigeria revealed an h-index of 36 and 3736 citations, while the number one researcher in the world has an h-index of 272 and 482648 citations. Mohammed (2017) in a survey to ascertain the research harvest of some Nigerian universities in the peer-reviewed journals of the New England Journal of Medicine (NEJM) and Nature, no university in the study area had any paper in the leading journals. In the webometric ranking of universities which used as proxies in the evaluation of universities global performance, the 2017 ranking showed that only two out the five universities under study were counted with the Federal University of Technology, Minna occupying the 50th position in Africa and 2548th in the world, while

University of Ilorin occupied 86th in Africa and 3225th in the world. The not very impressive performance of the supposed giant of Africa is attributed to lack of well spelt out goals of Nigerian universities as Kperogi (2014) observed that the Nigerian university system is in turmoil because they lack clearly-defined missions.

The findings on beneficiaries' assessment of adequacy and frequency of university community service programmes in North-central Nigerian universities revealed mean scores of 1.68, 1.89, 2.07, 1.53, 1.77 and 2.43 for outreach/extension programmes for local artisans, adult education programmes, frequency of the programmes, improved skills as a result of the programmes, relevance of the programmes, and other agencies having better programmes than those mounted by the universities respectively. The results indicated an F- ratio of 3.52 with a degree of F- 0.081 that was not significant at 0.05 alpha level. The null hypothesis was therefore accepted and this implied that university community service programmes did not make significant contribution to university community service productivity in North Central Nigeria. The volunteer programmes which were supposed to draw the universities attention to the peculiar problems confronting the local communities did not achieve the desired results. The essence of university community service is to transmit teaching and research endeavours into programmes that can solve the problems of societies. The study revealed that many faculties do not have programmes that are of direct benefit to their immediate communities. There is a said to be a disconnect between universities, the industries and communities. Many research findings gather dusts in shelves of laboratories instead of translating the

findings to tangible programmes and services that can be of direct benefits to the nation.

Conclusion

Based on the findings of the study, the two variables of administrators' leadership skills and management support services were found to have made significant contributions to university teaching and research productivities. However, they did not make significant impact on university community services. Despite the impressive results obtained in teaching and research productivity, realities in the Nigerian education system did not show a very impressive performance in community service programmes. Perhaps the lack of impact in community service programmes where universities are expected to translate their achievements in teaching and research to improved living conditions of citizens is responsible for the under-performance witnessed in the education sector in particular and the society at large. The aim of any university teaching and research endeavours are to ensure that stake holders have a space to achieve their individual desires for improved living standards. Universities should be seen to be responding to the socio-political and economic challenges and position the country for global competition.

Recommendations

In order for universities in North-central Nigeria to be well positioned to respond to challenges diminishing the status of the Nigerian nation and for global engagement with other world-class universities, the following recommendations are made:

1. even though administrators of universities in the universities under study have adequate leadership skills, there is a need to constantly update and upgrade human, technical and conceptual skills of administrators. This is with a view to keeping them abreast of development in the management of world class universities.
2. there is also a need to improve on the support services for staff development in order to build the capacity of staff. Equity and fairness in the allocation of grants for staff development will ensure everyone has opportunity for capacity building in order to meet the present and future needs in the universities. Only staff whose expectations and aspirations are met can contribute their best and achieve the goals of education.
3. to further assess the contributions of universities to national development, there is a need to ensure proper accountability through a new framework for assessing university productivity especially teaching productivity just like it's proposed for universities in the United Kingdom. The present ranking of universities relies on proxies rather than concrete and direct benefits that accrue from teaching and research activities. Such ranking should take into account the peculiar developmental challenges of developing nations and to see whether the universities are actually addressing these challenges through improved university community services.
4. in order to further ensure improved engagement with the communities and achieve the third mandate of the university, there should be collaboration in form of functional memorandum of understanding followed with concrete

community service programmes like joint programmes, and research collaborations especially with the industries. This way the communities will benefit from the activities of teaching and research of universities.

Limitation of the Study

The study was limited to universities in North-central Nigeria, thus limiting the generalisability of the findings. A few programmes were focused in the assessment of university community service programmes. The lack of impact of the community service programme cannot be generalized to cover programmes such as the ambitious and impactful COBES programme of the College of Health Sciences, University of Ilorin. This is because the medical programme are not available in all the universities and could not be assessed. A longitudinal study with longer time frame to observe long term impact than the present study with a limited time frame may have also revealed better impact of the programmes.

Despite the limitations, the researcher is of the strong believe that the study has made an effort to contribute to the understanding of some of the factors that can contribute to improved university system and by extension arrest the dwindling fortunes of the nation's education industry.

Suggestions for further studies

In the light of the limitations identified, the study suggested that further studies should be conducted to cover longer time frame in order to be able to assess

the long time impact of educational programmes. In addition, future studies should examine other factors that are may likely influence university productivity.

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Appendix 1
Research Advisor, 2006

Required Sample Size[†]

Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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ILORIN, NIGERIA

FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL MANAGEMENT

Questionnaire on “Administrators’ Leadership Skills, Management Support Services and University Productivity in North-Central Nigeria”.

Dear Respondents

This questionnaire is to obtain your view on the topic: Administrators’ Leadership Skills, Support Services and University Productivity in North-Central Nigeria.

Please respond to each item that is appropriate to your response or give your opinion as honest as possible. Your response will be treated with utmost confidentiality and will be used by the researcher for the purpose of this study only.

Thanking you in anticipation of your kind support and assistance.

Sincerely,

Kikelomo W. Sallee

Questionnaire on Staff Assessment of Administrators’ Leadership Skills

SECTION A: Demographic Information

Please put a tick

1. Name of your University:

University of Ilorin ☐

Fed. University of Tech. Minna ☐

Fed. University of Agric. Makurdi ☐

University of Abuja ☐

University of Jos ☐

2. Gender:

Male ☐

Female ☐

3. Highest Academic Qualification:

Ph. D. Degree ☐

Master's Degree ☐

Bachelor's Degree ☐

Others ☐

4. Faculty/Unit:

Education ☐

Agriculture ☐

Science ☐

Communication Sciences ☐

Others ☐

5. Position in the University:

Administrative staff ☐

Lecturer ☐

Technologist ☐

Others ☐

6. Length of service in the University

6months-10 years ☐

11-20 years ☐

21- 30 ☐

31-40 ☐

41-50 ☐

51-60 ☐

61-70 ☐

7. Age:

20-30 years ☐

31- 40 years ☐

41-50 years ☐

51-60years ☐

61 years and above ☐

S/ N		S A	A	D	SD
	Staff Assessment of Administrators' Leadership Skills				
1	My superior officer is transparent in conducts with staff				
2	My superior officer rewards efforts of staff				
3	My superior officer takes responsibility for his actions				
4	My superior officer welcomes suggestions on how to perform official duties from staff				
5	My superior officer shows sympathy to staff when necessary				
6	My superior officer builds relationships with staff				
7	My superior officer regulates behaviours of staff				
8	My superior officer manages conflicts amongst staff				
9	My superior officer have expert knowledge and apply this to duties				
10	My superior officer has the ability to meet objectives under challenging situations				
11	My superior officer sets guidelines when assigning duties				
12	My superior officer communicates adequately the information needed to carry out assigned duties				
13	My superior officer delegates duties				
14	My superior officer works with staff to achieve the goals of the University				
15	My superior officer has a deep-rooted understanding of the mission of the University				
16	My superior officer has a broad view of the vision of the University				
17	My superior officer has a deep knowledge of the organizational environment and utilizes this to understand and achieve the mission of the University				
18	My superior officer has skills of strategic management				
19	My superior Officer is a link between management and staff				

Administrators' Assessment of University's Support Services to University

Administrators

SECTION A: Demographic Information

1. Name of your University:

2. Gender:

Male ☐

Female ☐

3. Highest Academic Qualification:

Ph. D. Degree ☐

Master's Degree ☐

Bachelor's Degree ☐

Others ☐

4. Faculty/Unit:

Education ☐

Agriculture ☐

Science ☐

Comm. Sciences ☐

Others ☐

5. Position in the University:

Administrative staff ☐

Lecturer ☐

Technologist ☐

Others ☐

6. Length of service in the University

6 months-10 years ☐

11-20 years ☐

21- 30 ☐

31-40 ☐

41-50 ☐

51-60 ☐

61-70 ☐

7. Age:

20-30 years ☐

31- 40 years ☐

41-50 years ☐

51-60years ☐

61 years and above ☐

Please state the adequacy/frequency of the following Support Services of your University to University Administrators? Please indicate by putting a tick (✓) against the preferred option such as 1 Very Adequate, 2 Adequate, 3 Fairly Adequate, 4 Not Adequate.

Research support programmes

S/ N	Items	V A	A	F A	NA
1	Research linkages and collaborations with other universities				
2	Infrastructure for research activities				
3	Library services for research activity				
4	Financial incentives for conducting research				
5	Subscription to relevant Local and International Journals				
6	Research collaboration with International partners				
7	Collaboration with other departments for research activities				
8	Support to publish research findings				

Staff Development Services

9	Attendance at International conferences	V A	A	F A	N A
10	Attendance at local conferences				
11	Study leave to do higher degrees				
12	Induction programmes				
13	Staff development to do higher degrees				
14	Mentoring by superior officers				
15	Access to electronic media programmes				
16	access to relevant information resources				
16	access to relevant information resources				

Welfare Support Services

S/N	Items	V	A	F	N
		A		A	A
17	Recreation facilities				
18	Sporting facilities				
19	Promotions are as at when due				
20	Loan facilities to fund projects				
21	Health care for staff and dependants				
22	Conducive working environment				

Lecturers' Assessment of Research Productivity

SECTION A: Demographic Data

1. Name of your University:

2. Gender:

Male ☐

Female ☐

3. Highest Academic Qualification:

Ph. D. Degree ☐

Master's Degree ☐

Bachelor's Degree ☐

Others ☐

4. Faculty/Unit:

Education ☐

Agriculture ☐

Science ☐

Communication Sciences ☐

Others ☐

5. Length of service in the University

6months-10 years ☐

11-20 years ☐

21- 30 ☐

31-40 ☐

41-50 ☐

51-60 ☐

61-70 ☐

7. Age: 20-30 years ☐

31- 40 years ☐

41-50 years ☐

51-60years ☐

61 years and above ☐

12. Are you on:

Google Scholar ☐

Research Gate ☐

Specify others ☐

13. What is your overall Citation Index?

Less than 100 ☐

Above 100 ☐

**Beneficiaries' Assessment of Adequacy of University- Community Service
Programmes**

SECTION A: Demographic Information

1. Name of your Community -----

2. Gender:

Male ☐

Female ☐

3. Highest Academic Qualification:

Ph. D. Degree ☐

Master's Degree ☐

Bachelor's Degree ☐

Others ☐

4. Occupation: ☐

Civil Servant ☐

Farmer ☐

Artisans ☐

Others ☐

5. Type of extension/Outreach programme:

Agriculture ☐

Training ☐

Conference ☐

Workshop ☐

Skill acquisition ☐

Others ☐

6. Age:

20-30 years ☐

31- 40 years ☐

41-50 years ☐

51-60years ☐

61 years and above ☐

Assessment of University-community service productivity

Please state the adequacy/frequency of the following Universities' Community Service Extension/Outreach programmes by putting a tick (✓) against the preferred option such as Very Adequate (VA), Adequate (A), Fairly Adequate (FA), Not Adequate (NA)

S/ N	ITEMS	V A	A	F A	N A
1	Outreach/extension Programmes for local artisans				
2	Outreach/extension adult education programmes				
3	Frequency of outreach/extension programmes				
4	Outreach/extension Programme has improved my skills				
5	Outreach/extension programme is relevant to my occupation				
6	Other agencies have better programmes than those of the universities				

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naire on Students' Assessment of Teaching Productivity

Section A.

i. Lecturer's Faculty-----

ii. Lecturer's Department-----

iii. Course Code/Title

iv. Semester

Section B. Please be honest in your response to the following statements about your lecturers. All information supplied shall be treated with utmost confidentiality. Please indicate by putting a tick \checkmark against your preferred option such as Excellent (E), Very Good (VG), Good (G), Fair (F), and Poor (P)

Students' Assessment of Teaching Productivity

S/ N	Items	E	VG	G	F	P
1	Punctual at lectures					
2	Regular at lectures					
3	Knowledge of the subject matter					
4	Currency of presentation					
5	Explains clearly					
6	Covers course content					
7	Very audible while teaching					
8	Has good command of English language					
9	Tolerates students					
10	Attendance are taken during lectures					
11	Conducts Continuous Assessments tests					
12	Is accessible outside of lectures					

13	The quality of teaching is high					
14	Has high good moral behavior					

Appendix 3

Lecturers Assessment of Research Productivity of universities in North-central Nigeria

S/N	Lecturers' Assessment	Strongly Agree	Agree	Disagree	Strongly Disagree	\bar{X}
	of Research Productivity	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	
1.	I publish scientific articles regularly	209 (54.6)	84 (21.9)	51 (13.3)	39 (10.2)	1.83
2.	I have publications in Edited conference proceedings	161 (42.0)	116 (30.3)	67 (17.5)	39 (10.2)	2.03
3.	I have written book(s)	174 (45.4)	91 (23.8)	63 (16.4)	55 (14.4)	2.02
4.	I have written chapter(s) in book(s)	189 (49.3)	64 (16.7)	75 (19.6)	55 (14.4)	2.04
5.	I have supervised P. Graduate students	178 (46.5)	54 (14.1)	91 (23.8)	60 (15.7)	2.17
6.	I have attracted internal research grants	161(42.0)	84 (21.9)	82 (21.4)	56 (14.6)	2.15

7. I have attracted internal research grants	189 (49.3)	64 (16.7)	71 (18.5)	59 (15.4)	2.03
8. I have performed editorial duties	201 (52.5)	64 (16.7)	63 (16.4)	55 (14.4)	1.95
9. I have patent rights	185 (48.3)	92 (24.0)	67 (17.5)	39 (10.2)	1.97
10. I have undertaken Post-doctoral Fellowship	161 (42.0)	88 (23.0)	94 (24.5)	40 (10.4)	2.18
11. I collaborate with Co-researchers	202 (52.7)	119 (31.1)	31 (8.1)	31 (8.1)	1.72
Overall Mean					1.61

Students' Assessment of Teaching Productivity

S/N Students Satisfaction X	Excellent	Very Good	Good	Fair	Poor	
with teaching Productivity	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	
1. Punctual at lectures	204 (53.3)	131 (34.2)	18 (4.7)	9 (2.3)	21 (5.5)	1.73
2. Regular at lectures	199 (52.0)	97 (25.3)	35 (9.1)	22 (5.7)	30 (7.8)	1.92
3. Knowledge of Subject matter	217 (56.7)	103 (26.9)	26 (6.8)	10 (2.6)	27 (7.0)	1.77
4. Currency of publication	145 (37.9)	156 (40.7)	34 (8.9)	12 (3.1)	36 (9.4)	2.06
5. Explains clearly	201 (52.5)	96 (25.1)	34 (8.9)	13 (3.4)	39 (10.2)	1.94
6. Covers course content	207 (54.0)	78 (20.4)	52 (13.6)	16 (4.2)	30 (7.8)	1.91
7. Very audible while teaching	208 (54.3)	126 (32.9)	33 (8.6)	13 (3.4)	3 (0.8)	1.64
8. Has good command of English	226 (59.0)	98 (25.6)	40 (10.4)	16 (4.2)	3 (0.8)	1.62
9. Tolerates students	186 (48.6)	120 (31.3)	40 (10.4)	19 (5.0)	18 (4.7)	1.86
10. Attendance are taken during lectures	176 (46.0)	83 (21.7)	47 (12.3)	23 (6.0)	54 (14.1)	2.21
11. Conducts continuous Assessment tests	202 (52.7)	103 (26.9)	30 (7.8)	30 (7.8)	18 (4.7)	1.85
12. Is accessible outside lectures	188 (49.1)	96 (25.1)	28 (7.3)	31 (8.1)	40 (10.4)	2.06
13. The quality of teaching is high	186 (48.6)	124 (32.4)	30 (7.8)	22 (5.7)	21 (5.5)	1.87
14. Has high moral behaviour	228 (59.5)	92 (24.0)	18 (4.7)	18 (4.7)	27 (7.0)	1.76
Overall Mean						1.87

Beneficiaries Assessment of Community-service Productivity

S/N Community Service Programmes	Strongly Agree	Agree	Disagree Strongly	Disagree	\bar{X}
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	
1. Outreach /extension programmes for local artisans	130 (51.6)	78 (31.0)	38 (15.1)	6 (2.4)	1.68
2. Outreach/extension adult education programmes	77 (30.6)	137 (54.4)	6 (2.4)	32 (12.7)	1.87
3. Frequency of outreach/extension programmes	70 (27.8)	100 (39.7)	5 (2.0)	77 (30.6)	2.07
4. Outreach/extension programmes has improved my skills	139 (55.2)	93 (36.9)	-----	20 (7.9)	1.53
5. Outreach/extension programmes is relevant to my occupation	97 (38.9)	123 (48.8)	6 (2.4)	26 (10.3)	1.77
6. Other agencies have better programmes than those of the universities	57 (22.6)	72 (28.6)	42 (16.7)	81 (32.1)	2.43
Overall Mean					1.89

Appendix 4

Table 1: Demographic Characteristic of Respondents

Item	Frequency	Percentage (%)
Administrator by Institutions		
A	80	21.1
B	80	21.1
C	66	17.4
D	75	19.7
E	79	20.8
Total	380	100
Administrators by Gender		
Male	248	65.3
Female	132	34.7
Total	380	100
Staff by Institutions		

A	97	25.4
B	72	18.9
C	71	18.6
D	70	18.2
E	72	18.9
Total	382	100
Staff by Gender		
Male	205	53.7
Female	177	46.3
Total	382	100
Lecturers by Institutions		
A	80	20.9
B	63	16.4
C	80	20.9
D	80	20.9
E	80	20.9
Total	383	100
Lecturers by Gender		
Male	215	56.1
Female	168	43.9
Total	383	100
Lecturers by Citation Index		
Less than 100	234	61.1
Above 100	149	38.9
Total	383	100
Lecturers by Research		
Platform	126	32.9
Google Scholar	209	54.6
Research Gate	48	12.5
Others	383	100
Total		

Appendix 5

Budget for the Programme

This study is self-sponsored. The total cost is estimated at about ₦2,042,000

	TUITION/ SEMINAR FEES	₦	₦
A	1.Tuition fee	450,000	550,000
	2.Seminar fee	120,000	
	TEXTBOOKS/JOURNALS		
B	1.Text books	45,000	65,000
	2.Journal/magazine	20,000	

C	COMPUTER SYSTEM		
	1.Zinox laptop	130,000	
	2.Mini laptop	24,000	
	3.Small printer	20,000	
	4.Toner	3,000	177,000
D	INTERNET FACILITIES		
	1.Browsing/down loading	50,000	75,000
	2.Reprinting of materials on internet	25,000	
E	STATIONERIES		
	1.Photocopy	90,000	175,000
	2.Binding	25,000	
	3.Paper	60,000	
F	TRANSPORTATION		
	1.Inter-state	700,000	
	2.Local running	100,000	800,000
G	ACCOMODATION	150,000	150,000
H	Miscellaneous	50,000	50,000
TOTAL		2,042,000	2,042,000