## CHAPTER ONE INTRODUCTION

**Background to the Study**

Economic and social developments globally are increasingly driven by the advancement and application of knowledge. The changing world of work has been influenced significantly in recent years by changes in technology,as well as in theories of managerial best practices. This development has made organizations to become more interested in talented employees with innovative skills toenable organizations competefavourably with other competitors (Aida, Noralis&Rozain, 2015). The demands of the knowledge economy have placed renewed emphasis on graduates‟ employability and the development of higher order thinking skills. Changes in technology, managerial practices and the competitive environment have raised the level and breadth of knowledge, skills and abilities that employers require from employees. This has further widened the already significant gap between employers‟ needs and the actual skill levels and abilities of graduates who enter the labour pool to apply these skills(Babes, 2009).

In both developed and developing countries, the issue of graduates‟ employability is a contentious issue that is debated in the labour market, educational institutions as well as the private and public sector (Bester &Boshoff,

2009).Petronellaand Renee (2015) observed that employers‟dissatisfaction with the level of skills and qualities ofgraduates contributes to the growing graduates‟unemployment rate in most parts of the world in recent times. Akinyemi,Ofem and Ikuenomore (2012) reiterated that graduates turn out outpaced the graduate employment rate in Nigeria. This development is as a result of inadequate application of technical knowledge, deficiency in English proficiency and lack of critical thinking skills on the part of the graduates coupled with high technological drive of most organizations in response to tougher competition in the competitive markets.

In the report of the forum held in Nigeria by the British council on “bridging employability skill gap in Nigeria”,it was revealed that the graduates‟ unemployment in Nigeria is attributableto lack of foundational skills which encompasses the communicative skills. It was added that some graduates do not know how to express themselves in writing especially when looking for employment. In the same vein,LaoluOguntuyi a participant during the forum reiterated that Nigerian graduates lack hard skills and the soft skills. It was suggested at the forum that in order for graduates to be globally competitive, supporting economic growth and continuing to attract inward investment, it is essential, for the Nigerian graduates to have employability skills which encompasses soft skills and hard skills.

Okpiaifo (2016) stated that most people often imply that bad economy, ineffective government, job scarcity are the causes of unemployment in Nigeria. However, having seen a number of vacancy adverts around, it would be observed that lack of employability skills by applicants is majorly responsible for unemployment rate in Nigeria. Okpiaifo reiterated that the lack of leadership skills, good communicative skills, critical thinking skills, personal development skills, interpersonal skills, computer literacy, problem solving skills, time management skills, technical skills and a host of other skills are often times the reason Nigerian graduates are unemployed.

Some Nigerian university graduates lack job related skills,requisite skills for employment which include critical thinking skills, communicative skills, management skills, interpersonal skills, decision making skills, personal skills, job specific skills and a host of other relevant skills(Asuquo&Adegbola, 2014).Akinyemi, Ofem and Ikuenomore (2012), opined that graduate unemployment in Nigeria is attributable to the fact that employees‟ education and skills acquired are inadequate to meet the demands of modern day jobs and what employers desire. In the same vein, Ediagbonya and Oduma (2012) cited the report of the Group Managing Director of Nigeria National Petroleum Cooperation (NNPC), Austin Oniwon in August 2011 which stated that 80 percent of job seekers failed the Cooperation‟s recruitment test. It was attributed to the fact that

those job seekers do not possess the employability skills needed by the cooperation despite their paper qualifications of a minimum of second class upper division (21).In times of high unemployment rate as in Nigeria, employers have more choice of applicants and will favour those who possess and can apply needed employability skills in the execution of office tasks.

According to Aida et al (2015), degree acquisition is no guarantee for job performance. The authors maintained that it is the integration of new graduates as employees into an organization, the application of employability skills in the haulage of their duties and speed at which they can contribute effectively that have become a critical success factor.Understanding and possessing what a company is searching for will go a long way in helping an applicant to secure a job in the company whilethe level of applying the skills in tasks performance willenable the employee retain and progress on the job. Buttressing these points, Andrews and Higson (2008) stated that severalresearcheshave shown that many employers are interested in essential employability skills of graduates and those who will be able to apply their skills in real work situations. Employers in this regards are those who are supervisors or bosses in any enterprise.According toAllen (2011), an employer is a legal entity that controls and directs a servant or worker under an express or implied contract of employment and pays (or is obligated to pay) him or her salary or wages in compensation. Employers are individuals in charge or

corporate organizations that hire workers to do different jobs in other to achieve the goals of the organizations. They can be classified as director, manager, heads of department, supervisor and other nomenclature as the case may be. The employers are usually the reporting officers who are in charge of appraising the performance of their subordinates.

As posited by Dania, Bakar and Mohammed (2014), in the new global economy, employers need more than technical knowledge and skills from workers which is often referred to as job specific skills. The authors affirmed that in addition to job specific skills, workers must apply soft skills to continue contributing to the growth and expansion of an industry or corporation.This means that to secure employment and progress in any chosen career, graduates require both hard skills (job specific skills) and soft skills (generic skills) which constitutes employability skills.

According toYorkeand Knight (2006), employability skills area set of skills, understanding and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupation which is of benefits to them, other stakeholders and ultimately the economy at large.Rosenbaum and Person (2003) cited the definition by United Kingdom Commission for Employment and Skills (UKCES) which gives the simplest definition of employability skills as skills almost everyone needs in order to do virtually any

job. Rosenbaum and Person went further to explain that employability skillsgoes beyond subject knowledge, qualifications and specialist experiences toencompass the soft skills and hard skills which can bring about effective job performance. In a nutshell therefore, employability skills areabilities any individual require to be able to secure, retain and advance in any working environment in order to succeed at all levels in the 21st century workplace and contribute to the development of the organization.

Several researchers such as Secretary‟s Commission on Achieving Necessary Skills (SCANS, 1991; 2000),Dabalen, Oni and Adekola (2000), Rosenbaum (2002), and othershave identified and summed up employability skills to include thesoft skills: foundational skills,critical thinking skills, management skills, personal and interpersonal skills and the hard skills: technical skills whichare the skills needed to carry out the functions, roles, and responsibilitiesof a particular profession.The profession of interest in this study is the Office Technology and Management (O.T.M.) profession.

According to Igbinedion (2011), the graduates of the O.T.M. profession can be regarded as secretaries, administrative assistants, office coordinators, executive assistants, office managers, administrative professionalsand consultants to organizations whether public or private. They carry out modern office procedures and practices.The O.T.M.professionalsare trained employees who possessmastery

of office skills and the ability to assume responsibility without direct supervision. The O.T.M. graduate employees deal with emergencies, gather facts and present them meaningfully.

According toAliata and Hawa (2014), several changes have taken place in private and public offices as regards the functions, roles and responsibilities of the

O.T.M. graduates as a result of advancement in technology and the competitive market.These changes have significant effects and pose more challenges and expectations for the O.T.M. graduates.

Every educational programme should be relevant to the specific career development of the individual student. Based on this, the O.T.M. curriculum has been undergoing series of review by the N.U.C., N.B.T.E., N.C.C.E. since 2004 to reflect these changes in employment requirements in order to produce graduates who should fit properly into the office of any computerized organizations and perform functions professionally (Igbinedion, 2011).It is believed that an individual may not possess all the skills but it is hoped that the school‟s curriculum should be redesigned and restructured to bring about the necessary changes and that individuals should assess their skills from time to time to know their relative standing (Ediagbonhia&Oyedongha, 2008).Applying employability skills discerns whether the training provided by the institutions is meeting the major objective of providing the right manpower for the industry.By implication, the efficiency with

which O.T.M. graduate employees perform their duties depends on the adequacy of the knowledge and skills they acquired during the period of training. Hence, the current trend is that the employability of graduates is used as a bench mark to measure the quality of higher education (Teichler, 2009).

Several studies conducted both locally and internationally have shown that there is a mismatch of skills possessed by graduate employees and what employers desire from them in terms of theirapplication of relevant skills in performing office tasks. In researches carried out by Iro (2013), Earnest (2010), andAliofor, (2005), on the assessment of skills possessed by O.T.M. graduates, it was revealed that there is a mismatch between the skills acquired by O.T.M. graduates and the skills required by employers.The above studies have supported the result of the study conducted by Barrie (2006) that employers have revealed that graduates are often ill-equipped for the workplace and that higher education institutions should be held accountable for producing more employable graduates. Barrie stated that although various lists of generic skills and research related skills could be found in some graduates, there is a need to know the level of the outcomes themselves, as well as for higher education institutions to review the quality of the education provided. In this regard, Maila (2007) pointed out that the provision of quality education and accountability is an obligatory function of higher education. According to Olofintoye and Prince (2013), the goals of tertiary education remains elusive and

seems unachievable as the tertiary institutions products(graduates) in Nigeria often do not marry knowledge acquired in schools with that of the labour market.

There have been many researches carried out on the assessment of employability skills of graduates in other professions and locations in Nigeria and also in other developed countries such as in the United States of America, but this is not so apparent in O.T.M. profession. Studies such as those carried out by Iro (2013), Garba (2012), Agboola (2006)on the application of skills by O.T.M. graduate employees, it will be observed that most of these studies focus majorly on the technical skills application leaving out the application of soft skills.Based on the employers‟needs, it is clear that possession and application of technical skills alone cannot guarantee employability of O.T.M. graduates but the combination of soft skills and the hard skills will guarantee their employability and survival in the work place. Against this back drop, this study soughtto ascertainsupervisors‟ assessment of the application of all-round employability skills by O.T.M. graduatesworking inpublic and private organizations in Edo and Delta States.

The type of organization and the years of experience of the employers are important variablesthat could affect their assessment of their employees.According to Adeyemo, Ogunleye, Oke and Adenle (2010), presently in Nigeria, two main sources of employment opportunities exist for graduates of educational institutions; these are

firstly, the public sector which includes government ministries, schools, and parastatals and secondly, the private sector which encompasses small to medium-sized personal businesses as well as multinational corporations (large scale businesses).Ascribing to the dissimilar business philosophies that underpin the public and private sectorsas pointed out by Ju Zhang andPacha(2012), there is a need to ascertain whether the dissimilarities in business philosophies is likely to affect the employers assessment of the application of employability skills by O.T.M. graduates in public and private organizations.Experience is also an essential variable that can affect assessment. Adebayo (2008) noted that experience of an assessor is a significant factor that can affect the competency of assessment by an assessor, hence the need to investigate if the levels of experience have a significant influence on the responses of employers.

## Statement of the Problem

Changes occasioned by globalization, knowledge-based economy and modern technological innovations have made the business world more competitive and complex. These changes have raised the level and breadth of knowledge, skills and abilities that employers require from employees which has further widened the already significant gap between employers‟ needs and the actual skill

levels and abilities of graduates who enter the labour pool to apply these skills.Ediagbonya and Oduma (2012), Jonck and Walt (2015), Petronella and Renee (2015), and othershave shown that employers in the public and private organizations are enthralled in graduates‟application of employability skillsin real work situation than mere degree subject. Workers need more than the application of technical knowledge and skills which are often job specific. In addition to applying technical skills, they must also highly apply soft skills in order to contribute to the growth and expansion of any industry.

The curriculums of most programmes in the tertiary institutions have undergone series of reviews in order to meet the demands of employers in the present global market. The current O.T.M. curriculum which came out as a result of the review of the curriculum of the secretarial administration was meant to keep pace with global developments and produce office managers who can function effectively in any modern office.It is expected that graduates from O.T.M. programme will highly apply all-round employability skills in order to meet labour market demands. In spite of curriculum reviews in most disciplines including O.T.M., employers still complain that the application of all-round employability skills by graduates of tertiary institutions is still inadequate. If the low application of employability skills persists, there is the tendency that O.T.M. graduates

willface the rigor of unemployment and it will be an indication that the curriculum is inadequate to produce the needed manpower for the industries.

The few studies that have been conducted in O.T.M. profession concerning the assessment of employability skills have basically concentrated on just the technical skills (hard skills)aspect of the employability skills without the assessment of the soft skills.Considering the sensitive rolethe O.T.M. professionals play in the operations and effective running of any organization andin view of the demands of employers of labour, it will be highly detrimental to the O.T.M. professionals if they cannot highly apply all round employability skills especially in this era of massive unemployment and job insecurity in Nigeria. Considering the determination of the effectiveness of the reviewed curriculum of O.T.M. programme,it is therefore pertinent to establish the levelO.T.M. graduates could apply all-round employability skills in the performance of office tasks in public and privateinstitutions in Edo and Delta States.

## Purpose of the Study

The purpose of this study was to assess the application of employability skills by O.T.M. graduate employees in public and private organizations in Edo and Delta States from the opinion of theirSupervisors. Specifically, the study determinedsupervisors‟ ratings ofO.T.M. graduates application of:

1. Foundational skills
2. Critical thinking skills
3. Management skills
4. Personal and Interpersonal skills
5. Technical skills

## Significance of the Study

The result of this study would be of immense benefit toinstitutions management,O.T.M. students, O.T.M. educators,O.T.M. graduates, employers of labour, human resource professionals, recruitment agencies, curriculum planners, policy makers,and future researchers.The findings of this study would be of immeasurable value to institutional management because it would serve as feedback mechanism to determine the effectiveness and relevance of O.T.M. programme in preparing graduates for work. In other words, the result of this study would helpboost students‟ acquisition of needed skills by disclosing the gap between the levels ofemployability skills acquired by O.T.M. graduate employees and expected level of skill needs of industry. This would aid in closing the skill gap through appropriate inculcation of skillsinto the students.

The findings of this study wouldbe beneficial to O.T.M. students andO.T.M. educators because it would help create awareness of the concept and importance of employability skills to the globalized business world. This would help both the teachers and students to take the acquisition of these skills very seriously. This

would help to reduce the unemployment crises because graduates of this field would be better equipped with the necessary skills and awareness of what is expected of them in real world of work.

The findings of this study would be of immense help to O.T.M. graduates because they will be able to assess the level of skills they have and the ones they need to revise in order to be relevant. This will help them to make frantic efforts to acquire these skills in order to compete favourably in the labour market.

The findings of this study would helpemployers of labour to identify the skills which their employees lack so that such information could be passed on the training institutions for curriculum review and update. Also, the findings of this study would helphuman resources professionals and recruitment agencies to identify training needs of the graduates‟ employees. The findings of this study would enable human resources professionals and recruitment agencies assess quality candidates that are better equipped with needed employability skills based on the training the school system would have provided considering skill gap that the findings of this study have shown.

To the curriculum planners, the findings of the study would help to provide the training needs in O.T.M. programme which would be used as a platform to update the curriculum to meet the labourmarket demands.Consequently, the findings of this study would be of considerable benefit to policy makers because it

would provide fundamental information which shows a gap in the present policy in formulating employability skills policies as it could help in the development of tertiary institutions in Nigeria.

The result of this study would be beneficial to future researchers because it wouldadd to the existing body of knowledge. It equally wouldserve as a reference material for those who might wish to carry out study on related areas.

## Scope of the Study

This study focused onsupervisors‟ assessmentof the application of employability skills by O.T.M. graduates.Thecontent scope was delimited to the

O.T.M. graduates application of foundational skills, critical thinking skills, management skills, personal and interpersonal skills andtechnical skills.The respondents were drawn from supervisors in public and private tertiary institutions in Edo and Delta States. Type of organization(Public and Private) and years of experience of the respondents were used as the intervening variables for the study. **Research Questions**

The following research questions guided the study:

1. How do supervisors assessthe O.T.M. graduate employees‟ application of foundational skills?
2. To what level do supervisors assess the O.T.M. graduate employees‟ application of critical thinking skills?
3. How do supervisors assess the O.T.M. graduate employees‟ application of management skills?
4. To what level do supervisors assess the O.T.M. graduate employees‟ application of personal and interpersonal skills?
5. How do supervisors assess the O.T.M. graduate employees‟ application of technical skills?

## Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. Public supervisors and private supervisors do not differ significantly in their mean ratings on the application of foundational skills by O.T.M. graduate employees.
2. Supervisors do not differ significantly in their mean ratings on the application of foundational skills by O.T.M. graduate employeesbased on years of experience.
3. Public supervisors and private supervisors do not differ significantly in their mean ratings on the application of critical thinking skills by O.T.M. graduate employees.
4. Supervisors do not differ significantly in their mean ratings on the application of critical thinking skills by O.T.M. graduate employeesbased on years of experience.
5. Public supervisors and private supervisors do not differ significantly in their mean ratings on the application of management skills by O.T.M. graduate employees
6. Supervisorsdo not differ significantly in their mean ratings on the application of management skills by O.T.M. graduate employeesbased on years of experience.
7. Public supervisors and private supervisors do not differ significantly in their mean ratings on the application of personal and interpersonal skills by

O.T.M. graduate employees.

1. Supervisors do not differ significantly in their mean ratings on the application of personal and interpersonal skills by O.T.M. graduate employees based on years of experience.
2. Public supervisors and private supervisors do not differ significantly in their mean ratings on the application of technical skills by O.T.M. graduate employees.
3. Supervisors do not differ significantly in their mean ratings on the application of technical skills by O.T.M. graduate employees based on years of experience.

## CHAPTER TWO

**REVIEW OF RELATED LITERATURE**

In this chapter, the researcher reviewed works of other authorities relevant to this study organized under the following sub-headings:

**Conceptual Framework** Assessment Application Employability Skills

Office Technology and Management Graduates

**Theoretical Framework** Dispositional Theory Human Capital Theory

## Theoretical Studies

Office Technology and Management Programme Nomenclatures and functions of O.T.M. graduate employees Employability Skills Needs

Enhancing students‟ employability skills

## Empirical Studies

Studies on assessment of graduates foundational skills and other skills Studies on assessment of graduates critical thinking skills and other skills

Studies on assessment of management skills in Public and Private Enterprises

Studies on assessment ofgraduates‟ application of technical skills

## Summary of Related Literature Review Conceptual Framework

Relevant concepts in the title of this study are reviewed in this section.

## Assessment

The term „assessment‟ may be defined in multiple ways by different individuals or institutions, perhaps with different goals.Assessment is a process that asks and answers important questions: To what degree are students learning? Are courses effective? Do programmes fulfill their objectives/missions/goals? Is the university in accord with objectives set by its accrediting body or bodies? The essence of assessment especially when it has to do with a programme, is to formalize the ways answers are given to the questions asked in harmony with each programme‟s goals(Atere, 2010).

Aceves (2015) stated that assessment seeks to improve the quality of performance regardless of its current level. Assessment is not necessarily simple or intuitive. Aceves went further to state that assessment is complicated by a dense thicket of literature that attempts to describe goals and process and it depends in large part on mutual understanding and the desire on the part of the faculty,

departments, programmes, and the university to make each piece happen. To be successful, it is important to acknowledge what is done well and also agree that assessment can be carried out in diverse ways and with different measures and identify achievable goals that improve the programme. One of the most relevant questions in creating an assessment plan is: What is to be assessed? Which should give answers to?What knowledge or skills should students who complete this program have? How can we know whether students have the expected knowledge or skills? How can we improve programs to bring students closer to expectations(Aceves, 2015).

According to Biggs and Tang (2011), assessment is a systematic collection, review, and use of information about educational programs undertaken for the purpose of improving learning and development. The Higher Learning Commission (2006)defined assessment as a participatory, iterative process that: provides data/information you need on your students learning;engages you and others in analyzing and using this data/information to confirm and improve teaching and learning; produces evidence that students are learning; the outcomes you intended; guides you in making educational and institutional improvements; evaluates whether changes made improve/impact students learning and documents the learning and your efforts. Assessment results are used to improve subsequent learning.

In a programme, assessment can be formative or summative. The point at which the assessment occurs in a programme distinguishes these two categories of assessment. The formative assessment is often done at the beginning or during a programme while summative assessment is comprehensive in nature, provides accountability and is used to check the level of achievement at the end of a programme. The programme goal and objectives is usually used to assess the success of a programme (Bardes& Denton, 2001).

Cintron and Flaniken (2015) stated that in organizations, assessment of employees‟ performance is referred to as performance appraisal. Nickolas (2007) sees appraisal as a concept which is defined as judgment of value, performance or nature of something or somebody. Appraisal depicts assigning numerical value to performance of workers (workers in this context are the O.T.M. graduate employees) by their supervisors otherwise referred to as executives/bosses on how they apply employability skills to office tasks. It is an impartial analysis and evaluation conducted according to established criteria so as to determine the acceptability, merit or worth of an employee‟s competences (Iro, 2013).

In the context of this study,assessment depicts a process by which the job performance of an employee is evaluated typically by the corresponding manager or supervisor. It is a process of obtaining, analyzing and recording information about the relative worth of an employee to the organization. Assessment is

measuring the outcome of a process based on the set standard or goal.Therefore,assessment can be defined as an appraisal or rating of performance of O.T.M. graduates‟ by their supervisors.

## Application

According to Ottoson (2005), application is to put a thing into practice. The complex multi-dimensional process of application takes more than one idea.Ottoson went further to state that applicationinvolves putting into practice knowledge and skills acquired. Application is to reclaim the value of a process. Bloom taxonomy of learning stated three lists that cover the learning objectives which are cognitive, affective and sensory domains. The cognitive domain (knowledge based) in the 2001 revised edition of Bloom‟s taxonomy presented a slight difference: remember, understand, apply, analyze, evaluate and create. According to Bloom (2001), applying involves using acquired knowledge to solve problems in new situations by applying acquired knowledge, facts, techniques and rules.

Application is a multidimensional concept as earlier mentioned, its definition is relative to situational use (Otoide, 2010). In teacher education, according to Adebayo (2005), application is putting into practice effective use of previously acquired knowledge to solving educational problems. Adebayo went further by illustrating a scenario within a teacher education class, the use of

technology; authenticity would include using computers for practices that teachers normally do in the classroom. This might include the development of instructional materials, the identification of suitable technology resources and practicing the skills that will be learned by their students. This in itself involves the concept of application. Ogbeide and Osagie (2010) cited the Wikipedia definition of application as the act of putting to a special use or purpose: the application of common sense to a problem. In science, a computer program with an interface, enabling people to see the computer as a tool to accomplish a specific task;Word processing, spread sheet, and communications software are all examples of application.

Based on the various definitions given by different authors, there is a common word which unites the whole definitions that is „putting into practice‟. Therefore, in the context of this study, application concept can be defined as putting into practice what has been learnt during the period of training. Relating this concept to the present study, the idea of application is to observe or to determine how effective O.T.M. graduates use prior knowledge and skills acquired during training to solve problems, identify corrections and relationships and how they apply these acquired skills to the working environment.

## Employability Skill

Knight and Yorke (2001) consider the concept of employability to be a

„synergic combination of personal qualities, skills of various kinds and subject understanding. It is a concept that is much more complex than the relatively restrictive key skills agenda, which has obscured a greater understanding of employability. In the rhetoric of employability, the concept is given many definitions and meanings, varying from those emphasizing individual skills and abilities, and preparedness to be employable to those laying stress on the employee‟s qualifications, the demand of labour force, and the employer‟s preferences and pattern of selection (McQuaid and Lindsay, 2005).McQuaid and Lindsay reiterated that most people view employability in absolute terms, focusing on the need for individuals to obtain credentials, knowledge and social status; the concept of employability can also be seen as subjective and dependent on contextual factors. Employability not only depends on whether one is able to fulfil the requirements of specific jobs, but also on how one stands relative to others within a hierarchy of job seekers (Brown &Hesketh,2004).

Yorke and Knight (2001) also suggest that traditionally, little emphasis has been placed upon a student‟s personal qualities, but that these could have considerable bearing on a particular student‟s success. Therefore, employability can be categorized in three ways as follows:

1. The educational conception relating to the ability of graduates to tackle

„graduate‟ jobs. This is related to the notion of „capability‟ whose development came into being in the late 1980s - 'Higher Education for Capability'. This means that employability of graduates relates to their being equipped for a job and capable of being employed, rather than job acquisition (Harvey, 2001; Heijden, 2001). Again, employability from the perspective of higher education is therefore about producing graduates who are capable, equipped and able to secure, maintain and progress in their chosen profession; these impact upon all areas of university life, in terms of the delivery of academic programmes and extra curricula activities. Employability as a concept has drawn attention in research, and has already developed norms and practice in working life according to some researchers (Docherty &Huzzard, 2003; Garsten& Jacobson, 2004).

1. The ability of the graduate to get a job – any job. The second concept is used by the Government in the construction of the Employability Performance Indicators (EPIs), but it is the first concept that most practitioners in tertiary institutions are primarily concerned with. Good student learning and the curriculum, teaching and assessment that goes with it, describes „education for employability‟ well (Knight&Yorke, 2000). This implies that curricula designed to enhance students‟ employability are also desirable on purely educational grounds.

It is possible to see both the traditional academic education and key skills as being subsets of „employability‟.

1. From the employers‟ point of view, employability is the propensity of the graduate to exhibit attributes that employers anticipate will be necessary for the future effective functioning of their organization.It has been asserted by many researchers that a person‟s employability is based largely on his knowledge, skills and abilities to carry out tasks assigned to the individual in the work place.

According to Okpiaifo (2016), many Nigerians have no clear-cut concept of employability. All they know is that one goes to school, graduates, gets a job and earns salary. This really would be fine, except that most companies want to know how employable a person is, before they add them to their staff. Employment and employability is not the same thing. Being employed means having a job, being employable means having the qualities needed to maintain employment and progress in the workplace.

In the new global economy, employabilityskills are more than technical knowledge and skills, which are often job-specific and not transferable. In addition to technical skills which are hard skills, workers must also have soft skills which arereferred to a cluster of personal qualities, habits, attitudes and social graces that make someone a good employee and a compatible co-worker. It is

valued across a variety of jobs, fields and organizations, regardless of position or title (Rosenberg, 2008).

Soft skills which are a subset of employability skills are essential for effective performance in a broad range of jobs and are transferable across workplaces (Huhman, 2014). According to Wikipedia, soft skills is a term associated with a person‟s emotional intelligence quotient, which is the cluster of personality traits that characterizes one‟s relationships with other people. Soft skills contrast with hard skills, which are generally easily quantifiable and measurable. Technical skills associated with different roles may be less important than the 'soft skills' that can be transferred between different jobs and different employment sectors.

Hard skills are skills needed to be able to manage a job role. Hard skills are usually related to professional knowledge, tools, or techniques that allow us to work within profession. It is technical or administrative procedures related to an organization„s core business. Hard skills have also been part of the program in preparing the graduates to be marketable (Amaiya, 2012). Hard skills are also skills needed by recruits to be capable in their chosen fields. This means that the specialist, technical skills associated with different roles are referred to as hard skills.

## Office Technology and Management Graduates

Igbinedion (2011) defines Office Technology and Management graduate asa diplomat, ambassador and mirror of the organization.Adebayo and Akinyele (2012) defined O.T.M. graduates as professionals that are trained employees who possessmastery of office skills and the ability to assume responsibility without direct supervision. The graduates of the O.T.M. profession can be secretaries, administrative assistants, office coordinators, executive assistants, office managers, administrative professionalsand consultants to organizations who carry out modern office procedures and practices (Igbinedion, 2011).

Igbinedion went further to state that theOffice Technology andManagement graduates of various cadres are very essential for the efficient and smooth running of business organizations. In any organized set up or office there has to be proper flow of communication and correct presentation from such establishment to achieve its corporate goals. In the light of the above, ideas, suggestions, thoughts, information and messages must be orderly and properly presented in printed forms. Records are to be preserved in offices for external and internal dealings of the establishment. Also visitors should be handled with sound business etiquette to create the necessary goodwill and healthy public image required of an enterprise. The processional discharge of all these functions lies with the O.T.M. graduate employee otherwise known as graduate secretary (Garba, 2012). Based on the

kind of training given to O.T.M. graduates, it is evident that most office functions revolve around them – computer application function, record management functions, management of bookings and appointments, handling and maintenance of office equipment and management of meetings proceedings/correspondences.

The personal attributes of an O.T.M. graduate employee should include good personality, integrity, pleasing temperament, imitativeness charming manners, understanding and sympathy toward others; self control and good humour in order to absorb the heat of the day‟s work. Based on the main objective of the O.T.M. programme, the O.T.M. graduates are expected to be knowledgeable and versatile in office management, the use of modern office technology, management of the information systems and in routine business functions such as generating, processing, storing, retrieving, handling and disseminating information with little or no supervision.

## Theoretical Framework

This section discussesthe following two theories which arerelevant to this

study:

## Dispositional Theory

The dispositionaltheorywas propounded by Fugate andKinicki in 2004. This theory is primarily interested in the measurement of traits which is the habitual patterns of behavior, thoughts and emotion.The aforementioned theorystates that

there are multidimensional constellations of inherent characteristics that predispose the individual to actively adapt to their employment and career environment. This theory confirms that by understanding the process of employability, individuals are able to manage their career more proactively, by focusing on inherent employability and emotional skills. The dispositional approach to employability is divided into three dimensions namely: career identity, personal adaptability and human capital development.

Career identity refers to the “who am I” in the context of individually chosen career paths. Career identity plays a pivotal role in motivating an individual to adapt to the changing environment. Whereas personal adaptability refers to the manner in which individuals are willing and able to change personal factors to meet the requirements of a particular work situation. In referring to human capital development, this implies the acquisition of knowledge and intellectual stock by means of education intended for expansion of productivity, efficiency, performance and output to ultimately increase the fiscal revenue of the organization.Human capital development confirms the notion that employability, as a disposition, is related to the inherent characteristics of the individual that might assist in adjusting to the external environment and foster positive employment results. Understanding the process of employability, individuals are

able to manage their career more proactively, by focusing on inherent employability and emotional skills.

The dispositional theory is ascribed to the fact that the contemporary work environment is characterized by instability and uncertainty that requires adaptability. Thus employees would be empowered to cope with changing work environment if they were in possession of the characteristics which will assist them to adapt to constant transitions. Employees who possess these qualities may also be less likely to terminate employment, as they are able to cope with the stressors of work more proficiently than someone without these qualities. Employability affects individual adaptability and reaction to the environment, and employability is at present seen to encompass the reactive and proactive personal characteristics needed in order for an employee to be successful in the workplace. This also affects the way that employees react to changes in their environment. The dispositional theory is also said to assist in identifying opportunities, taking into consideration personal learning and chance.

The relevance of this theory to the present study cannot be over emphasized. Taking a cursory view of the nature of work of the O.T.M. graduate employee, the contemporary work environment is characterized by instability and uncertainty which requires the O.T.M. graduates to possess skills that require them to be adaptable to changing environment. Office Technology and Management

graduates can only cope or be empowered to cope with the changing work environment if they possess the characteristics which will assist them to adapt to constant changes in the work place. This study therefore is out to establish the level to which O.T.M. graduates possess these skills that will enable them to obtain, retain and sustain career related jobs.

The above theory postulated three dimensional approaches to employability which has bearing with the present study. The first dimension is the career identity and the chosen career identity in the context of the present study is the O.T.M. profession. The second dimension is the personal adaptability of which this study has identified personal adaptability in the area of application of employability skills acquired or possessed during the period of training in order to be able adapt to the constantly changing environment which requires adaptabilityimplied by theapplication of employability skills by O.T.M. graduates. The relevance of the third dimension „the human capital development‟ to the present study is that the acquisition of knowledge and intellectual stock by O.T.M. graduates through their education which is intended for expansion of productivity, efficiency, performance and output to ultimately increase the fiscal revenue of the organization will be determined by this study.

## Human Capital Theory

The human capital theory was propounded by Gary Becker in 1964. Human capital theory states that formal education is highly instrumental and necessary to improve the productive capacity of a population. The theory emphasizes that education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capital which is a product of innate abilities and investment in human beings in the new global economy. Hard tangible assets may not be as important as investing in human being.

Human capital is heavily influenced by the neoclassical economic conception of human behaviour which believes that human behaviour is driven by the compulsion to maximize individual benefits. Actions and decisions are believed to be based on economically rational decision-making that utilizes market information to make a balanced and informed assessment of probable outcomes. Applied to education decisions, this view argues that students are like entrepreneurs; they seek to increase the economic value of their skills and work output and maximize the value of their initial investment. Given the right market conditions, students will seek maximum utility and adjust their decision-making accordingly. Within this context, tertiary education is increasingly defined in relation to how they enhance the interests of the individual and how they contribute to national economic prosperity, which for individuals comes back to how tertiary

education makes one more employable. Tertiary education is increasingly seen in terms of how it might enhance the skill-set, knowledge and capabilities valued by graduate employers rather than for any intrinsic value. For the human capital view, employability is a function of one‟s educational level and skill-set, which are matched to different sectors of the economy. It is followed by an assumption that the more educated the workforce the greater the proportion of high-skilled jobs the economy will be able to create. Thus, employability is first and foremost a supply- side issue.

Investments in human capital (skills and knowledge) are directly proportional to employability. Whilst they recognize other determinants of employability (personal circumstances and labour market environment) these are secondary to educational level. In any case, it is argued that educational investments are never wasted because they develop skill and knowledge- acquisition competencies highly prized by the dynamic global economy. The provision of education is a productive investment in human capital, which is a stock of skills and knowledge acquired through schooling. Basically, the greater the provision of relevant and quality education, the greater the quality of stock of human capital in the society. Consequently, this leads to the increase in the national productivity and economic growth. Thus, investment in human capital is

a function of the potency of the labour force to contribute meaningfully to the growth of any organization.

With the advent of Information and Communication Technology (ICT), the skills of graduates of the O.T.M. profession have been greatly enhanced for optimum effectiveness of practitioners and the organizations in which they work. However, human capital development can only play its role of producing individuals, including O.T.M. graduates, with the required skills where adequate and sustainable funding in accordance with international standard as well as policy support is implemented.

The relevance of this theory to the present study is quite obvious. There is a correlation between the application of employability skills by O.T.M. graduates and human capital development theory as the former is a function of the latter hence; the intellectual stock of O.T.M. graduates determines the return in investment which is reflected in the productivity of the workforce. Where the workforce applies the required skills and competencies, productivity is said to increase. Therefore, human capital theory is critical when discussing O.T.M. skills because human capital development is synonymous with deliberate and systematic training and retraining which provides O.T.M. graduates with necessary knowledge and skills. This study therefore will determine if the investment on

O.T.M. graduates has brought about increase productivity in terms of skills acquired.

## Theoretical Studies

The theoretical studies will discuss relevant opinion of scholars which further clarifies the study.

## Office Technology and Management (O.T.M.)Programme

According to Adelekin (2009), office technology and management (O.T.M.) programme as a new nomenclature for secretarial studies came into existence in 2004 due to the emergence of technology that metamorphose the Nigerian offices to be technologically inclined. Theprogramme is being offered in the Universities, Polytechnics and the Colleges of Education. It has been designed to equip graduates with secretarial/office skills for employment in various fields of endeavour. The O.T.M. programmeis aimed at providing the business world with highly skilled knowledgeable workers who will manage information efficiently, equipped with a comprehensive range of skills including managerial, technological and communication skills(Adelekin, 2009). The O.T.M. profession has become vaster and highly demanding than it used to be in the past because of the dynamic nature of the world of work. The use of archaic and slow manual office machines and equipment has given way to highly sophisticated ones. Persistent yearnings from stakeholders (employers of labour and professional bodies) on the need of the

change in the nomenclature and course contents of the programme as outlined by Oborah (2008) led National Board for Technical Education (N.B.T.E) to change the nomenclature to O.T.M. and drew a new curriculum and course specifications.

According to the N.B.T.E (2004), in addition to the acquisition of vocational skills in Office Technology and Management, the students are equipped with effective work competencies and socio-psychological such as work skills, which are very essential in everyday interactions with other. The grand objectives of the programme therefore are to: equip students with secretarial skills for employment as secretarial managers in various organizations. Students in the programme will be offered professional, foundational and general education courses, which will enable them, acquire higher vocational and interpersonal skills in Office Technology and Managementprogramme for effective work competencies. As stated in the N.B.T.E. (2004), The objectives of the programme therefore are:

1. Acquisition of Secretarial Skills that is the ability to:
2. Write in Shorthand for three minutes varied materials of 1.4 syllabic intensity dictated at 100 wpm and transcribed on the typewriter with a minimum of 95% accuracy.
3. Type effectively various office jobs and acquire a copying rate of 50 wpm on passages not below 1.30 syllabic intensity with 98% accuracy.
4. Fit properly into the office of any organization and perform professionally, the functions of a Secretary which among others include - relating the functions of the

office to the whole organization, attending meetings and providing information as may be required; make accurate records of proceedings, filing and retrieving information, taking appropriate action independently when faced with challenging secretarial office problems, showing personal qualities and attributes conducive to tolerance and co-existence with the work group.

1. Acquisition of General Education.
2. Laying Foundation for Advanced Studies.

The curriculum consists of four main components:

1. General Studies/Education: The General education component shall include courses in: Citizenship Education I & II and Communication which are compulsory.
2. Foundation Courses: Foundation Courses include courses in Economics, Business Mathematics, Business Administration, Accounting, Nigerian Legal System, and Entrepreneurship.
3. Professional Courses Professional Courses are courses, which gives the student the theory and practical skills he needs to practice as an Office Manager or Secretarial Administrator.
4. Supervised Industrial Work Experience Scheme (SIWES) which measures Punctuality, Attendance, General Attitude to work, Respect for Authority, Interest in the field/technical area, and Technical competence.

Based on the curricula offering as spelt out in NUC (2004); N.B.T.E. (2004); and N.C.C.E. (2014), the curriculum courses include: Shorthand, ICT office applications, Office Administration and Management, Business Communications, Social Psychology, Business Law, Research Methods, Nigerian Labour Law, Professional career development, Human Capital Management, Database Mgt System, Oral communication skills, Elements of Human Resource Management, Advanced Desktop Publishing, Management Information Systems, Professional Ethics and Social Responsibility, Entrepreneurship, Advanced Web Page Design, Business Education Practicum, international economics, office management etcetera. The course content of O.T.M. seems to be quite adequate to bring about competencies in both the hard skills and soft skills for the O.T.M. students.

## Nomenclature and Functions of O.T.M. graduate employees

The graduates of the O.T.M. profession could be referred to as secretaries, administrative assistants, office coordinators, executive assistants, office managers, administrative professionals, consultants to organizations in fastening out modern office procedures and practices.The Office Technology and Managementprofessionals are trained employees who can be referred to as assistant to an executive, Office manager, secretary, personal assistant and so on- possessing mastery of office skills and the ability to assume responsibility without direct supervision. Adebayo and Akinyele (2012) maintained that Office

Technology and Management graduate employeesare expected to plan, organize and control the office taking into consideration time limits and priorities. Office Technology and Management graduate employees deal with emergencies, gather facts and present them meaningfully, assist in decision making, keep interruptions to a minimum by screening visitors and maintain schedules of the executives‟ time including calendar of meetings, projects and itineraries.

Office Technology and Management graduate employees serve as pivot of any organization, and whether in public and private organizations. According toAliata and Hawa (2014), several changes have taken place in private and public offices as regards the functions, roles and responsibilities of the O.T.M. graduates.According to Bankole (2006), the functions, roles and responsibilities of

O.T.M. graduate employees are to serve as information and communication managers of offices, plan and schedule meetings and appointments for their bosses who in the context of this study is referred to as employers, take minutes of meetings, organize and maintain paper-work and electronic files disseminate information electronically through telephone, e-mail, fax machine, uses office equipment such as digital photocopier, scanners and electronic papers trimmers. Also, they use computer to create spread sheets, compose correspondences, manage database, and create presentations, reports and documents using desktop publishing software, digital graphics, Microsoft word among others.It is expected

that O.T.M. graduates should be knowledgeable and versatile in office management, the use of modern office technology, and information systems and in routine business functions such as generating, processing, storing, retrieving, handling and disseminating information with little or no supervision.

## Employability Skill Needs

For employers, getting the right people means identifying people with the right skills and qualities to fulfill the role and contribute to the organization's success (Aida, et al, 2015). According to Okpiaifo (2016), candidates may have the qualifications and 'hard skills' needed to be able to manage the job role but, without a well-honed set of 'soft skills', employers are less inclined to hire. Okpiaifo (2016) maintained that an employer wants to be sure that the person he employs will add value to his company. Of course, employers want recruits who are capable in their chosen fields, but that is not the only criteria. According to Woodcock (2016), based on a number of surveys on the skills required by graduates, Microsoft, Target Jobs, and other organizations came up with the summary of the skills which were most often deemed important by employers basically known as soft skills:

Butler (2013) stated that as the job market evolves, so do the skills required to enter it. Understanding what a company is searching for will go a long way in helping you to secure a job. Research has shown that businesses depend on

graduate-level talent to fill their most demanding roles. According to the Confederation of British Industry (CBI) Education and Skills Survey (2012), around 20% of jobs now require degree-level skills, and this proportion is likely to increase in the coming years. It also states that the all-round employability of graduates and the skills they have gained matter more than their degree subject. In fact, the United Kingdom Commission for Employment and Skills (UKCES) (2011) found that 81% of employers rate employability skills (soft skills) as the most important factor when assessing potential candidates.

In t*he ‘Times* Top 100 Graduate Employers of 2012/13‟, Aldi was ranked fifth. When asked what the firm looks for when recruiting for its graduate schemes, Richard Holloway, head of graduate recruitment at Aldi, stated that 'although they require a minimum 21 degree in any subject discipline, the business is also interested in a candidate's personal attributes: skills such as courage, self belief, inspiration, energy, commitment, ambition and leading from the front are all highly sought after.' CBI Education and Skills Survey (2012)suggest that in the next three to five years, 71% of employers expect to need people with leadership and management skills.

According to Allen (2013), for many people today, a career for life is no longer an option. Most people will hold jobs with a variety of employers and move across different employment sectors through their working life. According

to Allen, we all need to be flexible in our working patterns and be prepared to change jobs and/or sectors if we believe there are better opportunities elsewhere. He went further to state that in order to be flexible we need a set of „transferable skills‟ – skills that are not specific to one particular career path but are generic across all employment sectors. The job skills employers are looking for go beyond qualifications and experience. While your education and experience may make you eligible to apply for a job, to be successful in the role you will need to exhibit a mix of skills called „employability skills‟. This means that the specialist, technical skills associated with different roles may be less important than the 'soft skills' that can be transferred between different jobs and different employment sectors. For employers, getting the right people means identifying people with the right skills and qualities to fulfil the role and contribute to the organisation's success.

Enhancing graduate employability skills is considered as an important task within the university community in any country. In order to identify employer requirement most of the universities in the world regularly conduct employers‟ needs surveys. Employers normally give their comments on the skills they are looking for in new employees. Researchers such as SCANS (1991:2000); Dabalen, Oni and Adekola (2000); Rosenbaum (2002); and National University Commission (2004); Quintessential careers (2010); Rosenberg, et al (2012) and

also according to Employers‟ Needs Survey conducted by University of Guelph, Canada with the sub theme “Enhancing Employability through Quality Assurance, employers‟ expectations from employees”, the following employability skills have been identified as a prerequisite for securing, retaining and advancing in any employment as derived from employers survey needs**:**

## Foundational Skills

Foundational skills includes basic literacy and numeracy skills which is defined in the SCANS report as the ability to read, write, speak, listen, communicate and perform basic mathematical procedures. Reading skills include the ability to interpret written information. Understanding written sentences and paragraphs in work-related documents. Read and comprehend work-related instructions and policies, memos, bulletins, notices, letters, policy manuals and governmental regulations. Read and comprehend documents ranging from simple and straightforward, to more complex and detailed. Attain meaning and comprehend core ideas from written materials. Integrate what is learned from written materials with prior knowledge thereby apply what is learned from written material to work situations. Writing skills include the ability to communicate thoughts in letters and reports,using standardEnglish to clearly communicate thoughts, ideas and information in written form,prepare written materials that are

easy to understand using correct wording,communicate thoughts, ideas, information, messages and other written information in a logical, organized and coherent manner,use correct grammar, spelling, punctuation and capitalization. Write in a factual manner in a tone appropriate for the target audience in multiple formats.

Mathematical skills include the ability to solve practical problems through the use of a variety of mathematical techniques,using mathematics to solve problems,add, subtract, multiply and divide whole numbers, fractions, decimals and percent,convert decimals to fractions; convert fractions to percent,calculate averages, ratios, proportions and rates,take measurement of time, temperature, distance, length, width, height and weight; convert one measurement to another,translate practical problems into useful mathematical expressions. Numeracy involves an understanding of numerical data, statistics and graphs, and is also part of making decisions and reasoning. Numeracy skills are very important, irrespective of whether you consider a job to be "*working with numbers*". Having competence and being confident in working with numbers is a skill that can be used to your advantage in a wide range of employment settings: for example, knowing how profitable a company is, understands value for money when purchasing and ordering supplies, following a budget or just calculating your

holiday time. Being able to understand and analyze data in different formats is considered an essential skill in many organizations.

Employers look for people who communicate well both verbally and in writing. If you are either applying for a job or looking for a promotion with your current employer, you will need to demonstrate good communication skills. The ability to communicate both verbally and in writing with a wide variety of people, maintain good eye contact, write clearly and succinctly, demonstrate a varied vocabulary and tailor your language to your audience are all essential skills that employers seek out. Good verbal and written communication means you can get your messages across with less chance of misunderstanding. Similarly, active listening skills involve not only hearing but gaining and understanding information.

Listening is a basic requirement leading to fewer mistakes and a greater understanding of the needs of employer and client. As your career progresses, the importance of communication skills increases as well as creativity, people skills, and an aptitude for teamwork, the ability to speak and write with clarity and conciseness will become essential for managers.

## Critical Thinking Skills

The critical thinking skills also called analytical or system thinking skill include the ability to think creatively, make decisions, and solve problems (SCANS, 2001).Okpiaifo (2016) stated that another skill employers look for is critical thinking skills and problem solving skills. A good recruit must be able to think, analyze issues carefully, and come up with effective solutions to problems. This is important in decision-making. Additionally, Paranto and Kelkar (1999) reported employers were often not satisfied with graduates‟ ability to think; and employers noted continually the importance of critical thinking skills over content. Employers desire critical thinking skills with “graduates who can think on their feet and determine ways to accomplish tasks” (Garton,&Vaughn, 2007). When compared to critical thinking skills, content has become less important to employers based on their ability to teach through experience the subject matter required for the job (Sleap& Reed, 2006).

According toGarton, and Vaughn(2007), the ability to solve problems and make decisions can be a huge asset to your employer and these are therefore desirable skills to develop. Decision making and problem solving require gathering reliable information, evaluating the information for a variety of solutions and selecting the most appropriate option based on the criteria and situation.

Although the ability to solve problems and make appropriate decisions is critical in any job, people with these skills are especially helpful in customer service positions. In terms of problem solving, recruiters want graduates who can research and implement change, and candidates who donot panic when things go wrong but seek a way around the problem. You can demonstrate this by describing a complex problem you faced, in a work scenario or in everyday life, and the steps you took to solve it (Garton,&Vaughn, 2007).

In SCANS (1999;2001), it was asserted that creative thinkers are innovative and inventive and are more likely to devise new ways of doing things that add value to the work environment, making systems and procedures more efficient. Creative thinkers can offer new perspectives about the job and the company.

Systems Thinking Skills include the ability to understand and operate within social, organizational, and technological systems. Designing and suggesting modifications to systems and explaining the interaction of systems in the context of the global economy are elements of systems thinking skills (Senge, 2000).

## Management Skills

Management skills also known as leadership skill include the ability to motivate others to achieve organizational goals (Schermerhorn, 2008).

Management Skills include the activities of planning, organizing, leading, and controlling to meet organizational goals (Schermerhorn, 2008). Management skills also include time management which is one of the most crucial employability skills. At various stages in one‟s career, one is faced with deadlines to meet. A person who cannot manage his time well will find it extremely difficult to meet up with these deadlines, and could find working an unpleasant experience.

Okpiaifo (2016) stated that Leadership entails influencing others toward the achievement of a goal. Leaders have, or are perceived to have strong self- confidence. Good leadership skills allow one to work well in a team to achieve the best results. Typical characteristics of effective leadership are responsibility, self- esteem, and the ethical qualities of integrity and honesty. Leaders either have, or are perceived to have, strong self-confidence. Leaders are team players, allowing them to work in a group to achieve the best results for their employer. Leaders show social skills by respecting the thoughts, opinions and ideas of others - they gain the respect of others and aim for credibility(Okpiaifo,2016). Developing your leadership skills can therefore not only help you to find a senior position, but may also help you to gain promotion with your current employer. The ability to manage several tasks at once, to set priorities and allocate time effectively in order to meet multiple deadlines is also very important. The ability to lead, influence and motivate others. The ability to be able to effectively plan and organize means

that you, or your team, are more likely to get the job done correctly the first time(Schermerhorn, 2008). Schermerhornstates that these skills are beneficial to employers as they save time and money.

## Personal and Interpersonal Skills

InOkpiaifo(2014), personal skills are all about having the right attitude towards work and the organization you work for.An individual‟s disposition toward work could be regarded as personal attribute which is referred to as work ethics. Valente (2014) stated that work ethics is a set of moral principles that guides an employee in his or her job.It went further to enlist personal attributes which are considered to be a judge to ensuring workplace ethics to include regular attendance to work, punctuality, respectfulness, dedication, determination, accountability, humility, integrity, commitment, honesty, loyalty, and motivation, patience, good attitude, dependability, professionalism, and realistic expectations of job requirements. According to Wikipedia the free encyclopedia, work ethics is value based on hard. Every employee from Chief Executive Officer (CEO) to entry level workers must have a good personal attributes to keep the company functioning at its peak. According to the National Association of Colleges and Employers Job Outlook 2009 report, personal attributes was the competency most lacking in recent graduates. Several researchers, including Rosenbaum (2002),

Bracey (2007), and Carnevale, Gainer, Meltzer, and Holland (2008), have observed that employers described work habits as being more important than academic skills. Rosenbaum (2001) suggested that it is these skills that are sometimes considered to be the best predictors of job performance.

According to Okpiaifo(2014), personal development skills entail having the right attitude towards work, keenness to develop and learn and willingness to adapt to better ways of doing things. In addition to these, many employers look for recruits with work experience, preferably in the field they are looking forward to work. Lifelong learners are always valued in organizations. In order to stay ahead of the competition, organizations need to continually learn and develop better ways of doing things. The employee who is open to learning and embraces change will be more successful than the person who is afraid of learning and resistant to changes in the organization. Most jobs involve change, some more frequently than others, and employers want people who are adaptable, flexible, and patient, and respond well to change. Personal development is also concerned with how individuals evolve their working practices and attitudes to work. Self-motivation and confidence are key areas of personal development as is personal appearance and how others perceive you. Self-management skills, also known as „self-control are the skills we use to manage our personal feelings and how we react to challenges and problems both at work and in our private lives. Personal

development includes learning to avoid potentially negative emotions such as anger and stress while developing assertiveness and effective negotiation skills and the ability to manage your career in a constantly changing world of work (Okpiaifo,2014).

Interpersonal skills include the ability to work in teams, help others to learn, provide customer service, and negotiate agreements, resolve differences, and work in a multicultural organization (SCANS, 2000). One must also have good teamwork and interpersonal skills. This means how well one works in a group, and one‟s relations with other people. An employee with effective interpersonal skills will definitely participate well as part of a team. Interpersonal skills are vital when seeking employment and may be the single most important factor for many recruiters. Interpersonal skills are the skills we use to interact with other people, satisfy customer (SCANS, 2000).Possession of interpersonal skills allows us to empathize and build rapport with colleagues and clients, leading to a better working environment which can be less stressful.

## Technical Skills

According to Quintessential Careers (2010), Amaiya (2012), certain skills have been associated with the professional O.T.M. graduate. The list covers a wide spectrum which includes the following:

1. Knowledge of office practices, procedures, and computer software programs.
2. Knowledge of the organization and composition of letters, minutes, reports, charts, and spreadsheets.
3. Knowledge of scheduling and coordinating travel arrangements.
4. Skill in typing from clear copy at a rate of 40 words per minute.
5. Ability to follow, apply, interpret, and explain instructions and/or guidelines.
6. Ability to determine work priorities.
7. Ability to communicate effectively.
8. Ability to compose routine correspondence and reports.
9. Ability to type with speed and accuracy.
10. Ability to operate standard office equipment. 11.Knowledge of the use and make up of forms.

According to Financial Management Service Foundation (2012), Adedayo and Akinyele (2012), employees in this job, coordinate office activities and perform secretarial assignments for professional or management staff in support of the on-going operations of the office. Secretarial assignments include such duties as office coordination, scheduling meetings, preparing and maintaining office records, reports, and correspondence pertaining to the professional(s)'s and/or

management staff's area of responsibility. The job duties listed are typical examples of the work performed by positions based on job classification or levels.

1. Composes and types routine letters, memoranda, reports, minutes of meetings, scientific or technical material, numerical data, charts and forms.
2. Receives and screens visitors and telephone calls, takes messages, schedules appointments for professional(s) and/or management staff and provides information to callers requiring knowledge of agency's operations, supervisor's point of view, and the interpretation and application of policies and procedures.
3. Schedules and arranges meetings and conferences for professional(s) and/or management staff and notifies interested parties; makes travel reservations as needed.
4. Proofreads and corrects prepared materials for correct grammar, format, completeness, and content.
5. Establishes and maintains office files, logs, indexes, control records, or other information concerning the work under the supervisor's control.
6. Enters, retrieves, updates, verifies, and deletes information from electronic files.
7. Takes minutes or recordings of meetings.
8. Sorts, opens, and distributes incoming mail to staff; associates incoming correspondence with files or related materials needed for meetings, correspondence, and reports.

9 Maintains confidentiality of documents and information received.

1. Keeps informed of office details and advise management of problems.
2. Assists in the preparation of budgets and financial reports; prepares and monitors timekeeping and other personnel records.
3. Determines needs and orders office supplies, equipment, repair and maintenance services through agency channels.
4. Operates standard office equipment.
5. Composes, formats, prepares, and edits correspondence and reports with some latitude as to content.
6. Locates and reviews pertinent information from files, documents, newspapers, and other sources; and prepares a summary of content for professional(s) and/or management staff.
7. Serves as liaison between management and staff by transmitting information, explaining appropriate work instructions, and following up on assignments.
8. Makes scheduling commitments for professional(s) or management staff for meetings, conferences and speeches and assembles related necessary materials.

18. Reads incoming correspondence and reports, screening those items that can be handled personally, and forwarding the rest to management and staff.

1. Updates management on status of issues before scheduled meetings.
2. Prepares minutes of meetings from notes and/or recordings.
3. Assists in the study of office operations and services and provides recommendations for improving efficiency and economy of operations; makes recommendations regarding the purchase of office equipment.

22. Assists in creating and revising forms; proposes procedures, formats, and standards for office correspondence.

23 Reviews and evaluates applications, petitions, contracts, or other documents to determine if prescribed requirements are met for acceptance or approval.

24. Oversees the work of office support staff in the unit.

25 Gathers data for surveys or performs research on special subjects or projects. (Adedayo&Akinyele, 2012)

According to Bankole (2006), the responsibility of O.T.M. graduates is to serve as information and communication managers of offices, plan and schedule meetings and appointments, take minutes of meetings, organize and maintain paper-work and electronic files disseminate information electronically through

telephone, e-mail, fax machine, uses office equipment such as digital photocopier, scanners and electronic papers trimmers. Also, they use computer to create spread sheets, compose correspondences, manage databases, and create presentations, reports and documents using desktop publishing software and digital graphics. It is expected that O.T.M. graduates should be knowledgeable and versatile in office management and the use of modern office technology and information systems and in routine business functions such as generating, processing, storing, retrieving, handling and disseminating information with little or no supervision (Bankole, 2006). Based on the above scenario, the O.T.M. curriculum was developed to prepare adequately and produce graduates that will be able to carry out these functions and responsibilities and face the challenges of managing the modern day office whether in the public or private sector.

## Enhancing Employability Skills of Graduates

The notion that education in general and higher education in particular are fundamental to the construction of a knowledge economy and society in all nations cannot be over emphasized. Education is vital in the knowledge economy as the commodity of knowledge is gaining accreditation, replacing raw materials as the most critical input for determining a country‟s ability to compete in the world economy (Yabuuchiet al, 2009). As such, Woldegiorgis, Jonck and Goujon (2015) as well as Babes (2009) asserted that ascribed to globalization, the major economies are knowledge-based with elevated levels of skills, education, lifelong

learning, and innovation. Moreover, in recent years the function of higher education has been increasingly tied to economic growth and national productivity (Cummings, 2010). Consequently, a key function of higher education is to increase the total factor productivity of a country, inducing growth, and ultimately reducing poverty (Jonck, 2014; Le Van, Nguyen, Nguyen&Luong, 2010). Due to the emphasis on education by the South African Government for instance, higher education is under increasing pressure to validate its function and to clearly demonstrate the output from the public funds that it consume, with growing calls for accountability (Backhouse, 2010; Campbell, 2010).

In a study carried out by Barrie (2006) employers have revealed that graduates are often ill-equipped for the workplace and that higher education institutions should be held accountable for producing more employable graduates. Barrie (2006) stated that although various lists of generic skills and research related thereto could be found, there is a need to understand the nature of the outcomes themselves, as well as for higher education institutions to review the quality of the education provided. In this regard, Maila (2007) pointed out that the provision of quality education and accountability is an obligatory function of higher education. Quality education can be seen as an effective means to alleviate poverty, facilitate democracies and foster peaceful societies. Affirming the aforementioned Ahmed (2010) added that the role of education is to cultivate

creativity and innovation to propel economic growth, improve productivity and advance human well-being in a sustainable manner. According to Matic and Agusaj (2012), the alignment of industries requirements with higher education programmes in transitional countries might aid to uplift society in general, assisting with employment and provision of scare skills. A growing demand for adequate skilled graduates has led to many higher education institutions reviewing their objectives and aims, to meet industry needs. For the higher education sector to reach adequate levels of competitiveness, warrant relevance and be accounTable, it must keep abreast of labour market requirements and adjust curricula accordingly to ensure effective development of human capital through training (Wessels& Jacobs, 2010). Barr and Tagg (1995) stated that a school‟s purpose is not to transfer knowledge but to create environments and experiences that bring students to discover and construct knowledge for them, to make students members of communities of learners that make discoveries and solve problems

A review of literature revealed numerous challenging opportunities for the various stakeholders to collaborate if the issue of skills development in graduates is to improve (Rateau& Kaufman, 2009). Failures to collaborate are obvious as employers continue to voice concern that the curriculum and standard teaching methods are not generating the graduates and future leaders they desire to hire (Conference Board, 2009; Conference Board 2006; Evers, 1998). Additionally,

Glover (2002) reported that collaboration between higher education and employer has been weak. The issue of collaboration becomes even more critical for improvement. Per Evers (1998) stated that the problem is that education institutions and organizations that employ graduates are for the most part isolated spheres”. Threestrategies that will close this gap include:

1. Instructional strategies and program planning strategies: Changes in educational strategies can pose challenges to the structure, system and culture of higher education (Rae, 2007). One strategy to close the gap between what employers need and what is acquired is through innovative teaching strategies (Duch, Groh, and Allen, 2001). For graduates long term success in our rapidly changing world, the role of teaching and learning must shift from knowing what (or content), to a pedagogy of knowing how to find out and learning to learn (Harvey, 2005). There must be a paradigm shift in higher education away from a teaching paradigm to a learning paradigm, where the focus is on student learning. However, this shift is difficult and often met with resistance.Coll and Zegwaard (2006) argued that instructors may not have had the proper training or knowledge to implement the pedagogies that develop best the desirable skills students need. Weimer (2002) stated instructors are often hesitant to move to a learner-centered environment due to lack of support from peers or administrators. Rae (2007) continued by stating there can be resistance from both administrators and

instructors to form the needed collaborative partnerships with all stakeholders. Resistance to change can and does come from numerous areas and must be removed for future progress. Lovejoy (2000) states that in order to integrate employability standards into the curriculum, educators are required to use innovative teaching techniques. While designing the curriculum, planners should involve the industry partners so that they can incorporate real workplace procedures and systems in instructional strategies. This can then be incorporated in the teaching and learning process by using innovative teaching methods and implementing authentic assessment. Students will be able to apply skills in real- life situations. (Riebe, Roepen, &Santarelli. 2010).

Instruction should be designed to ensure those goals and objectives are reached. Parents need to be involved in goal setting and modeling behavior for in- school youth. Teach employability skills using a democratic approach so that students‟ awareness of values, attitudes, and worker responsibilities is increased. Supervisors, trainers and teachers should set good examples of the desired behavior. Students should have the opportunity to observe the type of work place behavior that is being required of them. When possible, classrooms should replicate the features of real work settings. Set and communicate high expectations and hold students responsible for their behavior.

1. Program Planning Strategies: Program planning is a systematic process of needs assessments, planning, implementation and evaluation of academic programs and curriculum and come in various formats, with no one format deemed as best for every need (Caffarella, 2002; Cervero& Wilson, 2006). Although there is recognition for the need of effective and regular program planning to remain abreast with the changing world and to ensure the desired results of the program are being attained. Many universities need a more rigorous approach to planning with the “capability of bridging the cultural gap” between all stakeholders, thus resulting in effective programs leading to desired outputs (Ruben, 2008). Ruben (2008) also acknowledged that there are various program planning approaches that attempt to close the loop. One of such approach, as proposed by Caffarella (2002) is the “Interactive Model of Program Planning” which provides one avenue that helps planners get through this maze of tasks, people issues, and political agendas to assist them in getting from start to finish. One distinguishing difference in the Caffarella (2002) model from other models is people and places are acknowledged as important in the planning process, a critical issue for overall success of the program plan and outcomes. Recognizing planning involves people and should include all stakeholders in the process. The question arises as to sorting through the various stakeholder interests for final decision making and whose educational vision will prevail as the planning begins” (Cervero& Wilson, 2006). Program

planning offers a powerful strategy to ensure needs are met and the desired outcomes of a program are produced, while recognizing planners must include all stakeholders in a process that is both ethical and democratic (Cervero& Wilson, 2006). Initiatives for enhancing graduate employability research has documented several responses and strategies of enhancing graduate employability including introduction of new relevant courses and qualifications, enhanced curricula, entrepreneurship modules, imaginative developments in work experience and its accreditation, careers advice and the development of progress files and personal career planning (Nunan, 2000; Blackwell, 2001; Harvey, 2002; Knight and Yorke, 2003; Callanan&Benzing 2004; Moreland, 2005). Cranmer, (2006) reported that several universities had introduced some employability skills into their curricula either by incorporating the skills aspect or through separate courses that concentrate on skills development and entrepreneurship.

1. Opportunities through Path-Goal Leadership Theory: The path-goal leadership theory can guide efforts to develop the appropriate skills among students and address the failures in collaboration between stakeholders. Path-goal theory is based on leader strategies to define goals, clarify paths, remove obstacles, and provide support for the follower. Path-goal theory, as conceptualized by House (1971), and later refined by various noted leadership researchers, specifies leader behaviors that enhance subordinate empowerment and satisfaction and work unit

and subordinate effectiveness. This statement on the role of a leader is similar to the role of an instructor as noted by Schunk (2008) to enhance both student learning and students desire to learn by focusing on student motivation.

Although path-goal theory is viewed typically as a leadership theory, it has direct application to the classroom, as the role of a leader and the role of an instructor are very similar (Northouse, 2010; Weimer, 2002). Northouse (2010) stated, the overarching purpose of leadership is to guide and coach subordinates as they move along the path to achieve goals. This statement is similar to the Weimer‟s (2002) description of an effective instructor as “my role is a guide and resource to the students”, providing support and guiding the student on the path to success. Consistent with the path-goal theory, university administrators in their role as leaders “facilitate collaborative relationships,” “provide guidance,” and “clarifying goals” for stakeholders.

Eric Mayer (2011) enlists some of the ways students can enhance their employability skills as stated as follows:

* + Communication . Organizing and expressing ideas concisely.
  + Speaking clearly and directly to individuals or groups.
  + Being proficient in other languages.
  + Writing assignments and reports.
  + Presenting and participating in class discussions.
  + Using customer service skills.
  + Teamwork to achieve a common goal.
  + Sharing information, supporting and empowering other team members.
  + Responding constructively to the opinions of others.
  + Working on group assignments at university.
  + Being involved in a student society, sports team or organization.
  + Problem solving researching and selecting relevant information to solve a problem.
  + Analyzing issues for underlying causes, assessing options, proposing solutions.
  + Thinking sequentially, critiquing and synthesizing information.
  + Working on assessment exercises such as a research project.
  + Participating in work-integrated learning such as a placement or internship.
  + Working within a customer service environment and dealing with complaints.
  + Easily adjusting to new situations.
  + Mapping out ideas to an action plan.
  + Identifying innovative options.
  + Obtaining work placement, vacation employment or internship
  + Operating own business.
  + Innovation in student group, club or team.
  + Managing timelines and prioritizing.
  + Allocating and coordinating tasks for self and others.
  + Anticipating future needs and forward planning.
  + Project planning or managing an event.
  + Arranging study and work commitments to support you at university.
  + Organizing; networking, fundraising, sporting or social activities.
  + Self-management: Operating independently and taking responsibility for your own actions.
  + Being aware of your own strengths and limitations.
  + Being able to communicate your own ideas.
  + Learning putting in time and effort to learn new skills.
  + Understanding the need for learning to bring about change.
  + Being adaptable in different learning environments, e.g. class, online, on the job.
  + Mentoring or coaching activities.
  + Participating in an interest group or student society.
  + Subscribing to newsletters and updates from professional associations.
  + Technology Proficiency in using computers and telecommunications systems.
  + Understanding current trends and developments Managing information through technology.
  + Sourcing information with electronic databases.
  + Using specialized software packages for course/occupation.
  + Managing project timelines with software.

Rabey (2008) found that there is room for improvement in the way that tertiary schools prepare their students for the workforce, and suggested placing more emphasis on teaching organizational structure and interactions, money management and market dominance, communication, teamwork, and goal setting. These can be boiled down to three important areas: life skills, work skills, and knowledge of the workplace. The good news is that, while many soft skills are inherent, others can be learned. If you are shy, for example, get involved in debating societies and other clubs at school and university. There are also courses on communication skills online that can not only teach you some soft skills but help you demonstrate to employers‟ self-awareness and initiative simply by the fact you have signed up into the particular environment in the network. If you feel like you are lacking these skills, then don't panic as they can be acquired through different channels. Extra-curricular activities, work experience and part-time or voluntary work all provide a breeding ground for employability skills. For example, if you feel your written skills are lacking then create a blog, or maybe volunteer your services to student magazine. Planning and organization skills can

be demonstrated and enhanced through working part time in a busy restaurant or juggling seemingly unmanageable workloads at university.

## Empirical Studies

Although, there has not been research conducted directly on the application of all-round employability skills assessment on O.T.M. graduates which encompasses the soft skills and the hard skills as assessed by employers, an attempt has been made to identify some studies which are connected to this study. They are presented in the following sub headings:

## Study on assessment of graduates Foundational skills

Aida, Normailis and Rozaini (2015) conducted a study on the critical success factor on graduate employability programme. The purpose of the study was to attempts to examine whether the contents or the context of graduates employability program has been successful in boosting employment potential of graduates in Malaysia. The study employed the survey method. The population of the study was 145 graduates. Questionnaire was adapted from Magic Bullet Model of Employabilityfor collection of data. Data was analyzed using mean, standard deviation and t-test. The findings of the study showed that one of the goals of the employability programs which is to enhance the marketability of respondent in the labour market was successful, contents of the programs objectives were manageable and clear and are relevant which form the basis to enhance the

graduates communication skills. This result has clearly shown that the module and components of the program are the most important for graduate employability. In conclusion, the current graduate employability program should focus on the context of the program.

The above study is related to the present study in the sense that it has studied the adequacy of the school programme on the impact of employability on graduates‟ employment. In other words, the study has attempted to determine the relevance of the programme which is also what the present study has attempted to investigate. The above study differs in the “area of study” also in the demography of respondents. The present study intends to bridge the gap between the studies in the area of differences thereby specifying a particular profession and assessing employability possessed by the rating of the employers.

Adeyemo, Ogunleye, Oke and Adenle (2010) conducted a research on factors determining the employability of science and technology graduates of polytechnics and universities in the Nigerian labour market. Five researchquestions were drawn to guide the study. The study adopted descriptive survey design. The area of study was in Ogun State. Questionnaire was used to elicit responses from managers from some public enterprises, private firms, professional associations and non-governmental organizations, the education sector and also science graduates of the various establishments. Mean and standard deviation was used to

answer the research questions while f-test and Anova was used to analyze the hypotheses at 0.05 level of significant. The findings of the study showed a mismatch between university outputs and labour market demands. It was therefore recommended that university departments will need to change their curricula every two or three years in order to ensure that the content of their teaching reflects the rapidly advancing frontiers of scientific knowledge and the global market. Furthermore, employers are increasingly demanding new curricula that include skill standards and perhaps even vendor specific certifications that are not typically included in traditional university curricula. These employers simply do not trust that the traditional, faculty-developed curriculum will meet their needs especially in the area of information technology as different companies now adopt new vendor products and then search for individuals who have mastered the technology.

The study carried out by Adeyemo, Ogunleye, Oke and Adenle (2010) and the present study are concerned with determining the mismatch between output from tertiary institutions and labourmarket demand but differs in terms of area of discipline or area of specialization, geographical coverage and also differs in scope of the study. The present study has filled the gap the study above could not fill.

Ediagbonya and Oyadongha (2013) conducted a study with the main purpose of ascertaining the mean ratingsof employers on the employability skills

possessed by Business Education graduates in Edo State. Four research questions and three hypotheses guided the study. A case study research design was adopted for the study. A systematic random sampling technique was used in selecting 60 respondents from the population of 130. The questionnaire titled 'Employability of Business Education Graduates Questionnaire (EBEGQ)' was used in eliciting information from the respondents.The reliability of the instrument was established using cronbach alpha method and a reliability coefficient of 0.88. The arithmetic mean, standard deviation, percentages, frequencies and tables were used in analyzing the data. The findings revealed that: (i) Business Education graduates employability skills are low (ii) There is a significant difference between employability skills by sex of employer.A major recommendation made was that institutions should collaborate with industries around to ease the transmission of these skills. That is, having school-industry partnership because some of these equipment/facilities which are used in the work place are not in these schools were these graduates are trained.

Ediagbonya and Oyadongha (2013) study and the present study are concerned with the issue of employability skills possessed by graduates. The present study specifically assessed the application of employability skills by

O.T.M. graduate as rated by their supervisors.

## Studies on assessment of graduates critical thinking skills and other skills.

Akinyemi, Ofem, Igot, and Ikuenomore (2012) carried out a study titled “Graduate turnout and graduate employment in Nigeria”. The purpose was to assess the mismatch between skills acquired by graduates and requirement by labour market demand. Three research questions were formulated for the study. The population of the study included all the universities, polytechnics, colleges of education both public and private and all registered organizations in Nigeria. Purposive sampling technique was used to select dominant public and private labour organizations in Nigeria. The study utilized a checklist questionnaire. The data collected was analyzed using simple percentages, frequencies and charts. The findings of this study revealed that there is an increase in unemployment in Nigeria which is attributable to the mismatch between graduate employee skills and those skills required by the labour market. The study also found that inadequate technical knowledge, deficiency in English proficiency and lack of critical thinking skills coupled with high technological drive of most organizations are the cause of high unemployment rate in Nigeria. The study therefore recommended that in other to address the issue of the mismatch between graduates turnout vis a vis their skills and graduate employment should be addressed by taking a three dimensional approaches that includes the government, tertiary institutions and labour market so that theycan plan the curriculum in such a way that employability skills that matches up to the requirements of job demands are included.

Akinyemi etal (2012) study and the present study are concerned with assessment of employability skills of graduates. The present study assessed the application of employability skills by O.T.M. graduates working in Edo and Delta States with a view to ascertain the level of mismatch between skills applied vis a vis skills required while Akinyemi et al (2012) assessed the employability skills of graduates in Nigeria notwithstanding the discipline. The present study intends to cover this gap by focusing on a specific discipline.Rosenberg,

Heimler and Morote (2012) carried out a study titled "Basic Employability Skills: A Triangular Design Approach". The purpose of the study was to examine the basic employability skills needed for job performance. The study used a survey design. The area of the study was carried out in central Carolina in United States of America. The population of the study included distinct groups: recent graduates, the faculty who taught them and human resource managers totally who recruit the graduates were studied. A total of 532 participants were studied. The participants responded to a structured questionnaire that included 47 items measuring eight dimensions of basic employability skills needed by graduates. Mean scores and standard deviation was used to analyze data obtained. Respondents identified the importance of all the eight dimension of employability skills, these skills were noted to be below expectations for industry. It was however recommended that there is the need for additional training of recent graduates which appears to be a

major concern according to the results. It was also noted that in a highly competitive economy, there is little chance that unprepared graduates will be successful in obtaining employment and then perform in their jobs. The triangular approach taken in the study validates the importance of the interconnectednessamong graduates, faculty, and industry. It is therefore imperative to strengthen the communication across these groups to ensure adequate preparation of graduates.

The study carried by Rosenberg et al (2012) relates to the present study in the aspect of assessing employability skills of graduates but it differs in the sense that the above study assessed only the soft skills needed by graduates using three distinct groups while the present study assessed both the hard skills and the soft skills which is anall-round employability skills needed by employers from O.T.M. graduates. Again the Rosenberg et al study differs in demography of respondents and geographical location. The present study covers the employers‟ assessmentof all round employability skills in a particular profession which is the O.T.M. profession which is more specific compared to the above study.

## Study on Assessment of Management skills and other skills in public and private enterprises

Jonck and Walt (2015) carried out a research titled "Graduate Employability Skills: Differences between the Private and the Public Sector in South Africa". The

objective of the research was to infer comparison between the private and the public sector with reference to an evaluation of employability skills of graduates'in a sample consisting of employers from the Mangaung area, South Africa. A quantitative study was conducted using an unabridged questionnaire. The population of the study consisted of 250 private-sector and 253 public-sector respondents. Exploratory analysis and confirmatory analysis were used to analyze the data. The results indicate that the only statistically significant differences between the private and the public sector in terms of graduate employability skills are self-responsibility and interpersonal skills. Indicative of the notion that thedifferences between the private and the public sector are becoming less marked, and that the employability skills that are sought by the public sector are similar to those that are sought by the private sector. Based on the findings of the study, it was recommended that higher education institutions should place stronger emphasis on research skills in undergraduate programmes. The presentation and assimilation of knowledge by students in different formats, including oral presentation of information, should be encouraged and examined. Information should also be innovatively re-contextualized in all subjects. Furthermore, it was recommended that a generic business administration subject should be developed and incorporated into the curriculum, focusing on customer service, telephone etiquette, punctuality, and work ethic. In addition to this, soft skills also need to be

considered. Some soft skills which should form part of curricula are emotional intelligence, literacy and numeracy skills, leadership skills, problem-solving skills, stress management skills, time management skills, and career self-assessment skills.

In relation to this present study, the above study has assessed what is lacking in graduates and how to bridge the gap within what is learnt and what is needed in the real world of work. The present study went further to ascertain if these employability skills are lacking in O.T.M. graduates and also assessed the hard skills which are technical skills not addressed by the above study. Also,the above study respondents differ from the present study respondents and their geographical boundaries.

## Studies on Assessment of Personal and Interpersonal Skills and other skills

In the study of Aliozor (2005) on the employability skills required .by university business education graduates in Enugu State, four research questions and four hypotheses guided the study. Survey research design was used for the study. The population of the study includes graduates, lecturers and employers. The questionnaire was used as instrument for collecting data. The data collected for the study were analyzed using mean and standard deviation for answering the research questions, while t-test was used to test null hypotheses1 to 3 at 0.05 level of significance while null hypotheses4 was tested and analyzed using the ANOVA.

The findings of the study showed that 37 of the 40 employability skills listed are seen as important to university business education graduates in Enugu State. The result of the null hypotheses tested showed that there was no significant difference in the mean ratings of graduates, their lecturers and their employers on the employability skills required by university business education graduates in Enugu State. The study recommended among other things that the university business education curriculum should be reviewed to include courses in communication and individual competence building, adaptability, responsibility, interpersonal/human relations, work ethics and entrepreneurship development skills among others.

The study of Aliofor (2005) is related to the present study for the fact that they both centers on issues bordering on employability skills. The major difference of the present study and Aliofor‟s study is that the present study is interested in the application of employability skills by O.T.M. graduates while Aliofor‟s study was interested in the employability skill needed by business education graduates. Aliofor study also differs from the present study in terms of geographical coverage of study, respondent variables, and the scope of the study. The present study is out to cover the lapses of the Aliofor study and also study O.T.M. graduates specifically.

Ibrahim and Dandago (2013) carried out a study on the effect of technological advancement on the employability of business education graduates in

Nigeria labour market. Four hypotheses guided the study. Descriptive survey design method was adopted. Four rating scale structured questionnaire was adopted for the study. Population of the study included 89 respondents that participated in the 2012/2013 business education postgraduate‟s entry examination. Instrument was by experts in measurement and evaluation department and reliability of the instrument was done using the statistical package for the social science (SPSS) getting a coefficient of 0.76 Data collected were coded using SPSS to run Pearson Product Moment Correlation Coefficient to test null hypothesis one. Chi-square was used to test null hypothesis two, while ANNOVA was used to test null hypotheses three and four. All the four hypotheses were tested at 0.05 level of Significance. The analysis reveals, among other findings, that business education curriculum contents in Nigeria do not equip students with generic skills required for their employability in Nigerian labour market in the present advanced technological era. Based on the findings, the researchers recommend that all the major skills in the modern technologies needed by theNigerian labour market should be integrated into the curriculum of business education Programme in Nigerian universities.In the test of null hypothesesPearson Product Moment Correlation Coefficient was used to test null hypothesis one, Chi-Square was used to test for null hypothesis two and ANNOVA was used to test null hypotheses three and four. All the null hypotheses were tested at 0.05 level of significance.The

outcome of the research work reveals that there is no link between business education curriculum contents and generic skills required for the employability of business education graduates in the advanced technological era of the Nigerian labour market.

This study is similar to the present study because it measures the gap in employability skills of graduates but differs in demography of respondents, scope of the study, analytical tools and study respondents. This present study intends to have broader view of the assessment of all-round employability.

## Studies on assessment of Technical skills possessed by O.T.M. graduates

Earnest (2010) conducted a study titled office operational skills perceived as necessary for office information systems by secretaries in University of Nigeria, Nsukka. The researcher used a descriptive survey design with a population of 110 secretaries as respondents. The researcher used a structured questionnaire to collect data. The reliability of the instrument was determined by using test-retest method and a coefficient of 0.89 was obtained. Method of data collection was done by the researcher. Mean and standard deviation were the analytical tool used for the study. The findings of the study showed that secretaries possessed few of the listed operational skills in word processing, interpersonal skills, data base management skills and reprographic system skills. Based on the findings, the researcher

therefore recommended that secretaries already on the job need retraining in other to meet with the demands of the business world.

The relationship between Earnest (2010) study and the present study is that both studies are interested in measuring employability skillsof O.T.M. graduates.but differs in scope, geographical coverage, method of determining the reliability of the instrument and the study respondents. The present study assesses the application of employability skills by O.T.M. graduates through the response of their employers in Edo and Delta States.

Agboola (2006) conducted a research on the appraisal of the effectiveness of Higher National Diploma(HND) secretarial studies graduates in I.C.T competencies in Lagos State. Five research questions guided the study. A survey research design was adopted. The researcher used 410 H.N.D secretarial studiesgraduates. A five-point Likert type questionnaire was used to collect data for the study. Validation of instrument was done by two experts and the cronbach Alpha method was used for the reliability of the instrument obtaining coefficient of

0.70. Data collection was done by three research assistants. Data collected were analyzed using mean and standard deviation. The researcher found out that H.N.Dsecretarial studies graduates on the average were not effective in virtually most of officecompetences such as the internet facilities, operation system and

tablegeneration competences, but effective in document reproduction competences. Based on the findings of the study, it was recommended that since the curriculum has been reviewed to accommodate the competencies need of secretarial studies graduates, there should be adequate provision of necessary equipment to teach or instruct students of this programme and also training of teachers to be able to use a better methodology for the teaching of these secretarial courses in order to produce secretarial graduates who can fit properly into the real world of work.

The Agboola (2006) study is similar to the present study because it has assessed O.T.M. employability skills in the area of the hard skills (technical skills) which is one of the major competencies expected of an O.T.M. graduate to possess. Thedissimilarities appear in the area of using students as respondents instead of employers. The geographical coverage of theAgboola study differs from that of the present study. Agboola study was interested in the technical skills which is leaving a gap because emphases was only placed on just an aspect of what constitute employability skills. This present study has accommodated all the skills that encompass the employability skills.

Garba (2012) carried out a study which was undertaken to ascertain how proficient Office Technology and Management students in north-west Nigerian polytechnics consider themselves in the use of office applications. Six research questions and five hypotheses tested at 0.05 level of significance guided the study.

Survey research design was used for the study, the population of the study was 967 and sample of 231 was obtained using Taro Yamane formula. Instrument for data collection was a 94-item validated questionnaire. The validation of the instrument was done by three experts. Reliability of the instrument was determined by test- retest method, obtaining a reliability coefficient of 0.87. data collection was with the help of three assistance. Data were analyzed using mean and standard deviation to answer the research questions while z-test and ANOVA were used to test the hypothesesat 0.05 level of significance. Results showed that the O.T.M. students were barely proficient in the five office applications. The researcher, therefore, concludes that the students' exposure to the applications is grossly inadequate either as a result of inadequacy of competent lecturers, equipment and facilities, period allocation or lack of commitment on the part of the students which will adversely affect their performance in employment. Consequently, it was recommended among others that management of polytechnics should engage adequate number of highly competent lecturers or re-train their existing teaching staff and that O.T.M. students should be re-oriented on the prospects of the program for its effective implementation.

Garba (2012) study relates to the present study because both studies are out toassess the attainment of the objectives of O.T.M. programmein producinggraduates who will meet with the demands of having needed manpower

for the industries. The instrumentation and measuring tool fordata analysis are almost the same. The above study differs from the present study in the areas ofscope, respondent variables, and geographical coverage of the study.

Iro (2013) carried out a study which was aimed at the appraisal of the effectiveness of office functions performed by office technology and management graduates in North-Western states of Nigeria. The researcher used descriptive survey design. The population of the study comprised 384 employers of O.T.M graduates in Nort-Western states of Nigeria. The instrument used for the collection of data was a structured questionnaire. Mean rating and standard deviation were used to answer the research questions, while the z-test was used to test the null hypotheses. The results of the analyses revealed that employers in the North- Western states of Nigeria rated O.T.M graduates high in four functions including administrative, personnel, record keeping and information and communication technology, and fair in human relations functions. The five nullhypotheses were rejected. Based on the findings, it was recommended that the O.T.M department should intensify training on all departmental courses; the lecturers should be effectively mentored by the most senior lecturers to ensure strict adherence to all aspect in the curriculum among others.

Iro‟s study (2013) is related to the present study because it appraised the practical application of technical skills of O.T.M. graduates by soliciting the rating

of employers in the North- Western States of Nigeria. Though Iro (2013) study covered only employers rating of technical skills of O.T.M. graduates and conducted the research using North-Western States, The present study covers employers rating of all round employability skills of O.T.M. graduates in the south-south states of Nigeria.

## Summary of Related Literature Review

The review of related literature was delineated under conceptual framework, theoretical framework, theoretical studies and related empirical studies. Conceptual framework covered the concept of assessment, application, employabilityskillsand Office Technology and Management graduates.Theoretical framework was based on two theories: depositional theory and human capital theory. Theoretical studies dealt with office technology and management programme, employers‟ skill needswhich includes foundational skills, critical thinking skills, management skills, personal and interpersonal skills and technical skills which includes the functions and responsibilities of O.T.M. graduate employees.

The reviewof literature for this studydisclosed that employability is a multidimensional concept. The ability of graduate to secure and tackle graduate jobs basically is dependent on the employability skills possessed by graduates. Employability skills have been defined by several authors as skills, knowledge,

understanding and personalattributes that enable a person to obtain employment maintain and progress in a chosen career or employment.It has also been revealed that recent challenges occasioned by globalization, knowledge-based economy and technological evolution have made organizations to seek for talented and highly skilled workers with all-round employability skills to enable organizations obtain competitive advantage over other competitors. The skills include: foundational skills, critical thinking skills, management skills, personal and interpersonal skills and technical skills. The technical skills have been likened to the skills needed by

O.T.M. graduates to execute their functions, roles and responsibilities in both public and private organizations.

The role of O.T.M. graduates is pivotal to the success of any organization. The O.T.M. curriculum was developed to prepare adequately and produce graduates that will be able to carry out these functions and responsibilities of managing information processes in the modern office.

Most of the empirical studies reviewed concerning the assessment of employability skill needs, it was observed that there is a mismatch between what employers need and what graduatespossessed.Findings from these studies also revealed that most of the studies on assessment of employability skills in O.T.M. profession were on the assessmentof technical skills aspect without a corresponding assessment of soft skills.Findings from most studies have shown

that possession of technical skills are not enough to guarantee ones security of job since employers are interested in both the hard skills and the soft skills. Most of the studies in this context were carried out in other parts of the States and outside Nigeria. Most of the studies assessed graduates from other disciplines. Some of the results obtained were based on self-assessment by the graduates and this cannot present true picture based on self-bias. However, no study inthe literature reviewwas carried out to ascertain the assessment of employers on the application of all-round employability skills by O.T.M. graduates in Edo and Delta States. This has left a gap in the body of knowledge which this study intends to close.

CHAPTER THREE METHOD

This chapter describes the method adopted in conducting the study. This was done under research design, area of the study, population of the study, sample and sampling techniques, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

## Research Design

Theresearch survey design was adopted for this study.Nwogu and Momoh (2015) recommended the research survey design for studies that involve eliciting the opinion, attitude and perception of a group of people or part of the group that is considered to be representative of the entire group. This design was chosen and considered appropriate for the study because it seeks the views of Supervisors regarding the application of employability skills by their O.T.M. graduate employees. Several researchers such as Iro (2013),Adeyemo, Ogunleye, Oke and Adenle (2010), and Agboola (2006) used survey design in carrying out studies of this nature successfully, hence the choice of survey design for the present study.

## Area of the Study

The study was carried out in Edo and Delta States which were formally known as Bendel State. Edo and Delta States are located in South-South

Nigeria.Edo State is bounded by Kogi State to the Northeast and East, Delta State to the southeast and South, and OndoState to the West and Northwest. Delta State is bounded by Edo to the Northwest. In the Southwest and South it has approximately 122 kilometres of coastline bounded by the Bight of Benin on the Atlantic Ocean.

Both States have almost the same weather condition andalso known to be educationally advanced since they have many tertiary institutions. These States are oil producing and industrialized with so many companies situated in them because of the rich natural resources. People of these States engage in agriculture, forestry, fishery, mining, cocoa farming, timber cultivation, rubber research, cavalry etcetera.The choice of this area was informed by the fact that the States have many public and private tertiary institutions that employ O.T.M. graduates. Also, the choice of the area is based on the fact that the researcher teaches O.T.M. subjectsand is interested in ascertaining the application of all round employability skills by graduates of O.T.M. programme in order to determine the adequacy and relevance of the curriculum in equipping the products to secure, retain and progress in any organization.

## Population of the Study

The population of this study includes1,016supervisors in public and private tertiary institutions in Edo and Delta States who have O.T.M. graduates

servingunder them. There are 17State government tertiary institutions with 740supervisors who have qualified O.T.M. graduates as secretaries (Appendix C, page 147).Statistics from the personnel record of each institution shows that there are 375officers in the executive positions from government tertiary institutions in Edo State and 365officers in the executive positions from State government institution in Delta State making a total of 740 executive officers. Statistics from the private tertiary institutions‟ personnel records shows that there are 153 executives who haveO.T.M. graduates as secretary or office managers in Edo State and 123 executives in private tertiary institutions in Delta States. Total number of supervisors in private tertiary institutions in both States stands at 276 (Appendix C,page 147). Therefore, total number of supervisors from States tertiary institutions and private tertiary institutions according to information from personnel department of the respective institutions stand at1,016 which constitute the population for this study.

## Sample and Sampling Technique

A sample of 309 was selected using proportionate stratified sampling technique which was used to select sample participants from each stratum. See details in Appendix D, page149.

## Instrument for Data Collection

The data for this study werecollected through the use of a structured questionnaire developed by the researcher titled “application of employability skills questionnaire (AESQ). The questionnaire has two sections A and B. Section A contains two items on respondents‟ demographic data covering institution ownership and years of experience. Section B contains sub-sections B1 to B5 based on the research questions with a total of 61 items. B1 to B5 contains 8, 9, 10, 15 and 19 items respectively as shown in Appendix B on page 143. Section B is a five point rating scale of:

|  |  |  |  |
| --- | --- | --- | --- |
| Very highly applied | (VHA) | - | 5 |
| Highly Applied - | (HA) | - | 4 |
| Moderately Applied- | (MA) | - | 3 |
| Lowly Applied - | (LA) | - | 2 |

# Very Lowly Applied- (VLA) - 1

## Validation of the Instrument

The research instrument (AESQ) was subjected to face validation. Four experts validated the instrument. One expert in measurement and evaluation from Educational foundations Department, University of Benin,one from Vocational and Technical Education, University of Beninand twoexpertswere from Vocational

Education Department,NnamdiAzikiweUniversity, Awka, Anambra State. The statement of the problem, purpose of the study, research questions, hypotheses and the 75item questionnaire were given to the experts to aid the validation exercise.The experts were carefully selected based on their knowledge and experience, and were requested to validatethe instrument by effectingcorrectionsin the areas of suitability or appropriateness of the items, workings and item construct. Based on the experts‟ inputs, section A items were restructured and items in section B reduced from 75 items to 61 items. Their inputs were harmonized and taken into account before the final production of the instrument.

## Reliability of the Instrument

The reliability of the instrument was established by administering the instrument to 20 supervisorsin Ondo State which were not part of the population of the study. Cronbach Alpha method was used to test for internal consistency of the instrument and reliability coefficients of 0.79, 0.89, 0.71, 0.75, 0.89were obtained for clusters B1 to B5respectively with an overall reliability coefficient of 0.80.According to Owie (2006), these results are considered high enough for the instrument to be reliable.Details of the reliability calculation are presented in Appendix E onpage 151).

## Method of Data Collection

Instrument for the study was administered on respondents with the help of four research assistants. Research assistants were briefed on how to administer and collect copies of the questionnaire.The researcher and the research assistants visited the tertiary institutions and administered the instrument personally to the respondents involved in the study. Respondents were allowed two weeks to enable them complete the questionnaire properly because of the diverse areas and number of institutions covered and the nature of supervisors‟ job schedules.Three weeks was used to distribute and retrieve questionnaire from the respondents.

Three hundred and nine (309) copies of the questionnaire were distributed 308(representing 99.68 percent) were retrieved and used for the study.

## Method of Data Analysis

The data collected for the study in section A wereanalyzed using frequency counts and percentages. Data related to research questions were analyzed using arithmetic mean and standard deviations in order to determine the measure of central tendency which is the average sum of all the scores and standard deviation to determine the measure of variability of scores from the mean.Boundary limit of values was used for taking decisions on the items and research questions. Mean score ranging from 1.00 – 1.99 were regarded as very lowly applied, aggregate mean ranging from 2.00 – 2.99 were interpreted as lowly applied and aggregate

mean ranging from 3.00 – 3.99 were interpreted as moderately applied. Furthermore, mean score ranging from 4.00 – 4.99 were regarded as highly applied and aggregate mean of 5.00 were regarded as very highly applied.See page 177 for details..

The t-test was used to test null hypotheses 1, 3, 5, 7 and 9 and ANOVA was used to test null hypotheses 2, 4, 6, 8 and 10 at 0.05 level of significance. The p- value was used to accept or reject the null hypotheses with the aid of SPSS 24.0 version. Therefore, a null hypothesis was accepted when the probability value is greater than or equal to or greater than the level of 0.05 (level of significance) and rejected when the p-value is less thanthe level of significance.

## CHAPTER FOUR PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis of the data collected for the study according to the research questions and hypotheses which is as follows:

**Research Question 1:**To what level do O.T.M. graduates employees in Edo and Delta States apply foundational skills?

Data collected in respect of research question 1 were analyzed and presented in table 1 below.

**Table 1:Respondents’ Mean Ratings on the application of Foundational Skills by O.T.M.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Graduates in Edo and Delta States** | **N = 308** | |  |  |
| **S/N Items on foundational skills** | **X S.D** | | **Remarks** |
|  | 1. Express ideas clearly and confidently in speech | 3.48 .73 | | Moderately Applied |  |
|  | 2. Express ideas clearly in writing | 3.49 .78 | | Moderately Applied |  |
|  | 3. Communicate with a wide variety of people | 3.30 .90 | | Moderately Applied |  |
| 4. Listen attentively | | 4.01 | .80 | Highly Applied |  |
| 1. Interpretation of written information 2. Solve practical problems using a variety of Mathematical techniques | | 3.74  3.18 | .87  1.07 | Moderately Applied  Moderately Applied |  |
| 7. Understands numerical data, statistics | | 3.15 | 1.01 | Moderately Applied |  |
| 8. Work with numbers | | 3.48 | 1.00 | Moderately Applied |  |
| **Aggregate Mean 3.48** | | | **.89** | **Moderately Applied** | |

The Data in Table 1 reveal that out of the 8 listed items on foundational skills, 7 were rated moderately applied while 1 item was rated highly applied. The mean values of the respondents ranged from 3.15 to 4.01.In addition, the aggregate mean for all the items onfoundational skills was 3.48, which fell within the boundary limit of “moderately applied”.

A look at the standard deviation computed, the individual responses ranged from 0.73 to 1.01 with an average standard deviation of .90 indicating that all items are within the same range. By implication, the result shows that the respondents are not wide apart in their mean ratings.

**Research Question 2:** To what level do O.T.M. graduate employees in Edo and Delta States apply critical thinkingskills?

Data collected in respect of research question 2 were analyzed and presented in Table 2 below.

**Table2:Respondents’ Mean Ratings on the application of critical thinking Skills by O.T.M.**

**Graduates in Edo and Delta States N = 308**

**S/N Items on critical thinking skills X S.D Remarks**

1. Gather information systematically to establish facts

and Principles to solve problems 3.59 .94 Moderately Applied

1. Articulate, act on initiative and identify opportunities 3.52 .73 Moderately Applied
2. Analysis and assess services and operations for quality

efficiency and effectiveness and make recommendation 3.57 78 Moderately Applied

|  |  |  |  |
| --- | --- | --- | --- |
| 4. Develop strategic and creative vision | 3.44 | .90 | Moderately Applied |
| 5. Understand and operate within social, organizational |  |  |  |
| and technological systems 3.63 .80 Moderately Applied | | | |
| 6. Innovative and invent workable practices | 3.47 | .84 | Moderately Applied |
| 7. Make good decisions | 3.59 | .88 | Moderately Applied |
| 8. Conduct researches | 3.18 | 1.08 | Moderately Applied |
| 9. Design and suggest suitable modification to systems | 3.40 | .90 | Moderately Applied |
| **Aggregate Mean** | **3.49** | **.87** | **Moderately Applied** |

The data in Table 2 reveal that all the 9 listed items on critical thinking skills were rated moderately applied based on the fact that their mean ratings fell within the range of 3.00 – 3.99. This implies that respondents are of the opinion that the application of critical thinking skills is moderately applied. In addition, the

aggregate Meanfor all the items oncritical thinking skills was 3.49, which fell within the boundary limit of “moderately applied”.

A look at the standard deviation computed, the individual responses ranged from 0.73 to 1.10 with an average standard deviation of 0.87 indicating that all items are within the same range. This by implication shows that the respondents are not wide apart in their mean ratings.

**Research Question 3:** To what level do O.T.M. graduate employees in Edo and Delta States apply management skills?

Data collected in respect of research question three were analyzed and presented in Table 3.

**Table3:Respondents’ Mean Ratings on the application of Managementskills by O.T.M. Graduates in Edo and Delta States N = 308**

**S/N Items on Management skills X S.D Remarks**

1. Motivate and influence others to achieve set goals 3.41 .86 Moderately Applied
2. Allocate people and other resources to tasks 3.42 .94 Moderately Applied
3. Supervise the work of junior staff effectively 3.45 .94 Moderately Applied

|  |  |  |  |
| --- | --- | --- | --- |
| 4. Plan and organize means to get job correctly | 3.40 | .84 | Moderately Applied |
| 5. Manage time effectively, priotize tasks and meet deadlines | 3.30 | .86 | Moderately Applied |
| 6. Resourceful | 3.41 | .85 | Moderately Applied |
| 7. Proactive | 3.51 | .83 | Moderately Applied |
| 8. Respect the views, opinion and ideas of other staff | 3.96 | .77 | Moderately Applied |
| 9. Participate in continuous improvement and planning Processes in the organization | 3.39 | .78 | Moderately Applied |
| 10. Carry others along without ranchor | 3.49 | 1.01 | Moderately Applied |
| **Aggregate Mean** | **3.47** | **.87** | **Moderately Applied** |

The Data in Table 3 reveal that all the 10 listed items on management skills were rated moderately applied due to the fact that the mean values of the respondents ranged from 3.30 to 3.96. This implies that respondents are of the opinion that the application of management skills is moderately applied.In addition, the aggregate meanfor all the items onmanagement skills was 3.49, which fell within the boundary limit of “moderately applied”.

A look at the standard deviation computed, the individual responses ranged from 0.77 to 1.01 with an average standard deviation of 0.87 indicating that all items are within the same range. This by implication shows that the respondents are not wide apart in their mean ratings.

**Research Question 4:**To what level do O.T.M. graduate employees in Edo and Delta States apply personal and interpersonal skills?

Data collected in respect of research question four were analyzed and presented in Table 4.

**Table4: Respondents’ Mean Ratings on the application of personal and interpersonalskills by O.T.M. Graduates in Edo and Delta States N = 308**

**S/N Items on Personal and Interpersonal skills X S.D Remarks**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Habitual attendance to work | 4.16 | .84 | Moderately Applied |
| 2. Punctuality at any circumstance | 3.99 | .86 | Moderately Applied |
| 3. Respectful to customers, clients and colleagues | 4.07 | .81 | Moderately Applied |
| 4. Pays care and attention to quality in all duties and responsibilities | 3.86 | .81 | Moderately Applied |
| 5. Hard work and diligence | 3.93 | .89 | Moderately Applied |
| 6. Adhered to standards and procedures | 3.93 | .83 | Moderately Applied |
| 7. Maintain confidentiality at all times | 3.96 | .99 | Moderately Applied |
| 8. Appropriate dressing code to the office | 3.95 | .90 | Moderately Applied |
| 9. Adapt successfully to changing situation and Environment | 3.81 | .77 | Moderately Applied |
| 10. Self-motivational skills and confidence in the Area of personal development | 3.84 | .81 | Moderately Applied |
| 11. Ability to work in team | 3.95 | .69 | Moderately Applied |
| 12. Assist others to do a job | 3.80 | .73 | Moderately Applied |
| 13. Relate harmoniously with colleagues | 3.87 | .73 | Moderately Applied |
| 14. Work confidently within group | 3.76 | .85 | Moderately Applied |
| 15. Recognize and respect different perspective, open To ideas and views of others | 3.81 | .72 | Moderately Applied |

Aggregate **Mean 3.91 .82 Moderately Applied**

The Data in Table 4 reveal that out of the 15 listed items on personal and interpersonal skills 2 itemswere rated highly appliedbased on the fact that their mean ratings fell within the range 4.00 – 4.99while 13 items were rated “moderately applied” based on the fact that their mean ratings fell within the range

3.00 – 3.99. This implies that respondents are of the opinion that graduates moderately apply personal and interpersonal skills. However, the aggregate

meanfor all the items on personal and interpersonal skills was 3.91, which fell within the boundary limit of “moderately applied”.

The standard deviation computed shows that the individual responses ranged from 0.69 to .99 with an average standard deviation of .82. This means that all items are within the same range. This by implication shows that the respondents are not wide apart in their mean ratings.

**Research Question 5:**To what level do O.T.M. graduate employees in Edo and Delta States apply technical skills?

Data collected in respect of research question five were analyzed and presented in Table 5.

Table5 Respondents‟ Mean Ratings on the application of Technicalskills by O.T.M. Graduates in

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Edo and Delta States | N = 308 | |  | |
| **S/N Items on TechnicalSkills** | **X** | | **S.D Remarks** | |
| 1. Use word processing to compose and type |  | |  | |
| correspondences, scientific or technical materials, numerical data, charts and forms | 3.71 .83 | | Moderately Applied | |
| 2. Manage database | | 3.45 | .93 | Moderately Applied |
| 3. Create spread sheets | | 3.43 | 1.05 | Moderately Applied |
| 4. Use the internet and email | | 3.65 | 1.05 | Moderately Applied |
| 5. Design web pages | | 2.93 | 1.20 | Lowly Applied |
| 6. Disseminate information electronically through | |  |  |  |
| Telephone and email, fax machine and telex | | 3.50 | 1.02 | Moderately Applied |
| 7. Use computer to create presentation using projector | | 3.24 | 1.13 | Moderately Applied |
| 8. Use desktop publishing and digital graphics to design | | 3.12 | 1.04 | Moderately Applied |
| 9. Enters, retrieves, updates, verifies and deletes | |  |  |  |
| Information from electronic files | | 3.63 | .96 | Moderately Applied |
| 10. Operate available modern office equipment | | 3.64 | .88 | Moderately Applied |
| 11. Establish, maintain and control office files, logs and | |  |  |  |
| Indexes | | 3.65 | .85 | Moderately Applied |
| 12. Use electronic storage to store official records | | 3.67 | .94 | Moderately Applied |
| 13. Maintain financial records with imprest account | | 3.33 | 1.04 | Moderately Applied |
| 14. Plan and schedule the itinerary and appointments of | |  |  |  |
| Bosses | | 3.28 | 1.03 | Moderately Applied |
| 15. Schedule appointments for their bosses | | 3.35 | 1.05 | Moderately Applied |
| 16. Suitably develop minutes of meetings | | 3.58 | 1.09 | Moderately Applied |
| 17. Handle incoming and outgoing mails suitably | | 3.57 | .96 | Moderately Applied |
| 18. Create and revise forms | | 3.36 | .87 | Moderately Applied |
| 19. Edit correspondences | | 3.30 | .90 | Moderately Applied |
| **Aggregate mean 3.44** | | | **.94** | **Moderately Applied** |

The Data in Table 5 reveals that the mean values of the respondents ranged from 2.93 to 3.71. This implies that respondents are of the opinion that the application of technical skills is moderately applied.However, the aggregate meanfor all the items ontechnical skillswas 3.44, which fell within the boundary/real limit of “moderately applied”.

The standard deviation computed showed that the individual responses ranged from 0.85 to 1.20 with an average standard deviation of 0.94 indicating that all items are within the same range.This by implication shows that the respondents are not wide apart in their mean ratings.

## Summary of Analysis of Data Related to Hypotheses Hypothesis Testing

A total of ten (10) hypotheses were tested in this study. In testing hypotheses 1, 3, 5, 7 and 9 t-test was employed and one-way ANOVA analysis was used in

testing hypotheses 2, 4, 6, 8 and 10 respectivelyat 0.05 level of significance. **Hypothesis 1:** Supervisors do not differ significantly in their mean ratings on the application of foundational skills by O.T.M. graduates based on type of organization.

Analysis of data in respect of hypothesis onewere analyzed and presented in Table 6.

**Table6: Summary oft-test for significant difference between Public and Private Supervisors’ Mean Ratings on the Application of Foundational Skills by O.T.M. Graduates.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | N | Mean |  | SD | Df | sig. | t-test | p-value | Decision |
| Public Institutions  Private Institutions | 218  90 | 3.54  4.07 |  | 0.62  0.63 | 306 | 0.05 | -6.71 | 0.00 | Reject |

Data in Table6 shows a probability value of 0.00 which is lesser than the stated level of significance of 0.05 indicating rejection of null hypothesis.

Therefore, there is significant difference in the scores of public supervisors (M = 3.54, SD = 0.62) and private supervisors (M = 4.07, SD = 0.62); t =-6.71, p = 0.00. From these results therefore, the hypothesis which stated that supervisors in public and privatetertiary institutions do not differ significantly in their mean ratings of

O.T.M. graduates‟ application of foundational skills was rejected.

**Hypothesis 2:** Supervisors do not differ significantly in their mean ratings on the application of foundational skills by O.T.M. graduates based on years of experience.

Analysis of data in respect of hypothesis twowere analyzed and presented in Table 7.

**Table7:One – way Analysis of Variance (ANOVA) Summary of Supervisors’ Mean Ratings on the Application of Foundational Skills by O.T.M. Graduates based on years of experience.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | df | Mean Square | F | p-  value. | DECISION |
| Between Groups | 2.54 | 2 | 1.27 | 2.87 | .06 |  |
| Within Groups | 134.78 | 305 | .44 |  |  | Accept |
| Total | 137.32 | 307 |  |  |  |  |

Data in Table7 shows 2 and 305 degree of freedom at 0.05 level of significance and a probability value of .06. P-value is greater than the level of significance of 0.05, the null hypothesis is accepted. It can therefore be concluded that the result indicates that the supervisors‟ mean ratings of application of foundational skills by O.T.M. graduates was not significantly different for the three categories of years of experience.

**Hypothesis 3:** Supervisorsdo not differ significantly in their mean ratings on the application of critical thinking skills by O.T.M. graduates based on type of organization.

Analysis of data in respect of hypothesis 3were analyzed and presented in Table 8.

**Table8: Summary of t-test for significant difference between Public and Private Supervisors’ Mean Ratings on the Application of Critical Thinking Skills by O.T.M. Graduates.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | N | Mean | SD | Df | Sig. | t-test | P-Value | DECISION |
| Public. Institutions  Private. Institutions | 218  90 | 3.38  3.69 | .68  .70 | 306 | 0.05 | -3.58 | 0.00 | Reject |

Data in Table 8 shows a probability value of .0.00 which is lesser than the stated level of significance of 0.05 indicating rejection of null hypothesis. Therefore, there is significant difference in the mean ratings of supervisors of public tertiary institutions (M = 3.38, SD = 0.68) and in the mean ratings of supervisors in private tertiary institutions (M = 3.69, SD = 0.697); t =-3.577, p =

0.000. From these results therefore, the hypothesis which stated that supervisors in public and private tertiary institutions not differ significantly in their mean ratings of O.T.M. graduates‟ application of critical thinking skills was rejected. **Hypothesis 4:** Supervisors do not differ significantly in their mean ratings on the application of critical thinking skills by O.T.M. graduates based on years of experience.

Analysis of data in respect of hypothesis fourwere analyzed and presented in Table 9.

**Table9:One – way Analysis of Variance (ANOVA) Summaryof Supervisors’ Mean Ratings on the Application of Critical Thinking Skills by O.T.M. Graduates based on years of experience.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | Df | Mean Square | F. | P-  value | Decision |
| Between Groups | 2.54 | 2 | 1.27 | .37 | .69 |  |
| Within Groups | 134.78 | 305 | .44 |  |  | Accepted |
| Total | 137.32 | 307 |  |  |  |  |

Data in Table 9 shows 2 and 305 degree of freedom at 0.05 level of significance and a p-value of 0.69. Since p-value is greater than the level of significance, the null hypothesis is accepted. It can therefore be concluded that the result indicates that the supervisors‟ mean ratings of application of critical thinking skills by O.T.M. graduate was not significantly different for the three categories of years of experience.

**Hypothesis 5:** Supervisors do not differ significantly in their mean ratings on the application of management skills by O.T.M. graduates based on type of organization.

Analysis of data in respect of hypothesis 5were analyzed and presented in Table 10.

**Table10: Summary of t-test for significant difference between of Public and Private Supervisors’ Mean Ratings on the Application of Management Skills by O.T.M. Graduates.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | N | Mean | SD | Df | Sig. | t-test | P-Value | DECSION |  |
| Public Institutions  Private Institutions | 218  90 | 3.66  4.04 | .69  .60 | 306 | 0.05 | -4.67 | 0.00 | Reject |  |

Data in Table 10 shows a probability value of .0.00 which is lesser than the stated level of significance of 0.05 indicating rejection of the null hypothesis. Therefore, there is significant difference in the scores for supervisors in public tertiary institutions (M = 3.66, SD = 0.69) and supervisors in private tertiary institutions (M = 4.04, SD = 0.60); t =-4.67, p = 0.00. From these results therefore, the hypothesis which stated that supervisors in public and private tertiary institutions do not differ significantly in their mean ratings of O.T.M. graduates‟application of management skills was rejected.

**Hypothesis 6:** Supervisors do not differ significantly in their mean ratings on the application of managerial skills by O.T.M. graduates based on years of experience.

Analysis of data in respect of hypothesis 6were analyzed and presented in Table 11.

**Table11: One – way Analysis of Variance (ANOVA) Summaryof Supervisors’ Mean Ratings on the Application of Management Skills by O.T.M. Graduates based on years of experience.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sum of Squares | | Df | Mean Square | F | p-value  sig. | Decision |
| Between Groups | 2.54 | 2 | 1.27 | 0.37 | .69 | Accepted |
| Within Groups | 134.78 | 305 | .44 |  |  |  |
| Total | 137.32 | 307 |  |  |  |  |

Data in Table 11 shows 2 and 305 degree of freedom at 0.05 level of significance and a p-value of 0.69. Since p-value is greater than level of significance of 0.05, the null hypothesis is accepted. It can therefore be concluded that the result indicates that the supervisors‟ mean ratings of the application of management skills by O.T.M. graduates was not significantly different for the three categories of years of experience

**Hypothesis 7:** Supervisors do not differ significantly in their mean ratings on the application of personal and interpersonal skills by O.T.M. graduates based on type of organization.

Analysis of data in respect of hypothesis seven were analyzed and presented in Table 12

**Table12: Summary of t-test for significant difference between of Public and Private Supervisors’ Mean Ratings on the Application of Personal and Interpersonal skill by**

**O.T.M. Graduates.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | N | Mean | SD | Df | Sig. | t-test | P-value | Decision |  |
| Public Institutions  Private Institutions. | 218  90 | 3.88  3.99 | .68  .63 | 306 | 0.05 | -1.35 | 0.18 | Accept |  |

Data in Table 12 shows a probability value of 0.18 which is greater than the stated level of significance of 0.05 indicating acceptance of null hypothesis. Therefore, there is no significant difference in the mean ratings of supervisors in the public tertiary institutions (M = 3.88, SD = 0.68) and supervisors in private tertiary institutions (M = 3.99, SD = 0.63); t =-1.35, p = 0.18. From these results

therefore, the hypothesis which stated that supervisors in public and private tertiary institutions do not differ significantly in their mean ratings of O.T.M. graduates‟ application of personal and interpersonal skills was accepted.

**Hypothesis 8:** Supervisors do not differ significantly in their mean ratings on the application of personal and interpersonal skills by O.T.M. graduates based on years of experience.

Analysis of data in respect of hypothesis 8 were analyzed and presented in Table 13

**Table13: One – way Analysis of Variance (ANOVA) Summaryof Supervisors’ Mean Ratings on the Application of Personal and Interpersonal Skills by O.T.M. Graduates based on years of experience.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sum of Squares | | Df | Mean Square | F. | p-  value. | decision |
| Between Groups | 2.54 | 2 | 1.27 | .73 | .48 |  |
| Within Groups | 134.78 | 305 | .44 |  | Accept | |
| Total | 137.32 | 307 |  |  |  | |

Data in Table 13 shows 2 and 305 degree of freedom at 0.05 level of significance and p-value of 0.48. Since p-value is greater than the level of significance of 0.05, the null hypothesis is accepted. It can therefore be concluded that the result indicates that the supervisors‟ mean ratings of the application of personal and interpersonal skills by O.T.M. graduate was not significantly different for the three categories of years of experience.

**Hypothesis 9:** Supervisors do not differ significantly in their mean ratings on the application of technical skills by O.T.M. graduates based on type of organization.

Analysis of data in respect of hypothesis 9were analyzed and presented in Table 14

Table 14:Summary of t-test for significant difference between of Public and Private Supervisors‟ Mean Ratings on the Application of Technical Skills by O.T.M. Graduates

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | N | Mean | SD | Df | Sig. | t-test | P-Value | DECSION |  |
| Public Institutions  Private Institutions. | 218  90 | 3.44  3.56 | .69  .72 | 306 | 0.05 | -1.37 | 0.17 | Accepted |  |

Data in Table 15 shows a probability value of .0.17 which is greater than the stated level of significance of 0.05 indicating that there is significant difference in the scores of supervisors in public tertiary institutions (M = 3.44, SD = 0.69) and supervisors in private tertiary institutions (M = 3.56, SD = 0.72); t =-1.37, p = 0.17. From these results therefore, the hypothesis which stated that supervisors in public and privateinstitutions do not differ significantly in their mean ratings of O.T.M. graduates‟ application of technical skills was accepted.

**Hypothesis 10:** Supervisors do not differ significantly in their mean ratings on the application of technical skills by O.T.M. graduates based on years of experience.

Analysis of data in respect of hypothesis 10 were analyzed and presented in Table 15.

**Table15: One – way Analysis of Variance (ANOVA) Summaryof Supervisors’ Mean Ratings on the Application of Technical Skills by O.T.M. Graduates based on years of experience.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sum of Squares | | Df | Mean Square | F. | p-value | Decision |
| Between Groups | 2.54 | 2 | 1.27 | 1.69 | .19 | Accept |
| Within Groups | 134.78 | 305 | .44 |  |  |  |
| Total | 137.32 | 307 |  |  |  |  |

Data in Table 16 shows 2 and 305 degree of freedom at 0.05 level of significance and a p-value of .19. Since p-value is greater than level of significance, the null hypothesis is accepted. It can therefore be concluded that the result indicates that the supervisors‟ mean ratings of the application of technical skills by O.T.M. graduate was not significantly different for the three categories of years of experience.

## Summary of Findings

The findings of this study are summarized as follows:

1. Office Technology and Management graduates in Edo and Delta states apply foundational skills to a moderate level.
2. Office Technology and Management graduates in Edo and Delta states apply critical thinking skills to a moderate level.
3. Office Technology and Management graduates in Edo and Delta states apply management skills to a moderate level.
4. Office Technology and Management graduates in Edo and Delta states apply personal and interpersonal skills to a moderate level.
5. Office Technology and Management graduates in Edo and Delta states apply technical skills to a moderate level.
6. There is a statistical significant difference in the mean ratings of public and private Supervisors on the application of foundational skills by O.T.M. graduates in Edo and Delta states
7. There is no significant difference in the mean ratings of Supervisors on the application of foundational skills by O.T.M. graduates based on years of experience.
8. There is a statistical significant difference in the mean ratings of public and private Supervisors on the application of critical thinking skills by O.T.M. graduates in Edo and Delta states
9. There is no significant difference in the mean ratings of Supervisors on the application of critical thinking skills by O.T.M. graduates based on years of experience.
10. There is a statistical significant difference in the mean ratings of public and private Supervisors on the application of management skills by O.T.M. graduates in Edo and Delta states
11. There is no significant difference in the mean ratings of Supervisors on the application of management skills by O.T.M. graduates based on years of experience.
12. There is no significant difference in the mean ratings of public and private Supervisors on the application of personal and interpersonal skills by O.T.M. graduates in Edo and Delta states
13. There is no significant difference in the mean rating of Supervisors on the application of personal and interpersonal skills by O.T.M. graduates based on years of experience
14. There is no significant difference in the mean ratings of public and private Supervisors on the application of technical skills by O.T.M. graduates in Edo and Delta states
15. There is no significant difference in the mean rating of Supervisors on the application of technical skills by O.T.M. graduates based on years of experience

## CHAPTER FIVE

**DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

This chapter deals with the discussion of findings, conclusion, implication of the study, recommendations, limitations of the study and suggestions for further research.

## Discussion of the Findings

The findings were discussed according to the different aspects covered in the research questions that guided the study and hypotheses formulated for the study as follows:

## Application of foundational skills by O.T.M. graduate employees

The results of the analysis of the data relating to foundational skills revealed thatO.T.M. graduates apply foundational skillsto a moderatelevel. The findings however revealed that most of the items on foundational skills were moderately applied. This result signifies an average level of performance which is neither impressive nor unremarkable in the application of foundational by O.T.M. graduates. This shows that what is applied by O.T.M. graduates in the aspect of foundational skills is quite inadequate compared to what is expected byemployers since O.T.M. graduates are barely proficient in their application of foundational skills.This further shows that though the curriculum content of O.T.M. programmemay seem to be adequate but it has not been able to achieve the needed

result of producing adequate man power for the industry. The implication of this finding is that there seems to be a lacuna either from the school system or from the method of teaching or it may be as a result of inadequate educators, or lack of necessary infrastructure that may have resulted in the inadequate application of foundational skills by O.T.M. graduates.

The findings of this study is in agreement with the findings of Adeyemo, Ogunleye, Oke and Adenle (2010), Akinyemi, Ofem, Igot, and Ikuenomore (2012), Rosenberg, Heimler and Morote (2012) which states that there is a disparity between what is applied and what is expected by employers from graduates and that the graduates are barely proficient in the application of employability skills especially in English proficiency, deficiency in basic mathematical skills which encompasses the foundational skills, and communicative skills. These findings also agrees with the assertions made by Asuquo and Adegbola (2014), Okpiaifo (2016) which states that communicative skills which is a major part of foundational skills are lacking in Nigerian graduates.

The findings further revealed that there is a significant difference between the Mean Ratings of public and private employers on the application of foundational skills by O.T.M. graduates in Edo and Delta states. Though, this finding is at variance with that ofJonck and Walt (2015). The Authors state that there is no significant difference between the private and the public sector and that

they are becoming less marked.By implication therefore, the findings of this study is pointing out that the nature of organization can affect the application of employability skills of graduates.

The findings further revealed that there is no significant difference in the mean rating of employers on the application of foundational skills by O.T.M. graduates based on years of experience. This has negated the assertion made by Adebayo (2008) who noted that experience of an assessor is a significant factor that can affect the competency of assessment by an assessor. From the findings of this study the level of experience of the employers whether experienced or inexperience did not have any effect on the rating of the application of foundational skills by O.T.M. graduates.

## Application of critical thinking skills by O.T.M. graduate employees

Critical thinking skill is an essential aspect of employability skills needed in the knowledge economy which involves using ones initiative, knowledge and experience to be able to make meaningful contributions to the decision process of the organization hence the need for graduates who enter the labour pool to be highly talented and versatile in this aspect. The results of the analysis of the data relating to the second research question as shown in Table 3 revealed that employers in Edo and Delta statesopinioned that O.T.M. graduates apply critical

thinking skills to a moderatelevel.The findings however revealed that most of the items on critical thinking skillswere rated “moderately applied” by supervisors.

According to Olofintoye, and Prince, (2013), the goals of tertiary education remains elusive and seems unachievable as the tertiary institutions products(graduates) in Nigeria often time could not marry knowledge acquired in schools with that of the labour market. This likely may be the case of O.T.M. graduates who have not been able to marry what have been learnt to practice in the real world of work.

The findings of this study is in consonant with the findings of the study carried out by Akinyemi, Ofem, Igot, and Ikuenomore (2012) which revealed that graduates lack critical thinking skills which is one of the causes of unemployment in Nigeria and which is making employers to be dissatisfied with graduate output in Nigeria. The present study is also in agreement with the findings of the study carried out by Rosenberg, Heimler and Morote (2012) which identified critical thinking skills as one of the eight dimensions of employability skills lacking among graduates and that it is below expectations for the industry. Aida, Noralisand Rozain, (2015) observed that employers are looking for employees who are talented and with innovative skills that can make the organizations compete favourably with other competitors but the findings of this study shows that O.T.M.

graduates fairly apply this aspect of employability skill hence the application of critical thinking skills by O.T.M. graduates is still below expectation.

The findings further revealed that there is a significant difference in the mean rating of employers in public and private organizations on the application of critical thinking skills by O.T.M. graduates in Edo and Delta state. This findings is in disagreement with the findings of the study carried out by Jonck and Watt (2015).Jonck and Watt found out that the differences between the private and the public sector are becoming less marked, and that the employability skills that are sought by the public sector are similar to those that are sought by the private sector.

The findings also revealed that level of experience of employersdo not have any effect on supervisors‟ assessment on the application of critical thinking skills by O.T.M. graduates.

## Application of management skills by O.T.M. graduate employees

Management skill which is ability to motivate others to achieve organizational goals involving planning, organizing, leading, and controlling to meet organizational goalsis fairly appliedby O.T.M. graduates and this is not enough for O.T.M. graduates to succeed in the competitive and knowledge economy.This findings are in line with the findings ofAgboola (2006),Garba (2012), where it was observed that graduates were barely proficient in office

application which includes management skills. The findings of Ediagbonya and Oyadongha (2013) also connote that graduates employability skills which includes management skills is low compared to what is needed in the current business environment. From the findings of Iro (2013) on administrative skills application by O.T.M. graduates in the north-Western states of Nigeria, it was discovered that

O.T.M. graduates were rated high which negates the findings of this study on application of management skill.

The study also revealed that there is a significant difference in the mean rating of employers in public and private organizations on the level application of management skills by O.T.M. graduates in Edo and Delta States. This negates the findings of Jonck and Watt (2015) which states that there is no significant difference in the skillsrequired in public sector and skills required in the private sector. It was also revealed in this study that there is no significant difference in the mean rating of employers on the application of management skills based on the years of experience of employers.

## Application of personal and interpersonal skills by O.T.M. graduate employees

The findings of the study underapplication of personal and interpersonal skills are moderately applied by O.T.M. graduatesin Edo and Delta states.It shows that the training received by O.T.M. graduates is inadequate to meet the demands

of the labour market and that employers are interested in talented and highly skilled workers that can make organizations compete favourably with other competitors.

In agreement with the findings of this study, Aliofor (2005) is of the opinion that due to the defect of inadequate employability skills observed to be prevalent among graduates, curriculum should be reviewed to include courses in individual competence building, adaptability, responsibility, interpersonal/human relations, work ethics and entrepreneurship development skills among others.Buttressing the above findings,Rosenberg et al (2012) in their findings also observed that these skills were noted to be below expectation. In view of the above findings Asuquo and Adegbola (2015) stated that most Nigeria University graduates lack job related skills; requisite skills for employment which includes critical thinking skills, communicative skills, management skills, interpersonal skills, decision making skills, personal skills, job specific skills and a host of other relevant skills. This assertion was also revealed in Iro (2013) study which rated O.T.M. graduates interpersonal skills as fairly proficient.

The findings further revealed that there is no significant difference in the mean rating of employers in public and private organizations on the application of personal and interpersonal skills by O.T.M. graduates in Edo and Delta state. The finding is in consonance with the findings of the study carried out by Jonck and

Watt (2015). Jonck and Watt found out that the differences between the private and the public sector are becoming less marked, and that the employability skills that are sought by the public sector are similar to those that are sought by the private sector.

The findings also revealed that level of experience of employers do not have any effect on employers‟ assessment on the application of personal and interpersonal skills by O.T.M. graduates.

## Application of technical skills by O.T.M. graduate employees

The results of the analysis of the data relating to the technical skills which entails the professional skills of the O.T.M. graduates revealed that O.T.M. graduates moderately appliedtechnical skills.This implies that the application of technical skills which is the professional area (job specific) of the O.T.M. graduates is inadequate to meet the labour market demands.

The findings is in line with those of Agboola (2006), Earnest (2010), Garba (2012) that observed that O.T.M. graduates are barely proficient in technical skills. Though the findings of Iro (2013) negate this findings because it was observed that

O.T.M. graduates in North-western part of Nigeria are proficient in most technical area.

The findings further revealed that there is no significant difference in the mean rating of employers in public and private organizations on the application of

technical skills by O.T.M. graduates working in Edo and Delta States.It was also revealed that level of experience of employers does not have any effect on employers‟ assessment on the application of personal and interpersonal skills by

O.T.M. graduates in Edo and Delta States.

## Conclusion

From the findings of the study, it can be observed that the application of employability skills in the area of foundational skills, critical thinking skills, management skills, personal and interpersonal skills and technical skill were moderately applied. The result of this study shows that the application of employability skills is below expectations of Supervisors. The findings of this study have shown that the assertions made by some researchers that there is significant gap between employers‟ needs and the actual skill levels and abilities of graduates who enter the labour pool to apply these skills is quite true. This therefore implies that the training received by O.T.M. graduates is inadequate to meet the challenges of the competitive business environment and the demands of employers,hence, the need for practical skills to be emphasized more to enable the

O.T.M. graduates meet the demands of the labour market.

## Implication of the Study

The findings of this study have far reaching educational and policy implications on tertiary institutions offering O.T.M. programme, employers,

recruitment agencies, O.T.M. students, O.T.M. Educators, O.T.M. graduates, curriculum planners, policy makers and future researchers. The application of employability skills by O.T.M. graduates is still below expectation given that the application of foundational skills, critical thinking skills, management skills, personal and interpersonal skills and technical skills have been found to be moderately applied. The implication therefore is that despite the review of the curriculum of O.T.M. programme, graduates are still ill-equipped to meet the demands of employers. There is need for adequate training of O.T.M. graduates in view of the sensitive positions or roles they play in the survival of any organization. The findings of this study has great implication on tertiary institutions mandate to produce needed manpower demands for the knowledge economy that has been influenced significantly by advancement in technology, managerial best practices and the competitive working environment.

This study has provided a feedback mechanism to policy makers and curriculum planners, on the need to review the curriculumin line with the realities on groundfor the production of needed quality manpower for the industry. By implication, there is a need toincorporate the right teaching strategies into the curriculum with emphasis on practical applications which will contribute significantly to the acquisition of adequate employability skills during training. In

other words, practical should be given enough time to enable graduates gain mastery for effective application in the organization.

The findings of this study have great implication for school management andO.T.M. educators.Adequate training and development on teaching methodology will enhance teaching effectiveness that will enable students to be properly directed to inculcate the needed skill needs for the industry.

The findings also have far reaching implications for the O.T.M. students who by the findings of this study will have awareness opportunity on employability skills needs that should be developed in them in other for them to become employed after graduation from school.This finding will acquaint educators and graduates of O.T.M. with a wide range of employability skills and also help them to focus their attention during training on neglected areas of employability skills.

The findings of this study also have far reaching implications for the employers and recruitment agencies who by the findings of this study will be able to determine the training needs of O.T.M. graduates working in these organizations for proper information to the institutions on the skill needed by O.T.M. graduates. This collaboration will help the O.T.M. graduates to be well equipped with needed employability skills that will meet with the demands of the exigencies of the present time.

## Recommendations

With reference to the findings and conclusion of the study, the following recommendations are made:

1. The observed deficiencies in literacy, numeracy and communicative skills which constitute the foundational skills should be adequately addressed by revamping the general studies courses such as use of English, basic mathematics in general studies units in tertiary institutions. Also,those students who feel their written skills are lacking should create a blog, or maybe volunteer their services to students‟ magazine which will boost their writing skills.
2. Educators should use innovative teaching strategies such as inquiring method of teaching that allow students to acquire knowledge through a guided process by the educators.This method will stir up critical thinking skills of students whereby students are made to explore or research and use their initiative to solve problems. In other words, there should be a paradigm shift from teacher centered method of teaching to student centered method of teaching where students dominate the teaching and learning process.
3. Students should engage in literary and debating societies and voluntary organizations such as Man‟O‟War, Red Cross, Road Safety clubs etcetera in

schools. Membership of such organizations will give students opportunities for management and leadership positions that will provide the needed skills. Those students that lack management skills such as planning and organizing can enhance such skills through working part-time in a department as work aid.

1. Teaching of employability skills using a democratic approach so that students‟ awareness of values, attitudes, and worker responsibilities is increased. Supervisors, trainers and teachers should set good examples of the desired behavior. Students should have the opportunity to observe the type of work place behaviour that is being required of them.
2. Government agencies and institutional management should concentrate in training of O.T.M. educators to be able to use a better methodology for the teaching of these secretarial courses in order to produce secretarial graduates who can fit properly into the real world of work.
3. Educational planners and policy makers should ensure effective and regular program planning to remain abreast with the skills needed for changing world and to ensure the desired results of the program are being attained.
4. There should be review of the O.T.M. curriculum by curriculum planners in line with the realities on ground for the production of needed quality manpower for the industry by incorporate the right teaching strategies into

the curriculum with emphasis on practical applications that will be given enough time to enable graduates gain mastery of the needed skills.

## Suggestions for Further Research

The following are suggestions for further research:

1. Causes of inadequate application of employability skills by O.T.M. graduates.
2. Appraisal of O.T.M. programme in tertiary institutions toward meeting the employment needs of employers of O.T.M. graduates.
3. Assessment of application of employability skills by O.T.M. graduates in other States of Nigeria.
4. Multiple dimensional approach for the assessment of employability skills of

O.T.M. graduates in Edo and Delta states.

1. Assessment of office technology and management educators‟ competence to implement O.T.M.curriculum as it affects employability skill acquisition.

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APPENDIX A LETTER OF TRANSMITTAL

Department of Vocational Education, Faculty of Education,

Dear Sir,

NnamdiAzikiwe University, Awka.

3rd January, 2017

Request to Complete a Questionnaire

I am a Ph.D student in the Department of Vocational Education, NnamdiAzikiwe University, Awka. I am carrying out a research to find out Employers assessment of the application of employability skills by office technology and management graduates employees in Edo and Delta States.

I will highly appreciate if you could spare few minutes to complete this questionnaire and avail me some information which will be helpful in this study.The information solicited is strictly for academic purpose and will be treated with strict confidentiality.

Thank you in anticipation of your cooperation.

Yours faithfully,

M.E.Osahon (Mrs) Researcher 08055214807

# APPENDIX B

APPLICATION OF EMPLOYABILITY SKILLS QUESTIONAIRE (AESQ)

## SECTION A Respondent’s Biographic Data

Instruction: Please tick ( ) in the suitable options for items 1 and 2 below as they apply to you.

1. Type of organization: Public ( ) Private ( )
2. Experience: 0 – 5yrs ( ) 6-10yrs( ) above 10yrs( )

## SECTION B

Application of employability skills by O.T.M. graduates.

Instructions: Please tick ( ) in the options for all items in sections B1 to B5to indicate your assessment of the application of each by O.T.M. graduate employees working under you. Use the following keys for the response codes:

VHA Very highly applied

HA Highly Applied

MA Moderately applied

LA Lowly applied

VLA Very LowlyApplied

## SECTION B1 – B5:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **SECTION B1: Foundational skills application** | **VHA** | **HA** | **MA** | **LA** | **VLA** |
| 1. | **Ability to:**  Express ideas clearly and confidently in speech. |  |  |  |  |  |
| 2. | Express ideas clearly in writing. |  |  |  |  |  |
| 3. | Communicate with a wide variety of people. |  |  |  |  |  |
| 4. | Listen attentively. |  |  |  |  |  |
| 5. | Interpretation of written information. |  |  |  |  |  |
| 6. | Solve practical problems using a variety of  mathematical techniques. |  |  |  |  |  |
| 7. | Understanding of numerical data, statistics and graph. |  |  |  |  |  |
| 8. | Working with numbers. |  |  |  |  |  |
| **S/N** | **SECTION B2: Critical thinking skills application** | **VHA** | **HA** | **MA** | **LA** | **VLA** |
| 1. | **Ability to:**  Gather information systematically to establish facts and |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | principles to solve problems. |  |  |  |  |  |
| 2. | Articulate, act on initiative and identify opportunities. |  |  |  |  |  |
| 3. | Analyze and assess services and operations for quality, efficiency and effectiveness and make recommendations  for improvement. |  |  |  |  |  |
| 4 | Develop strategic and creative vision. |  |  |  |  |  |
| 5 | Understand and operate within social, organizational  and technological systems. |  |  |  |  |  |
| 6 | Innovate and invent workable practices. |  |  |  |  |  |
| 7 | Make good decisions. |  |  |  |  |  |
| 8 | Conduct researches. |  |  |  |  |  |
| 9 | Design and suggest suitable modification to systems. |  |  |  |  |  |
| S/N | **SECTION B3: Management Skills Application** | **VHA** | **HA** | **MA** | **LA** | **VLA** |
| 1. | **Ability to:**  Motivate and influence others to achieve set goals. |  |  |  |  |  |
| 2 | Allocate people and other resources to tasks. |  |  |  |  |  |
| 3. | Supervise the work of junior staff effectively. |  |  |  |  |  |
| 4. | Plan and organize means to get job Correctly. |  |  |  |  |  |
| 5. | Manage time effectively, priotize tasks and meet  deadlines. |  |  |  |  |  |
| 6. | Be resourceful. |  |  |  |  |  |
| 7 | Be proactive. |  |  |  |  |  |
| 8. | Respect the views, opinion and ideas of other staff. |  |  |  |  |  |
| 9. | Participate in continuous improvement and planning processes in the organization. |  |  |  |  |  |
| 10. | Carry others along without ranchor. |  |  |  |  |  |
|  | **SECTION B4: Personal and Interpersonal Skills application** | **VHA** | **HA** | **MA** | **LA** | **VLA** |
| **1.** | Habitual attendance to work. |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2.** | Punctuality at any circumstance. |  |  |  |  |  |
| **3.** | Respectful to customers, clients and colleagues. |  |  |  |  |  |
| **4.** | Pays care and attention to quality in all duties and  responsibilities. |  |  |  |  |  |
| **5.** | Hard work and diligence. |  |  |  |  |  |
| **6.** | Adhered to standards and procedures. |  |  |  |  |  |
| **7.** | Maintain confidentiality at all times. |  |  |  |  |  |
| **8.** | Appropriate dressing code to the office. |  |  |  |  |  |
| 9. | Adapt successfully to changing situation and  environment. |  |  |  |  |  |
| 10. | Self motivational skills and confidence in the area of personal development. |  |  |  |  |  |
| 11. | Ability to work in team. |  |  |  |  |  |
| 12. | Assist others to do a job. |  |  |  |  |  |
| 13. | Relate harmonious with colleagues |  |  |  |  |  |
| 14. | Work confidently within a group |  |  |  |  |  |
| 15. | Recognize and respect different perspectives, open to  the ideas and views of others. |  |  |  |  |  |
| **S/N** | **SECTION B5: Technical skills application** | **VHA** | **HA** | **MA** | **LA** | **VLA** |
| **1.** | **Ability to:**  Use word processing to compose and type  correspondences, scientific or technical materials, numerical data, charts and forms. |  |  |  |  |  |
| 2. | Manage databases. |  |  |  |  |  |
| 3. | Create spread sheets. |  |  |  |  |  |
| 4. | Use the internet and email. |  |  |  |  |  |
| 5. | Design web pages. |  |  |  |  |  |
| 6. | Disseminate information electronically through:   1. Telephone and email 2. Fax machine and telex |  |  |  |  |  |
| 7. | Use computer to create presentation using projector. |  |  |  |  |  |
| 8. | Use desktop publishing and digital graphics to design. |  |  |  |  |  |
| 9. | Enters, retrieves, updates, verifies and deletes  information from electronic files. |  |  |  |  |  |
| 10. | Operate available modern office equipment. |  |  |  |  |  |
| 11. | Establish, maintain and control office files, logs and  indexes. |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 12. | Use electronic storage to store official records. |  |  |  |  |  |
| 13. | Maintain financial records with imprest account. |  |  |  |  |  |
| 14. | Plan and schedule the itinerary and appointments of  employers. |  |  |  |  |  |
| 15. | Schedule appointments for their bosses. |  |  |  |  |  |
| 16. | Suitably develop minutes of meetings. |  |  |  |  |  |
| 17. | Handle incoming and outgoing mails suitably. |  |  |  |  |  |
| 18. | Create and revise forms. |  |  |  |  |  |
| 19. | Edit correspondences. |  |  |  |  |  |

**APPENDIX C**

**POPULATION DISTRIBUTION OF PUBLIC TERTIARY INSTITUTIONS AND NUMBER OF EXECUTIVES WITH O.T.M. GRADUATES IN EDO AND DELTA STATES**

|  |  |  |
| --- | --- | --- |
| **S/N** | **PUBLIC TERTIARY INSTITUTIONS IN EDO STATE** | **NO. OF EXECUTIVES WITH O.T.M. GRADUATES** |
| 1. | University of Benin, Benin City | 126 |
| 2. | Ambrose Ali University, Ekpoma | 55 |
| 3. | University of Benin Teaching Hospital | 35 |
| 4. | Auchi Polytechnic, Auchi | 45 |
| 5 | Usen Polytechnic, Usen | 30 |
| 6 | College of Education, Ekiadolor | 45 |
| 7 | College of Education, Igueben | 29 |
| 8 | Federal Institute of Construction Technology, Uromi | 10 |
|  | **TOTAL** | **375** |
|  | **PUBLIC TERTIARY INSTITUTIONS IN DELTA STATE** |  |
| 11. | Delta State University, Abraka | 85 |
| 12. | Federal University of Petroleum Resources, Efurun | 25 |
| 13. | Petroleum Training Institute | 32 |
| 14. | Ogwachu Polytechnic, Ogwachi | 36 |
| 15 | Ozoro Polytechnic, Ozoro | 31 |
| 16. | College of Education, Technical, Asaba | 34 |
| 17 | College of Education, Warri | 45 |
|  | College of Education, Agbor | 35 |
|  | College of Education, Mosogar | 42 |
|  | **Total** | **365** |
|  | **GRAND TOTAL 375 + 365** | **740** |

Sources: Personnel departmental records.

**POPULATION DISTRIBUTION OF PRIVATE TERTIARY INSTITUTIONS AND NUMBER OF EXECUTIVES WITH O.T.M. GRADUATES IN EDO AND DELTA STATES**

|  |  |  |
| --- | --- | --- |
| **S/N** | **PRIVATE TERTIARY**  **INSTITUTIONS IN EDO STATE** | **NO. OF EXECUTIVES WITH O.T.M. GRADUATES** |
| 1. | Igbinedion University, Okada | 47 |
| 2 | Benson Idahosa University, Benin City | 51 |
| 3 | Edwin Clara University, Benin | 20 |
| 4 | Adegboyinga University, Ogua | 20 |
| 5 | Light House Polytechnic, B/City | 15 |
|  | **TOTAL** | **153** |
|  | **PRIVATE TERTIARY INSTITUTIONS IN EDO**  **STATE** | **NO. OF EXECUTIVES WITH O.T.M. GRADUATES** |
| 6 | Western Delta University, Oghara | 35 |

|  |  |  |
| --- | --- | --- |
| 7 | Novena University, Obiaroko | 28 |
| 8 | IbeAgborotu Polytechnic, Delta State | 34 |
| 9 | Otete Delta State Polytechnic, Delta | 26 |
|  | **TOTAL** | **123** |
|  | **GRAND TOTAL 153 + 123** | **276** |

Sources: Personnel departmental records.

**Total Population of Public and Private Tertiary Institutions**

|  |  |
| --- | --- |
| Public tertiary institutions in Edo and Delta States | 740 |
| Private tertiary institutions in Edo and Delta States | 276 |
| **Total** | **1,016** |

## APPENDIX D

SAMPLE CALCULATION PROPORTIONATE STRATIFIED SAMPLING TECHNIQUE

Formula: No. of executives in each institution X Total No. of executives in each stratum

Total population (1016)

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **PUBLIC TERTIARY INSTITUTIONS IN EDO STATE** | **NO. OF EXECUTIVES WITH O.T.M. GRADUATES** | **PROPORTIONATE STRATIFIED SAMPLING TECHNIQUE** |
| 1. | University of Benin, Benin City | 126 | 126/1016\*375 = 47 |
| 2. | Ambrose Ali University, Ekpoma | 55 | 55/1016\*375 = 20 |
| 3. | University of Benin Teaching  Hospital | 35 | 35/1016\*375 = 13 |
| 4. | Auchi Polytechnic, Auchi | 45 | 45/1016\*375 = 17 |
| 5 | Usen Polytechnic, Usen | 30 | 30/1016\*375 = 11 |
| 6 | College of Education, Ekiadolor | 45 | 45/1016\*375 = 17 |
| 7 | College of Education, Igueben | 29 | 29/1016\*375 = 11 |
| 8 | Federal Institute of Construction  Technology, Uromi | 10 | 10/1016\*375 = 4 |
|  | **TOTAL** | **375** | **141** |

|  |  |  |
| --- | --- | --- |
| **PUBLIC TERTIARY INSTITUTIONS IN DELTA STATE** | **NO. OF EXECUTIVES**  **WITH O.T.M. graduates** | **PROPORTIONATE STRATIFIED SAMPLING TECHNIQUE** |
| Delta State University, Abraka | 85 | 85/1016\*365 = 31 |
| Federal University of Petroleum Resources,  Efurun | 25 | 25/1016\*365 = 09 |
| Petroleum Training Institute | 32 | 32/1016\*365 = 12 |
| Ogwachu Polytechnic, Ogwachi | 36 | 36/1016\*365 = 13 |
| Ozoro Polytechnic, Ozoro | 31 | 31/1016\*365 = 11 |
| College of Education, Technical, Asaba | 34 | 34/1016\*365 = 12 |
| College of Education, Warri | 45 | 45/1016\*365 = 16 |
| College of Education, Agbor | 35 | 35/1016\*365 = 13 |
| College of Education, Mosogar | 42 | 42/1016\*365 = 15 |
| **Total** | **365** | **132** |

|  |  |  |  |
| --- | --- | --- | --- |
| **S/N** | **PRIVATE TERTIARY INSTITUTIONS IN EDO**  **STATE** | **NO. OF EXECUTIVES WITH O.T.M.**  **GRADUATES** | **PROPORTIONATE STRATIFIED SAMPLING**  **TECHNIQUE** |
| 1. | Igbinedion University, Okada | 47 | 47/1016\*153 = 7 |
| 2 | Benson Idahosa University,  Benin City | 51 | 51/1016\*153 = 8 |
| 3 | Edwin Clara University, Benin | 20 | 20/1016\*153 = 3 |
| 4 | Adegboyinga University, Ogua | 20 | 20/1016\*3153 = 3 |
| 5 | Light House Polytechnic, B/City | 15 | 15/1016\*153 = 2 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **TOTAL** | **153** | **23** |
|  | **PRIVATE TERTIARY**  **INSTITUTIONS IN EDO STATE** | **NO. OF EXECUTIVES**  **WITH O.T.M. GRADUATES** |  |
| 6 | Western Delta University,  Oghara | 35 | 35/1016\*123 = 4 |
| 7 | Novena University, Obiaroko | 28 | 28/1016\*123 = 3 |
| 8 | IbeAgborotu Polytechnic, Delta  State | 34 | 34/1016\*123 = 4 |
| 9 | Otete Delta State Polytechnic,  Delta | 26 | 26/1016\*123 = 3 |
|  | **TOTAL** | **123** | **14** |

## TOTAL POPULATION =1016

**SAMPLE SIZE: 141 + 132 +23 + 14 = 309**

## APPENDIX E

RELIABILITY CALCULATION (CRONBACH ALPHA)

**Scale: Foundational skills application**

**Case Processing Summary**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | N | % |
| Cases | Valid | 20 | 100.0 |
| Excludeda | 0 | .0 |
| Total | 20 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

|  |  |
| --- | --- |
| Cronbach's Alpha | N of Items |
| .794 | 8 |

**Item-Total Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item  Deleted | Scale Variance if  Item Deleted | Corrected Item-  Total Correlation | Cronbach's Alpha  if Item Deleted |
| VAR00001 | 24.1000 | 22.516 | .592 | .756 |
| VAR00002 | 24.1500 | 24.239 | .679 | .751 |
| VAR00003 | 24.8500 | 28.029 | .110 | .833 |
| VAR00004 | 24.6500 | 24.345 | .509 | .771 |
| VAR00005 | 25.2000 | 21.747 | .548 | .767 |
| VAR00006 | 23.7000 | 24.747 | .737 | .751 |
| VAR00007 | 24.2500 | 26.618 | .308 | .799 |
| VAR00008 | 24.0500 | 21.734 | .758 | .729 |

**Scale: Critical thinking skills application**

**Case Processing Summary**

|  |  |  |
| --- | --- | --- |
|  | N | % |

|  |  |  |  |
| --- | --- | --- | --- |
| Cases | Valid | 20 | 100.0 |
| Excludeda | 0 | .0 |
| Total | 20 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

|  |  |
| --- | --- |
| Cronbach's  Alpha | N of Items |
| .885 | 9 |

**Item-Total Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected  Item-Total Correlation | Cronbach's  Alpha if Item Deleted |
| VAR00009 | 30.6500 | 32.661 | .869 | .850 |
| VAR00010 | 31.2000 | 40.379 | .153 | .935 |
| VAR00011 | 30.2000 | 33.011 | .815 | .855 |
| VAR00012 | 29.5000 | 41.211 | .839 | .877 |
| VAR00013 | 30.4000 | 33.411 | .861 | .852 |
| VAR00014 | 30.4500 | 33.629 | .869 | .851 |
| VAR00015 | 29.9000 | 35.989 | .853 | .857 |
| VAR00016 | 31.1500 | 38.555 | .723 | .870 |
| VAR00017 | 30.9500 | 41.524 | .387 | .889 |

**Scale: Management Skills Application Case Processing Summary**

|  |  |  |
| --- | --- | --- |
|  | N | % |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Valid | 20 | 100.0 |
| Cases | Excludeda | 0 | .0 |
|  | Total | 20 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

|  |  |
| --- | --- |
| Cronbach's Alpha | N of Items |
| .711 | 10 |

**Item-Total Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item  Deleted | Scale Variance if  Item Deleted | Corrected Item-  Total Correlation | Cronbach's Alpha  if Item Deleted |
| VAR00018 | 37.7000 | 6.537 | .750 | .636 |
| VAR00019 | 36.9500 | 13.313 | .556 | .666 |
| VAR00020 | 35.9000 | 14.832 | .273 | .703 |
| VAR00021 | 35.8000 | 13.853 | .662 | .669 |
| VAR00022 | 36.0500 | 13.208 | .694 | .655 |
| VAR00023 | 36.6500 | 15.082 | .127 | .721 |
| VAR00024 | 36.2000 | 13.326 | .540 | .667 |
| VAR00025 | 36.5500 | 13.839 | .408 | .685 |
| VAR00026 | 36.8000 | 13.958 | .308 | .698 |
| VAR00027 | 36.8000 | 16.168 | -.095 | .742 |

**Scale: Personal and Interpersonal Skills application Case Processing Summary**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | N | % |
| Cases | Valid | 20 | 95.2 |
| Excludeda | 1 | 4.8 |
| Total | 21 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

|  |  |
| --- | --- |
| Cronbach's Alpha | N of Items |
| .748 | 15 |

**Item-Total Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item  Deleted | Scale Variance if  Item Deleted | Corrected Item-  Total Correlation | Cronbach's Alpha  if Item Deleted |
| VAR00028 | 32.3500 | 11.082 | .284 | .752 |
| VAR00029 | 32.2500 | 9.461 | .627 | .685 |
| VAR00030 | 31.9500 | 9.945 | .474 | .717 |
| VAR00031 | 31.3500 | 10.029 | .500 | .711 |
| VAR00032 | 32.2000 | 11.221 | .550 | .713 |
| VAR00033 | 31.2500 | 11.250 | .530 | .715 |
| VAR00034 | 31.8000 | 11.326 | .445 | .724 |
| VAR00035 | 31.6500 | 11.503 | .302 | .744 |
| VAR00036 | 27.7500 | 33.250 | .565 | .823 |
| VAR00037 | 27.8000 | 34.484 | .724 | .810 |
| VAR00038 | 28.5000 | 38.789 | .166 | .866 |
| VAR00039 | 28.3000 | 35.168 | .502 | .829 |
| VAR00040 | 28.8500 | 32.029 | .549 | .827 |
| VAR00041 | 27.3500 | 35.082 | .786 | .810 |
| VAR00042 | 27.9000 | 38.095 | .285 | .849 |

**Scale: Technical Skills Application**

**Case Processing Summary**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | N | % |
| Cases | Valid | 20 | 95.2 |
| Excludeda | 1 | 4.8 |
| Total | 21 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

|  |  |
| --- | --- |
| Cronbach's Alpha | N of Items |
| .884 | 19 |

**Item-Total Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item  Deleted | Scale Variance if  Item Deleted | Corrected Item-  Total Correlation | Cronbach's Alpha  if Item Deleted |
| VAR00043 | 46.0000 | 18.316 | -.102 | .189 |
| VAR00044 | 45.0500 | 13.629 | .607 | -.146a |
| VAR00045 | 45.3000 | 17.695 | .000 | .137 |
| VAR00046 | 45.6500 | 16.976 | .042 | .119 |
| VAR00047 | 45.8500 | 19.082 | -.186 | .233 |
| VAR00048 | 45.7500 | 15.461 | .216 | .026 |
| VAR00049 | 45.4500 | 15.734 | .150 | .058 |
| VAR00050 | 46.3000 | 13.379 | .324 | -.083a |
| VAR00051 | 45.6000 | 21.200 | -.413 | .294 |
| VAR00052 | 45.1500 | 18.345 | -.125 | .210 |
| VAR00053 | 45.5500 | 15.418 | .090 | .085 |
| VAR00054 | 48.1000 | 19.042 | -.171 | .172 |
| VAR00055 | 45.1000 | 17.674 | .065 | .114 |
| VAR00056 | 46.7000 | 59.484 | .584 | .799 |
| VAR00057 | 46.7500 | 60.934 | .753 | .793 |
| VAR00058 | 47.4500 | 68.471 | .103 | .835 |
| VAR00059 | 47.2500 | 64.934 | .340 | .817 |
| VAR00060 | 47.8000 | 56.905 | .622 | .795 |
| VAR00061 | 46.3000 | 62.432 | .752 | .797 |

a. The value is negative due to a negative average covariance among items.

This violates reliability model assumptions. You may want to check item codings.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Scale Mean if Item  Deleted | Scale Variance if  Item Deleted | Corrected Item-  Total Correlation | Cronbach's Alpha  if Item Deleted |
| VAR00043 | 46.7000 | 59.484 | .584 | .799 |
| VAR00044 | 46.7500 | 60.934 | .753 | .793 |
| VAR00045 | 47.4500 | 68.471 | .103 | .835 |
| VAR00046 | 47.2500 | 64.934 | .340 | .817 |
| VAR00047 | 47.8000 | 56.905 | .622 | .795 |
| VAR00048 | 46.3000 | 62.432 | .752 | .797 |
| VAR00049 | 46.8500 | 68.134 | .165 | .828 |
| VAR00050 | 46.6500 | 58.871 | .693 | .792 |
| VAR00051 | 46.8000 | 56.589 | .779 | .783 |
| VAR00052 | 47.3500 | 56.239 | .566 | .801 |
| VAR00053 | 46.5000 | 67.526 | .483 | .814 |
| VAR00054 | 46.3000 | 65.695 | .416 | .813 |
| VAR00055 | 46.3500 | 67.082 | .289 | .819 |
| VAR00057 | 46.7500 | 60.934 | .753 | .793 |
| VAR00058 | 47.4500 | 68.471 | .103 | .835 |
| VAR00059 | 47.2500 | 64.934 | .340 | .817 |
| VAR00060 | 47.8000 | 56.905 | .622 | .795 |
| VAR00061 | 46.3000 | 62.432 | .752 | .797 |

SUMMARY OF RESULT

|  |  |  |
| --- | --- | --- |
| **Variable** | **Cronbach's Alpha** | **No. of Items** |
| Foundational skills application | .794 | 8 |
| Critical thinking skills application | .885 | 9 |
| Management Skills Application | .711 | 10 |
| Personal and Interpersonal Skills application | .748 | 15 |
| Technical skills | .884 | 19 |

Total Average = .804

**APPENDIX F**

DETAILED ANALYSIS OF HYPOTHESES TESTING

**T-Test calculation for Hypotheses 1**

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 15-FEB-2017 22:29:47  C:\Users\HTL- NPDC\Documents\mrs Osahon(PhD work).  DataSet1  <none>  <none>  <none>  308  User defined missing values are treated as missing.  Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.  T-TEST GROUPS=VAR00001(1 2)  /MISSING=ANALYSIS  /VARIABLES=FS  /CRITERIA=CI(.95).  00:00:00.02  00:00:00.01 |
| Comments |  |
|  | Data |
|  | Active Dataset |
|  | Filter |
| Input | Weight |
|  | Split File |
|  | N of Rows in Working Data |
|  | File |
|  | Definition of Missing |
| Missing Value Handling |  |
|  | Cases Used |
| Syntax |  |
|  | Processor Time |
| Resources |  |
|  | Elapsed Time |

**Group Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of organization | N | Mean | Std. Deviation | Std. Error Mean |
| Public Institutions  Foundational Skills  Private Institutions | 218  90 | 3.42  3.54 | .623  .632 | .042  .067 |

**Independent Samples Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of  Variances | | t-test for Equality of  Means | |
| F | Sig. | t | Df |
|  | Equal variances assumed | 11.345 | .001 | -6.704 | 306 |
| Foundational Skills | Equal variances not  assumed | -6.660 | 163.723 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Foundational Skills | Equal variances assumed | .000 | -.525 | .078 |
| Equal variances not assumed | .000 | -.525 | .079 |

**Independent Samples Test**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Foundational Skills | Equal variances assumed | -.680 | -.371 |
| Equal variances not assumed | -.681 | -.370 |

**ANOVA CALCULATION FOR HYPOTHESIS 2**

**Oneway**

**Notes**

Output Created

15-FEB-2017 23:10:40

Comments

C:\Users\HTL-

Data

NPDC\Documents\mrs

Osahon(PhD work).sav

Active Dataset

DataSet1

Input

Filter

<none>

Weight

<none>

Split File

<none>

N of Rows in Working Data

308

File

Definition of Missing

Missing Value Handling

Cases Used

User-defined missing values are treated as missing.

Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

ONEWAY FS BY VAR00002

Syntax

/MISSING ANALYSIS.

Processor Time

00:00:00.02

Resources

Elapsed Time

00:00:00.01

Foundational Skills

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
| Lower Bound | Upper Bound |
| 0-5 years | 29 | 3.43 | .516 | .096 | 3.30 | 4.06 |
| 6-10 years | 126 | 3.49 | .720 | .064 | 3.47 | 3.89 |
| Above 10years | 153 | 3.51 | .641 | .052 | 3.46 | 3.71 |
| Total | 308 | 3.48 | .669 | .038 | 3.41 | 3.77 |

|  |  |  |
| --- | --- | --- |
|  | **Descriptive** |  |
| Foundational Skills |  |  |
|  | Minimum | Maximum |
| 0-5 years | 3 | 5 |
| 6-10 years | 3 | 5 |
| Above 10years | 3 | 5 |
| Total | 3 | 5 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Foundational Skills | | | | | |
|  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | 2.536 | 2 | 1.268 | 2.869 | .058 |
| Within Groups | 134.776 | 305 | .442 |
| Total | 137.312 | 307 |  |

## T-Test calculation for Hypotheses 3

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 04:41:28 |
| Comments |  | C:\Users\HTL- NPDC\Documents\mrs Osahon(PhD work).sav |
|  | Data |
|  | Active Dataset | DataSet1 |
| Input | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data  File | 308 |
|  | Definition of Missing | User defined missing values are treated as missing. |
| Missing Value Handling | | Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the  analysis. |
|  | Cases Used |
| Syntax |  | T-TEST GROUPS=VAR00001(1 2)  /MISSING=ANALYSIS  /VARIABLES=CTS  /CRITERIA=CI(.95). |
|  | Processor Time | 00:00:00.00 |
| Resources |  |  |
|  | Elapsed Time | 00:00:00.00 |

[DataSet1] C:\Users\HTL-NPDC\Documents\Mrs Osahon(PhD work).save

**Group Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of organization | N | Mean | Std. Deviation | Std. Error Mean |
| Public Institutions | 218 | 3.38 | .684 | .046 |
| Critical Thinking Skills |  |  |  |  |
| Private Institutions | 90 | 3.59 | .697 | .074 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of Variances | | t-test for  Equality of Means |
| F | Sig. | t |
|  | Equal variances assumed | .766 | .382 | -3.577 |
| Critical Thinking Skills | Equal variances not assumed | -3.547 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | t-test for Equality of Means | | |
| Df | Sig. (2-tailed) | Mean Difference |
| Critical Thinking Skills | Equal variances assumed | 306 | .000 | -.308 |
| Equal variances not assumed | 163.077 | .001 | -.308 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | t-test for Equality of Means | | |
| Std. Error Difference | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Critical Thinking Skills | Equal variances assumed | .086 | -.478 | -.139 |
| Equal variances not assumed | .087 | -.480 | -.137 |

|  |  |  |
| --- | --- | --- |
| **ANOVA CALCULATION FOR HYPOTHESIS 4**  **Notes** | | |
| Output Created | | 16-FEB-2017 05:14:00 |
| Comments | |  |
| Input | Data | C:\Users\HTL- NPDC\Documents\mrs  Osahon(PhD work).sav |
| Active Dataset | DataSet1 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| N of Rows in Working Data  File | 308 |
| Missing Value Handling | Definition of Missing | User-defined missing values  are treated as missing. |
| Cases Used | Statistics for each analysis are based on cases with no  missing data for any variable in the analysis. |
| Syntax | | ONEWAY CTS BY VAR00002  /STATISTICS DESCRIPTIVES  /MISSING ANALYSIS. |
| Resources | Processor Time | 00:00:00.02 |
| Elapsed Time | 00:00:00.02 |

[DataSet1] C:\Users\HTL-NPDC\Documents\mrs Osahon(PhD work).sav

**Descriptives**

Critical Thinking Skills

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
| Lower Bound | Upper Bound |
| 0-5 years | 29 | 3.55 | .736 | .137 | 3.27 | 3.83 |
| 6-10 years | 126 | 3.44 | .805 | .072 | 3.29 | 3.58 |
| Above 10years | 153 | 3.48 | .597 | .048 | 3.39 | 3.58 |
| Total | 308 | 3.49 | .701 | .040 | 3.39 | 3.55 |

**Descriptive**

Critical Thinking Skills

|  |  |  |
| --- | --- | --- |
|  | Minimum | Maximum |
| 0-5 years | 2 | 4 |
| 6-10 years | 2 | 5 |
| Above 10years | 2 | 5 |
| Total | 2 | 5 |

Critical Thinking Skills

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | .363 | 2 | .182 | .369 | .692 |
| Within Groups | 150.374 | 305 | .493 |
| Total | 150.737 | 307 |  |

## T-Test calculation for Hypotheses 5

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 05:30:44 |
| Comments |  |  |
|  | Data | C:\Users\HTL- NPDC\Documents\mrs |
|  |  | Osahon(PhD work).sav |
|  | Active Dataset | DataSet1 |
|  | Filter | <none> |
| Input | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data |  |
|  |  | 308 |
|  | File |  |
|  | Definition of Missing | User defined missing values |
|  |  | are treated as missing. |
| Missing Value Handling | Cases Used | Statistics for each analysis are based on the cases with no missing or out-of-range |
|  |  | data for any variable in the |
|  |  | analysis. |
|  |  | T-TEST |
| Syntax |  | GROUPS=VAR00001(1 2)  /MISSING=ANALYSIS |
|  |  | /VARIABLES=MS |
|  |  | /CRITERIA=CI(.95). |
|  | Processor Time | 00:00:00.02 |
| Resources |  |  |
|  | Elapsed Time | 00:00:00.02 |

[DataSet1] C:\Users\HTL-NPDC\DocumentsMrs.Osahon(PhD work).save

**Group Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of organization | N | Mean | Std. Deviation | Std. Error Mean |
| Public Institutions | 218 | 3.66 | .690 | .047 |
| Managerial Skills |  |  |  |  |
| Private Institutions | 90 | 4.04 | .598 | .063 |

**Independent Samples Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of  Variances | | t-test for Equality of  Means | |
| F | Sig. | T | df |
|  | Equal variances assumed | 20.253 | .000 | -4.668 | 306 |
| Managerial Skills | Equal variances not  assumed | -4.952 | 190.071 |

**Independent Samples Test**

|  |  |  |  |
| --- | --- | --- | --- |
|  | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Equal variances assumed | .000 | -.388 | .083 |
| Managerial Skills |  |  |  |
| Equal variances not assumed | .000 | -.388 | .078 |

**Independent Samples Test**

|  |  |  |
| --- | --- | --- |
|  | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Equal variances assumed | -.552 | -.225 |
| Managerial Skills |  |  |
| Equal variances not assumed | -.543 | -.234 |

## ANOVA CALCULATION FOR HYPOTHESIS 6

**Oneway**

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 05:47:31 |
| Comments |  |  |
|  |  | C:\Users\HTL- |
|  | Data | NPDC\Documents\mrs |
|  |  | Osahon(PhD work).sav |
|  | Active Dataset | DataSet1 |
| Input | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data |  |
|  |  | 308 |
|  | File |  |
|  |  | User-defined missing values |
|  | Definition of Missing |  |
|  |  | are treated as missing. |
|  |  | Statistics for each analysis |
| Missing Value Handling |  |  |
|  |  | are based on cases with no |
|  | Cases Used |  |
|  |  | missing data for any variable |
|  |  | in the analysis. |
|  |  | ONEWAY MS BY VAR00002 |
|  |  | /STATISTICS |
| Syntax |  |  |
|  |  | DESCRIPTIVES |
|  |  | /MISSING ANALYSIS. |
|  | Processor Time | 00:00:00.00 |
| Resources |  |  |
|  | Elapsed Time | 00:00:00.00 |

[DataSet1] C:\Users\HTL-NPDC\Documents\mrs Osahon(PhD work).sav

**Descriptives**

Managerial Skills

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
| Lower Bound | Upper Bound |
| 0-5 years | 29 | 3.76 | .577 | .107 | 3.54 | 3.98 |
| 6-10 years | 126 | 3.81 | .690 | .061 | 3.69 | 3.93 |
| Above 10years | 153 | 3.74 | .705 | .057 | 3.63 | 3.85 |
| Total | 308 | 3.77 | .686 | .039 | 3.69 | 3.85 |

**Descriptives**

Managerial Skills

|  |  |  |
| --- | --- | --- |
|  | Minimum | Maximum |
| 0-5 years | 2 | 5 |
| 6-10 years | 2 | 5 |
| Above 10years | 3 | 5 |
| Total | 2 | 5 |

ANOVA

Managerial Skills

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | .352 | 2 | .176 | .372 | .690 |
| Within Groups | 144.281 | 305 | .473 |
| Total | 144.633 | 307 |  |

## T-Test calculation for Hypotheses 7

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 05:58:41 |
| Comments |  |  |
|  |  | C:\Users\HTL- |
|  | Data | NPDC\Documents\mrs |
|  |  | Osahon(PhD work).sav |
|  | Active Dataset | DataSet1 |
| Input | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data File | 308 |
|  | Definition of Missing | User defined missing values are treated as missing. |
|  |  | Statistics for each analysis |
| Missing Value Handling |  | are based on the cases with |
|  | Cases Used | no missing or out-of-range |
|  |  | data for any variable in the |
|  |  | analysis. |
|  |  | T-TEST |
|  |  | GROUPS=VAR00001(1 2) |
| Syntax |  | /MISSING=ANALYSIS |
|  |  | /VARIABLES=PIS |
|  |  | /CRITERIA=CI(.95). |
| Resources | Processor Time | 00:00:00.00 |
|  | Elapsed Time | 00:00:00.00 |

[DataSet1] C:\Users\HTL-NPDC\Documents\mrs Osahon(PhD work).sav

**Group Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of organization | | N | Mean | Std. Deviation | Std. Error Mean |
| Personal and Interpersonal skills | Public Institutions | 218 | 3.88 | .684 | .046 |
| Private Institutions | 90 | 3.99 | .627 | .066 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of Variances | | t-test for  Equality of Means |
| F | Sig. | t |
|  | Equal variances assumed | 2.422 | .121 | -1.347 |
| Personal and Interpersonal  skills | Equal variances not assumed | -1.397 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | t-test for Equality of Means | | |
| Df | Sig. (2-tailed) | Mean Difference |
| Personal and Interpersonal skills | Equal variances assumed | 306 | .179 | -.113 |
| Equal variances not assumed | 180.218 | .164 | -.113 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | t-test for Equality of Means | | |
| Std. Error Difference | 95% Confidence Interval of the  Difference | |
| Lower | Upper |
|  | Equal variances assumed | .084 | -.277 | .052 |
| Personal and Interpersonal skills | Equal variances not assumed | .081 | -.272 | .047 |

## ANOVA CALCULATION FOR HYPOTHESIS 8

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 06:13:05  C:\Users\HTL- NPDC\Documents\mrs Osahon(PhD work).sav DataSet1  <none>  <none>  <none>  308  User-defined missing values are treated as missing.  Statistics for each analysis are based on cases with no missing data for any variable in the analysis.  ONEWAY PIS BY VAR00002  /STATISTICS DESCRIPTIVES  /MISSING ANALYSIS.  00:00:00.02  00:00:00.02 |
| Comments |  |
|  | Data |
|  | Active Dataset |
| Input | Filter |
|  | Weight |
|  | Split File |
|  | N of Rows in Working Data |
|  | File |
|  | Definition of Missing |
| Missing Value Handling |  |
|  | Cases Used |
| Syntax |  |
|  | Processor Time |
| Resources |  |
|  | Elapsed Time |

[DataSet1] C:\Users\HTL-NPDC\Documents\mrs Osahon(PhD work).sav

**Descriptives**

Personal and Interpersonal skills

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
| Lower Bound | Upper Bound |
| 0-5 years | 29 | 3.97 | .626 | .116 | 3.73 | 4.20 |
| 6-10 years | 126 | 3.95 | .747 | .067 | 3.82 | 4.08 |
| Above 10years | 153 | 3.86 | .608 | .049 | 3.77 | 3.96 |
| Total | 308 | 3.91 | .669 | .038 | 3.83 | 3.98 |

|  |  |  |
| --- | --- | --- |
|  | **Descriptives** |  |
| Personal and Interpersonal skills |  |  |
|  | Minimum | Maximum |
| 0-5 years | 2 | 5 |
| 6-10 years | 2 | 5 |
| Above 10years | 2 | 5 |
| Total | 2 | 5 |

**ANOVA**

Personal and Interpersonal skills

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | .657 | 2 | .329 | .733 | .482 |
| Within Groups | 136.797 | 305 | .449 |
| Total | 137.455 | 307 |  |

**T-Test calculation for Hypotheses 9**

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 06:22:27 |
| Comments |  |  |
|  |  | C:\Users\HTL- |
|  | Data | NPDC\Documents\mrs |
|  |  | Osahon(PhD work).sav |
|  | Active Dataset | DataSet1 |
| Input | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data |  |
|  |  | 308 |
|  | File |  |
|  |  | User defined missing values |
|  | Definition of Missing |  |
|  |  | are treated as missing. |
|  |  | Statistics for each analysis |
| Missing Value Handling |  | are based on the cases with |
|  | Cases Used | no missing or out-of-range |
|  |  | data for any variable in the |
|  |  | analysis. |
|  |  | T-TEST |
|  |  | GROUPS=VAR00001(1 2) |
| Syntax |  | /MISSING=ANALYSIS |
|  |  | /VARIABLES=TS |
|  |  | /CRITERIA=CI(.95). |
|  | Processor Time | 00:00:00.00 |
| Resources |  |  |
|  | Elapsed Time | 00:00:00.00 |

[DataSet1] C:\Users\HTL-NPDC\Documents\mrs Osahon(PhD work).sav

**Group Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of organization | N | Mean | Std. Deviation | Std. Error Mean |
| Public Institutions | 218 | 3.44 | .691 | .047 |
| Technical Skills |  |  |  |  |
| Private Institutions | 90 | 3.56 | .721 | .076 |

**Independent Samples Test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of  Variances | | t-test for Equality of  Means | |
| F | Sig. | T | df |
|  | Equal variances assumed | .284 | .594 | -1.366 | 306 |
| Technical Skills | Equal variances not assumed | -1.342 | 159.925 |

**Independent Samples Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | t-test for Equality of Means | | |
| Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Technical Skills | Equal variances assumed | .173 | -.120 | .088 |
| Equal variances not assumed | .181 | -.120 | .089 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Independent Samples Test** | | | |
|  | | t-test for Equality of Means | |
| 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Technical Skills | Equal variances assumed | -.292 | .053 |
| Equal variances not assumed | -.296 | .056 |

**ANOVA CALCULATION FOR HYPOTHESIS 10**

**Notes**

|  |  |  |
| --- | --- | --- |
| Output Created |  | 16-FEB-2017 06:39:21 |
| Comments |  |  |
|  |  | C:\Users\HTL- |
|  | Data | NPDC\Documents\mrs |
|  |  | Osahon(PhD work).sav |
|  | Active Dataset | DataSet1 |
| Input | Filter | <none> |
|  | Weight | <none> |
|  | Split File | <none> |
|  | N of Rows in Working Data  File | 308 |
|  | Definition of Missing | User-defined missing values are treated as missing. |
| Missing Value Handling | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable |
|  |  | in the analysis. |
|  |  | ONEWAY TS BY VAR00002 |
| Syntax |  | /STATISTICS DESCRIPTIVES |
|  |  | /MISSING ANALYSIS. |
| Resources | Processor Time | 00:00:00.02 |
|  | Elapsed Time | 00:00:00.02 |

[DataSet1] C:\Users\HTL-NPDC\Documents\Mrs Osahon(PhD work)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Descriptive** |  |  |  |
| Technical Skills |  |  |  |  |  |  |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
| Lower Bound | Upper Bound |
| 0-5 years | 29 | 3.59 | .780 | .145 | 3.29 | 3.88 |
| 6-10 years | 126 | 3.53 | .756 | .067 | 3.40 | 3.66 |
| Above 10years | 153 | 3.40 | .632 | .051 | 3.30 | 3.50 |
| Total | 308 | 3.47 | .701 | .040 | 3.39 | 3.55 |

**Descriptives**

Technical Skills

|  |  |  |
| --- | --- | --- |
|  | Minimum | Maximum |
| 0-5 years | 2 | 5 |
| 6-10 years | 2 | 5 |
| Above 10years | 2 | 5 |
| Total | 2 | 5 |

**ANOVA**

Technical Skills

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between Groups | 1.650 | 2 | .825 | 1.688 | .187 |
| Within Groups | 149.087 | 305 | .489 |
| Total | 150.737 | 307 |  |

APPENDIX G

## Analysis of Respondents Demographic Variables

|  |  |  |  |
| --- | --- | --- | --- |
| **Demographic Variable** |  | **Frequency** | **Percent** |
| Type of organization | Public Institutions | 218 | 70.8 |
| Private Institutions | 90 | 29.2 |
| **Total** | **308** | **100.0** |
| Years of Experience | 0-5 years | 29 | 9.4 |
| 6-10 years | 126 | 40.9 |
| Above 10years | 153 | 49.7 |
| **Total** | **308** | **100.0** |

Sources: Author's fieldwork (2017)

## APPENDIX H

Lower boundary= high score - lower score andupper boundary= high score– lowerscore Number of scale Number of scale – 1

|  |  |  |  |
| --- | --- | --- | --- |
| Lower boundary | = 5 - 1 | and | Upper bound = 5 - 1 |
|  | 5 |  | 5 - 1 |

Lower boundary = 4/5 = 0.80and Upper bound = 4/4 =1.00

Decision rule = width or scores within 0.80 to 1.00 starting from lower limit of 1 to upper limit of 5.

Therefore, boundary limit for decision rule is

High score = 5 (based on five point rating scale) Lower score =1

Number of scale = 5