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Career Readiness of Graduating Office Technology and Management Students in Polytechnics in Southeast Nigeria

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Abstract. Career readiness of graduating Office Technology and Management (OTM) students of polytechnics in three states of South-East Nigeria was assessed. Career readiness was determined based on the extent to which the students possessed the attitudes and skills required for advancing on the OTM career path. The skills were aggregated into six clusters: office, managerial, entrepreneurial, ICT (information and communication technology), communication, and socio-psychological skills. Two research questions guided the study, namely (i) the extent to which the graduating OTM students possessed the requisite skills, and (ii) the career readiness index of the students. A total of 179 HND (Higher National Diploma) II students of OTM at the time of the study constituted the study population. A questionnaire, structured on a five-point scale in line with the indicators for career readiness was used to collect data from the participants. The instrument was face validated and trial tested prior to the study, yielding a 95-reliability coefficient. Mean and standard deviations were used to answer research question one, while research question two was answered using the career readiness index formula. Findings of the study showed an average career readiness index of 3.06 for the graduating OTM students in the polytechnics studied. The indicators showed that the students were lacking in office, managerial, entrepreneurial and communication skills, but rated very high in ICT and socio-psychological skills. The study concludes that there is a need for improvement and recommends, among others, that the institutions should strengthen their partnership with industry for work-based training of students to support improved effectiveness of the OTM programme.

Keywords: career readiness; entrepreneurial; ICT; communication and socio-psychological skills; office technology and management

1. Introduction

The role of institutions of higher learning in the economic development of a nation in terms of equipping graduates with core skills that enhance their employability and career prospects cannot be overemphasized. Although career choice and employment prospects are major considerations for students opting for higher education (Jackson & Wilton, 2017), their preparedness to take advantage of the openings in the chosen career path is more important than the mere choice of a career. Traditionally, the term 'career' was conceived as a series of work experiences associated with a single paid employment within a fixed organizational setting. However, new ways of conceptualizing careers have emerged, driven by changes in organizational hierarchies, employment relationships and workforce demographics, which have resulted in greater opportunities for the mobility of employees, thereby making employment relationships less permanent (Gyansah & Guantai, 2018; Tomlinson, Baird, Berg & Cooper, 2018). Furthermore, the advent of information and communication technology (ICT) has brought about tremendous changes in the outlook of the present-day office environment (Efunboade, Adegoke, Ogunmesa & Daramola, 2020). Office Technology and Management (OTM), formerly referred to as Secretarial Studies in Nigeria, evolved out of a need to meet the technological and managerial demands of today's workplace. The new name OTM was approved by the supervising body for Nigerian polytechnics, the National Board for Technical Education (NBTE), in 2004. In the curriculum document for OTM, the NBTE stated the core skills which the OTM programme seeks to convey to students to prepare them for a career in OTM (NBTE, 2004). These skills include office, managerial, entrepreneurial, ICT, communication, and socio-psychological skills (Esene, 2017). This study was designed in line with these six core skills as shown in Figure 1, to assess the career readiness of graduating OTM students of polytechnics in south-east Nigeria based on the extent to which they possessed these skills.

2. Literature Review

Abston and Soter (2020) defined career as a sequence of attainment and demonstration of requisite competencies that broadly prepare students for a successful transition into the world of work. In other words, career relates to helping individuals make the most of work opportunities and includes the impacts on and relationships between work roles and wider life roles (Career Development Institute, 2017). Career development is not just a decision that takes place at the entry point to a job; it is a lifetime process, which entails the different roles and responsibilities in which one engages throughout one's working adulthood into retirement, including one's education, family, leisure activities, paid or volunteer work, and so on (Career Development Institute, 2017). It involves the totality of an individual's psychological, sociological, and educational events which eventually result into occupational choice and other life roles. In other words, it describes one's growth and progress in one's chosen career path (Gyansah & Guantai, 2018). This growth in career improves the quality of individuals' lives in terms of who they become, their sense of purpose, socio-economic status and positive impact on the communities they belong to. Career

development requires specialized training in a particular direction or path, and this makes the role of education prominent in preparing for a career.

Career-readiness is defined in terms of having the requisite cognitive, academic, work and social skills, knowledge or experiences, which enable the individual's transition from school into the workplace and make viable a career path in the present-day context (Villares & Brigman, 2018). The Association for Career and Technical Education (2011) described career readiness as involving a blend of academic, technical, and employability skills. There is a great concern about the gap that exists between the school and the workplace. Graduates have been seen, by a group of researchers (Azih & Ejeka, 2015), to experience much difficulty making the transition from academic life to work, even though the school is supposed to provide the experiences and training to help individuals make intelligent occupational choices to advance their career paths. The authors further noted that the change from secretarial studies to OTM occurred mainly because graduates of secretarial studies were not able to build a career in their chosen vocation, due to a mismatch between the self-identity of the students upon graduation and that which is required for secretarial studies professionals in today's office. Thus, secretarial studies changed to OTM in order to bridge that gap by providing functional training that would help the graduates of OTM make a career in office management.

According to Esene (2017), OTM is an educational programme designed to develop individuals' abilities, skills, work ethics, and attitudes, as well as to impart the necessary knowledge required for effective entry and steady progress in gainful employment. The two main reasons for designing the Office Technology and Management programme were, first, to address the needs of the conventional office environment, which has long been the desire of the Secretarial Studies students and practitioners, and, second, to enhance students' knowledge by equipping them with the requisite skills for today's modern office/work environment. These changes led to a change in curriculum with more emphasis on information and communication technology (ICT), and managerial and entrepreneurial competencies (Azih & Ejeka, 2015). OTM, thus, is an activity-based educational programme aimed at equipping students with office, technological and managerial skills, attitudes, competencies, and work habits that are required for success in occupations that have to do with secretarial and office management (Omoniyi & Elemure, 2014). The office skills include typewriting, shorthand, bookkeeping and more (Adam, 2015). Managerial and entrepreneurial skills comprise planning, organizing, directing, decision making, problem solving, personal drive, creativity, self-reliance, and more (Suarda, Suwintana, Sudhana & Hariyanti, 2017). ICT skills include web browsing, e-mail, database and spreadsheet management, and other computer and technology skills (Chepkonga, 2015), while communication skills include reading, writing, speaking, and listening, which are involved in the process of receiving, generating, or transmitting messages (Suarda et al., 2017). Socio-psychological skills comprise inter-personal and intra-personal skills (Low, Botes, Rue & Allen, 2016). Possession of these skills indicates graduating OTM students' preparedness for the labour market, and, by implication, their employability. The quality of

higher education programmes in terms of graduate career readiness and employability has been the focus of much research in recent times; and in many cases, the lack of employability skills in higher education graduates was reported (Abayadeera & Watty, 2016; Low et al., 2016). Suarta et al. (2017) underscored the need for institutions of higher learning to design and implement educational programmes to produce graduates who not only possess the technical skills associated with their discipline, but also interpersonal skills which meet the needs and expectations of employers. Relatedly, Villares and Brigman (2018) opined that preparing students to participate and compete favourably in today's 21st century workplace will require the implementation of definite career readiness interventions.

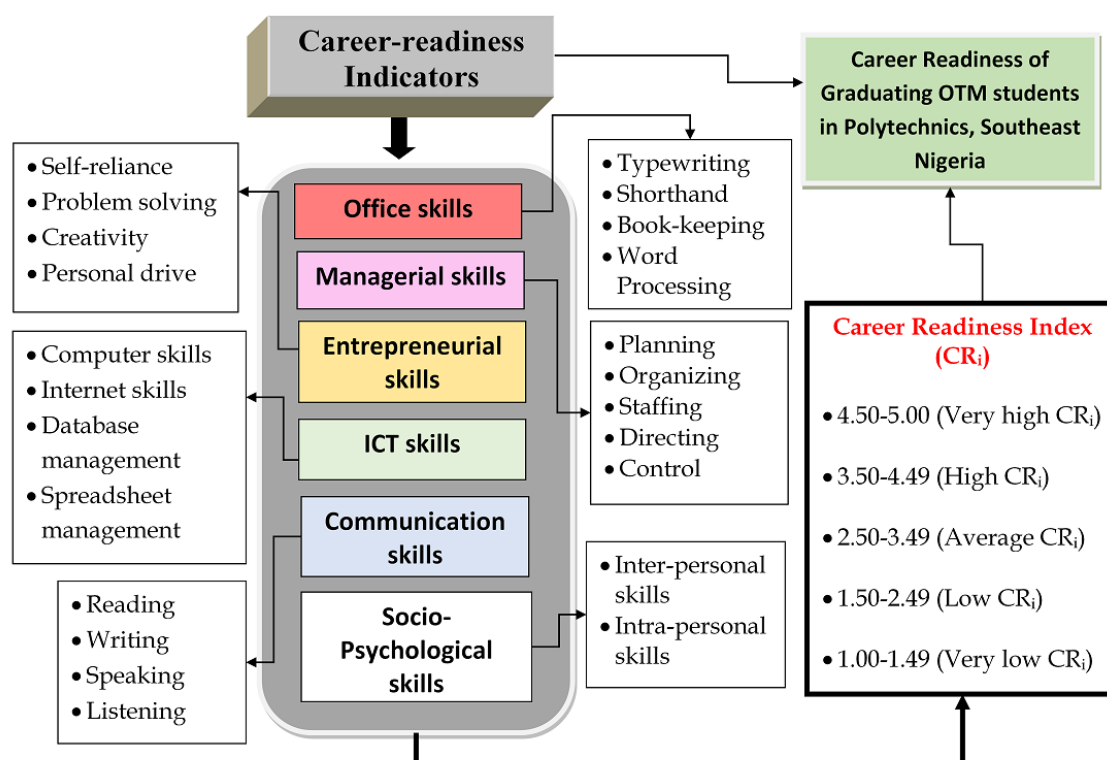


Figure 1: Conceptual framework for the assessment of career readiness of graduating OTM students

Research Questions

Two research questions guided the study:

Q1: To what extent do the graduating OTM students possess office, managerial, entrepreneurial, ICT, communication and socio-psychological skills?

Q2: What is the career readiness index value of the graduating OTM students?

3. Methodology

Study Design and Population

This study used a survey research design and involved public polytechnics that offer OTM programmes in Enugu, Ebonyi and Anambra States, South-east Nigeria. The population was a total of 179 HND II (final year) OTM students in

the three states, comprising 49 students in Enugu State, 45 in Ebonyi State and 85 in Anambra State. Due to the relatively small size of the population, total population sampling was used in the study.

The Instrument for Data Collection

A questionnaire containing 79 items was structured to collect information on the career readiness of the OTM students. The questionnaire consisted of seven sections (A - G). Section A collected demographic details of respondents, while sections B - G collected data regarding the office, managerial, entrepreneurial, ICT, communication and socio-psychological skills respectively. A five-point Likert-type rating scale of very highly possessed (VHP), highly possessed (HP), possessed (P), slightly possessed (SP) and not possessed (NP) was used. Before the study, validation of the questionnaire was obtained independently from three experts in the Department of Business Education, University of Nigeria, Nsukka, and the questionnaire was trial-tested on 35 OTM students of another polytechnic outside the area of the study. The result of the testing gave a reliability coefficient of 0.95 using Cronbach's alpha.

Data Collection Procedure

Verbal consent was obtained from the heads of department in the various institutions and the students/respondents themselves. With the assistance of the students' class representatives, hard copies of the questionnaire were administered in person to the respondents in their classrooms after a briefing. All the 179 copies of the questionnaire administered were retrieved and used for data analysis.

Analysis of Data

Data collected were analysed using mean (\bar{x}) and standard deviation. In answering the research questions, the extent to which students possessed the skills under each career readiness indicator/cluster, was rated from the means using real limits as follows: 4.50 - 5.00 = very highly possessed (VHP), 3.50 - 4.49 = highly possessed (HP), 2.50 - 3.49 = possessed (P), 1.50 - 2.49 = slightly possessed (SP) and 1.00 - 1.49 = not possessed (NP). The career readiness index (research question two) of the graduating OTM students/ respondents was computed using a formula adapted from Arowolo and Ede (2012), namely

$$CRi = \frac{\sum_{179}^{\infty}(Os, Ms, Is, Es, Cs, Ss)}{N}$$

where: CRi = Career-readiness index; OS = mean score in office skills; MS = mean score in managerial skills; ES = mean score in entrepreneurial skills; IS = mean score in ICT skills; CS = mean score in communication skills; SS = mean score in socio-psychological skills; N = total number of measures.

The career readiness index was interpreted based on the real limits: very high career readiness index = 4.50 - 5.00; high career readiness index = 3.50 - 4.49; average career readiness index = 2.50 - 3.49; low career readiness index = 1.50 - 2.49; and very low career readiness index = 1.00 - 1.49.

4. Results

Office skills rating of graduating OTM students for career readiness

The overall mean score rating for office skills was 2.50 as shown in Table 1 and Figure 2, indicating that the OTM students possessed office skills. The results further revealed that the students highly possessed skills in writing shorthand consonants, and creating word documents, with mean scores of 3.83 and 3.66 respectively, while they slightly possessed skills in usage of stylus keyboard for shorthand writing, applying the principles of vocalization position in shorthand writing and also typing with eyes off the keyboard, with mean scores of 1.53, 1.84 and 1.82 respectively. Standard deviation values for the items ranged between 0.64 - 1.64, implying that the mean ratings did not vary widely among the respondents.

Table 1: Mean ratings of office skills possessed by graduating OTM students

S/No	Item	\bar{x}	SD
1	Ability to write shorthand consonants correctly	3.83	1.11
2	Ability to use stylus keyboard to do shorthand writing	1.53	0.71
3	Ability to write shorthand at a minimum speed of 80 wpm	2.55	0.85
4	Ability to apply the principles of vocalization position in shorthand writing	1.84	0.87
5	Ability to read back fluently dictated passages at the rate of 100 wpm to 120 wpm	2.60	1.16
6	Ability to use the keyboard without fixing eyes on the keys	1.82	0.84
7	Ability to create word documents on the computer	3.66	1.64
8	Ability to open, save and close word documents in Microsoft Office	2.37	0.64
9	Ability to use the cut, copy and paste functions when working in Microsoft Word	2.03	0.80
10	Ability to set paragraphs and align texts in Microsoft Office Word	2.54	0.72
11	Book-keeping ability	2.36	0.80
12	Ability to keep detailed records of accounts	2.84	1.22
	Overall mean	2.50	0.70

Key: \bar{x} = mean; SD = standard deviation

Managerial skills rating of graduating OTM students for career readiness

As presented in Table 2 and Figure 2, the results on OTM students' managerial skills revealed that the OTM students slightly possessed managerial skills with an overall mean of 2.31. The students slightly possessed skills in team leading, encouraging others to express themselves freely, inspiring others, respecting the opinions of others, understanding how and when to delegate a function, handling stress, setting long-term goals, accepting criticism, managing human and material resources, and working with people of different ethnic groups, tribes or religions. On the other hand, the result (Table 2) showed that the OTM students highly possessed skills in running an effective and productive meeting. The standard deviations of the items were between 0.59 - 1.01 showing that the mean ratings by the respondents were not diverging that much.

Table 2: Mean ratings of managerial skills possessed by graduating OTM students

S/no	Item	\bar{x}	SD
1	Ability to lead a team	2.15	0.66
2	Ability to encourage others to freely express themselves	2.19	0.74
3	Ability to be confined in by people easily	2.03	0.64
4	Ability to inspire others to achieve their goals	2.26	0.59
5	Ability to listen to and respect the opinion of others when deliberating in a team	1.81	0.69
6	Ability to run an effective and productive meeting	4.13	0.92
7	Ability to understand how and when to effectively delegate a function	1.65	0.62
8	Ability to confidently engage people or team members in a difficult conversation	2.05	0.66
9	Ability to inform people about their duties and responsibilities, and to clarify rules and policies	2.27	0.68
10	Ability to set specific and challenging but realistic performance goals	2.63	0.85
11	Ability to handle stress without transferring own mood to others	2.30	0.78
12	Ability to set goals and establish a long-term vision	2.32	1.01
13	Ability to accept criticism	2.28	0.77
14	Ability to manage human and material resources	2.45	0.97
15	Ability to work with people of different ethnic groups, tribes, or religions	2.07	0.85
	Overall Mean	2.31	0.60

Key: \bar{x} = mean; SD = standard deviation

Entrepreneurial skills rating of graduating OTM students for career readiness

From the results of entrepreneurial skills possessed by the OTM students as shown in Table 3, the OTM students had an overall mean of 2.89, which is rated as possessed (P). The students slightly possessed skills in seeing business opportunities, as well as in regularly coming up with creative ideas. The standard deviation values were between 0.64 - 1.16, showing that there was not much variation in the respondents' mean ratings on entrepreneurial skills.

Table 3: Mean ratings of entrepreneurial skills possessed by graduating OTM students

S/No	Item	\bar{x}	SD
1	Ability to constantly see business opportunities or ideas that have commercial values	1.72	0.70
2	Ability to grow or build businesses	2.48	0.66
3	Ability to be creative and regularly come up with new ideas	3.13	0.64
4	Ability to proffer solutions to business problems	3.45	1.11
5	Ability to convert lectures to marketable ideas	3.40	1.11
6	Ability to stand one's ground even in difficult decisions	3.04	0.82
7	Ability to come up with more than one way to solve a problem	3.13	1.11
8	Ability to be decisive when making important decisions in business	2.99	1.16
9	Ability to look at business problems from all angles to find the best solution	2.77	0.95
10	Ability to be active, have functional skills and ideas to create jobs	2.96	0.84

11	Ability to explore government programmes for entrepreneurship	2.70	1.01
Overall mean		2.89	0.48

Key: \bar{x} = mean; SD = standard deviation

ICT skills rating of graduating OTM students for career readiness

The OTM students had an overall mean score of 3.97 in ICT skills as shown in Table 4. This implies that the participants highly possessed skills in ICT. The table also shows that the students were very proficient in the usage of Microsoft Word with a mean score of 4.70, which implies that the skill was very highly possessed. The standard deviation values were between 0.65-1.49, indicating that the mean ratings of the respondents were very close to one another.

Communication skills rating of graduating OTM students for career readiness

The mean rating of the responses on communication skills possessed by the OTM students as shown in Table 5 shows that the students had an overall mean score of 2.87. Although the results show that the OTM students highly possessed skills in listening beyond subject content, reflecting on speakers' body language, reading books other than school books, understanding what they read, and using leisure time for reading, it was also revealed that the students slightly possessed skills in taking notes during lectures, in using the dictionary, logically organizing ideas when writing, and in accurately paraphrasing information they had read. The standard deviation values of the items ranged between 0.66 - 1.34, thus indicating that there was not much variation in the mean ratings of the respondents on communication skills.

Table 4: Mean rating of ICT skills possessed by graduating OTM students

S/No	Item	\bar{x}	SD
1	Ability to access and navigate the computer independently	4.49	0.85
2	Ability to use word processing software, e.g., Microsoft Word	4.70	0.65
3	Ability to prepare a slideshow using Microsoft Power Point	4.17	1.06
4	Ability to use Microsoft Excel to analyse information, do basic calculations, and view data in the spread sheet	4.34	0.93
5	Ability to use Microsoft Groove and One Note to share notes for team projects	3.20	1.34
6	Ability to design simple flyers, memos, and more on Microsoft Publisher	4.00	1.09
7	Ability to organize own e-mails, contacts, and schedules using Microsoft Outlook	3.52	1.36
8	Ability to use search engines to search for information	3.84	1.33
9	Ability to download material and save files and other information effectively on a computer or external storage device	4.31	1.00
10	Ability to upload notes, research work, discoveries, etc. on the cyberspace	3.55	1.28
11	Ability to do online video conferencing using Skype, Google Hangout, Yahoo Messenger, etc.	3.17	1.49
12	Ability to chat with family or friends, using WhatsApp, Facebook, etc.	4.26	1.12
Overall mean		3.97	0.51

Key: \bar{x} = mean; SD = standard deviation

Table 5: Mean Rating of Communication Skills Possessed by Graduating OTM Students

S/No	Items	\bar{x}	SD
1	Ability to take notes during lectures	2.44	0.75
2	Ability to use the dictionary	2.46	0.73
3	Ability to logically organize ideas when writing	2.40	0.66
4	Ability to write an accurate paraphrase of information that has been read	1.68	0.75
5	Ability to speak clearly without mumbling	2.79	0.99
6	Ability to use metaphors appropriately	2.79	0.90
7	Ability to sustain a discussion for a long time	2.75	0.99
8	Ability to tailor a conversation to suit various audiences	2.89	0.97
9	Ability to introduce self, confidently and appropriately, to others	2.79	0.91
10	Ability to listen beyond subject content for the speakers' emotional meaning	3.72	1.20
11	Ability to listen to people patiently and without interruption	3.51	1.34
12	Ability to reflect on the speaker's body language	3.58	1.25
13	Ability to read books other than school books	3.54	1.27
14	Ability to understand words when reading	3.96	1.04
15	Ability to use leisure time for reading	3.74	1.17
	Overall mean	2.87	0.64

Key: \bar{x} = mean; SD = standard deviation

Socio-psychological skills rating of graduating OTM students for career readiness

The mean rating of responses on socio-psychological skills possessed, as shown in Table 6, reveals that the students had an overall mean score of 3.79. This implies that socio-psychological skills were highly possessed. All the items related to socio-psychological skills were ranked as highly possessed. The standard deviation values of the items ranged between 0.80 - 2.33, showing that the mean ratings of the respondents did not vary distinctively.

Table 6: Mean Rating of Socio-Psychological Skills Possessed by Graduating OTM Students

S/No	Items	\bar{x}	SD
1	Ability to relate freely to people from a variety of backgrounds	3.96	1.01
2	Ability to negotiate on own terms with others	4.14	0.85
3	Ability to contribute own best to the success of group work, projects, assignments, etc.	4.37	0.80
4	Ability to take a leadership role in the class, church, community meetings, etc.	3.89	1.21
5	Ability to take different kinds of food (especially those from other cultures)	3.50	1.28
6	Ability to make important decisions on own without consulting people	4.32	0.85
7	Ability to be dedicated to the highest quality of work in assignments, projects, tests, exams, etc.	4.15	1.01
8	Ability of always being conscious of time	3.77	1.26
9	Ability to have a written out long-term plan for life	4.03	2.33
10	Ability to have a written down "to-do" list for each day	3.30	1.18
11	Ability to ensure that daily "to-do" list is fulfilled every day	3.46	1.26
12	Ability to give undivided attention to one task at a time	3.20	1.31

13	Ability to plan one's day, and to set aside time to rest every day	3.49	1.39
14	Ability to know what one wants	3.49	1.39
Overall mean		3.79	0.39

Key: \bar{x} = mean; SD = standard deviation

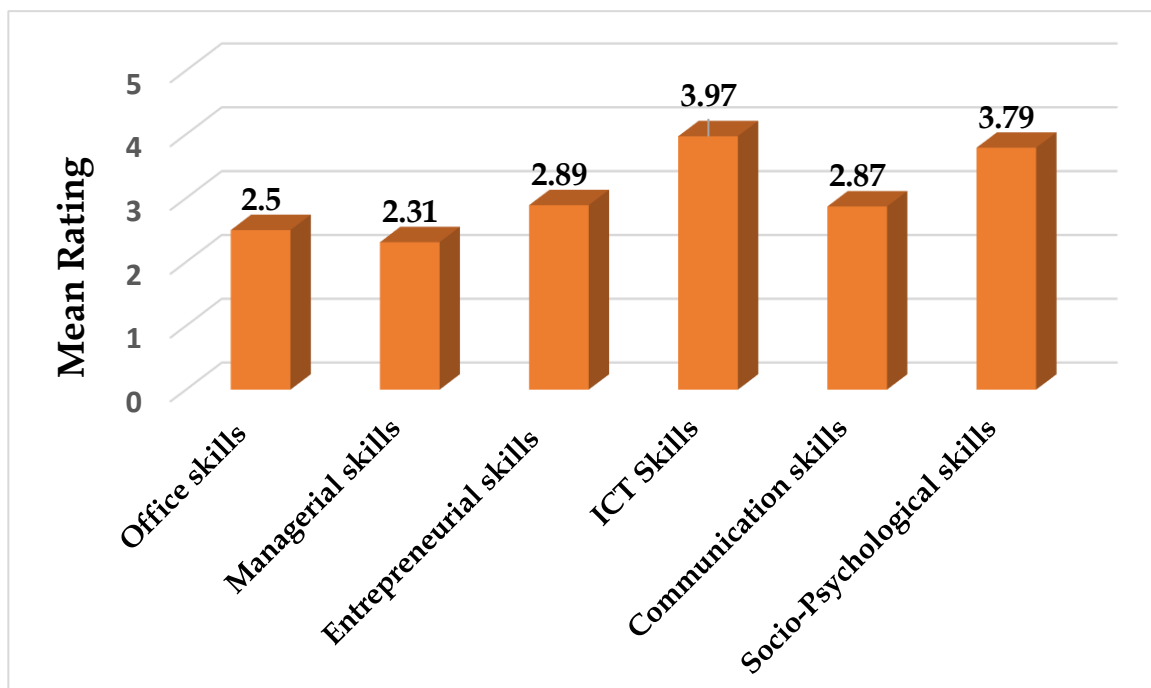


Figure 2: Mean ratings of graduating OTM students on their possession of the core skills for career readiness

Career-Readiness Index of Graduating OTM Students

The result of the career readiness index presented in Table 7 shows that the career readiness index of the graduating OTM students was 3.06. Thus, based on the real limits of the career readiness index, the OTM students were found to be average on the career readiness index.

Table 7: Career-Readiness Index Value of the Graduating OTM Students

Career-readiness Indicators	Mean ratings	Career-Readiness Index
Office skills	2.50	3.06
Managerial skills	2.31	
Entrepreneurial skills	2.89	
ICT Skills	3.97	
Communication skills	2.87	
Socio-Psychological skills	3.79	

$$CRI = \frac{\sum_{i=1}^n (Os, Ms, Is, Es, Cs, Ss)}{N}$$

5. Discussion

The possession of office skills among the graduating OTM students as observed in this study can be attributed partly to the extensive emphasis placed on shorthand writing in the polytechnics. Agbongiasede (2014) noted that shorthand writing is a key course or subject in the study of OTM, and priority is given to teaching and learning shorthand in the polytechnics. Although the students were found to be proficient in taking shorthand dictations on their notepads, the findings also revealed that the students lacked skills in using modern technologies like the stylus pad in taking shorthand dictations. The lack of skills in using stylus pads for taking shorthand dictations could be attributed to inadequate or absence of modern teaching facilities for teaching and learning of shorthand in the institutions. Ubulom, Enyekit and Egwe (2010) observed that the teaching of skill subjects such as typewriting and shorthand requires some stimulus to be effective and this can be achieved by using instructional materials. Therefore, the observed lack of skills among the students in using modern office technologies such as stylus pad for taking shorthand dictations might be attributed to the required instructional materials either not being available or not being utilized. The findings also showed that OTM students were not able to type without fixing their eyes on the keyboard, even though the participants tended to exhibit high proficiency skills in the use of computers in creating Word documents, as well as in performing other actions such as saving, copying, and pasting in Microsoft Word. This finding is in agreement with Udo's (2014) finding, that a large percentage of students can only type with computer or typewriter keyboards using two or three fingers instead of the required standard of nine fingers, and can hardly take their eyes off the keyboard when performing typing tasks.

The findings on managerial skills possessed by the OTM graduating students showed that the OTM students lacked skills in team leading, and also had a lack of confidence to engage with people in general or members of their team in difficult conversations. A professional secretary should be proficient as a manager in terms of delegation of duties, listening to and respecting others' opinions in a team, being goal-oriented, able to work with people from varied backgrounds, and able to handle stress. With the growing demand for organizations to compete favourably in a global economy, the need for graduates who have high managerial competencies becomes inevitable. Lack of such skills results in graduates being considered not suitable in today's workplace (Udo, 2014). Regarding entrepreneurial skills possessed by the graduating OTM students, the study showed that the students were skills deficient in creating and seeing business opportunities and lacked skills in growing or building a business. Although entrepreneurship studies have been included in the curriculum for OTM in Nigeria, this study found that the students were still lacking skills needed for creating businesses. OTM programmes should prepare and equip learners with the skills that make them not merely capable but also willing to undertake and run a small business of any kind with the sole aim of making profit. This they can achieve if they have the requisite skills for that task. This implies that the aim of entrepreneurship education as stated by the NBTE (2004), namely to equip OTM students with enterprising skills, is not yet being achieved.

The finding that the graduating OTM students highly possessed ICT skills agrees with recent reports on the positive impacts of ICT (Ghavifekr & Rosdy, 2015; Wakil, Muhamad, Sardar & Jalal, 2017). Today's students have a natural inclination to get acquainted with ICT skills, owing to the preponderance of electronic gadgets such as computers, cell phones, digital music players and cameras, along with software for games, chats, electronic mail and more, which have become an integral part of everyday life. The finding has positive implications for career readiness of the OTM students in the sense that ICT has revolutionized the landscape of the current world of work, as skills in ICT have become prerequisite for effectiveness in any workplace. In this regard, the high possession of ICT skills is to the advantage of the graduating OTM students. Assessing the extent to which ICT resources were utilized in teaching business education students in south Nigeria, Okolocha and Nwadiani (2015) reported that ICT resources were poorly utilized. Thus, it is possible that the high level of ICT skills among OTM students reported in this study ensued from the students' exposure to the generally digitalized environment rather than from ICT resources being used to teach them in school.

Furthermore, communication is central to keeping people together and is a core skill needed to make a career in OTM. Communication has intellectual, socio-cultural, psychological, technological and linguistic dimensions. Suarta et al. (2017) posited that communication skills are critical for the career success of a secretary as the person who represents the organization. A professional secretary must be able to logically organize ideas in writing and communicate with clients and colleagues effectively. The finding that the graduating OTM students highly possess socio-psychological skills justifies the essence for the inclusion of socio-psychology in the OTM programme. The students of OTM are expected to possess inter-personal and intra-personal competencies that would enhance their effectiveness in the workplace. While inter-personal skills are everyday life skills involved in relating with others, whether individually or in groups, intra-personal skills (within-the-self skills/internal abilities and behaviours) are the capacity of individuals to guide themselves in any way possible toward achieving important goals (Widjaja & Saragih, 2018). OTM students are expected to master these skills because it is impossible to sustain momentum toward accomplishing set goals without such skills. Changes in the nature of work and workplace have shown that what counts as a 'skill' also has evolved. This means that formal knowledge may be only a small portion of what enables graduating students in OTM to successfully confront the ambiguities of today's workplace practice (Otamiri, 2014). The high rating of ICT skills also might have influenced students' high rating of their socio-psychological skills. Today's students function in a networked digital society with a continual chain of interaction via social media among people from different spheres and religious backgrounds. This interaction, according to Widjaja and Saragih (2018), impacts greatly on the socio-psychology of individuals.

The relatively low mean ratings in office skills, managerial skills, entrepreneurial skills and communication skills (Figure 2) contributed majorly to the ensuing average career readiness index identified. No indispensable secretary can survive

without office skills such as working on a keyboard, book keeping, taking minutes of meetings, and other skills mentioned (Adam, 2015). Furthermore, communication skills are imperative for the effectiveness of an indispensable secretary. A professional secretary must be proficient as a manager, communicate effectively, possess core technical skills and must be versed in the use of current technologies used in today's offices (Aliata & Hawa, 2014). The economy of any nation depends, to a significant extent, on the trained work force supplied from the tertiary institutions; career readiness of the graduating students, therefore, is invaluable. The observed average career readiness index of graduating OTM students implies that the students merely possess the skills that they need to succeed in the workplace. In the highly competitive workplace of the 21st century, one needs more than average career readiness in order to succeed. Since career readiness is closely related to employability (Abayadeera & Watty, 2016; Low et al., 2016; Suarta et al., 2017), the observed average career readiness of the graduating OTM students has the potential to impede their career or employment prospects upon graduation. By extension, this will create a deficit in manpower supply for jobs that require OTM graduates.

6. Conclusion and Recommendations

The study assessed career readiness of graduating OTM students in three polytechnics in south-east Nigeria, based on the extent to which the students possessed the attitudes and skills required for advancing on the OTM career path. The graduating OTM students rated high in ICT and socio-psychological skills, but rated low in managerial skills. Overall, the findings indicated an average career readiness index for the graduating OTM students. Given the observed low level of managerial and entrepreneurial competencies, the study concludes that the OTM programme of Nigerian polytechnics is not yet fully achieving its stated goals in adequately preparing OTM students to fit into their career path in the current world of work. Hence, a need for improvement exists regarding the implementation of the OTM programme in the polytechnics.

Based on the study findings, it is recommended that the OTM curriculum should be re-evaluated to identify possible causes of skills deficiencies, especially those with a bearing on the managerial proficiency of the OTM students. Modern technologies and tools, such as the stylus pad for taking shorthand dictations, should be provided and adequately incorporated into the training of the OTM students. More emphasis should be placed by the institutions and instructors on the practical aspect of the training and not mere theory. Modern facilities, such as simulators, should be provided for improved effectiveness of teaching and learning of OTM courses in the institutions. Furthermore, monitoring and proper accreditation of the institutions offering OTM programmes, based on the availability of these modern facilities and qualified staff, will enhance the effectiveness of the OTM programme and help teaching and training staff to achieve its objectives. The educational institutions should strengthen their partnership with industries for work-based training of their students. Provision of mentoring programmes in entrepreneurship for the OTM students will facilitate the students' entrepreneurial skills development and consequently their career readiness. Finally, periodic workshops, awareness campaigns, and regular

retraining should be organized for OTM lecturers on how best to impart the 21st-century skills required of their graduates for effective work participation in the knowledge-driven economy.

7. References

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