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# SUPERVISORS' RATING OF COMPUTER COMPETENCIES POSSESSED BY SECRETARIES FOR EFFECTIVE PERFORMANCE IN THE PUBLIC SERVICE OF ANAMBRA STATE

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#### Abstract

The need to ensure effective performance by secretaries in the technology driven era necessitated this study on supervisors' rating of computer competencies possessed by secretaries for effective performance in the public service of Anambra State. Three research questions guided the study and two null hypotheses were tested. Descriptive survey design was adopted. A population of 107 supervisors was studied without sampling because the population was manageable. A structured questionnaire with 25 items in three clusters was used for data collection. The instrument was validated by three experts and has reliability coefficients of 0.92, 0.92 and 0.93, for the three clusters respectively. The arithmetic mean and standard deviation were used to answer the research questions while t-test was used to test the null hypotheses at 0.05 level of significance. Findings indicated that computer competencies possessed by the secretaries in the three areas were rated low. Gender had a significant effect on the respondents' rating on hardware manipulative competencies and word processing competencies but did not significantly affect respondents' rating on spreadsheet competencies possessed by the secretaries. It was concluded that secretaries in Anambra State public service poorly possess computer competencies for effective performance. Based on the findings and conclusion of the study, it was recommended among others that secretaries in Anambra State public service should enroll in computer training programmes to acquire relevant competencies for effective performance in the public service.

#### Introduction

Technological advancement and inventions have affected and transformed all aspects of human activities in the present generation. With these technological changes, offices have evolved their functions to rely on different types of technological equipment and resources. Public service offices in Anambra State are not left behind as they embrace these technologies in their day-to-day activities so as to achieve effective and efficient performance.

Research studies and findings (Okechukwu, 2014; Francis, 2012; Aliata & Hawa, 2014 and Alikali, 2012)) over the years show that the introduction of new technologies in today's office pose enormous challenges to secretaries because of

their involvement in the different stages or aspects of office information processing using modern office technologies. Duniya (2011) stated that with the introduction of sophisticated information and communication technology equipment like computers into today's offices, it is expected that the performance of secretaries will significantly improve.

A secretary is an office worker who is employed to assist officers and executives in the public service and other organizations in performing clerical and other information management functions. Adebayo (2012) defined a competent secretary as an executive assistant who has mastery of office skills, demonstrates the ability to assume responsibility without direct supervision, exercises initiative and judgment and makes decisions within the scope of assigned authority. From this definition, one can say that although various office workers perform certain facets of secretarial work and some are even designated secretaries. Office workers who are designated secretaries are not secretaries in a true sense, if they are not trained in the skills and competencies of a secretary. Secretaries have more responsibilities and perform tasks similar to those of an executive or administrative assistant. Generally, a competent secretary coordinates the daily routines of an office and organizes the office schedules and paper work.

A secretary's duties require analysis of any situation, judgment, technical knowledge and creativity. The number and type of activities secretaries are assigned to perform depends on whether they are generalists (multifunctional secretaries) or specialists (such as legal or bilingual secretaries). Secretaries use different talents and work with different people. Being office professionals, they have the responsibility to organize work flow, so that the employer will feel certain that everything is under control and that all projects/works will be completed as planned.

Secretaries have always been indispensable individuals in all types of organizations especially the public service as they have relieved countless supervisors of detailed explanations of complicated official rules and regulations to employees and customers. The traditional role of a secretary is to support a supervisor/executive by helping to manage the supervisor's/executive's schedule, handle visitors and callers as well as produce documents and communications. However, Mugisha (2009) observed that the nature of secretarial work has changed drastically with the advent of technology in the office which facilitates proper, quick and accurate management of information and files electronically.

As the reliance on technology continues to expand in today's offices, the role of secretaries has greatly evolved with office automation and organizational restructuring which leads to continuous increase in the duties and responsibilities of secretaries. A competent secretary is no more restricted to just mastery of typewriting and shorthand but is now expected to be knowledgeable in computer and other electronic devices for efficient and effective duty performance (Ezinwa 2015). Expertise in keyboarding and shorthand may not be totally overlooked, as the two

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skills are still criteria for competent performance of secretaries in the public service of any State.

This means that for secretaries in the public service of Anambra State to achieve efficient and effective performance, they should be knowledgeable in office automation and be able to utilize the automation resources effectively. Peter (2010) asserted, that although the modern office technologies enhance the performance of secretaries, they are complex and sophisticated. The assertion of Peter means that today's secretaries need training to acquire competencies in computer and related technologies to boost their productivity.

The basic computer competencies required by secretaries in the public service for effective duty performance cover the area of hardware manipulation, word processing and spreadsheet. The extent serving secretaries in the public service possess these competencies is crucial to their effectiveness and can only be ascertained by engaging their immediate supervisors to rate them.

Supervisors in the context of this study are executives in the public service of Anambra State who have secretaries working directly under them. Some of them are Heads of Units (HOU) or Directors who work closely with secretaries in planning and overseeing all the activities of their units or ministries for overall work performance. As these supervisors work closely with their secretaries in their daily functions, they are in a position to rate the computer competencies possessed by their secretaries.

Rating is the assessment of the outcome of an activity carried out. It is the estimation of the result of an act in terms of its worth. Rating indicates the degree/level of a specific learning outcome thereby making room for decision taking and for improvement in the specific learning programme. Ajuonuma (2010) stated that rating implies the use of different methods and sources to gather and estimate different types of information about a person, a group or event in a comprehensive way.

Fletcher (2010) stated that performance deals with attributes that go beyond task competence and fosters behaviours that enhance the climate and effectiveness of the organization. Performance is the behaviour or action relevant to the attainment of an organization's goals that can be scaled, (that is, measured). Public service as contained in section 169 of the 1999 Constitution encompasses the civil service (Ministerial departments), statutory corporations or parastatals, judiciary, legislature, educational institutions, wholly or principally owned by government at the State, Local and Federal levels, the Nigeria Police or Armed Forces and other organizations in which the Federal or state governments owned controlling share or interest.

The respondents of this study comprised male and female executive of different work experiences and educational qualifications, which are likely to influence their opinions. According to Wolin and Korgaonkar (2007), males exhibit more positive attitudes towards computer competencies/usage than female. Lehto and Marrison (2007) affirmed that gender differences are noticed in information communication technology (ICT) processing and decision making. Therefore, the

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study determined whether the effects of each of the three variables and opinions of the respondents are significant or not significant.

## Purpose of the study

The main purpose of this study was to ascertain supervisors' rating of computer competencies possessed by secretaries for effective performance in the public service of Anambra State. Specifically, the study sought to ascertain the rating of supervisors' in Anambra State public service on:

- 1. Computer hardware manipulative competencies possessed by secretaries for effective performance.
- 2. Word processing competencies possessed by secretaries for effective performance.
- 3. Spreadsheet competencies possessed by secretaries for effective performance.

## **Research questions**

The following research questions guided the study:

What is the rating of supervisors in Anambra State public service on:

- 1. Computer hardware manipulative competencies possessed by their secretaries for effective performance.
- 2. Word processing competencies possessed by their secretaries for effective performance.
- 3. Spreadsheet competencies possessed by their secretaries for effective performance.

## **Hypotheses**

The following hypotheses were tested at 0.05 level of significance:

- 1. Male and female supervisors do not differ significantly in their mean ratings on the level of computer hardware manipulating competencies possessed by their secretaries for effective performance.
- 2. Male and female supervisors do not differ significantly in their mean ratings on the level of word processing competencies possessed by their secretaries for effective performance.

## Method

Survey research design was adopted for the study. A total of 107 supervisors were used in the study. Data were collected using a validated structured questionnaire. The internal consistency of the items was ensured using Crombach Alpha which yielded reliability coefficients of 0.92, 0.92 and 0.93 for the three clusters respectively. Arithmetic mean and standard deviation was used to analyze data related to the research questions and ascertain the closeness of respondents' responses

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respectively. Item by item analysis for the clusters are subject to the real limits of numbers thus:

Very highly possessed	-	4.50 - 5.00
Highly possessed	-	3.50 - 4.49
Moderately possessed	-	2.50 - 3.49
Lowly possessed	-	1.50 - 2.49
Not possessed	-	1.00 - 1.49

The t-test was used to test the hypotheses at 0.05 level of significance. The null hypotheses were accepted where the calculated t-value was equal to or less than the critical t-value, otherwise, the hypotheses were rejected.

#### **Results**

The results are sequentially presented starting with the answers to the research questions and then the testing of hypotheses.

## **Research question 1**

What are the ratings of supervisors in Anambra State public service on the computer hardware manipulative competencies possessed by their secretaries for effective performance?

Table 1 Supervisors' Mean ratings on the level of computer hardware manipulative competencies possessed by their secretaries

S/No	Computer hardware	SD	Remarks	
	manipulative competencies	-		
1.	Ability to manipulate computer keyboard	2.38	0.79	Low level
2.	Ability to create folders, using the computer	2.25	0.70	Low level
3.	Ability to delete folders in the computer 2.16		0.64	Low level
	system			
4.	Ability to rename folders in the system	2.24	0.90	Low level
5.	Ability to create files in the computer system	2.35	0.99	Low level
6.	Ability to delete files in the computer system	2.08	0.72	Low level
7.	Ability to rename files in the computer system	2.29	0.88	Low level
8.	Ability to sort files in the computer system	2.01	0.88	Low level

Data in Table 1 reveal the items have mean ratings ranging from 2.38 to 2.01. This implies that the supervisors rated their secretaries to possess all the eight computer hardware manipulative competencies at a low level. The standard deviation for all the items are within the same range (0.64-0.99) showing that the respondents' rating from were not wide apart.

# **Research question 2**

What is the rating of supervisors in Anambra State Public Services on the word processing competencies possessed by their secretaries for effective performance?

Table 2
Supervisors' mean ratings on the level of word processing competencies possessed by their secretaries

S/N	Word processing competencies	-	SD	Remarks
1.	Ability to open word processing application	2.37	0.86	Low level
2.	Ability to create a new document	2.24	0.81	Low level
3.	Ability to open an existing document	2.49	0.87	Low level
4.	Ability to edit an existing document	2.18	1.05	Low level
5.	Ability to save documents as web pages	2.11	0.88	Low level
6.	Ability to preview document before printing	2.27	0.89	Low level
7.	Ability to format documents	2.06	0.84	Low level
8.	Ability to use the spelling checker in the document	2.27	0.99	Low level
9.	Ability to use grammar checker in the document	2.18	0.90	Low level

Data presented in Table 2 reveal that the mean score of the respondents ranged from 2.49 to 2.06. This implies that supervisors rated their secretaries to possess all the nine word processing competencies at a low level. The standard deviation for all the items are within the same range (0.81 - 1.05) showing that the respondents were homogenous in their ratings.

## Research question 3

What is the rating of supervisors in Anambra State public service on the spreadsheet competencies possessed by their secretaries for effective performance?

Table 3
Supervisors' Mean ratings on the level of spreadsheet competencies possessed by their secretaries

S/No	Spreadsheet competencies	-	SD	Remarks
1.	Ability to open spreadsheet applications	2.28	0.86	Low level
2.	Ability to create spreadsheet documents	1.93	0.89	Low level
3.	Ability to save spreadsheet as web page	2.01	0.89	Low level
4.	Ability to preview spreadsheet	2.21	0.90	Low level
5.	Ability to use spreadsheet to analyze update data	1.95	0.69	Low level

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Table 3
Supervisors' Mean ratings on the level of spreadsheet competencies possessed by their secretaries

S/No	Spreadsheet competencies	÷	SD	Remarks
6.	Ability to perform arithmetic calculation with	2.33	0.80	Low level
	spreadsheet			
7.	Ability to use charts / graphs for data	2.16	0.81	Low level
	representation in spreadsheet			
8.	Ability to use data spreadsheet to forecast	2.33	0.81	Low level
	or predict outcomes			
9.	Ability to modify appearance of chart	2.04	0.84	Low level
10.	Ability to insert amend test numerical	2.05	0.97	Low level
	data into spreadsheet			
11.	Ability to use spreadsheet software to create	2.10	0.88	Low level
	simple charts graphs like pie chart and bar			
	chart			

Data presented in Table 3 reveal that the mean score of respondents ranged from 2.33 to 1.93. This implies that supervisors rated their secretaries to possess all the eleven spreadsheet competencies at a low level. The standard deviation for all the items were within the same range (0.69-0.97) showing that the respondents' rating were not wide apart.

# **Hypothesis 1**

Male and female respondents do not differ significantly in their ratings on the level of computer hardware manipulative competencies possessed by their secretaries for effective performance.

Table 6
Summary of the t-test summary on the mean ratings of male and female supervisors on the level of computer hardware manipulative competencies possessed by their secretaries

Source of variation	N	-	sd	df	Cal.t	Crit.t	Remarks
Male	74	16.97	4.84				
				101	2.49	1.96	S
Female	29	19.76	5.75				

Data in Table 6 indicates that the calculated t-value of 2.49 is greater than the table value of 1.96. This means that there is a significant difference in the mean ratings of male and female supervisors on the level of computer hardware manipulative competencies possessed by their secretaries in the public service of Anambra State. This led to the null hypothesis being rejected.

# Hypothesis 2

Male and female respondents do not differ significantly in their ratings on the word processing competencies possessed by their secretaries for effective performance.

Table 7
Summary of t-test on the mean ratings of male and female supervisors on the word processing competencies possessed by their secretaries

Source of variation	N	-	Sd	df	t-cal	t-crit	Decision
Male	74	20.12	6.64				
				101	0.13	1.96	NS
Female	29	20.31	7.49				

Table 7 reveals that at 0.05 level of significance and 101df the calculated t of 0.13 is less than the critical t of 1.96. The second null hypothesis is therefore rejected. Thus, there is no significant difference in the mean ratings of male and female supervisors on the word processing manipulative competencies possessed by their secretaries.

### **Discussion**

The result of the analysis of data relating to the level of computer hardware manipulative competencies indicated that secretaries in the public service of Anambra State possessed the competencies at a low level. This finding is in agreement with Ogbonnia (2010), who stated that secretaries in Anambra State still possess computer manipulative competencies at a very lowly level. The findings are also in agreement with Buabeng-Andoh (2012) who revealed that majority of secretaries were moderate competent in their computer manipulative competencies. However, there is a significant difference in the mean rating of male and female supervisors on computer hardware manipulative competencies possessed by secretaries. The findings further indicated a significant difference in the mean ratings of male and female supervisors in Anambra State Civil Service on the computer hardware manipulative competencies possessed by their secretaries. This finding agrees with studies of Liaw (2002), Jackson (2001), Houte and Gupta in Luan, Aziz, Yunus, Sidek, Baker, Meseran and Atan (2008) which reported that females lag behind males in many aspects when it comes to computer manipulative competencies, there reports also agreed with the recent by (Ezinwa 2015) that most chief executives officers prefer male secretaries to female secretaries.

The result of the analysis of the data relating to the level of word processing competencies indicated that secretaries possessed word processing competencies to a low level. The finding is in accordance with Sani (2004) who noted that most secretaries still lacked word processing competencies in Nigeria public service. This finding also agrees with the study of Igberaharha (2010) which revealed that

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secretaries do not possess most ICT competencies including word processing competencies. Abolande (2010) also affirmed that secretaries lacked word processing knowledge and skills to perform in the office which sometimes cause conflict between them and their bosses.

Furthermore, the study revealed that male and female supervisors did not differ significantly in their mean ratings on the word processing competencies possessed by their secretaries. This could be explained by the fact that all the supervisors are equally interested in the use of the application as a major tool for creating, modifying and reproducing different types of office documents.

The result of the analysis of the data relating to the level of spreadsheet competencies indicated that secretaries in the public service of Anambra State possessed spreadsheet competencies at a low level. This finding is in accordance with Akpomi and Ordu (2009) who noted that secretaries in the public service still found it difficult to utilize spreadsheet in their various offices.

### Conclusion

The findings of this study have shown that three computer competency skills were rated by supervisors in Anambra State Public Service to be possessed at a low level. This implies that secretaries in the public service are not competent in the use of computer to perform office work. It is therefore concluded that secretaries in Anambra State public service lacked computer competencies and cannot perform effectively as required in the current era without training and retraining.

## Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

- Secretaries in Anambra State public service should enroll in computer training programmes to acquire relevant computer hardware competencies for effective performance.
- 2. Secretarial training institutions and relevant professional associations should develop short term courses, seminars and workshops for practicing secretaries to enhance their word processing competencies.
- 3. Anambra State government should implement the federal government policy on ICT in its establishments to motivate employees to pursue the possession of computer competencies for enhanced productivity.

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