

TROUBLE SHOOTING SKILL AND ADMINISTRATIVE MANAGER JOB PERFORMANCE IN PUBLIC TERTIARY INSTITUTIONS IN RIVERS STATE

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ABSTRACT

This study examines the relationship between trouble shooting skill and administrative manager job performance in public tertiary institutions in Rivers State. The objective of the study was to examine the extent of relationship between trouble shooting skills and administrative manager job performance in terms of information dissemination, timely task accomplishment and record management. Four research questions and ten hypotheses were formulated to guide the study. The study adopted the explanatory cross-sectional survey research design with a population of 821 administrative managers in 8 public tertiary institutions in Rivers State. The sample size of the study was two hundred and sixty-nine (269) respondents which was obtained using the Taro Yamene Formula. Questionnaire developed on a 4-point rating scale was used to elicit data from respondents. Out of 269 copies of the questionnaire administered, a total of 229 copies were retrieved. Mean and standard deviation were used for the univariate analysis; Spearman Rank Coefficient Correlation was used for the bivariate analysis while the multivariate analysis was done using Partial Correlation. SPSS version. The analysis revealed that trouble shooting skill has significant positive relationship with Administrative Manager job performance in public tertiary institutions in Rivers State. Hence it was concluded that since all the dimensions of digital communication skill enhances administrative manager job performance in public tertiary institutions in Rivers State. The study recommended that Management should provide regular hands-on computer trainings and upgrade their technological infrastructure to increase Administrative Managers' digital access and familiarity with digital practices.

Keyword: Trouble Shooting Skill, Administrative Performance, Information dissemination, Timely Task Accomplishment

INTRODUCTION

Administrative Managers handle a lot of responsibilities ranging from information handling to administrative coordination. Particularly in public tertiary institutions, Administrative Managers have the responsibility of ensuring that administrative tasks under their auspices are started and completed at the right time before deadlines. Effective Administrative Managers make sure that their administrative activities are properly coordinated and operations are in progress and endeavor to circulate information accurately and timeously. Administrative Managers handle a lot of sensitive official documents both in print and electronic format. The term administrative manager operationally refers to middle level administrative heads saddled with the responsibility of managing the affairs of a Department or Unit of an organization.

Within the structure of tertiary institutions, administrative heads within this category include Heads of Departments (HODs), Deans, and Directors of Academic Units (Odu, 2019; Otamiri et al., 2020). Administrative managers are saddled with the responsibility of coordinating the administrative activities of the unit under their auspices; they ensure that management decisions and other administrative information are properly communicated; and they are also expected to manage the administrative records of the unit under them. In line with the views of Olayanju and Asogwa

(2010); Olali (2017) and Greg (2018), this work measures administrative manager job performance in terms of information dissemination, timely tasks completion, and records management. This study conceptualizes information dissemination as the effective process of making accurate and reliable data and information resources securely available to designated or authorized persons, units, partners, and other consumers on time within the context of an organization. Information dissemination as a measure of Administrative Manager job performance is closely associated with digital skills of an administrator in circulating information on time (Okonu, 2017). The ability of administrative managers such as Directors, Dean and Heads of Departments to circulate relevant administrative decisions and information contents to stakeholders. They are also expected to provide timely feedback to facilitate the business of administration in the institution. Another measure of Administrative Manager job performance is timely tasks completion. Timely tasks completion refers to the accomplishment of routine office functions within the specified period of time. For instance, the preparation of various correspondences and processes are expected to be completed within specific period of time. If the administrative manager is able to complete task before deadline, they can be said to be timely in task completion. Timely task completion refers to the completion of administrative assignments on or before the deadline allotted to them. It may be also seen as the ability of an administrative manager to get works under his auspices or control accomplished within the shortest possible time limit (Katehi et al., 2009). On daily basis, administrative managers coordinate the operations of academic and non-academic staff and make all necessary administrative arrangements to facilitate institutional operations within their unit.

It is quite disturbing to observe that in spite of the myriad of digital capital (laptops, ipads, printers, modems, and routers) provided across administrative offices, most administrative managers have continued to run paper-based administration. Letters, memos, and other correspondences or documentations are prominently paper-based. The use of e-mail and other digital information management platforms still appears to be very low. The researcher's interaction with administrative managers in some of the tertiary institutions in the state, also shows that most of them are having serious problems navigating to the digital administrative practices necessitated by Covid-19 lockdown. The persistence of administrative manager ineffectiveness in spite of the myriad of research done and the provision of basic digital capital for their offices, suggest that there is an aspect of their proficiency that has not been adequately employed in tackling the issues of administrative ineffectiveness. That aspect might be digital proficiency.

This work conceptualizes digital proficiency as a set of skills and capabilities needed for an individual to operate and use computer systems and digital office applications in the management of information contents in the workplace. They are basic computer skills required of workers (in this case, administrative managers) to be able to operate independently and smoothly in an electronic work system. This work dimensionalizes digital proficiency in terms of digital communication skills, troubleshooting skills and voice-texting skills. Digital communication skills refer to a set of technical know-how that enables an individual to successfully use digital information and communication technologies in circulating information contents in the form of electronic mails, online meetings and cloud computing. With the advent of Covid-19 pandemic, administrative managers across tertiary institutions in Nigeria are propelled to use digital platforms to hold meetings and share files. By this trend, Administrative Managers who are digitally proficient find it easy to join online meetings and engage in email-based file sharing. This makes it possible for Administrative Managers to handle their information handling functions virtually even when they are not in their physical office space. However, this trend may constitute serious occupational stress for those who are not digitally proficient. It is therefore, not surprising that many Administrative Managers in tertiary institutions still prefer the traditional paper-based information dissemination practices.

Research Hypotheses

Null hypotheses are relevant to our thesis as outlined below:

- Ho₁: There is no significant relationship between troubleshooting skills and information dissemination by administrative managers in public tertiary institutions in Rivers State.
- Ho₂: There is no significant relationship between troubleshooting skills and timely tasks completion by administrative managers in public tertiary institutions in Rivers State.
- Ho₃: There is no significant relationship between troubleshooting skills and records management by administrative managers in public tertiary institutions in Rivers State.

Troubleshooting Skills and Administrative Manager Job Performance

Troubleshooting as one of the major skills required for one to be digitally inclined in communication is a vital tool to solving problems as regards digital communication devices and processes. Administrative managers are to have basic technical experience on how to diagnose digital communication problems in order to solve them, and make the product or process operational again, hence disseminating information, managing records and completing tasks as at when due, effectively and efficiently. Since troubleshooting skills denote the ability to diagnose and prognose a challenge digitally faced by the Administrative manager, it is necessary appropriate troubleshooting is enhanced through effective determining and remedying the causes of these symptoms.

It is required of the administrative manager able to use trouble shooting process and means to solving problems that are connected to digital communication. Troubleshooting is a complex skill; it involves information management, overcoming failure, and creativity, among others (International Technology Education Association, 2007; Rugarcia, et al., 2000; Katehi et al., 2009). The learning process of trouble shooting requires the Administrative manager be able to get to new information, and decides which information is useful, relevant, or well grounded, which requires the development of information management skills.

Creativity enables the administrative manager to increase the alternatives he or she can find while solving a particular problem. In the course of using creative thinking, it is expected of the administrative manager to know the different alternative designs created by the manufacturer of such device to help solve the problem. A creative administrative manager can achieve higher troubleshooting skills due to fact that he or she will probably have more than one solution for each problem having decided between alternatives. It is expected of the administrative manager to know the basic troubleshooting steps in order to enhance performance effectively and efficiently. Common technology issues encompassing troubleshooting such as: the printer is not working; the computer is frozen. a program is not responding; the keyboard is not working; new hardware or software is working incorrectly; the mouse is not working; the computer is slow; the browser's home page suddenly changed, etc are expected of the administrative manager to be acquainted with, as they are issues that one may likely face on daily or weekly bases, emanating form hardware or software applications as regards the system of digital communication among telecommunication firms. Where a program is not responding, it is expected of the administrative manager to: push the Ctrl, Alt; delete keys at the same time; start the task manager, highlight the program's name, and hit the and task button; perform a hard reboot by simply pressing the on/off button to turn off the computer, manually, to enable the programme's effective responses.

More so, where the keyboard is not working it is expected of the administrative manager to: make sure the keyboard is connected to the computer; If not, connect it to the computer. If he or she is using a wireless keyboard, he or she should try changing the batteries; If one of the keys on his or her keyboard gets stuck, he should turn the computer off and clean with a damp cloth; then use the mouse to restart the computer, for effective function. Therefore, where the hardware or

software is working incorrectly it is expected of the administrative manager to: verify if computer meets the requirements of the program or utility; Uninstall and install the program; where a conflict arises with another installed program, the administrative manager should contact his or her system administrators (David, 2018). This will enable carry out or her tasks and responsibilities via information dissemination, timely task completion and effective record management.

Where the mouse is not working correctly it is expected of the administrative manager to: check if the mouse is securely plugged into the computer. If not, plug it in completely; Check to see if the cord has been damaged. If so, the mouse may need replacing; If he or she is using a cordless mouse, try pushing the connection button on the underside of the mouse to re-establish a connection. Where the computer is slow, it is expected of the Administrative manager to: Restart your computer; Verify that there is at least 200-500 MB of free hard drive space. To do so, select Start and click on My Computer or Computer. Then highlight the local C drive by clicking on it once. Select the Properties button at the top left-hand corner of the window; this will display a window showing how much free and used space he or she has; Old or unused programs that are not being used may still have components running behind the scenes when one starts his or her own computer, which can slow down the system. You can prevent these programs from running when he or she starts his or her computer by removing unused shortcuts and turning off unused program services; Run a virus scan to remove potential viruses that can slow down his or her computer.

Where the browser's homepage suddenly changed it is expected of the Administrative manager to: Try re-setting the home page to the default; If the home page still reverts back to the "new" page, do an Internet search using keywords that include the name of the "new" homepage and the word "virus." If there is a virus, this search may reveal more information on the virus and how it can be safely removed; Run a virus scan. This will help solve the problem and boost his or her job performance among others via dissemination of information, timely task completion and effective record management.

Diffusion of Innovation Theory

The second theory adopted by this study is the Diffusion of Innovation Theory as propounded by Roger in 1962 to explain how people accept new technologies and innovative skills set as cited in Amadi-George (2018). The assumptions relevant to this study are as follows:

- i) In a social system, there will always be a disparity in the level and time at which individuals within a given social system adopt new ideas, techniques, and technology.
- ii) Individuals and arms of institutions that adopt innovations early will naturally out-perform late adopters and the laggards (Rogers cited in Amadi-George, 2018).

What this theory implies is that as tertiary institutions advance in encouraging digital proficiency, such as Digital communication skills, Data processing proficiency and virtual computing proficiency, there will definitely be some disparity in the manner and period employees will show interest in getting trained to acquire these proficiencies.

It follows that employees (in this case, administrative managers) who fail to adopt the innovations in digital proficiency will definitely experience ineffectiveness, slow operations and high level inefficiency (Odu, 2018) while those who embrace and adapt emerging digital communication technologies (proficiencies) enjoy speed, efficiency and high level effectiveness in administration, while enhancing their office/Administrative manager job performance in areas of records management, information dissemination and coordination. Since these theoretical assumptions have not been tested and verified empirically among tertiary institutions in Rivers State, there is therefore need to empirically investigate how digital proficiency influence administrative manager job performance of public tertiary institutions in Rivers State.

Empirical Review

Las et al. (2017) examined the ICT proficiencies of public school teachers as the basis for community extension program. The study aimed to assess the level of ICT proficiencies of public school teachers at San Jose Central Elementary School, Division of Tacloban City, Philippines. Descriptive survey method was used which involved a questionnaire, interviews, and observations. Sixty-two (62) teachers served as respondents, as Descriptive statistical tools were used to analyzed research questions and test hypotheses with the aid of SPSS version 22. Results showed that most of the teachers have a basic knowledge on ICT and needs improvement. More trainings is hereby needed to the teachers for them to integrate ICT in teaching and other related task assigned to them so as to uplift and enhance the quality of education of the said elementary public school.

David (2018) carried out a study on the assessment of staff ICT literacy proficiency in Nigerian federal university libraries. The study discussed information communication technology (ICT) literacy as the relative measure of library staff’s capacity to make appropriate use of ICTs for information acquisition, organization, retrieval and dissemination. It also examined the impact of Information and Communication Technology (ICT) literacy on the duties of library staff in selected federal university libraries in Nigeria. The research sample was three hundred and sixty four (364) library staff drawn through the employment of purposive sampling technique to select six federal universities one each from the six geopolitical zones in Nigeria. Questionnaire was used for data collection which yielded 290 (79.7% response rate). A major finding of the study revealed that over 60% of the respondents were proficient in sending emails, use of search engines, the use of Microsoft application software such as Ms Word and Ms Power Point. The study concluded that the level of ICT literacy proficiency among the library staff in the Nigerian federal university libraries studied is on the average.

Nwaokwa and Okoli (2012) examined the influence of ICT on secretaries’ performance in government ministries in Nasarawa State. Two research questions guided the study which are: What ICT resources are available for use by secretaries in government ministries in Nasarawa State; and What ICT skills are used by secretaries in government ministries in Nasarawa State. Structured questionnaire was the only instrument used for data collection and 84 copies of this questionnaire were administered in the (14) government ministries in Nasarawa state. With the population of 84 secretaries, no sampling was drawn due to the small number. Mean and standard deviation were used to analyze the data using Statistical Package for Social Sciences (SPSS version 23). The study revealed that ICT has influenced the performance of secretaries in much different ways-speedy delivery of information, accuracy and effectiveness at work.

METHODOLOGY

The explanatory cross-sectional survey research design was adopted for the study. The population of the study consisted of eight hundred and twenty-one (821) administrative managers in the eight (8) public tertiary institutions in Rivers State. The sample size of the study was two hundred and sixty-nine (269) respondents. The sample of 269 respondents was obtained using the Taro Yamene Formula.

Table 1: Sample Distribution

S/N	Public Tertiary Institutions	Population	Sample
1.	University of Port Harcourt	199	65
2.	Rivers State University	197	65
3.	Ignatius Ajuru University of Education	87	29
4.	Federal College of Education (Technical), Omoku	103	34
5.	Captain Elechi Amadi Polytechnic, Rumuola	65	21

6.	Ken Saro Wiwa Polytechnic, Bori	59	19
7.	Federal Polytechnic of Oil and Gas, Bonny	45	15
8.	Rivers State College of Health Science and Technology Management, Rumueme	66	21
Total		821	269

Source: Researcher’s Computation, 2022.

Considering the framework of the study, both primary and secondary sources of data were employed in order to generate valid information. Mean and standard deviation were used for the univariate analysis while the bivariate analysis was done using Spearman Rank Order Correlation with the aid of SPSS.

Results

Bivariate Analysis

Ho₁: There is no significant relationship between troubleshooting skills and information dissemination by administrative managers in public tertiary institutions in Rivers State.

Correlation between Troubleshooting Skills and Information Dissemination

		Troubleshooting skills	Information dissemination
Spearman's rho	Troubleshooting skills	Correlation Coefficient	1.000
		Sig. (2-tailed)	.612**
		N	.000
		N	229
Information dissemination	Information dissemination	Correlation Coefficient	.612**
		Sig. (2-tailed)	1.000
		N	.000
		N	229

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2022

Table 2 reveals a correlation value of 0.612 at a significance level of $0.00 < 0.05$ for the hypothesis relating troubleshooting skills with information dissemination. Since $p = 0.00 < 0.05$, the null hypothesis which stated that there is no significant relationship between troubleshooting skills and information dissemination by administrative managers in public tertiary institutions in Rivers State was rejected based on the decision rule of $p < 0.05$ for null rejection. The rho of 0.612 and $p = 0.000$ indicates a strong positive correlation between troubleshooting skills and information dissemination by administrative managers in public tertiary institutions in Rivers State.

Ho₂: There is no significant relationship between troubleshooting skills and timely tasks completion by administrative managers in public tertiary institutions in Rivers State.

Table 3 Correlation between Troubleshooting Skills and Timely Tasks Completion

			Troubleshooting skills	Timely tasks completion
Spearman's rho	Troubleshooting skills	Correlation Coefficient	1.000	.500**
		Sig. (2-tailed)	.	.000
		N	229	229
	Timely tasks completion	Correlation Coefficient	.500**	1.000
		Sig. (2-tailed)	.000	.
		N	229	229

** . Correlation is significant at the 0.01 level (2-tailed).
 Source: SPSS Output, 2022

Table 3 reveals a correlation value of 0.500 at a significance level of $0.00 < 0.05$ for the hypothesis relating troubleshooting skills with timely tasks completion. Since $p = 0.00 < 0.05$, the null hypothesis which stated that there is no significant relationship between troubleshooting skills and timely tasks completion by administrative managers in public tertiary institutions in Rivers State was rejected based on the decision rule of $p < 0.05$ for null rejection. The rho of 0.500 and $p = 0.000$ indicates a moderate positive correlation between troubleshooting skills and timely tasks completion by administrative managers in public tertiary institutions in Rivers State.

Ho₃: There is no significant relationship between troubleshooting skills and records management by administrative managers in public tertiary institutions in Rivers State.

Table 4 Correlation between Troubleshooting Skills and Records Management

			Troubleshooting skills	Records management
Spearman's rho	Troubleshooting skills	Correlation Coefficient	1.000	.602**
		Sig. (2-tailed)	.	.000
		N	229	229
	Records management	Correlation Coefficient	.602**	1.000
		Sig. (2-tailed)	.000	.
		N	229	229

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2022.

Table 4 reveals a correlation value of 0.602 at a significance level of $0.00 < 0.05$ for the hypothesis relating troubleshooting skills with record management. Since $p = 0.00 < 0.05$, the null hypothesis which stated that there is no significant relationship between troubleshooting skills and record management by administrative managers in public tertiary institutions in Rivers State was rejected and based on the decision rule of $p < 0.05$ for null rejection. The rho of 0.424 and $p = 0.000$

indicates a strong positive correlation between troubleshooting skills and record management by administrative managers in public tertiary institutions in Rivers State.

Discussion of Findings

Troubleshooting Skills and Information Dissemination

The test of hypotheses four, five and six revealed that troubleshooting skills are significantly and positively associated with administrative manager job performance in terms of information dissemination, timely tasks completion, and record management in public tertiary institutions in Rivers State. This finding is in consonance with the findings of Yazon et al. (2019) that there is a strong and significant relationship between faculty members' digital literacies like browsing and troubleshooting ability and their research productivity. This means that the increase in understanding, finding, using, and creating information using digital technologies is positively related to faculty members' ability to conduct, complete, present and publish a research article. Being proficient in basic troubleshooting can help Administrative Managers to complete their typesetting jobs on time. Troubleshooting as one of the major skills required for one to be digitally inclined in communication is a vital tool to solving problems as regards digital communication devices and processes. Administrative managers are to have basic technical experience on how to diagnose digital communication problems in order to solve them, and make the product or process operational again, hence disseminating information, managing records and completing tasks as at when due, effectively and efficiently. Since troubleshooting skills denote the ability to diagnose and prognose a challenge digitally faced by the Administrative manager, it is necessary appropriate troubleshooting is enhanced through effective determining and remedying the causes of these symptoms.

It is required of the administrative manager able to use trouble shooting process and means to solving problems that are connected to digital communication. Troubleshooting is a complex skill; it involves information management, overcoming failure, and creativity, among others (International Technology Education Association, 2007; Rugarcia, et al., 2000; Katehi et al., 2009). The learning process of trouble shooting requires the Administrative manager be able to get to new information, and decides which information is useful, relevant, or well grounded, which requires the development of information management skills.

Creativity enables the administrative manager to increase the alternatives he or she can find while solving a particular problem. In the course of using creative thinking, it is expected of the administrative manager to know the different alternative designs created by the manufacturer of such device to help solve the problem. A creative administrative manager can achieve higher troubleshooting skills due to fact that he or she will probably have more than one solution for each problem having decided between alternatives. It is expected of the administrative manager to know the basic troubleshooting steps in order to enhance performance effectively and efficiently. Common technology issues encompassing troubleshooting such as: the printer is not working; the computer is frozen. a program is not responding; the keyboard is not working; new hardware or software is working incorrectly; the mouse is not working; the computer is slow; the browser's home page suddenly changed, etc are expected of the administrative manager to be acquainted with, as they are issues that one may likely face on daily or weekly bases, emanating form hardware or software applications as regards the system of digital communication among telecommunication firms. Where a program is not responding, it is expected of the administrative manager to: push the Ctrl, Alt; delete keys at the same time; start the task manager, highlight the program's name, and hit the and task button; perform a hard reboot by simply pressing the on/off button to turn off the computer, manually, to enable the programme's effective responses.

More so, where the keyboard is not working it is expected of the administrative manager to: make sure the keyboard is connected to the computer; If not, connect it to the computer. If he or she

is using a wireless keyboard, he or she should try changing the batteries; If one of the keys on his or her keyboard gets stuck, he should turn the computer off and clean with a damp cloth; then use the mouse to restart the computer, for effective function. Therefore, where the hardware or software is working incorrectly it is expected of the administrative manager to: verify if computer meets the requirements of the program or utility; Uninstall and install the program; where a conflict arises with another installed program, the administrative manager should contact his or her system administrators (David, 2018). This will enable carry out or her tasks and responsibilities via information dissemination, timely task completion and effective record management.

Troubleshooting as one of the major skills required for one to be digitally inclined in communication is a vital tool to solving problems as regards digital communication devices and processes. Troubleshooting skills help administrators to overcome technical challenges that may encounter as such findings from this study indicating that there is a significant relationship between troubleshooting skills and information dissemination is adequate. It is required of the administrative manager able to use trouble shooting process to solving problems that are connected to digital communication. Troubleshooting is a complex skill; it involves information management, overcoming failure, and creativity, among others (International Technology Education Association, 2007; Rugarcia, et al., 2000; Katehi et al., 2009). Troubleshooting skills enhance the functionality of digital equipment which enhance the effectiveness of completion of task as such the findings of the study indicating that there is a relationship between troubleshooting skills and timely task completion is adequate.

CONCLUSIONS

Based on the findings, the study concluded that trouble shooting skill enhances Administrative Manager job performance in public tertiary institutions in Rivers State. More specifically, the study concluded that is indispensable for the effective performance of administrative functions in public tertiary institutions in Rivers State in terms of information dissemination, timely tasks completion and records management. It was also concluded that administrative managers who are digitally communication skill will find easier to function in the emerging digital workspace. The study also concluded that Administrative Managers who are not digitally proficient may not be able to effectively and efficiently perform their duties.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Management should provide computer technicians that will be available to fix computer problems in the office to enable Administrative Managers work uninterruptedly.
2. Administrative Managers should also take it upon themselves to personally acquire basic computer skills to enable them use digital office resources comfortably and perform minor troubleshooting functions without much assistance.
3. Management of public tertiary institutions in Rivers State should periodically organize seminars and workshops for administrative managers in order to orient and reorient them about emerging digital practices such as the use of voice-texting software. Such platforms will increase their awareness and readiness to learn and upgrade their digital skills.

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