

Training Location and Theoretical Programs: Impacts on Patient Recuperation and Service Quality in Calabar Healthcare Institutions

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Abstract

In today's ever-changing environment, organizations, including healthcare institutions, must continuously adapt and invest in the training and development of their workforce to enhance organizational performance. This study investigates the influence of training location and theoretical programs on patient recuperation rates and service quality in healthcare institutions in Calabar. A quantitative research approach was employed, and data was collected through a structured survey questionnaire. The study included two public health institutions, the University of Calabar Teaching Hospital and the Federal Neuro-Psychiatric Hospital Calabar. Data analysis involved simple regression techniques, correlation analysis, and statistical tests to evaluate the relationships between training factors and patient outcomes. The study found that training location significantly impacts patient recuperation rates, with a positive correlation between training location and patient recovery. The educational level and experience of resource persons in training locations also enhance worker productivity. The influence of theoretical training programs, including seminars and lectures, was positively associated with service quality. Seminars were found to have the most substantial impact on service quality, followed by lectures, symposiums, and tutorials. This research emphasizes the critical role of training strategies in healthcare institutions. Effective training programs and the location of training significantly influence patient recuperation rates and service quality. Public health institutions should prioritize continuous training and development initiatives to improve patient outcomes and overall service quality.

Keywords: Training location, theoretical programs, patient recuperation, service quality

Introduction

In an ever-evolving global landscape, organizations, both public and private, must adapt to changes stemming from external environmental factors. These changes encompass political/legal dimensions, economic conditions, technological advancements, and socio-cultural trends. It necessitates a continual adjustment of financial, material, and most importantly, human resources to ensure the sustained existence and success of institutions. The human component within organizations stands as the most crucial resource, as their knowledge, competence, and skills determine the efficient utilization of other corporate assets (Ada, & Angioha, 2021; Memon, Ghani, Hyder, Han, Zada, Ariza-Montes, & Arraño-Muñoz, 2022; Ogundele, 2016; Ingwe, Ada, & Adalikwu, 2013). Consequently, it is imperative for organizations to consistently enhance the competence, skills, expertise, and overall knowledge of their workforce through effective training to ensure sustainable improvements in organizational performance. Training can take place within or outside an organization, depending on various factors such as the nature of the training, training intervals, organizational objectives, and resource availability (Long, 2009; Etim, Ndem, Inyang, & Ada, 2023; Ada & Akan, 2019). Internal training, known as on-the-job training, and external training, referred to as off-the-job training, can encompass theoretical training through seminars, workshops, symposia, lectures, and practical training through simulation,

apprenticeship, and mentoring. The frequency of training, termed the training interval, is influenced by technological advancements and Information Communication Technology (ICT) changes in an organization's operating environment (Armstrong, 2006; Ada, 2014; Ada, Akan, Angioha & Enamhe, 2021).

Organizational objectives, such as competitiveness, profitability, market expansion, and product development, may dictate the need for consistent on-the-job or off-the-job training programs. Furthermore, the availability of financial resources significantly influences the type, location, and frequency of training adopted by organizations (Mikalef, Krogstie, Pappas, & Pavlou, 2020; Ada, & Ada, 2013). Adequate financial resources can empower an organization to engage in comprehensive theoretical and practical staff training, thereby enhancing its workforce's capability and enthusiasm in fulfilling their responsibilities (Armstrong & Stephen, 2005; Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012; Ada & Akan, 2019).

A well-trained workforce is one motivated to utilize organizational resources effectively and efficiently, given that their knowledge, skills, and worldviews are updated to meet current challenges (Ingwe, Ada, & Adalikwu, 2015). The ability of an organization's workforce to effectively tackle operational challenges reflects positive organizational performance, benefiting both internal and external stakeholders (Ingwe, Ada, & Angiating, 2014; Ada, & Ada, 2013; Ewah, Ekeng, & Ada, 2009). This training-organizational performance link is mediated by motivation. However, the relationship between training and organizational performance varies between public and private entities, especially regarding performance measurement. In the private sector, performance is typically measured in terms of sales volume, return on investment (ROI), earnings per share (EPS), and total revenue. In contrast, public sector entities, such as healthcare institutions like the University of Calabar Teaching Hospital (UCTH) and Federal Neuro-Psychiatric Hospital Calabar (FNPH), measure performance through indicators like patient recovery rates, diagnostic accuracy, clinical examination accuracy, and service quality. This research aims to highlight the critical role of training strategies such as Location and Theoretical Programs and their impact on patient recuperation rates and service delivery quality.

Materials and Methods

Study Design and Setting

In this study, we employed a quantitative research approach, utilizing a structured survey questionnaire as our primary data collection tool. The questionnaire was meticulously designed, featuring a five-point Likert scale ranging from five to one, with 'Strongly Agree' (SA) and 'Agree' (A) representing positive responses, while 'Disagree' (D) and 'Strongly Disagree' (SD) denoted negative responses. The 'Undecided' (U) option allowed participants to express neutrality. Items were scored as follows: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1). This survey design facilitated the systematic gathering of data from two Public Health Institutions in Calabar, Cross River State. The selected Public Health Institutions were the University of Calabar Teaching Hospital, Calabar, and Federal Neuro-Psychiatric Hospital Calabar.

Sampling

The study's target population encompassed the management and staff of two specific Public Health Institutions, namely the University of Calabar Teaching Hospital, with 2,112 employees, and the Federal Neuro-Psychiatric Hospital Calabar, with 911 employees. To ensure unbiased representation, we employed a simple random sampling technique, as suggested by Asika (2004). This technique afforded every member of the population an equal and independent chance of selection, enhancing the generalizability of our findings to a broader context.

The 'hat and draw' (balloting) method was employed to select the specific Public Health Institutions in Calabar, Cross River State, from a list arranged alphabetically. In this manner, two out of six Public Health Institutions were chosen for inclusion in the study. The sample size was determined using the Taro Yamane formula. Based on the computation, the sample size that best represents the population for the study was 353.

Method of data analysis

Data collected for this study was meticulously summarized and organized into tables, complemented by the use of percentages to draw meaningful insights from the field. To test and validate the study's hypotheses, we employed a simple regression technique using Statistical Package for Social Science (SPSS) software version 20. Our decision rule was based on a comparison between the calculated F-ratio and the critical F-value. Specifically, if the calculated F-ratio exceeded the critical value, we rejected the null hypothesis in favor of the alternative hypothesis. Conversely, if the critical value was greater than the calculated F-ratio, we rejected the alternative hypothesis in favor of the null hypothesis. We applied a simple linear regression model, as recommended by Ryan (2009), to assess the impact of practical training, and theoretical training programs, on, clinical precision, and the quality-of-service delivery in the selected healthcare institutions.

Findings

Demographic distribution of respondent

A total of 353 questionnaires were administered to assess the impact of training on organizational performance in selected Health Institutions in Calabar. After retrieving 347 questionnaires, four were excluded due to incomplete responses. The study proceeded with 343 properly filled questionnaires, representing 97.16 percent of the distributed surveys. Table 4.1 presents the demographic profile of the respondents. Among the 343 participants, 185 (54 percent) were male, and 158 (46 percent) were female. In terms of age, 117 (34 percent) fell within the 18-30 age group, 144 (42 percent) were aged between 31-40, 65 (19 percent) were in the 41-50 age bracket, and 17 (5 percent) were 51 years or older. Regarding educational qualifications, 11 percent held WAEC/SSCE/GCE, 13 percent had Diploma/NCE/Equivalent, and 45 percent possessed HND/B. Sc degrees, 19 percent held MBA/M. Sc degrees and 12 percent had Ph.D. or higher qualifications.

Marital status showed 43 percent were single, 52 percent were married, 4 percent were divorced, and 1 percent were widowed or widowers. In terms of designation/status, 4 percent were in management, 18 percent were administrative staff, 23 percent were junior staff, 20 percent were doctors, and 35 percent were nurses. These demographic details form the foundation for a comprehensive analysis of the training's impact on organizational performance in the selected Health Institutions.

TABLE 1: Demographic distribution of respondents in the selected Health Institutions

terms	Number of respondents	percentage
Sex		
Male	185	54
Female	158	46
Total	343	100
Age (in years)		
18-30	117	34
31-40	144	42

41-50	65	19
51 and above	17	5
Total	343	100
Level of Education		
WAEC/SSCE/GCE	37	11
Diploma/NCE/Equivalent	45	13
HND/B.Sc	155	45
MBA/M.Sc	65	19
Ph.D	41	12
Total	343	100
Marital status		
Single	147	43
Married	179	52
Divorce	14	4
Widow/widower	3	1
Total	543	100
Designation/status		
Management staff	15	4
Admin, Staff	61	18
Junior staff	78	23
Doctors	69	20
Nurses	120	35
Total	343	100

Source: Fieldwork, 2017

Presentation of results

Regarding the impact of proper identification of off-the-job training locations on workers' efficiency in selected Health Institutions, Table 2 reveals that out of 343 respondents, 39 percent (134) strongly agreed, while 28 percent (96) simply agreed. In contrast, 4 percent (14) were undecided, 14 percent (48) disagreed, and 15 percent (51) strongly disagreed. Regarding the effect of facilities in training locations on training efficiency, the data showed that 35 percent (120) strongly agreed, and 26 percent (89) agreed. However, 9 percent (31) were undecided, 16 percent (55) disagreed, and 14 percent (48) strongly disagreed. Concerning the influence of the educational level and experience of resource persons in training locations on worker productivity, 37 percent (127) strongly agreed, and 28 percent (96) agreed. Meanwhile, 8 percent (27) were undecided, 15 percent (52) disagreed, and 12 percent (41) strongly disagreed. The mean responses from Table 2 indicate that most respondents believed that training location positively impacts staff productivity and patient recuperation rates, with a mean value of 3.86. Proper identification of off-the-job training locations also influenced workers' efficiency, with a mean value of 3.83. Additionally, the educational level and experience of resource persons in training locations were perceived to enhance worker productivity, with a mean value of 3.73. Facilities in training locations had the lowest influence on training efficiency, with a mean value of 3.64. These findings provide valuable insights into the perceived impact of various training factors on organizational performance in selected Health Institutions.

Table 2: Responses on the effect of training location on patient recuperation rate in the selected Health Institutions in Calabar

S/N	Statement	options	Number of respondents	percentage	Mean
1	Training location enhances staff productivity in the selected Health Institutions	Strongly agree	147	43	
		Agree	79	23	
		Undecided	21	6	
		Disagree	62	18	
		Strongly disagree	34	10	
	Total		343	100	3.86
2	Proper identification of off-the-job framing location enhance workers' efficiency in the selected Health Institutions	Strongly agree	134	39	
		Agree	96	100	
		Undecided	14	4	
		Disagree	48	14	
		Strongly disagree	51	15	
	Total		343	100	3.83
3	Facilities in training location enhance training efficiency	Strongly agree	120	35	
		Agree	89	26	
		Undecided	31	9	
		Disagree	55	16	
		Strongly disagree	48	14	
	Total		343	100	3.64
4	Educational level and experience of resource persons in training location enhances worker productivity	Strongly agree	127	37	
		agree Agree	96	28	
		Undecided	27	8	
		Disagree	52	15	
		Strongly disagree	41	12	
	Total		343	100	3.74

Source: Fieldwork, 2017

Table 3 presents respondents' perceptions regarding the impact of theoretical training programs on service quality in selected Health Institutions in Calabar. Concerning the question of whether seminars enhance service quality, 44 percent strongly agreed, 14 percent agreed, 5 percent were

undecided, 11 percent disagreed, and 26 percent strongly disagreed. Regarding tutorials and their influence on employee productivity, 35 percent strongly agreed, 12 percent agreed, 14 percent were undecided, 18 percent disagreed, and 21 percent strongly disagreed. For lectures and their effect on workers' commitment, 48 percent strongly agreed, 7 percent agreed, 6 percent were undecided, 8 percent disagreed, and 31 percent strongly disagreed.

Regarding symposiums and their impact on worker efficiency, 31 percent strongly agreed, 16 percent agreed, 4 percent were undecided, 22 percent disagreed, and 27 percent strongly disagreed. The mean responses revealed that respondents believed seminars had the highest impact on service quality (mean value of 3.66), followed by lectures on workers' commitment (mean value of 3.60), symposiums on worker efficiency (mean value of 3.43), and tutorials on employee productivity (mean value of 3.35). These findings shed light on the perceived influence of theoretical training programs on service quality in the selected Health Institutions in Calabar.

Table 3: Responses on the effect of theoretical training programs on the quality-of-service delivery in the selected Health Institutions in Calabar

S/N	Statement	options	Number of respondents	percentage	Mean
1	Seminars enhance the quality of service delivery in the selected Health Institutions in Calabar	Strongly agree	151	44	3.66
		Agree	48	14	
		Undecided	17	5	
		Disagree	38	11	
		Strongly disagree	89	26	
		Total	343	100	
2	Tutorial enhance employees' productivity in the selected Health Institutions in Calabar	Strongly agree	120	35	3.33
		Agree	41	12	
		Undecided	48	14	
		Disagree	62	18	
		Strongly disagree	72	21	
		Total	343	100	
3	Lectures enhance workers commitment in the selected Health Institutions in Calabar	Strongly agree	165	48	3.60
		Agree	24	7	
		Undecided	21	6	
		Disagree	27	8	
		Strongly disagree	106	31	
		Total	343	100	
4	Symposium enhances workers efficiency in the selected Health Institutions in Calabar	Strongly agree	106	31	3.43
		Agree	55	16	
		Undecided	14	4	
		Disagree	75	22	
		Strongly disagree	93	27	
		Total	343	100	

Source: Fieldwork, 2017

Correlation Analysis

We conducted a correlation analysis to check the relationship between training location and patient recuperation rate in the selected Health Institutions in Calabar.

Table 4: Simple linear regression coefficient result of the effect of training location on patient recuperation rate in the selected Health Institutions in Calabar

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
	B	Std. Error	Beta	
(constant)	9.457	.507		18.652
TI	5.018	.496	.657	10.1116

a. Dependent Variable: Diagnosis Accuracy

Source: SPSS output, 2017

Table 5: Model summary of simple linear regression result of the effect of training location on patient recuperation rate in the selected Health Institutions in Calabar

Model	R	R Square	Adjusted R	Std. The error of the estimate
1	.690*	.576	.575	0.7806s

a. Predictors: (Constant), Training intervals

Source: SPSS output, 2017

Table 6: Analysis of variance (ANOVA) table for simple linear regression, result of effect of training location on patient recuperation rate in the selected Health Institutions in Calabar

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3016.795	1	3016.795	98.966	.000 ^b
1 Residual	10394.855	341	30.483		
Total	13411.65	342			

a. Dependent Variable: Patient recuperation rate

b. Predictors: (Constant), Training location

Significant, @P< 0.05

Calculated F-ratio 98.966

Critical F-value - 3.84

Source: SPSS output, 2017.

The relationship between training location and patient recuperation rate in selected Health Institutions in Calabar was assessed using data from tables 4, 5, and 6. The statistical analysis was conducted using the simple linear regression technique with the assistance of SPSS software version 20. Table 4, focusing on the simple linear regression coefficient results for the effect of training location on patient recuperation rate, demonstrated a strong predictive power with a significant t-value of 10.901 at $p < 0.05$. This indicated that the variable "patient recuperation rate" was well represented in the model.

In Table 5, the model summary of the simple linear regression results revealed an R value of 0.690, an adjusted R-square value of 0.576, and an R-square value of 0.575. The R-square value of 0.576 indicated that the model accounted for 57.6 percent of the variation in the response variable, patient recuperation rate, while 42.4 percent remained unexplained.

Table 6 displayed a calculated F-ratio value of 98.966, which exceeded the critical F-value of 3.84 at a significance level of $p < 0.05$, with degrees of freedom of 341 and 342. Consequently, the null hypothesis was rejected, and the alternative hypothesis was accepted. This signifies that training location has a significant positive effect on patient recuperation rate in the selected Health Institutions in Calabar.

We also conducted a correlation analysis to check the relationship between theoretical training programs and quality of service delivery in the selected Health Institutions in Calabar.

Table 7: Simple Linear regression coefficient result of the effect of theoretical training programs on quality of service delivery in the selected Health Institutions in Calabar

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
B	Std. Error		Beta		
1	(Constant)	17,509	1.307	13396"	.000
	TIP	6295 694	.690	9.070	.000

Dependent Quality of Service Delivery Source: SPSS output, 2017

Table 8: Model summary of simple linear regression result of effect of theoretical training programs on quality of service delivery in the selected Health Institutions in Calabar

Model	R	R Square	Adjusted R	Std. Error of the estimate
1	.690*	.576	.575	1.78066

a. Predictors: (Constant), Training intervals

Source: SPSS output, 2017

Table 9: Analysis of variance (ANOVA) table for simple linear regression, result of effect theoretical training programs on quality of service delivery in the selected Health Institutions in Calabar

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2866.795	1	2866.795	85.791	.000 ^b
Residual	11394.855	341	30.416		
Total	14261.65	342			

a. Dependent Variable: Patient recuperation rate

b. Predictors: (Constant), Training location

Significant, @P< 0.05

Calculated F-ratio 85.791

Critical F-value - 3.84

Source: SPSS output, 2017.

To examine the relationship between theoretical training programs and the quality-of-service delivery in selected Health Institutions in Calabar, data from Tables 7, 8, and 9 were analyzed using the simple linear regression technique with the assistance of SPSS software version 20.

Table 7, presenting the simple linear regression coefficient results, showcased a robust and significant predictive power. The variable "quality of service delivery" was effectively captured in the model, with a highly significant t-value of 9.070 at $p < 0.05$.

In Table 8, the model summary revealed an R value of 0.690, an R-square value of 0.576, and an adjusted R-square value of 0.575. The R-square value of 0.576 indicated that the model explained 57.6 percent of the variation in the response variable, quality of service delivery, leaving 42.4 percent unexplained. Table 9 displayed a calculated F-ratio value of 85.791, exceeding the critical F-value of 3.84 at a significance level of $p < 0.05$, with degrees of freedom at 341 and 342.

Consequently, the null hypothesis (Ho) was rejected, while the alternative hypothesis (Hi) was accepted. This suggests that theoretical training programs have a significant and positive effect on the quality-of-service delivery in the selected Health Institutions in Calabar.

Discussion of Findings

The study focused on the impact of training strategies, specifically training location and theoretical training programs, on patient recuperation rates and the quality-of-service delivery in selected Health Institutions in Calabar. The research employed a quantitative approach and gathered data from 343 respondents, including healthcare professionals and staff. The first analysis revealed a significant and positive relationship between training location and patient recuperation rates in the selected Health Institutions. Training location had a notable effect on patient recuperation rates, as supported by the regression analysis. This finding underscores the importance of considering where training occurs in healthcare settings.

The positive impact of training location on patient recuperation rates can be attributed to several factors. When training takes place in well-equipped and suitable locations, healthcare professionals can learn and practice their skills effectively. Properly identified off-the-job training locations can simulate real healthcare environments, allowing staff to familiarize themselves with the equipment, procedures, and conditions they will encounter when treating patients. This familiarity can lead to increased confidence and competence, ultimately resulting in better patient outcomes. Facilities in training locations were found to have a slightly lower influence on training efficiency compared to other factors. This may be due to the fact that modern healthcare training often includes advanced simulations and virtual environments, which can be more important than the physical facilities in the training location.

The study also examined the impact of theoretical training programs on the quality of service delivery in healthcare institutions. The analysis revealed a significant and positive relationship between these training programs and service quality. Several theoretical training methods, including seminars, tutorials, lectures, and symposiums, were considered in the study. Seminars had the highest impact on service quality, followed by lectures, symposiums, and tutorials. This suggests that interactive and discussion-based training methods are particularly effective in improving service quality. Seminars provide healthcare professionals with opportunities to engage in in-depth discussions, share experiences, and learn from experts. This interactive approach can lead to a better understanding of healthcare concepts and practices, ultimately enhancing the quality-of-service delivery.

Lectures, while still beneficial, may have slightly less impact on service quality compared to seminars. However, they remain a valuable method for conveying essential knowledge and information. Symposiums, although effective, were rated slightly lower than seminars and lectures in terms of their impact on service quality. This could be due to the variation in the quality and content of symposiums. Tutorials, as the least impactful method in the study, may benefit from further development and customization to better suit the specific needs of healthcare professionals.

Conclusion and Implications

This study sheds light on the pivotal role of training strategies in healthcare institutions and their profound influence on patient recuperation rates and service quality. The research findings reinforce the significance of well-structured training locations and the diverse utilization of theoretical training programs as instrumental tools for augmenting the proficiency and expertise of healthcare professionals. Ultimately, these enhancements translate into notable benefits for both patients and healthcare organizations. Based on the findings, the study has several recommendations

- a) Healthcare institutions should prioritize investments in simulated training locations that closely replicate real healthcare settings. These environments serve as incubators for enhanced training outcomes and, in turn, contribute to the amelioration of patient recuperation rates.
- b) Healthcare organizations should embrace a broader spectrum of theoretical training methods. While seminars and lectures prove effective, a multifaceted approach that encompasses diverse training modalities can synergistically elevate the overall quality of service delivery.
- c) Encourage healthcare professionals to partake in continuous training and skill enhancement programs. By staying current with the latest advancements in the field, healthcare providers are better equipped to furnish patients with exceptional and up-to-date care.
- d) Establish a routine process for the assessment and refinement of training programs. Regular evaluations ensure that these programs remain aligned with their intended objectives, offering opportunities for ongoing improvement

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