NAU Journal of Technology & Vocational Education, Vol. 7, No. 1, December 2022

CONSTRUCTION WORKERS RATING OF EXTENT OF COMPLIANCE TO TRAINING AND MOTIVATION PRACTICES IN BUILDING INDUSTRIES IN ANAMBRA STATE

O. T. Ibeneme [1]& Jacinta O. Nwankwo [2]
[1,2]Department of Vocational and Technical Education, University of Benin
ogo.jacinta@yahoo.com

Abstract
Building provides comfort, security, privacy and accommodation to occupant but adverse to this is incessant building collapse that claimed lives and properties of peoples in Anambra State. This study investigated the extent of compliance to training and motivation practices in building industry in Anambra State. Two research questions guided the study and two hypotheses were tested at 0.05 level of significance. A survey research design was adopted for the study. A total of 304 out of 1,240 construction workers in building industries that were registered with Ministry of Housing Anambra State were randomly sampled. A structured questionnaire was used to ascertain ratings of construction workers on extent of compliance to training and motivation practices in building industry. Three experts carried out face and content validations of the instrument. Cronbach's alpha reliability test was used to determine the reliability of the instrument and the results were 0.76 and 0.76 for training and motivation practices. The result of the reliability test yielded a value of 0.76 for the entire items which shows that the instrument has a high internal consistency and therefore considered suitable for the study. Mean and standard deviation were used to answer research questions, while Analysis of Variance (ANOVA) was used to test the hypotheses. It was found out that training and motivation practices were mostly rated to moderate extent by the construction workers. It was recommended that human resource managers should strictly comply to training and motivation practices in building industries.
Keywords. Construction Workers, Training, Motivation and Building Industry, compliance.

Introduction

Human beings live in buildings which provide shelter from sun, rain and snow. A building begins as an idea in someone's mind (Allen & Iano, 20I5), a desire for an accommodation for a family, organization, or an enterprise. A building is divided into two major components; sub-structure (foundation) and super-structure (All parts above foundation level). There are three stages involved in the construction of a building; the design stage, working drawing stage and construction stage. For construction of standard and quality building, construction workers have to be properly trained and well-motivated.

Training of construction workers help to familiarize them with techniques and processes of work in the industry especially now that new techniques and ideas of construction are springing up in the building industry on daily bases. Newly recruited workers can only be in their best performance if they were trained to acquire the requisite skills and knowledge needed for smooth running of the industry. Training is a highly useful tool that can bring an employee into a position where they can do their job correctly. Castanneda, Tucker and Haas (2015) found that lack of training was a contributing factor to the shortage of skilled workforce in the

construction sector and this has exerted a negative impact on project performance. Raja, Forgan and Muhammad (2011) discovered that training has become the most important factor in the building world today. Training constitutes a basic concept in human resource development. Since techniques and work processes advances in building industry, workers skills and knowledge must always be refreshed. Extensive training helps workers to develop and gain knowledge, skills and abilities. According to Abdelnaser (2016), training is described as a structured intervention that is aimed at achieving and improving key elements vital in individual performance. Training and motivation have a very strong relationship. This is because motivation increases readiness of workers to transfer what they learnt from training to the building industry (Niveen, Rateb, Razan, & Mohammed 2019). Training yield more result if workers are well motivated.

Motivation has continually posed a big challenge in building industries. Getting employee to do their best even in strenuous circumstances can be made possible through motivating them (Chukwuma & Okafor, 2014). To encourage workers to do more is to motivate them. Afuye (2013) found that productivity decrease being experienced in Nigeria construction industry may continue if motivation strategy is not re-designed to meet workers need. Workers who were offered bonuses for every accomplishment they achieved were found to have strived harder to meet deadlines and move to the next set of tasks so they can receive more bonuses (Pro crew Software, 20I9). This is why attention needs to be giving to workers' welfare so that they can grow love for their craft and produce quality and standard building. The essence of training and motivation of workers is to construct standard and quality structures that will provide comfort, security and accommodation to the occupants. Unfortunately, this is not always the case.

There are reports about building collapses throughout Nigeria of which Anambra State is inclusive. Ujumadu and Nwaiwu (2019) reported the collapse of three-storey building under construction in Onitsha Anambra State, claiming five lives, including the site engineer. Two storeys building under construction collapse at Amikwo Village in Awka no life was lost but properties was wasted Ujumadu (2021). Similarly, another two storey building collapse in Ibolo Oraifite Anambra State two lives was lost Obianeri (2022). Some scholars like Hamma-Adama and Kouider (2017), pointed out some likely causes of building collapse like workers' mistakes, corruption, non-adherence to building regulation, use of sub-standard materials, weak foundation, natural disaster, non-compliance to training and motivation practices among others. For effective and efficient operation of building industry construction workers has to be properly trained and motivated.

Construction workers are the employee working in building industry for achievement of the goals of the building project and at the same time earning benefits for themselves (Prajapati, Pitrada & Chetna, 2014).The workers bring in their ideas and perspectives for smooth running of building industry. Construction workers activities have a direct impact in the building project (Odesola, Okolie & Okoye, 2020). Machines/equipment is operated by workers, meaning that building industry cannot do without construction workers. Anyim, Ikemefuna and Mbah (2011) said that despite the application of technology in modern organization management, human resource are still relevant and the most adaptive resources of an organization especially in labour intensive industry such as building industry. Construction workers are made up of project managers, project engineers, quantity surveyors, structural engineers, architects, health, safety and environmental officers, site foremen and artisans with different levels of educational qualifications.

Building industry is unique due to the fact that one can enter into the field via any qualification from school (from primary to university) or work through apprenticeship trades Luis (2019). There are divisions with the workforce that reflects these education pathways. According to Marchington and Wilkinson (2012) educational qualification of building construction workers can make a difference between successful and unsuccessful building project. However, the study was used to determine whether educational qualifications of construction workers have a significance different in their ratings of training and motivation practices in building industry. Construction workers are the backbone of building industry because most of the works done are labour intensive. Most of the workers are familiar with training and motivation practices in the industry hence the need for construction workers ratings of extent of compliance to training and motivation practices in building industry in Anambra State.

Statement of the Problem

Building is one aspect of construction industry that provides shelter/accommodation to human beings. Well-constructed buildings create a healthy environment for economic development like commerce, school, hospital and offices. To achieve sustained quality building, workers have to be properly trained and motivated. When workers are properly trained and well-motivated, it results in achievement of higher performance in building industry. When poorly trained and motivated, workers perform poorly hence the collapse of many building in Anambra State and Nigeria in general. The problem of the study therefore is the frequency of building collapses and the attendant consequences of loss of lives and properties in Anambra State.

Research Questions

The following two research questions guided the study

3. What are construction workers ratings of extent of compliance to training practices in building industry in Anambra State?
4. What are construction workers ratings of extent of compliance to motivation practices in building industry in Anambra State.

Hypotheses

2. There is no significant difference in the mean ratings of extent of compliance to training practices in building industry in Anambra State based on construction workers educational qualifications.

3. There is no significant difference in the mean ratings of extent of compliance to motivation practices in building industry in Anambra State based on construction workers educational qualifications.

Methods

The study adopted survey research design. Population of the study comprised of 1,240 construction workers with different levels of educational qualifications. A total of 304 out of 1,240 construction workers in building industry that were registered with Ministry of Housing Anambra State were randomly sampled.A questionnaire that was developed by the researchers was used to collect data. The questionnaire has two sections: A and B(1-2). Section A contain respondents' educational qualifications. Section B(1-2) was structured on a five rating scale of Very High Extent (VHE), High Extent (HE), Moderate Extent (ME), low Extent (LE) and No Extent (NE). B1 was on training practices with 9 item statements and B2 was on motivation

practices with 8 item statements. Three experts validated the content of the instrument. Face validity and suitability of the language were also checked.Reliability of the instrument was checked by administering copies of the questionnaire to 20 construction workers working with Jerac Construction Company Emene, Enugu State. Reliability of the instrument was determined using Cronbach's alpha. The result of the reliability test yielded a value of 0.76 for the entire items which shows that the instrument has a high internal consistency and therefore considered suitable for the study. Three hundred and four copies of questionnaire that was titled ''Questionnaire on Rating of Extent of Compliance to Training and Motivation Practices in Building Industry'' (QRECTMPBI) were used to collect data with the help of two research assistance.

Data collected were analyzed using mean to answer research questions and standard deviation to determine the closeness of the respondents' mean ratings. Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. For research questions, decision rule was based on real limit of mean values as follows: Very High Extent: 4.50 – 5.00, High Extent: 3.50 – 4.49, Moderate Extent: 2.50 – 3.49, Low Extent: 1.50 – 2.49. No Extent: 1.00 – 1.49.

Results

Research Question 1

What are construction workers ratings of extent of compliance to training practices in building industry in Anambra State?

Table 1: Mean and Standard Deviation of Extent of Compliance to Training Practices

S/N	Item Statements on Training Pactices	Mean	SD	Remark
1	On the job training	3.33	1.259	ME
2	Conference training	2.94	1.166	ME
3	Mentoring training practices	3.35	1.273	ME
4	Workshop training	3.12	1.155	ME
5	Apprenticeship training	3.52	1.386	HE
6	Off-the job training practices	3.20	1.349	ME
7	Job rotation training	3.02	1.264	ME
8	Distance education programme	2.96	1.354	ME
9	In-service training	3.09	1.371	ME
	Cluster Mean	**3.17**	**0.569**	ME

Note: HE = High Extent, ME = Moderate Extent

Table 1 shows that 8 out of 9 item statements of training practices had mean scores that ranged from 2.94-3.35. This implies that 8 items were complied to moderate extent. Only item 5 were complied to high extent with a mean rating of 3.52. The spread in the standard deviation was relatively close, implying that respondents were relatively homogenous in their ratings of compliance to training practices

Research Question 2

What are construction workers ratings of extent of compliance to motivation practices in building industry in Anambra State?

Table 2: Mean and Standard Deviation of Ratings of Extent of Compliance to Motivation Practices

S/N	Item Statements on Motivation Practices	Mean	SD	Remark
10	Giving of incentives/bonuses	3.09	1.247	ME
11	Giving of award to hard working employee	3.09	1.278	ME
12	Provision of career development programme	3.34	1.315	ME
13	Giving of immediate feedback	3.69	1.170	HE
14	Timely payment of wages/salaries	3.31	1.139	ME
15	Creation of friendly work environment	3.27	1.246	ME
16	Reward on job well accomplished	3.51	1.273	HE
17	Giving of welfare packages	2.84	1.283	ME
	Cluster Mean	**3.27**	**0.607**	**ME**

Note: HE = High Extent, ME = Moderate Extent

Table 2 shows that 6 out of 8 item statements of motivation practices had mean scores that ranged from 2.84-3.34. This implies that 6 items were complied to moderate extent. The remaining 2 item statements 13 and 16 had mean sores of 3.69 and 3.51 respectively showing that they were complied to high extent. The spread in the standard deviation was relatively close, implying that respondents were relatively homogenous in their ratings of compliance to motivation practices

Hypothesis 1

There is no significant difference in the mean ratings of extent of compliance to training practices in building industry in Anambra State based on construction workers educational qualifications.

Table 3: Summary of one-way ANOVA Result on Extent of Compliance to training Practices based on Educational Qualifications

Sources of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.298	2	.649	2.015	.135
Within Groups	91.1440	284	.322		
Total	10	286			

Data presented in Table 3 shows that F (2, 284) = 2.015 was not significant (P = .135) at 0.05 level of significant. Hence the null hypothesis was accepted. This means that there was no significant difference between the mean ratings of extent of compliance to training practices based on construction workers educational qualification.

Hypothesis 2

There is no significant difference in the mean ratings of extent of compliance to motivation practices in building industry in Anambra State based on construction workers educational qualifications.

Table 4: Summary of ANOVA on Compliance to Motivation Practices based on Educational Qualifications

Sources of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.484	2	1.242	2.763	.065
Within Groups	127.624	284	449		
Total	130.108	286			

Table 4 shows that F (2, 284) = 2.763 was not significant (P = .065) at 0.05 level of significant. Hence the null hypothesis was accepted. Thus, there was no significant difference between the mean ratings of extent of compliance to motivation practices based on construction workers educational qualifications.

Discussion

The study revealed that training practices mapped out to enhance workers skills and knowledge were compiled to moderate extent and therefore it is not encouraging to say that building workers are well trained. The result of this finding supports the findings of Castanneda, Tucker and Haas (2015) who found that lack of training was a contributing factor to the shortage of skilled workforce in the construction sector, and this has exerted a negative impact on project performance. Raja, Forgan and Muhammad (2011) discovered that training has become the most important factor in the building world today, because it increases the efficiency and effectiveness of both the employee and building industry.

The study also revealed that motivation practices designed to boost workers interest were complied to moderate extent and therefore it is not encouraging to make workers to put in their best in the building industry. The result of this finding supports the findings of Afuye (2013) that found that productivity decrease being experienced in Nigeria construction industry may continue if motivation strategy is not re-designed to meet workers need.

Conclusion

Training and motivation have a very strong relationship because motivation increases readiness of workers to transfer what they learnt from training to the building industry. It is imperative that human resource managers should provide training opportunities for building workers to enhance their knowledge, skills and attitude toward delivering a successful building project. More so, motivation strategies need to be re-designed to meet worker's needs.

Recommendations

The following recommendations have been proffered based on the findings of the study:

1. Teachers/lecturers should be up-to-date in the current training and motivation practices. They should do this by attending seminars, workshop, conference and other programmes pertaining training and motivation of workers in industry.
2. Human resource managers should make sure that they strictly comply to training and motivation practices knowing fully well that the activities of construction workers have a lot of impact on the standard of buildings erected.

References

Abdelnaser, O. (2016). Examining the effect of training on employees' performance in Libyan construction industry. *Journal of EngineeringManagement and Competitiveness*, 6 (2), 99-110. doi: 10.5937/jemc

Afuye, F. (20I3). *Motivation and its impact on workers` productivity in construction firms in Lagos, Nigeria* (2008-2013). Unpublished PhD Dissertation, Department of Environmental Planning and Management, Kenyatta University.

Akinnyemi, P. A., Asa, O. A., Olusegun, J. O., Anthony, I. A., & Daniel, I. D. (2019). The need for green building rating system development in Nigeria: process, progress and prospect. *International Journal of Art and Science*, 7(2), 35-44

Allen, E. and Iano, J. (2015). *Fundamentals of building construction materials and methods.* New Jersey: John Wiley & Sons

Anyim, F. C., Ikemefuna, C. O., & Mbah, S. E. (2011). Human resource management: Challenge in Nigeria under a globalized economy. *International Journal of Economics and Management Sciences*, I (4), 20II.

Castaneda, J., Tucker, R., & Haas, C. (20I5). Demographic influences on construction craft shortages in the U. S and Canada. *Proceedings of the IIth Conference of Canadian Society forCivil Engineering International Construction Specialty*, 8-I0th June 20I5, UniversityofBritish Columbia, Vancouve, Canada.

Chukwuma, E. M., & Okafor, O. (2014). Effect of motivation on employees productivity: a case study of manufacturing companies Nnewi. *International Journal of Managerial Studies and Research* 2(7), 137-147. Retrieved from www.arijournals.org(ISSN) .

Eight tips to motivate your construction team and improve productivity (20I9, December 16). Retrieved from https://www.procrewschedule.com/8-tips-to-motivate-your-constructio-team-and-increase productivity.

Hamma-Adama, M., & Kouider, T. (2017). Causes of building failure/collapse in Nigeria: Professionals view. *American Journal of EngineeringResearch*, 6(12), 289-300.

Luis, R. (2019, December 10). *The impact of education on career growth in construction industry*. Retrieved from URL:https://digitalcommons.calpoly.edu/cmsp1293.

Marchington, M., & Wilkinson, A. (20I2). *Human resource management at work: People Management and development*. London: CIPD Publishing.

Niveen, A., Rateb, J., Razan, G., & Sweis, E. (2019). The effects of training and motivatiig employees on improving performance of construction companies. A case study of Jordan. *Journal of International Businessand Management*, 11 (2).

Obianeri, I. (2022, September 25). Two feared dead in Anambra building collapse. *Punch*, Retrieved from https://www.punchng.com on January 26, 2023.

Odesola, I. A., Okolie, K. C., & Okoye, P. (2020). Evaluating the impact of construction activities for sustainable construction practices in building Projects in Nigeria. *Journal of Sustainable Construction Materials andTechnologies*, 5 (2), 430-439.

Prajapati, N., Pitroda, J. U., & Chetna, M. V. (20I5). A critical literature reviews on integratedframework for assessing factors affecting HRM in construction. *Journal of*

International Academic Research for Multidisciplinary Impact Factor, 2 (I2), 2320-5083.

Raja, A.G.K., Furgan, A. K., & Muhammad, A. K. (2011). "The Impact of training and development on organizational performance.. *Global Journal of Management and Business Research*, 11 (7), 77-79

Ujumadu, V. (2021, July 7). Two buildings collapse in Awka. *Vanguard*, Retrieved from https://www.vanguardngr.com, on January 26, 2023.

Ujumadu, V. & Nwaiwu, C. (2019, May 27). How a survival's frantic phone call from inside Rubble saved him. *Vanguard*, Retrieved from www.vanguardngr.com, on January 20, 2020.