

Factors Affecting the Performance of Labour in Nigerian Construction Sites

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Abstract The paper identified some factors perceived to be negatively affecting the performance of construction labour and also examined how these factors vary from site to site in the Nigerian construction industry. To achieve this, structured questionnaires were administered on contractors and labour (operatives) on forty construction sites in the study area to sample their opinions. A Likert statistical technique was employed for the analysis in this perspective. The result indicated that unfair wages (RI = 0.89), negative influencing factors (RI = 0.85) and lack of motivation (RI = 0.79) were ranked high by the labour while the contractors ranked lack of training (RI = 0.84), poor communication (RI = 0.79) and inclement weather (RI = 0.71) as being affecting the performance labour in this respect. It was recommended, among other things, that contractors must study the peculiarities of their workers and identify their main motivators.

Keywords: Construction Industry; Contractor; Labour; Nigeria; Performance.

1. Introduction

The three basic needs of man are undoubtedly food, shelter, and clothing. It is therefore not surprising that the construction industry has been known to be the largest Nigeria industry employing a good proportion of the work force and controlling over 50% of the Nation's Gross National Product (Olubodun, 1985). Unfortunately, this giant stride of the construction industry is now gradually being eroded as the present economic problem in the country lasted more than a decade. Within this period, the rulership of the country had changed hands thirteen times, each regime with different strategies of solving the economic problems. The irony of these strategies is that more workers have had their employments terminated and embargoes have been placed on employment in both the private and public sectors at different times. Therefore, the few workers (labour) that remain in the construction industry need to be properly managed if performance is to improve.

Labour is defined as a task that requires the exertion of body and mind or both. Labour is also regarded as an important resource in construction because it is the one that combines all the other resources namely materials, plant equipment and finance in order to produce the various construction products (Wahab, 1991). As expressed by Wachira (2000), consultants via specification, control of materials, plant costs, profit and overheads are generally controlled by the competition. This then leaves labour as the major resource opened to improvement. Parker et al. (1986) identified three main factors that are affecting site performance as: shortcomings in labour management (unfair wages, lack of motivation, etc.); extraneous reasons (harsh weather, breakdown of law and order, etc.); and labour's shortcoming (lateness, idleness, poor workmanship, etc.)

According to Olateju (1992), the primary responsibility of management in a construction firm, as in any other firm, is to ensure that all resources namely, manpower, machinery, materials and money are employed optimally to produce maximum profit for the investors in the enterprise. The objective of the study therefore is to identify some factors that are perceived to

be negatively affecting the performance of labour in the construction industry and discuss the strategies for managing such problems.

1.1 Structure of Labour Force

The labour force can be broadly categorized into two. They are:

1. Skilled labour or craftsmen
2. Unskilled labour

The staffs under the skilled labour are of varying abilities ranging from apprentices to trades foremen or supervisors. The apprentice can be described as a beginner who is willing and interested in learning a certain trade in the construction industry. The three possible avenues of training this category of people are the school, the workshop and the field (Husseini, 1991). Some of the craftsmen in this category are carpenters, joiners, masons/bricklayers, electricians, plumbers, mechanics, painters, plant operators, scaffolders, crane drivers, steel fixers, tile setters. The unskilled labour on the other hand is a category of workers that requires no special skill and it is defined as any way of making a living with little or no degree of security of income and employment. They require little or no training to make them perform (Wahab, 1991). They are able-bodied men and women that perform manual duties. Their major asset therefore lies in their strength with a healthy body.

1.2. Previous Works

Studies into the performance of the construction products and personnel have engaged the attention of many researchers including Sidwell (1983), Sink (1985), Parker et al. (1986), Husseini (1991), Wahab (1991), Campbell (1995), Hatush and Skitmore (1997), Fagbenle (1997) Chimwaso (2000), Dada (2003) and Ojo (2009). According to Seeley (1996), the traditional project performance measures of cost, time and quality are frequently used to measure contractors' performance by clients. Sidwell (1983) identified factors influencing project time performance and concluded that client's experience, form of building, labour force, form of building procurement and project organizational structure are elements of a complex casual factor of project time performance. He also identified managerial control, which he classed as project procedure, as a key element of achieving project success. Hatush and Skitmore (1997) grouped the factors affecting the environment of construction projects under cultural, economic, political, social, physical, aesthetic, financial, legal, institutional, technological and policy. Other influencing factors identified include traditional measures such as health, safety, material, 2000), size and scope of project (Wachira 2000).

Sink (1985) identified seven dimensions of organizational performance namely: effectiveness; efficiency; quality; productivity; quality of work; innovation and profitability. Chauchan and Chiang (1989) undertook a survey of 100 building and civil engineering projects in Hong Kong, India, Korea, Singapore, Taiwan and Thailand. Their survey led them to believe that the performance of a construction management team is influenced by internal and external factors: which they classified as project, environment and management related. Chimwaso (2000) evaluated the cost performance of public projects in Botswana by identifying the factors that influence construction cost overruns. He concluded that seven out of ten projects investigated had reported cost overruns and that the five influencing factors are incomplete design at time of tender, technical omissions at design stage, additional work at the clients request, adjustments of prime cost and provisional sums as well as contractual claims. Wachira (2000) also studied the management of labour in Kenya by identifying some factors perceived to be negatively influencing labour performance in the Kenyan construction industry. The importance of manpower training and management to the construction industry was studied by Husseini (1991) and concluded that manpower enables the effective use of construction

resources. Wahab (1991) researched into the training needs of staff in the construction industry and he asserted that training programmes are designed to achieve increase in performance, improvements in quality, achievement of lower unit cost, betterment of individual worker and cultivation of workers' motivation. Fagbenle (1997) also researched into the use of unskilled labour force for non-traditional residential projects in Nigeria and noted that inadequate utilization of labour force has led to the increase in crime rate in the country. Also, Dada (2003) studied the perceptions on measures of contracting/contractors' performance by taking a case study of Lagos State indigenous contractors. His result indicated that there are no significant differences in the assessments and ratings of the identified measures of contractors performance.

All the research efforts provided good information on the several factors affecting construction projects on sites. However, they did not touch the aspects of construction labour performances and their influencing factors. Through, the work of Wachira (2000) treated labour's performance, his works are limited to labour management in Kenya. Qualitative analysis showing the effects of the identified factors on labour performance are therefore necessary.

2. Research Methodology

The population for the study are the construction contractors that are listed in the register of the Federation of Construction Industry (FOCI). A research conducted by Adeyemi (2004) revealed that FOCI maintained a total of 105 companies in their register and they are made up of medium and large construction contractors registering within categories B, C and D of the Federal Registration Board of Nigeria. One state each from the six geopolitical regions of the country were selected for visitation in this regard. The states are Lagos, Port Harcourt, Abuja, Kaduna, Sokoto and Imo. Research assistants were employed to assist in the distribution and collection of questionnaires in this perspective.

The statistically required sample size is calculated from the formula given by Sediary (1994) as follows.

$$n = n^1 / [1 + (n^1/N)]$$

Where,

n = sample size

$$n^1 = s^2 / v^2$$

N = total estimated population

V = standard error of the sampling distribution = 0.05

S = maximum standard deviation in population. Total error = 0.1 at a confidence level of 95% and $S^2 = (P) \times (1-P) = (0.5) \times (0.5) = 0.25$. Where P is the proportion of population elements that belong to a defined class. From this, the sample size for the contractors is forty (40) while one hundred (100) questionnaires were administered to labour on construction sites in the study area, 28 and 52 questionnaires were respectively returned by the contractors and labour in this regard. Respondent contractors were asked to rank the factors which they considered as being negatively affecting the performance of their labour on sites. The illiterate/semi-illiterate respondents among the labour were however guided by reading out the questions to them and their responses carefully filled-in. It was therefore necessary to compute the relative index of importance being attached to each of these factors, with a minimum value of 0 and a maximum value of 4. This was with a view to enable a comparison of these factors. The relative index (RI) was calculated using the following formula (Fagbenle, 2000).

$$\text{Relative Index} = \frac{\text{Point total}}{4 \times \text{sample size}}$$

Tables 1 and 2 showed the responses of the contractors and the labour respectively while table 3 gave the relative index for the two categories.

3. Results and Discussions

Results (Table 3) indicated that contractors were of the strong conviction that lack of training and retraining (RI = 0.84), Poor communication (RI = 0.79) and inclement weather (RI = 0.71) were the three strongest factors that can negatively affect the performance of labour on their sites. Unfair wages (RI = 0.644), lack of motivation (RI = 0.48), poor specification (RI = 0.44), late information (RI = 0.41), out of sequence work (RI = 0.36) and recruitment of unskilled labour (RI = 0.26) were also rated 4th, 5th, 6th, 7th, 8th, 10th, and 11th respectively among the twelve factors in this regard. For the labour, utmost importance is attached to the issues of unfair wages (RI = 0.89), negative influencing factors (RI = 0.85), and lack of motivation (RI = 0.79) as some of the factors that can negatively influence their performance. These were respectively followed by recruitment of unskilled labour (RI = 0.61), late information (RI = 0.55), inclement weather (RI = 0.50), design changes (RI = 0.37), poor communication (RI = 0.32), out of sequence work (RI = 0.29), lack of training and retraining (RI = 0.17) and poor specification (RI = 0.15). Interestingly, both the contractors and the labour did not want to agree that lack of investment in research and development can have any retrogressive impact on the performance of labour as this factor was rated very low by these two categories of respondents.

Table 1. Factors negatively affecting construction labours' performance (contractors' responses)

S/N	Factors	Response Per Frequency				
		4	3	2	1	0
1	Lack of training and retraining	20	3	2	1	2
2	Poor communication	15	6	3	4	0
3	Inclement weather	10	9	5	3	1
4	Unfair wages	8	7	8	3	2
5	Lack of motivation	7	3	13	1	4
6	Negative influencing factors	7	1	12	4	4
7	Design changes	5	2	10	8	3
8	Poor specification	5	0	8	13	2
9	Late information	3	2	9	10	4
10	Out of sequence work	2	4	3	14	5
11	Recruitment of unskilled labour	2	1	2	15	8
12	Lack of investment in research and development	1	1	1	14	1

Table 2. Factors negatively affecting construction labours' performance (labour's responses)

S/N	Factors	Response Per Frequency				
		4	3	2	1	0
1	Lack of training and retraining	41	4	3	3	1
2	Poor communication	34	8	7	2	1
3	Inclement weather	25	15	9	1	2
4	Unfair wages	24	1	5	17	5
5	Lack of motivation	14	5	15	14	4
6	Negative influencing factors	10	6	16	13	7
7	Design changes	10	0	1	35	6
8	Poor specification	7	2	0	33	10
9	Late information	5	1	1	35	10
10	Out of sequence work	5	0	0	17	30
11	Recruitment of unskilled labour	2	3	0	14	33
12	Lack of investment in research and development	0	5	0	10	37

Table 3. *Rrelatives index (ri) of factors negativeley affecting construction labours' performance (contractors' and labours' responses)*

S/N	Factors	Contractor		Labour	
		RI	Rank	RI	Rank
1	Lack of training and retraining	0.84	1 st	0.18	10 th
2	Poor communication	0.79	2 nd	0.32	8 th
3	Inclement weather	0.71	3 rd	0.50	6 th
4	Unfair wages	0.64	4 th	0.89	1 st
5	Lack of motivation	0.57	5 th	0.79	3 rd
6	Negative influencing factors	0.53	6 th	0.85	2 nd
7	Design changes	0.48	7 th	0.37	7 th
8	Poor specification	0.44	8 th	0.15	11 th
9	Late information	0.41	9 th	0.55	5 th
10	Out of sequence work	0.36	10 th	0.29	9 th
11	Recruitment of unskilled labour	0.26	11 th	0.61	4 th
12	Lack of investment in research and development	0.24	12 th	0.12	12 th

In view of the importance attached to these, some of the factors are therefore further discussed.

- **Unfair wages**

In Nigeria, there is no hard and fast rule relating to the minimum wage for the construction workers as different wages are being paid in different sites across the country. This normally prompts the construction workers to migrate to where they will be better remunerated, since there is no job security. The one-off nature of the construction industry has been adduced as one of the reasons for the non participation of construction workers in any trade unionism. This also informs the reason why their wages cannot be jointly negotiated, as it is the case in government establishment. The workers in turn do not work with full loyalty in this respect.

- **Negative influencing factors**

Included in this instance are delays in the delivery of materials and equipment as well as poor welfare facilities. These negative factors reduce the performance and effectiveness of the personnel in this regard. Also, mechanical plants that are delivered to the sites (s) hours behind schedule or equipment brought to the site and find out to be faulty at the point of use, will definitely affect worker's output in a negative manner.

- **Lack of Motivation**

Human potential is boundless but it requires motivation in order to excel (Schrader, 1972; cited in Fagbenle, 1997 and Wachira, 2000). Motivation may come in various forms such as money, recognition, bonus, job security, participation in decision-making, finish and go, etc. It is therefore the responsibility of the contractor to quickly identify the most demanding motivators for his operatives and make use of it. Surprisingly, most of the respondent contractors did not attach much premium to this factor. It must be stressed that lack of motivation has always led to high staff turnover in the construction industry thereby leading to lack of continuity in the organization.

- **Lack of Training And Retraining:**

All workers need continuous training and retraining in order to update their skills in all ramifications, learn new methods and technology, etc. Contractors\employers must thus continuously invest in training of their workers for an increased job performance. For example, the inability of construction supervisors to plan work, communicates with workers and direct their work activities adequately has always been a major factor in determining the cost-effectiveness of the construction industry. The casual nature of employment of the construction

workers has however been adduced as the militating factor in training employees since the contractors do not feel motivated to train non-permanent workers in this respect.

- **Poor Communication**

For construction workers to be effective, they must clearly understand what is required to be done on site. In most sites, contractors do not always communicate the work plan and/or schedule of work to the workers and the workers only get to know about day's work a few minutes to the day's work.. The workers in turn do not get a chance to make any input in this regard and most of the operatives have belief that their contributions might be very important.

- **Inclement Weather**

Inclement weather such as extremely hot sun, heavy rain and harsh harmattan can negatively contribute to labour performance on construction sites. In some cases, work has to be stopped as a result of heavy downpour/serious rainstorm. Harsh weather (e.g. sun) can also drop the output of average construction workers especially the new ones. Provision of adequate working tools and protective elements will go long way in reducing this negative influencing factor.

- **Dearth of Investment in Research and Development**

Research and development has been stressed by Wachira (2000) as an important one in order to devise new and more effective and efficient working methods. Unfortunately, none of the two categories of the target respondents attached serious importance to this issue as it was rated last by them. The government at the three tiers therefore has a role to play through enlightenment campaign, organizing workshops and proper funding of the various research and development centres in the country. The institutions of higher learning should be encouraged in this area through adequate and steady funding. The contractors and the construction workers must however be carried along in this pre-exercise because they are best suited to identify the areas which such research must focus on.

4. Conclusions

The importance of good labour performance in the Nigerian construction industry has been emphasized. Factors that could impede labour's performance had also been identified and the premiums attached to each of the factors highlighted. In order to have any meaningful improvement in labour's performance however, contractors/firm owners must study the peculiarities of their workers and also identify their main motivators. Training and retraining of contractors in robust labour management must be imbibed by the relevant governmental organizations and professional bodies in the country. Also, investment in research and development must be rigorously pursued, while the potential beneficiaries of such research must be willing and compelled to invest in this direction. Attention should also be given to other identified negative factors on our construction sites with a view to correcting some of these grey areas. Lastly, similar research in other parts of the globe is advocated.

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