

EFFECTS OF MOTIVATION OF OPERATIVES ON PRODUCTIVITY IN THE NIGERIA CONSTRUCTION INDUSTRY

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The construction industry in Nigeria is labour intensive and it is the highest employer of the nation's workforce. Hence, the effective management of human resources is the key towards achieving the higher construction workforce productivity, thus accomplishing the construction projects within their predefined limits. Therefore this research is aimed at investigating the effects of motivation of operatives on productivity in the Nigeria construction industry. The objectives are to examine the factors which motivate operatives towards improved productivity and to ascertain the effect of motivation of operative's on productivity in the Nigeria construction industry. Data were collected from both secondary and primary sources. The secondary data were journals and conference proceedings while the data from primary sources were those collected through questionnaires administered on construction industry professionals, i.e. architects, civil/structural engineers, mechanical/electrical engineers, builders and quantity surveyors, as they are to list the features required for employable operatives to be hired in the organization in order to perform optimally towards the realization of organizational goal. The data collected were analyzed using descriptive and inferential statistical tools. The study revealed that intrinsic factors have an edge over extrinsic factors when it comes to motivation of operatives and that the most important motivational intrinsic factor is "the work itself" (when a task offers the employee the opportunity to self-expression, personal satisfaction, and meaningful challenge, then the employee will undertake the task with enthusiasm), followed by extrinsic factor of "increase in salary". Inadequate planning was ranked the most problem associated with motivation of workers. The research revealed that the most significant effect of motivation of operatives on productivity is that it leads to higher performance and productivity. The study recommends that management of construction firms should consider the significance of proper understanding of the motivational needs of construction industry workers.

Keywords: extrinsic motivation, intrinsic motivation, motivation, operatives, productivity

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INTRODUCTION

The construction industry is very strategic to the national economy providing infrastructure and shelter for other economic activities to take place (Chigara & Moyo, 2014). The construction industry is complex in its nature because it comprises large number of parties such as owners (client), contractors, consultants, government agencies/regulators. Despite this complexity, the industry plays a major role in the development and achievement of society's goals (Enshassi, Mohammed, & Abushaban, 2009). In Nigeria, the industry when viewed from the perspective of its dynamism has the capacity to generate employment and absorb semi-skilled, skilled and unskilled artisans as operatives for the various trades in the sector. The productivity of this type of workers whose abilities and socio-cultural backgrounds vary in a wide spectrum is naturally affected by many factors, Raza, Muhammad and Saqib (2015), resulting in some of the chronic problems of poor performance leading to failure in achieving effective time and cost performance of projects (Olawale and Sun, 2010) In most developing countries, construction workforce is available at very cheap rate. And this fact has affected the level of efforts which must be done by the upper management in order to meet the expectations of the workforce to keep them motivated in order to achieve good productivity output.

The top level management of organizations that are operating in most developing countries are reluctant to acquire knowledge of core factors which keep the workforce motivated. Human resource management is of strategic importance when it comes to industries like construction industry. The effective management of human resource is the key towards achieving the higher construction workforce productivity thus accomplishing the construction projects within their predefined limits. This accounts for why the respondents in this study are the industry professionals who understand that people employed in the sector should perform optimally towards the realization of organizational goal. There are number of factors that directly affect the productivity of labour, one of those factors is lack of motivation. Therefore this research is aimed at investigating the effects of motivation of operatives on productivity in the Nigeria construction industry. The objectives are to examine the factors which motivate operatives towards improved productivity and to ascertain the effect of motivation of operative's on productivity in the Nigeria construction industry. Thus, this study answered the question, what factors motivate operatives towards improved productivity and how to ascertain the effect of motivation of operative's on productivity in Lekki, Eti-osa, L.G.A, Lagos, the Nigeria. At the micro level, if productivity is improved, ultimately it reduces or decreases the unit cost of project and gives overall best performance of project (Attar, Gupta, & Desai, n.d.). The motivation of employees depends on the strength of their motives. Motives are need, wants, desire, or impulses within the individual and these determine human behaviour. Therefore, motivation is the process of arousing behaviour, sustaining behaviour progress, and channeling behaviour into a specific course of action. Thus, motives (needs, desire) induce employees to act. Motivation therefore is the inner state that energises people, channels and sustains human behaviour (Maduka & Okafor, 2014). Productivity is defined as a ratio between an output value and an input used to produce the output (Thomas and Sudhakumar, 2014).. Output consists of products or services and input consists of

materials, labour, capital, energy etc. There is nothing as dangerous to an economy as a decrease in productivities because it creates inflationary pressure, social conflict, and mutual suspicion (Ameh & Osegbo, 2011). The bond between motivation and productivity is widely accepted and of high significance as well. The relationship between motivation and productivity can be summarized as that productivity is directly linked to motivation, and motivation is, in turn, dependent on productivity. Suitable motivation of labour can be hypothesized as a key contributor to maximizing workers' productivity (Kazz, Manisali, & Serdar, 2008). Operatives need motivation just as equipment's need fuel and operators. Motivation is a process which activates productivity. In order to effectively manage the human resources and to make sure that workforce is productive enough; it is necessary to understand those factors which have edge over others for motivating the construction workforce. This means that when motivation increases, a rise in productivity is also expected.

LITERATURE REVIEW

Construction is the world's largest and most challenging industry (Tucker, 1986). The output of the construction industry constitutes one half of the gross capital and is 3 to 8% of the Gross Domestic Product (GDP) in most countries (Arditi and Mochtar, 2000). Nevertheless, poor performance of the industry has been a cause of great concern among practitioners and academics. Construction projects worldwide have been experiencing significant cost and time overruns, with low labour productivity identified as a major reason for project delays and cost overruns, Thomas and Sudhakumar (2015). The productivity risk factor has a strong impact on the project duration. Namely, poor labour productivity probably causes time overruns in construction projects Kazaz and Ulubeyli (2004). Doloi et al. (2012) have identified poor labour productivity as a major reason for delays in Indian construction projects. It is evidence that workers of manufacturing firms in Nnewi are poorly motivated; hence low productivity Chukwuma and Okafor (2014). Improvement of construction labour productivity is therefore critical. Chukwuma and Okafor (2014) observed that the goal of motivation is to cause people to put forth their best efforts with enthusiasm and effectiveness in order to achieve and hopefully surpass organizational objective. The smallest action that is positive or negative can have an effect on workers' attitude and motivation, Raza, Muhammad and Saqib (2015) The motivation, especially monetary rather than moral, has proven its influence on the productivity of workers, and the methods of motivating personnel to promote productivity have been demonstrated by Khan (1993) through applications of different human relations theories of motivation.

Motivation could either be intrinsic or extrinsic (Olaitan, 2013). Intrinsic motivation refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within individual rather than relying on external pressures (Olaitan, 2013). Extrinsic motivation comes from outside of individual. Extrinsic motivators include security, working conditions, compensation, interpersonal relations, promotion criteria, salary hike and status (Mahalakshmi, 2016).

The relationship between motivation and productivity can be measured as that productivity is directly linked to motivation, and motivation is, in turn, dependent on productivity. Suitable motivation of labour can be hypothesized as a key

contributor to maximizing workers' productivity. In particular, motivation plays an important role in workers' generally defined as a composition of powers and mechanisms which help to direct human behaviour in a desired manner, or with a more specific context. It is described as the all convincing and encouraging actions which help workers fulfill their tasks willingly and to come closer to project objectives. Motivation of the labour force is of paramount importance because the quality of human performance at the workplace depends largely upon motivation (Kazaz, Manisali, & Serdar, 2008). That is, higher motivation brings higher productivity. Even the smallest action that is positive or negative can have an effect on workers' attitude and motivation. The motivation, especially monetary rather than moral, has proven its influence on the productivity of workers, and the methods of motivating personnel to promote productivity through applications of different human relations theories of motivation. Research on the relationship between motivation and productivity in the construction industry has been conducted over the last 40 years. There are three most commonly used theories in this research area (Kazaz, Manisali, and Serdar, 2008).

Maslow's need theory

Maslow (1970) argued that human beings strive to satisfy the following needs basically classified in ascending order: physiological needs, safety needs, social or belonging needs, self-esteem needs, and the need for selfactualization

Herzberg's motivation-hygiene theory

Herzberg (1968) labelled his two factor theory as satisfaction or motivation and dissatisfaction or hygiene factors. He further insisted that these two factors independently exist, one running from satisfied to neutral and the other from dissatisfied to neutral.

Expectancy theory of motivation

This theory argues that the motivational force to perform or expend effort is a multiplicative function of the expectancies that individuals have concerning future outcomes and the value they place on those outcomes

Productivity is defined as a ratio between an output value and an input used to produce the output (Thomas and Sudhakumar, 2014). Productivity is reaching the highest level of performance with the least of expenditure of resources. One of the ways to measure productivity in the construction industry is the partial factor productivity (PFP), which is expressed as the ratio of the outputs to a single or selected set of inputs. One of the most commonly used PFP measures in construction is labour productivity, which is defined as the ratio of output to labour input; the output is measured in terms of the quantities installed, and labour input is measured as work-hours. Thus, labour productivity is expressed as follows:

$$\text{Labour productivity} = \frac{\text{Output quantity}}{\text{Labour hours}}$$

Productivity, ultimately, is the ability to produce. (Usman, Inuwa, Iro, & Dantong, 2012). A good manager must identify the particular factor that will appropriately solve his productivity purpose, (Olaitan, 2013). Frederick Herzberg's two-factor theory developed also called hygiene-motivator. One set of the theory defines factors that lead to job satisfaction; like salary, job security, working condition,

status, quality of technical supervision, quality of interpersonal relations among peers, supervisors, and subordinators while the other set of factor defines what produces job satisfaction and motivation called motivators, like achievement, recognition, responsibility, advancement, the work itself and possibility of growth (Aiyetan & Olatuah, 2006).

The extent in which employees are motivated in their work depends on how well those employees are able to produce in their job. Motivation is expected to have a positive effect on quality performance; employees who are characterized by a high level of motivation show a higher work and life satisfaction. Having a high level of motivation is therefore in itself valuable for employees and a decrease in motivation might affect employee's performance. The motivation leads to high level of initiative and creativity from the employee and where monitoring is difficult, motivation is therefore extremely important for ensuring high quality performance (Osabiya, 2015). Maduka and Okafor (2014) concluded from their findings that the effect of motivation on employee productivity is of paramount important to the organization. In order to meet up with the current dynamic rate of the business trends, the management of an organization should try as much as possible to adopt good and positive motivational techniques to increase the morale of the workers towards productivity and performance. The variations found in the outputs of bricklayers were therefore as a result of high level of motivation leading to high morale and comradeship, and lack of motivation resulting in low morale and individualism (Fagbenle, Adeyemi, & Adesanya, 2004).

Problem statement / Research Question

Construction companies exist for the purpose of rendering construction services. For the organization to meet its objectives, peoples are employed in the organization in order to help the organization meet its objectives. These objectives can only be met when the output expected from the employee is achieved. Thus, in order to ensure that people employed in the organization perform optimally towards the realization of organizational goal, they need to be motivated to work. Motivating people to work entails meeting their needs. Maduka and Okafor (2014) states that workers leave organization due to the fact that they are not motivated enough. Some are not willing to leave because they are enjoying some benefits in terms of promotion, which leads to increase in salaries and wages, bonus and some other incentives.

There is a great controversy over the issue of motivating people. A school of thought, are of the view that such extrinsic factors like money, praise, and quality of supervision and company's policy can motivate people to work, while others are of the view that such intrinsic factors like advancement quality of the job done by person, recognition and growth can motivate workers to productivity. It is in view of these controversies that this study wants to look at the motivation of operatives in the Nigerian construction industry with a view of unveiling the most relevant factors.

RESEARCH DESIGN AND METHODS

To analyze the data provided by the questionnaire, two statistical methods were used. The first was to acquire percentage values by frequencies of the answers

received. The other was to calculate a relative importance index (RII). For this purpose, a rating scale of 1 to 5 was adopted with 1 representing the lowest level of effect and 5 representing the highest level. The RII was evaluated by the following expression (1):

$$RII = \frac{\sum_{i=1}^5 W_i X_i}{\sum_{i=1}^5 X_i}, (1 \leq RII \leq 5)$$

W_i is the rating given to each factor by the respondents ranging from 1 to 5, with 1 representing 'not significant' and 5 representing 'extremely significant'; X_i – the percentage of respondents scoring; and i – the order number of respondents. The numerical values calculated by the above formula were then differently classified, because a single point or number changing from 1 to 5 in questions no longer symbolizes each verbal scaling expression in the evaluation phase. Namely, since the results are obtained as decimal numbers instead of integer numbers, a specific scale should be established. Thus, 5 expressions are defined by the intervals of 0.8. In addition to calculating the relative index scale, the percentages of respondents scoring 2 or fewer, 3, and 4 or more, on the significance scale were also evaluated for each factor. These were used to rank the factors in which relative importance indices were the same

Data Collection

To obtain the data required for the study, a questionnaire comprising 58 detailed questions under 6 subject headings, such as demographic features of firms, experience levels of respondents, or factor groups, was first prepared ((Ulubeyli 2004). Then, Lagos Chamber of Commerce and Industry (LCCI), which has registered construction firms in operating Lagos, were contacted for the names of those operating within Lekki. Although there are 73 construction companies in total, 43 firms were interviewed. In the application stage of the questionnaire, face-to-face (one-to-one) interview technique was utilized in order to assure the validity and reliability of the survey. The telephone interviews, explaining the content of this study, were to be conducted with the Managing directors of these 43 firms, but 20 of them (45.85 %) responded positively. This relatively high approval rate can conveniently represent the sampling whole of the survey. The category of the construction firms in terms of economic scaling was determined by means of their average annual incomes. In addition, a great portion of the companies (41.74 %) has an experience of over 20 years in the sector, which is an indicator of possessing adequate experience.

ANALYSIS AND RESULTS

Table 1, above shows the number of questionnaire distributed to the respondents, 120 copies of questionnaire were distributed to the respondents, 103(86%) were returned while 17(14%) were not returned. This implies that the researcher recorded 103 questionnaires for data analysis.

Table 1: The background and demographic features of the respondents

Variable	Frequency	Percentage
Administered Questionnaire	120	100
Returned Sample	103	86
Not Returned Sample	17	14

Source: Field Survey, 2018

Table 2: Respondents' Demographic and Organizational Characteristics

S/N	Demographic Characteristics	Frequency	Percentage	Total %
1	Profession (N=103)			
	Architect	18	17.47	
	Civil/Structural Engineer	24	23.30	
	Mechanical/Electrical Engineer	12	11.65	
	Quantity Surveyor	22	21.35	
	Builder	27	<u>26.21</u>	100.0
2	Gender (N = 103)			
	Male	74	71.85	
	Female	29	<u>28.15</u>	100.0
3	Academic Qualification (N = 103)			
	ND	10	9.7	
	HND	34	33.00	
	B.Sc.	28	27.18	
	M.Sc.	20	19.41	
	PhD	11	<u>10.67</u>	100.0
4.	Professional Qualification (N=103)			
	MNIQS	20	19.41	
	MNIOB	24	23.3	
	MNIA	18	17.47	
	MNSE	30	29.12	
	Others	11	<u>10.67</u>	100.0
5	Years of Working Experience (N=103)			
	≤10 years	44	42.71	
	11-20years	36	34.95	
	21-30years	18	17.47	
	>30 years	5	<u>4.85</u>	100.0
6.	Nature of respondents' organization (N=103)			
	Consultancy	32	31.06	
	Contracting	46	44.66	
	Client	25	<u>24.27</u>	100.0
7	Age of Company (N=103)			
	≤10 years	24	23.30	
	11-20 years	36	34.95	
	21-30 years	19	18.44	
	>30 years	24	<u>23.30</u>	100.0
8.	Form of Ownership of Company (N=103)			
	Sole proprietorship	8	7.76	
	Partnership	16	15.55	
	Private Liability company (Ltd)	45	43.68	
	Public Liability company (PLC)	16	15.55	
	Public Sector (Government Agencies)	18	<u>17.46</u>	100.00

Source: Field Survey, 2018

Table 2, below shows the respondents' demographic and organizational characteristics, and it reveals that 23.30% of respondents were Civil/Structural Engineer and 26.21% were Builder, 21.35% Quantity Surveyor, 17.47% Architect while 11.65% were Mechanical/Electrical Engineer. Also, 71.85% of the respondents were male while 28.15% of the respondents were female. However, academic qualification of respondents shows that 33% were HND holders, 27.18% B.Sc. holders, 19.41% M.Sc. holders, 9.7% ND holders, while 10.67% PhD holders. The professional qualification of respondents where 29.12% MNSE, 23.30% MNIOB, 19.41% MNIQS, 17.41% MNIA, while 10.67% others. Moreso, the working

experience of the respondents indicates that 42.71% of respondents have been working for less than 10 years. 34.95% have been working for 11-20 years, 17.47% for 21-30 years while 4.85% have over 30 years working experience.

Also, the nature of the business of the respondents firm as shown on the table indicates that 44.66% of respondents work for contracting firm, 31.06% for consultancy firm, while 24.27% works for client origination. The age of firm/company of respondents' reveals that 23.30% of respondents were working for company that is less than 10 years old, 34.95% for 11-20 years, 18.44% were working for company that is 21-30 years old and 23.30% over 30 years old

The table 2 above also reveals that 43.68% of respondents were working in a Private Liability Company (Ltd) while 15.55% were working in Partnership, 15.55% in Public Liability Company (PLC) and 17.46% in Public Sector (Government Agencies) and 7.76% were working as sole proprietorship.

Table 3: Relative Importance Indices (RII) and ranking of motivational factors

S/N	Motivational Factors	Types of factors	5	4	3	2	1	RII	Rank
1	The work itself	Intrinsic	10	21	15	3	0	4.80	1
2	Increase in salary	Extrinsic	24	17	6	3	0	4.24	2
3	Promotion	Extrinsic	22	18	10	0	0	4.24	3
4	Interest on the job	Intrinsic	22	19	6	2	1	4.18	4
5	Compensation	Extrinsic	19	17	11	1	2	4.00	5
6	Health care services	Extrinsic	14	18	15	2	1	3.84	6
7	Potential for personal growth	Intrinsic	10	26	10	3	1	3.82	7
8	Achievement	Intrinsic	14	18	14	2	2	3.80	8
9	Provision of transportation	Extrinsic	10	22	14	2	2	3.72	9
10	A sense of job security	intrinsic	10	21	14	5	0	3.72	10
11	New experience	Intrinsic	10	20	17	2	1	3.72	11
12	Company policy	Extrinsic	9	20	18	3	0	3.70	12
13	Working condition	Extrinsic	12	17	15	5	1	3.68	13
14	Relation with co-worker (union)	Intrinsic	10	17	20	2	1	3.66	14
15	Responsibility	Intrinsic	12	15	16	4	3	3.58	15
16	Holiday abroad with pay	Extrinsic	13	16	9	7	5	3.50	16
17	Fairness of reward	Extrinsic	6	19	19	4	2	3.46	17
18	Worker evaluation of equity	Extrinsic	6	17	22	3	2	3.44	18
19	Fringe benefits	Extrinsic	4	22	18	4	2	3.44	19
20	Sharing profit	Extrinsic	9	17	14	6	4	3.42	20
21	Opportunity for advancement	Intrinsic	4	20	18	7	1	3.38	21
22	Recognition	Intrinsic	4	19	19	7	1	3.36	22
23	Individual importance	Intrinsic	7	15	16	12	0	3.34	23
24	Telephone services	Extrinsic	7	10	17	11	7	3.06	24

Source: Field Survey, 2018

Table 3, shows the relative importance indices (RII) and ranking of the first twenty four factors which motivate operatives towards improved productivity. In the overall ranking of the types of motivation, the work itself which is an intrinsic motivational factor came first as the most important factors which motivate

operatives with a mean item score of 4.80- Increase in salary and promotion which were extrinsic motivational factor were ranked second and third with a mean item score of 4.24. The reasons of the ranking order as mentioned in the Table 3 can be many. Nigeria is a developing country and a large population lives below poverty line. Money is not the sole motivator, but in the light of the Maslow's Hierarchy of Needs provided by Abraham Maslow (1943). Before going to the next level of hierarchy, preceding level must be satisfied then and then only the required results can be obtained. Figure given below is representing the RII values in descending order. Rising inflation is making the large section of the population deprived of many basic facilities. As mentioned in Table 3 that "Increase in salary" and "promotion" shared the second rank. The rising prices of fuel, the high cost of public transport is compelling the general public to think of this factor extremely motivational and to such a level that it has gained rank position higher than "A sense of job security" and "Recognition" and many others.

Problems associated with the motivation of workers in the construction industry

Table 4 Relative importance indices (RII) and ranking of problems associated with the motivation of workers

S/N	Problems	5	4	3	2	1	RII	RII Rank
1	Inadequate planning	24	15	7	1	1	4.16	1
2	Communication problem between site managers	16	15	11	3	2	3.86	2
3	The nature of the organisation	18	10	15	3	1	3.82	3
4	Construction managers lack of leadership	13	23	9	1	13	3.8	4
5	Construction method	7	25	14	4	7	3.7	5
6	Difficulties in measuring productivity	11	15	21	2	11	3.66	6
7	Project management style and harmony	6	21	20	2	1	3.58	7
8	Incorrect measurement of Labour' input	9	19	14	7	1	3.56	8
9	Obtaining unreliable data for both inputs and	11	10	22	6	1	3.48	9
10	Crew size and composition	5	20	18	6	1	3.44	10
11	A range of assumption about individual motives	6	15	20	7	2	3.32	11
12	A numbers of alternative approaches to motivation	2	17	22	5	1	3.22	12

Source: Field Survey, 2018

Table 4 shows the relative importance indices (RII) and ranking of the possible problems associated with motivation of operatives. In the ranking, inadequate planning came first as the most important problem associated with motivation of workers with a mean item score of 4.16. Communication problem between site managers and labour was ranked second with a mean item score of 3.86. The third problem is the nature of organisation with a mean item score of 3.82, the reason might be the fact that the practices of adopting motivational factors that revolve around monetary options like incentive payments and financial rewards, financial incentives (like profit sharing, commission increment, profit related pay, fringe benefits etc), free training for enhancement of skill and bonus on extra ordinary performance, are not commonly experienced by the top management of construction organizations that were surveyed.

Effects of motivation of operatives on productivity in the Nigerian construction industry

Table 5. Relative importance indices (RII) and Ranking of effects of motivation

S/N	Effects	5	4	3	2	1	RII	Rank
1	Lead to higher performance and productivity	29	12	7	0	2	4.32	1
2	Help organization to meet up with current dynamic rate of the business trends	17	22	9	2	0	4.08	2
3	Increase the moral of the workers towards productivity and performance	14	21	11	4	0	4.04	3
4	Perform their functions with all sense of responsibility, humility and efficiency	12	28	8	2	0	4.00	4
5	Lead to high level of creativity from the operatives	14	23	9	4	0	3.94	5
6	Lead to high quality performance	16	18	12	4	0	3.92	6
7	Lead to high morale	14	21	13	1	1	3.92	7
8	Lead to high level of initiative from the operatives	14	21	11	4	0	3.90	8
9	Improve general conduct	16	17	12	5	0	3.88	9
10	Lead to high level of cooperation at work	14	15	16	3	2	3.72	10
11	Willingness to perform additional tasks	12	14	22	2	0	3.72	11
12	Lead to high level of comradeship	13	14	19	2	2	3.68	12
13	Helps operatives to think constructively about how the organization they work for could be improved upon	12	15	18	5	0	3.68	13
14	Effort to perform creditably well in their function	9	16	16	8	1	3.48	14

Source: Field Survey, 2018

Table 5, Shows the relative importance indices (RII) and ranking of the effects of motivation of operatives on productivity in construction, industry of Nigeria. The most important effect is that it leads to higher performance and productivity with a mean item score of 4.32. The second effect is that it helps organisation to meet up with the current dynamic rate of business trends with a mean score of 4.08. Increase the moral of the workers towards productivity and performance was ranked the third most important effect with a mean score of 4.04,

DISCUSSION OF RESULTS

The study has revealed that the work-itself is the most important motivational factors as far as operatives are concerned. The reason for this is that, in this present day of entrepreneurship, operatives are motivated with the work they do so that they can learn the work and be able to set up their own business and become employer of labour. According to Aiyetan and Olotuah 2006, as far as the operatives are concerned, the motivation they preferred most is holiday abroad with pay. The likely reason that could be adduced for this is that, workers will be exposed to more experience in their field of work, to the latest available tools and equipment, better construction techniques/methods, which makes them become experts in their field and hence production will be faster and with higher quality. The likely reason for the difference between this study and the previous one could be as a result of the economic situation of the country as at the time of the findings. Based on the overall average mean of the two types of motivational factors, it has been observed that intrinsic factors is more important than extrinsic factors and this can be confirmed in Table 4.5 as the work itself which is an intrinsic motivational factor was ranked first with a mean item score of 4.80. The result of analysis revealed that the most important effect of motivation of operatives on productivity is that it leads to higher performance and productivity as it was ranked first on Table 4.7. This validates Osabiya (2015) that if employees are highly motivated it will lead to high level of performance and productivity. This study did

not investigated how construction activities can be performed more productively or finished more rapidly, but rather how the productivity of manpower can be increased without any machine assistance. Automation of construction tasks, which could potentially increase productivity, has yet to become reality on the job sites, and for the near term this seems unlikely with the exception of some off-site prefabrication because the opportunity of standardization in production is very limited in construction due to that products vary in a large spectrum from one project to another with clients' demands

CONCLUSION AND RECOMMENDATION

In this study, 24 factors influencing construction worker productivity in Nigeria were examined by bringing them together in 2 main groups constituted from Intrinsic and Extrinsic factors. The most effective among them was statistically determined as the work itself factor with a 'very significant' effect (4.8), followed by increase in salary (4.24) and promotion (4.24). From the obtained results it is clear that work-itself is the most important motivational factors as far as professionals are concerned. This shows that Intrinsic factors unexpectedly have a stronger effect than Extrinsic factors, when workforce productivity is the point in question. Even if this is directly connected with the application of questionnaire to professionals and thus with denoting the managerial viewpoint, it is clear that the importance of organizational management is now perceived at the top level in developing countries. Since motivation is an inducement for higher output it should be accorded a right, of place by employers of labour for the construction industry to achieve higher productivity, which will lead to higher performance and greater contribution to the nation's Gross Domestic; if operatives are encouraged by motivation, they can strive to make sure that they identify with the organisation. Since they are highly motivated, it will lead to high level of performance and productivity.

In light of the findings and conclusion of this research, this study recommends that, in order to improve the productivity of construction operatives in the context of Nigerian construction industry, motivation of operatives should be given priority by the construction industry employers, management of construction organizations should consider the significance of properly understanding the motivational needs of construction industry workers, salary and incentives of operatives should be improved upon when due in order to ensure better job management, hardworking, talented and ambitious workers should be given promotion and awards based on their performance, an operative should be given a job he has been trained for and is best suited for so that he can enjoy doing what he knows best and management should increase labours wage rates, should reward them and should also give them bonuses. Moreover some aids should be given to labours, in this way they will take interest in their job and in returns productivity improves. However, it is generally acknowledged that foremen and craftsmen are more knowledgeable about labour productivity problems than their supervisors, although managers consider construction labour productivity to be under their control rather than at the mercy of the construction industry environment. In this point, to improve the topic by one more step, the succeeding survey is planned to apply to the other side, i.e. workers.

This study was limited to Lekki in Eti-osa L.G.A., of Lagos State, Nigeria in the South west geopolitical zone of the Country due to its high concentration of ongoing building projects, further studies can be carried out on other areas of the country.

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