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Assessment of Effects of Motivation on Production Operatives in The Nigerian Construction Industry

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ABSTRACT

This study investigates the effect of motivation on operatives' productivity in the Nigerian construction sector. The purposes of this study are to inform the management of contracting firms in Nigeria construction industry about the critical motivational factors that affects operatives' productivity. The study was conducted by administering questionnaires to people of allied professionals in the Nigerian construction industry. To satisfy the aim of this study, 70 respondents were administered questionnaire, which were analyzed using ranking and percentile. The results showed there were 24 factors which motivate operatives towards improved productivity in the construction industry of Nigeria. The study also found that intrinsic factors have a stronger effect than extrinsic factors in motivating operatives. The study concludes that work itself is the most critical factor that motivates operatives towards improved productivity and recommends that operatives be encouraged by motivation, to make sure that they identify with the organization.

Keywords: Assessment, Construction Industry, Motivation, Effects, Productive Operatives

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1.0 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 numbers of parties as owners (clients), contractors, consultants, government agencies/regulators. Despite this complexity, the industry plays a major role in the development and achievement of society's goals (Enshassi, Mohamed, & Abushaban, 2009). In Nigeria, the industry when viewed from the perspective of its dynamism has the capacity to generate employment and absorb both skilled and unskilled operatives for the various trades in the sector. Over the years, the industry has made significant contribution to the economic development of the country (Kuroshi & Lawal, 2014).

The construction industry in Nigeria is labour intensive and it is the highest employer of the nation's work force. The industry also accounts for over 50% of the country's gross capital formulation (Fagbenle, Adeyemi and Adesanya, 2004). 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. It has been observed that the construction workforce, especially in developing countries, is not seen as an important input despite labour's generally constituting a large percentage of total construction project costs (e.g., up to 40% of direct cost in large projects) (Kazaz, Manisali, & Serdar, 2008).The construction operatives have over the years being subjected to a work environment that have not encouraged higher level of productivity. There are number of factors that directly affect the productivity of labour, one of those factors is lack of motivation,

thus it is important for organisations to study and identify those factors and take an appropriate action for improving the labour productivity, this then from the focus of this study.

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 channelling behaviour into a specific curse of action. Thus, motives (needs, desire) induce employees to act. Motivation therefore is the inner state that energies people, channels and sustains human behaviour (Maduka & Okafor, 2014).Productivity is defined as a ratio between an output value and an input value used to produce the output. 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 summarised 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 (Kazaz, 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. This reflects the belief that an increased motivation level causes an increase in productivity. Achieving the results demands that an adequate quality of inputs is provided in this first place and improved construction workforce productivity means a better input and this it will help contractors to be more competent and profitable whilst executing their jobs.

2.0 Literature Review

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. In particular, motivation plays an important role in workers' inclination to work productively (Yisa, Holt, & Zakeri, n.d). The motivation concept is 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 fulfil 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, & Serdar, 2008).Labour productivity in the construction industry has become one of the most frequently discussed issues in general management (Atomen, Chuka, Emeka, & Omoniyi, 2015). Construction labour productivity is a complex variable to measure, its constituents are vague and are difficult to quantify. A comprehensive understanding of the concept of productivity must be achieved to successfully analyse it (Hicksona & Ellis, 2014).

Productivity improvement in the construction industry is a deliberate process to improve the capacity and effectiveness of the industry to meet the demand for building and civil engineering products, and to support sustained national economic and social development objectives (Halwatura, 2015). Therefore, the effect of productivity on a nations' economy is highly significant.Improved productivity in the construction industry can have an important role in promoting national competitiveness and a satisfactory growth rate (Nanayakkara & Green, n.d). Labour productivity plays a key role in determining the financial success of a project. Therefore, any improvement in labour productivity will contribute a high deal to the improvement of the overall productivity and improvement in the whole performance (cost, time, and quality) in construction industry (Khan & Ajmal, 2015).

Improving productivity is a major concern for any profit-oriented organization, as representing the effective and efficient conversion of resources into marketable products and determining business profitability (Robles, Stifi, José, & Gentes, 2014).Although a great number of publications exist concerning construction productivity, there is no agreement on a standard productivity measurement system.Researchers have concluded that it is difficult to obtain a standard method to measure labour productivity because of project complexity and the unique characteristics of construction projects.The uniqueness and non-repetitive operations of construction projects make it difficult to develop a standard productivity definition and measure (Robles, Stifi, José, & Gentes, 2014). Over the years, the concept of motivation has been defined in different ways. Motivation is defined as the process that initiates, guides, and maintains goal-oriented behaviours. It is an internal process that makes a person move toward a goal.

Motivation in general, is concerned with factors or events that moves, leads, and drives certain human action or inaction over a given period of time, given the prevailing conditions. There is, however, no one theory of motivation that can be claimed to embrace the entire range of organisational and

personal circumstances that exist (Herman, Eaton, & Hasbollah, 2014).Motivation in management describes ways in which managers promote productivity in their employees. It actually describes the level of desire employees feel to perform, regardless of the level of happiness. Employees who are adequately motivated to perform will be more productive, more engaged and feel more invested in their work. Motivation is an art targeted to getting people work willingly, and an art of inducing one to behave in a particular manner to achieve a task (Maduka & Okafor, 2014).

Beside this, construction companies exist for the purpose of rendering some services. For the organization to meet its objectives, people are employed in the organization in order to help the organization meet its objectives. Thus, in order to ensure that people employed in the organization perform optimally towards the realization of organisational goal, they need to be motivated to work. Motivating people to work entails meeting their needs. Broadly, labour productivity is affected by external and internal factors, representing those outside the control of the firm's management and those originating within the firm respectively (Chigara & Moyo, 2014) identified the factors with significant impact on labour productivity in descending order of importance are as follows: unavailability of material, late payment of salaries and wages, suitability of plant and equipment, supervisory incompetence, lack of manpower skills, lack of labour experience, plant breakdown, late delivery of material, shortage of tools and equipment, and low remuneration.

Kuroshi and Lawal (2014) indicate that there are five factors having the most negative effect on labour productivity. These are project management style and harmony, inadequate method of construction, low level of motivation and commitment, level of familiarity with current job and condition, and frequent changes in design and scope of work. Also, their results indicate that the factors with low impact on labour productivity are late payments, low level of staff turnover, health of workforce, unsuitability of material storage location, and poor condition of equipment and tools. The top ten ranked factors affecting the efficiency of operatives in Egypt are as follows payment delay, skill of labour, shortage of experienced labour, lack of labour supervision, motivation of labour, working overtime, construction managers lack of leadership, high humidity, clarity of technical specification, high/low temperature (Hafez, Aziz, Morgan, Abdullah, & Ahmed, 2014).Motivation is the most critical factor affecting the labour productivity on site. It is thus, ranked the first as the most significant factor.

Recognition and award of excellence were reported to motivate workers on site. However, the financial incentive is more important than all other forms of incentives (Muhammad, Sani, Muhammad, Balubaid, Egba, & Suleiman, 2015).Since labour productivity involved the management of labour, project supervisors/engineers often regarded as middle level managers are responsible for the coordination of the instructions from upper-level managers for implementation by the craftsmen. These instructions equally affect construction labour productivity. Therefore, project supervisors/engineers are considered to be an important member of the project team who relates and implements management's issues and decisions that affect construction labour productivity (Odesola, Otali, & Ikediashi, 2013).

Study by Maduka and Okafor (2014) found 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 benefit 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. Some people 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 Nigeria construction industry.

3.0 Materials and Method of Data Collection

In this study, data were gathered by administering questionnaire to people of allied professionals in the Nigerian construction industry, which was distributed to professionals in the construction industry which are Quantity surveyor, Architect, Builders, Structural Engineer and others, that have practiced for at least 15years in Lagos state, Nigeria. A total of 80 questionnaires were distributed.Seventy (70) copies of research questionnaire were distributed, fifty (50) were collected back from the respondent during the field work. The information gotten were analysed and interpreted below using frequency tables 3.

Table 3: Distribution of Questionnaire

Variable	Frequency	Percentage
Administered Questionnaire	70	100
Returned Sample	50	71
Not Returned Sample	20	29

Source: Field Survey, 2021

Table 4.2 above shows the number of questionnaires distributed to the respondents, 70 copies of questionnaire were distributed to the respondents, 50(71%) were returned while 20(29%) were not returned. This implies that the researcher recorded 50 questionnaires for data analysis.

4.0 Findings and Discussions

This section present result of findings related to the effects of motivation on production operatives in the Nigerian construction industry. On the issues related, the nature of the business of the respondents' firm as shown on the table indicates that 46% of respondents work for contracting firm, 32% for consultancy firm, while 22% works for client organisation. The age of firm/company of respondents reveals that 36% of respondents were working for company that is less than 10years old, 24% for 11-20years and over 30years old, while 16% were working for company that is 21-30years old. The table 4.1 above also reveals that 44% of respondents were working in a Private Liability Company (Ltd) while 16% were working in Partnership, Public Liability Company (PLC) and Public Sector (Government Agencies) and 8% were working as sole proprietorship.

Table 4.1: Respondents' Demographic and Organisational Characteristics

S/N	Demographic Characteristics	Frequency	Percentage	Total %
1	Profession (N = 50)			
	Architect	9	18.0	
	Civil/Structural Engineer	12	24.0	
	Mechanical/Electrical Engineer	6	12.0	
	Quantity Surveyor	11	22.0	
	Builder	12	24.0	100.0
2	Gender (N = 50)			
	Male	37	74.0	
	Female	13	26.0	100.0
3	Academic Qualification (N = 50)			
	ND	5	10.0	
	HND	17	34.0	
	B.Sc.	14	28.0	
	M.Sc.	10	20.0	
	PhD	4	8.0	100.0
4	Professional Qualification (N = 50)			
	MNIQS	10	20.0	
	MNIOB	12	24.0	
	MNIA	9	18.0	
	MNSE	15	30.0	
	Others	4	8.0	100.0
5	Years of Working Experience (N = 50)			
	≤10years	22	44.0	
	11-20years	18	36.0	
	21-30years	9	18.0	
	>30years	1	2.0	100.0
6	Nature of respondents' organisation (N = 50)			
	Consultancy	16	32.0	
	Contracting	23	46.0	
	Client	11	22.0	100.0
7	Age of Company (N = 50)			
	≤10years	12	24.0	
	11-20years	18	36.0	
	21-30years	8	16.0	

	>30years	12	24.0	100.0
8	Form of Ownership of Company (N = 50)			
	Sole proprietorship	4	8.0	
	Partnership	8	16.0	
	Private Liability company (Ltd)	22	44.0	
	Public Liability Company (PLC)	8	16.0	
	Public Sector (Government Agencies)	8	16.0	100.0

Source: Field Survey, 2021

On the issues related the factors which motivates operatives towards improved productivity study on table 4.2 shows the relative importance indices (RII) and ranking of intrinsic factors which motivates operatives towards improved productivity. In the ranking, it was observed that the work itself is the most important factor which motivates operatives with a mean item score of 4.80. Interest on the job and potential for personal growth were ranked second and third with the mean item score of 4.18 and 3.82 respectively.

Table 4.2: Ranking of intrinsic motivational factors

S/N	Intrinsic	5	4	3	2	1	RII	Rank
1	The work itself	10	21	15	3	0	4.80	1
2	Interest on the job	22	19	6	2	1	4.18	2
3	Potential for personal growth	10	26	10	3	1	3.82	3
4	Achievement	14	18	14	2	2	3.80	4
5	A sense of job security	10	21	14	5	0	3.72	5
6	New experience	10	20	17	2	1	3.72	6
7	Relation with co-worker (union)	10	17	20	2	1	3.66	7
8	Responsibility	12	15	16	4	3	3.58	8
9	Opportunity for advancement	4	20	18	7	1	3.38	9
10	Recognition	4	19	19	7	1	3.36	10
11	Individual importance	7	15	16	12	0	3.34	11

Source: Field Survey, 2016

Table 4.3 shows the relative importance indices (RII) and ranking of extrinsic factors which motivate operatives towards improved productivity. In the ranking, it was observed that increase in salary is the most important factor which motivates operatives followed by promotion with a mean item score of 4.24. Compensation and health care services were ranked third and fourth with the mean item score of 4.00 and 3.84 respectively.

Table 4.3: Ranking of extrinsic motivational factors

S/N	Extrinsic	5	4	3	2	1	RII	Rank
1	Increase in salary	24	17	6	3	0	4.24	1
2	Promotion	22	18	10	0	0	4.24	2
3	Compensation	19	17	11	1	2	4.00	3
4	Health care services	14	18	15	2	1	3.84	4
5	Provision of transportation facility	10	22	14	2	2	3.72	5
6	Company policy	9	20	18	3	0	3.70	6
7	Working condition	12	17	15	5	1	3.68	7

8	Holiday abroad with pay	13	16	9	7	5	3.50	8
9	Fairness of reward	6	19	19	4	2	3.46	9
10	Worker evaluation of equity	6	17	22	3	2	3.44	10
11	Fringe benefits	4	22	18	4	2	3.44	11
12	Sharing profit	9	17	14	6	4	3.42	12
13	Telephone services	7	10	17	11	7	3.06	13

Source: Field Survey, 2021

Table 4.4 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 fourth factor is interest on the job which is an intrinsic motivational factor with a mean item score of 4.18.This indicates that the work itself is the most critical motivational factor that motivates operatives towards improved productivity. This means when a task offers the opportunity for self-expression, personal satisfaction, and meaningful challenge, operatives are likely to undertake the task with enthusiasm.

Table 4.4: 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 facility	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, 2021

This study found that construction itself is 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 are 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 finding of this research also showed that inadequate planning is the most important problem associated with the motivation of operatives. This is a confirmation of the rankings in Table 4.6. This indicates that if management of contracting firms in Nigeria plan adequately, operatives will be motivated to work.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 (see table 4.3-4.4).

5.0 Conclusion and Recommendations

This paper discusses the effect of motivation on the productivity of workers in the Nigerian construction industry. In this study, 24 factors which motivate operatives towards improved productivity in the construction industry of Nigeria were examined by bringing them together in two types that is, intrinsic and extrinsic motivational factor. From the obtained result, it is clear that intrinsic factors have stronger effect than extrinsic factors in motivating operatives. This paper concluded that the work itself is the most critical motivational factor that motivates operatives towards improved productivity.

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 Output. 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 the study, the following are recommended:

i. Operatives 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,

ii. 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.

iii. Proper management of construction organizations should consider the significance of properly understanding the motivational needs of construction industry workers,

iv. Salary and incentives of operatives should be improved upon when due in order to ensure better job management,

v. Hard working, talented and ambitious workers should be given promotion and awards based on their performance, and

vi. Management should increase labours wage rate, should reward them and should also give them bonuses. Moreover, some financial aid should be given to labours. In this way they will take interest in their job and in returns productivity improves.

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