

## **Effect of Motivation Schemes on Construction Workers Performance in Abuja Nigeria**

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### **Abstract**

The concept of construction productivity and the need for motivational incentive schemes towards improving the performance of construction workers has long been established. The choice of a motivational scheme either financial or non-financial and its level of contribution to the performance and productivity of construction workers have not been adequately addressed. Therefore, this study aimed at assessing the perception of professionals on the effects of motivation schemes on workers performance among various construction firms in Abuja Nigeria. Quantitative methodology was used, involving the use of questionnaires to obtain data from respondents. Data collected was analysed to obtain the RII for each motivation schemes. Results revealed that the various motivational schemes have a strong effect on workers performance with bonus schemes and overtime allowance having the highest effect on workers performance. It is therefore recommended that construction firms should have a clear and standardized welfare reward system for workers to make them more valuable and contributors to the success of the firms. This will greatly improve their performance in the construction firms

**Keywords:** Abuja; Construction; Effect; Motivation; Performance; Schemes; Workers

### **1. Introduction**

The output of construction industry constitutes one half of the gross capital and three to eight percent of the gross domestic product (GDP) in most countries (Aiyetan and Olotuah 2006). According to Mee-Edoye and Andawei (2002) employees in civil and building construction industry of a country are the largest. These workers input however determine the direction in terms of performance of the industry. Hence it follows that they must be motivated in order to put the industry in the right level of performance. People play an effective role in the effective utilization of other resources during project; hence improving the productivity of the personnel on the project can have significant improvement on the project outcome. It shows that for an organization performance to be enhanced, the workers and management of that organization must be motivated (Ibironke et al, 2011).

All construction activities are run by workers, it is risky for the firms to have de-motivated workers as it affects their performance in their various roles in the construction process (Adedeji, 2008). The degree and extent to which the lack or absence of motivational schemes influence construction workers performance in the Nigerian construction industry as well as in other developing countries is of great concern globally (Mee-Edoiye and Andawei 2002). According to Ibironke et al. (2011), Lack of motivational scheme reduces workers' performance and therefore affects the quality of the final product. Unmotivated workers tend to make only minimal effort with a commensurate lowering of potential overall output and quality of work (Dalhatu et al.,2012). The decline in workers performance due to the lack or absence of motivational scheme causes the failure of the building industry to deliver projects timely (Aiyetan and Olotuah, 2006). This study focused on the effects of motivational schemes on construction workers performance in Abuja Nigeria. Therefore, this study intends to provide answers to the following research questions which include:

1. What are the various motivational schemes in construction firms?
2. What is the perception of professionals on effects of the motivational schemes on workers in the construction firms?
3. What are the effects of the motivational schemes on workers performance?

## 2. Literature appraisal

### 2.1 Motivation

Motivation means an inner wholesome desire to exert effort without the external stimulus of money (Ibironke et al., 2011). According to Thwala and Monese (2011), it is the ability of indoctrinating the personnel with a unity of purpose and maintaining a continuing harmonious relationship of all people. Mohammed and Abdullahi (2011) asserted that motivation is the inner drive that pushes individuals to act or perform. Motivated employees normally perform better which results in productivity and lower labour turnover rates. Moreover, highly motivated workers strive to produce at the highest level possible and exert greater effort than employees who are not motivated (Nnenna and Wilfred 2011). Employee motivation is one of the strategies for managers to enhance effective job performance among workers in organizations. Motivating is the management process of influencing behaviour based on the knowledge of what makes people think (Mohammed and Abdullahi, 2011).

### 2.2 Motivational schemes

According to Marisa (2011), motivational schemes are rewards given to a single person or multiple persons that cause them to respond with specific behaviours. Fagbenle (2000) defined motivational schemes as positive or vice versa, could also be monetary, or non-financial, which are given to outstanding personnel, supervisors, or top officials as a reward for enhanced performance. adeyinka et al, (2007) asserted that schemes used for motivating workers include: salary, wages and conditions of service, money, staff training, information availability and communication. Similarly, Nwagbara and Akanji (2012) identified childcare support, profit sharing, special allowance, medical fee, and employee pension as motivational schemes needed to foster workers performance. Common motivational schemes used in construction include: task rotation, total quality. management, work rest cycle/break, combined task, increased decision-making opportunity for workers, training programs, self-managed gangs, workers participation in site meetings (Adamu, 2016).

### 2.3 Construction workers and performance

Construction workers are skilled individuals involved in construction activities from the starting stage to completion of building work (Akrani 2011). Similarly, Srivastava and Kailash (2011) define construction worker as that individual person that performs and execute construction activities work for his living. According to Lawal et al, (2014), skilled construction workers are professionals like architects, engineers, surveyors that design, estimate and build structures with the aid of artisans and labourers to arrive client requirements within stipulated cost and scope.

On the contrary, Adamu (2016) defines performance as the act of executing job duties with effectiveness, efficiency and quality output within the stipulated timeframe to meet client's needs. Similarly, according to Marisa (2011), performance is about behaviour or what employees do, and not what employees produce or the outcomes of their work. Performance is an effort along with the ability to put efforts supported with the organisational policies in order to achieve certain objectives.

## 3. Research methodology

Mixed research methodology was used which involves the use of questionnaire and interview to obtain data. Questionnaire backed with interview was used to collect data on the effect of motivational schemes on construction workers performance. The population of this study is managers of 245 officially registered building firms in Abuja Nigeria which was obtained from the Federal Inland Revenue Service. Since not all the professionals could be included in the study a purposive sampling technique was adopted. This involves the deliberate selection of 61 professionals in the building firms to constitute the sample size for this research work. The professionals selected include 19 Architects, 17 Builders, 14 civil engineers and 11 surveyors.

## 4. Data presentation and analysis

There are various motivational schemes projects as posited in various literatures. Respondents were requested to choose in terms of relevance among the motivational schemes as seen in Table 1.

Table 1: Level Importance of Motivational Schemes (Field survey, 2020)

S/N	Types of motivation scheme	Weightng/response frequency									
		1	2	3	4	5	( $\Sigma f$ )	$\Sigma fx$	MEAN	RII	RANK
1	Special allowance	18	-	-	21	32	61	252	4.13	0.83	1 <sup>st</sup>
2	Overtime allowance	14	-	-	16	31	61	233	3.82	0.76	3 <sup>rd</sup>

3	Training	15	-	-	17	29	61	228	3.74	0.75	4 <sup>th</sup>
4	Bonus scheme	17	-	-	16	28	61	221	3.62	0.72	5 <sup>th</sup>
5	Leave days and promotions	13	-	4	15	29	61	230	3.77	0.75	4 <sup>th</sup>
6	Transport fee	12	-	5	17	27	61	230	3.77	0.75	4 <sup>th</sup>
7	Employee pension	10	-	-	26	25	61	239	3.91	0.78	2 <sup>nd</sup>
8	End of year package	18	-	-	20	23	61	213	3.49	0.70	8 <sup>th</sup>
9	Profit sharing	23	-	-	18	20	61	195	3.20	0.63	11 <sup>th</sup>
10	Free lunch	25	-	-	15	21	61	190	3.11	0.62	12 <sup>th</sup>
11	Childcare support	23	-	-	17	21	61	196	3.21	0.64	10 <sup>th</sup>
12	Employee shareholding	21	-	-	21	19	61	200	3.28	0.66	9 <sup>th</sup>
13	Medical fee	25	-	-	20	16	61	185	3.03	0.61	13 <sup>th</sup>

#### 4.1 Perception of professionals on the effects of motivational schemes

Qualitative data on the effects of Motivational Schemes as posited by the various professionals were used to choose in terms of relevance of the effects of motivational schemes as shown in the Table 2.

Table 2: Effects of motivation schemes (Field survey, 2020)

S/No	Effects of motivation scheme	5	4	3	2	1	$\Sigma f$	$\Sigma fx$	Mean	RII	RANK
1	Promotes consistency	36	20	5	-	-	61	275	4.50	0.90	7 <sup>th</sup>
2	High quality performance	43	18	-	-	-	61	287	4.70	0.94	4 <sup>th</sup>
3	improved productivity	48	13	-	-	-	61	292	4.80	0.96	2 <sup>nd</sup>
4	Dedication to work	51	6	4	-	-	61	291	4.80	0.96	2 <sup>nd</sup>
5	Accountability	11	31	14	5	-	61	231	3.79	0.76	8 <sup>th</sup>
6	Reduction in project completion time	13	20	11	5	13	61	201	3.29	0.66	10 <sup>th</sup>
7	Increase in customer satisfaction	11	25	15	10	-	61	220	3.60	0.72	9 <sup>th</sup>
8	Increase in workers morale and teamwork	57	4	-	-	-	61	301	4.93	0.99	1 <sup>st</sup>
9	Job satisfaction	45	10	6	-	-	61	283	4.64	0.93	5 <sup>th</sup>
10	Improved execution	39	16	6	-	-	61	277	4.54	0.91	6 <sup>th</sup>

#### 4.2 Effect of motivational schemes on workers performance (regression analysis)

The outputs in the table below shows a multiple regression to establish the effect of motivational schemes on workers performance.

Table 3: Model summary

Model	R	R Square
1	.969 <sup>a</sup>	.940

Table 4: Coefficients

Model (Independent Variables)	Unstandardized Coefficients	
	B	Sig.
(Constant)	.928	.000
Special Allowance	.894	.000
Overtime Allowance	.874	.000
Training	.759	.000
Bonus Allowance	.616	.000
Leave Days and Promotion	.034	.943
Transport Fee	.306	.769
Employee Pension	.218	.025
End of Year Package	.241	.036

Profit Sharing	.072	.842
Free Lunch	.063	.600
Childcare Support	.070	.367
Employee Shareholding	.256	.002
Medical Fee	.194	.030

a -Dependent Variable: Workers Performance

R -Represent the relationship between dependent and all the independent variables.

R2- Represent how much of the depend variable can be explained by the independent variable

B -Represent co-efficient of the independent variable

Sig. -Represent the statistical significant level of the model

## 5. Discussion of results

From the survey carried out, it is impressive to know that the various motivational schemes have high RII rating as it is above 0.60. The respondents ranked "Special allowance" with a very high RII rating of 0.83 as the most important motivational scheme, while "Medical fee" was the least important motivational schemes with rating of 0.61.

From the survey on the effects of motivational schemes the respondents' ranked "Increase in workers morale and teamwork" as the most relevant effect of motivational schemes with a very high RII value of 0.99. Reduction in project completion time was ranked as the least effect with RII value of 0.66. The regression equation is therefore

$$y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 \quad (1)$$

When the values from the table are computed, the equation becomes:

$$y = 0.928 + 0.894 (x_1) + 0.874 (x_2) + 0.759 (x_3) + 0.616 (x_4) + 0.034 (x_5) + 0.306 (x_6) + 0.218 (x_7) + 0.241 (x_8) + 0.072 (x_9) + 0.063 (x_{10}) + 0.070 (x_{11}) + 0.256 (x_{12}) + 0.194 (x_{13})$$

From the equation, it was discovered that motivation had a strong relationship with performance. The correlation value was 0.969 which is considered a strong relationship because the value is above 0.70 (Jarad, 2011). The value was also positive indicating that, when the independent variables increase dependent variable also increases and vice versa. R Square indicates that 94% (0.940) of Workers performance could be explain using the independent variables. From the analysis the co-efficient values for Special Allowance and Overtime Allowance have highest co-efficient values of 0.894 and 0.874 respectively. This means that all things being equal, when the other twelve independent variables are held constant, Workers performance would increase by 89.4% if there is 100% improvement in Special Allowance. This was statistically significant (0.00<0.05) i.e. the variable (Special Allowance) is making a significant unique contribution to the prediction of the dependent variable (Workers performance) while for Overtime Allowance it means that all things being equal, when the other twelve independent variables are held constant, Workers performance would increase by 87.4% if there is 100% improvement in Overtime Allowance. This was statistically significant (0.00<0.05) i.e. the variable (Overtime Allowance) is making a significant unique contribution to the prediction of the dependent variable (Workers performance). Free Lunch has the least co-efficient values of 0.063. This means that all things being equal, when the other twelve independent variables are held constant, Workers performance would increase by 6.3% if there is 100% improvement in Free Lunch. This was statistically insignificant because it has value more than 0.05 i.e. the variable (Free Lunch) is not making any unique contribution to the prediction of Workers performance.

## 6. Conclusion and recommendations

The various motivational schemes were identified from literature survey while the effects posited by the professionals and were used to obtain data. RII was used for data analysis with "Special allowance" identified as the most important motivational scheme in the construction firms, while Increase in workers morale and teamwork" was perceived to be the most relevant of effect motivational schemes of on workers. Also, the regression analysis shows that motivation has a strong effect on workers performance while analysis the co-efficient has the strongest effect on workers performance. Construction firms should have a clear and standardized welfare reward system for workers to make them more valuable and contributors to the success of the firms.

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