Analysis of Factors Influencing the Selection of Incentive Schemes in Selected Construction Firms in Lagos State, Nigeria

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ABSTRACT

The management of construction firms use incentive schemes to motivate workers to be more productive. In doing this, different incentive schemes motivate workers differently, and their selection process also impacts the schemes. Their selection process has been rarely studied. Therefore, this study investigated the methods employed by firms to select incentive schemes and the factors influencing the methods. One hundred and four project managers of randomly selected construction firms were asked to indicate the methods they employed in selecting incentive schemes and the factors that influenced their choice. Findings revealed that incentive schemes were majorly selected by construction firms through discretion, tradition, study-based selection and selection based on performance measurement. Furthermore, construction firms' selection of incentive schemes by tradition was influenced by capacity of company to pay, culture and nature of task; selection by discretion was influenced by fluctuation in production, timing, and system of governance; selection based on performance measurement was influenced by availability of standardized work measurement technique, adequacy of work and cost benefit analysis; and the study-based selection was influenced by system of governance and strategy, cost and benefit analysis and adequacy of work. The study therefore emphasized the need for construction firms to understand and critically examine the factors that influence the selection of incentive schemes in order to achieve optimum effectiveness in their use.

Key words: Incentive Schemes, Incentive Schemes Selection Methods, Factors influencing incentive Selection Methods.

1. INTRODUCTION

The use of incentives to motivate workers has become an integral component of the development of most construction firms in the world. All construction firms offer one or more variant of incentives to workers the sole purpose of boosting the economy of construction (Aina and Adesanya, 2011).

Incentive as defined by Heathfield (2013) is an item of value, desired action or event that stimulates workers to do more of whatever is encouraged by the employer through the selected incentive scheme. Bubshait (2003) described incentives as rewards given to workers for their extra performance. Eriksson (2011), also viewed incentives as tools for influencing individual behavior.

The construction industry employs a number of incentives to suit its workers. Harris and McCaffer (2005), classified incentives used in the construction industry as non-financial or semi-financial incentives applied to managerial and clerical workers, and financial incentives for manual workers. Incentive schemes therefore represent plans for rewarding workers for their extra performance in relation to a set of objectives.

Construction workers represent a very important asset in the construction industry. The ability of a company and its effectiveness in retaining its employee is associated with its ability to recognize the contributions of its workers to the achievement of the company's goal (Wang, 2003). Effectiveness in the recognition of workers' contribution can therefore be achieved through appropriate selection of incentive schemes.

A major challenge faced by construction firms is related to decision on how to select incentive schemes, and what factors to consider in the selection of the schemes (Aina and Adesanya, 2011). Several studies revealed that incentive schemes are greatly affected by how they are selected. Kohn (1995), submitted that most construction firms select incentive schemes haphazardly because of lack of time in investigating connections between productivity and workplace morale. Furthermore, Cox, et al. (2010), suggested negligence towards psychological factors as another reason for abuse of incentive schemes. Consequently, the need to examine the methods employed by firms in selecting incentive schemes and the factors influencing their choice of methods has thus become important.

From the foregoing, it is therefore imperative to study the methods of selecting incentive schemes in the construction industry and the factors influencing the choice of methods with a view to improving the efficiency in the use of these schemes. Despite the extensive use of incentive schemes in construction firms, studies have not examined the methods of selecting and the factors influencing the selection of these incentive schemes, hence this study.

2. SELECTION OF INCENTIVE SCHEMES IN THE CONSTRUCTION INDUSTRY

The need to achieve maximum efficiency in the use of labour for the sole purpose of boosting productivity has brought about the need for incentives. Incentive is a tool for stimulating human effort; people are encouraged to give out their best by inducing them to greater and more productive effort (Duleep, 2004). Incentive schemes are programmes developed purposely to encourage a specific course of action or stimulate workers to behave in a particular manner.

Baumgarten (2013), submitted that a successful incentive scheme focuses on achieving organizational goals by driving the right behavior in employees. Since incentive schemes are a link between workers and considerable changes in their productivity, care needs to be taken in their selection. A key benefit derivable from appropriate selection of incentive schemes is that workers meet their physical and financial goals while organizations become more valuable and marketable.

A study conducted by Heathfield (2013), revealed that while some incentives can be dealt with quickly at an operational level, some will require an important consideration of the methods for selecting the schemes for their use; and a prominent reason for the failure of incentive schemes is that organizations do not take into account the methods of selecting these schemes. Gregorio (2006), reported that the first issue with incentive schemes commonly used in the United State's construction industry is that they are predominantly discretionary. He claimed that seventy five percent of respondents in his studies indicated that their incentives were determined by senior management's discretion. He further claimed that senior management of organizations decides what incentive will be of any tangible benefit to organizational performance, divisional contribution or individual achievements based on self judgement.

Burgess and Metcalfe (1999), argued that selection of incentive schemes by subjective performance has a problem of being non-verifiable since selection is based on subjective evaluation which is at risk of falsification by the superior officers. Furthermore, this is likely to be particularly a problem in cases where extra pay associated with a good report comes directly from the assessor's budget.

The importance of considering the selection of incentive schemes is inherent in the advantages and disadvantages manifested by incentives upon use. According to McQuerrey (2012), incentive schemes could result to increase in the volume of output; reduction of cost of production per unit; reduction of labour turnover and idle time. Aaronson (2012), argued that while incentive schemes may have some benefits, it could deteriorate the quality of production output; affect the introduction of improved methods; and increase the number of clerical work due to calculations involved in computing incentive earnings. Most of these draw backs in the use of incentive schemes could be avoided when incentive schemes are selected using appropriate methods.

Studies conducted by Daniel and Gary (2006), Gregori (2006) and McGinnis and Keng (2012) have identified a number of methods employed by organizations in selecting incentive schemes. They include: selection by tradition; study-based selection; selection by discretion; selection based on performance measurement, selection based on large group measure; selection by subjective performance measure; and selection by broad financial measure.

Selection of incentive schemes by performance measure is based upon supervisors' perception of employee's performance rather than objective results; selection of incentive schemes by tradition involves selection based on the assumption that incentive schemes once adopted by an organization will most likely continue to work for the organization; selection of incentive schemes based on performance measurement makes use of objective data from employees performance and bases its selection on a well defined and understood formulae; selection based on large group measure involves selection based on large group results from employees. Incentive schemes selected through this method include the profit sharing and gain sharing schemes (Gregori, 2006). Furthermore, selection based on broad financial measure entails selecting incentive schemes based on broad financial results such as return on equity, return on assets, e.t.c. Daniel and Gary (2006), argued that employees should not be evaluated or paid for results he or she has little or no impact upon. Lastly, selection by discretion involves selection based on management's judgement where selection measure, criteria, and pay potential are unpredictable and change frequently.

The choice of methods adopted by organizations is greatly influenced by a number of factors. Hottman (2002), listed the factors influencing the choice of methods for selecting of incentive schemes as: composition of workforce, culture, external environment, system of governance and strategy, types, incentive scheme's objective, cost and benefit analysis, timing, availability of standardized work measurement techniques, adequacy of work, availability of equitable wage structure, availability of improved and simplified work methods, presence of new workers, fluctuations in production, nature of tasks, financial capacity of the company, incentives scheme's term, level of understanding of incentive schemes by workers and the need for completion of tasks.

3. The Study Settings

Lagos State is an administrative division of Nigeria, located in the southwestern part of Nigeria. Situated in the south-western corner of the country, this elongated state spans the Guinea coast of the Atlantic Ocean for over 180km., from the Republic of Benin on the west to its boundary with Ogun state in the east. It extends approximately from latitude 6°2'North to 6°4'North, and from longitude 2°45'East to 4°20'East. Of its total area of 3,577sq. km., about 787sq. km. or 22 percent is water.

The smallest in area of Nigeria's states; Lagos State is the most populous state in the country with a total population of 10,788,000 (UN figure, 2014) and arguably the most economically important state of the country, containing Lagos, the nation's largest urban area. In 2003 many of the existing 20 Local Government Areas were split for administrative purposes into Local Council Development Areas. These lower-tier administrative units now number 56: Agbado/Oke-Odo, Agboyi/Ketu, Agege, Ajeromi, Alimosho e.t.c. The State is usually referred to as the financial and business capital of Nigeria. Therefore, due to the many business activities in the State, there is a high concentration of construction activities in the state; the state thus represents a valid environment to direct this study.

4. METHODS OF DATA COLLECTION AND ANALYSES

The study utilized primary data obtained through questionnaire administration on project managers of construction firms. To ascertain the suitability of respondents to supply relevant data, information on the nature of work undertaken by respondent, scope of operation, and size of respondent's firm were sought. Information on the methods employed by construction firms in selecting incentive schemes and the factors influencing the choice of the methods of selecting incentive schemes were also sourced.

This study utilized primary data generated through questionnaire survey. The questionnaires were administered on one hundred and four (104) project managers of forty (40) construction firms selected randomly from the sixty six construction firms in Lagos State that were registered with the Federation of Construction Industry (FOCI). Data obtained on the methods of selecting incentive schemes and the factors influencing the choice of methods of selecting incentive schemes were analyzed using frequency, percentages, mean, standard deviation and Spearman's Rank Order Correlation.

In order to evaluate the methods employed by firms in selecting incentive schemes, management of construction firms were required to rank the methods they employ in selecting incentive schemes on a likert scale of: always employed, often employed, sometimes employed, rarely employed and never employed. Data collected were analysed using Mean Index adapted from Ojo, et al., (2011).

To arrive at the Mean Index, the ratings respectively were assigned a value of 4, 3,2,1,0. The Total Weight Value (TWV) for each method was obtained through the summation of the product of the number of responses for each rating to a method and the respective weight value expressed mathematically as:

$$TWV = \sum_{i=0}^{4} P_i V_i$$

Where: TWV = Total Weight Value

P_i = Number of respondents assigned method i;

V_i = Weight assigned to method i.

The Mean Index employed to arrive at each method was calculated by dividing TWV by the summation of the respondents to each of the five ratings. This is expressed mathematically as:

$$MI = \frac{TWV}{\sum_{i=0}^{4} P_i}$$

Where: MI = Mean Index

In order to evaluate the factors influencing the choice o f methods adopted by firms in selecting incentive schemes, firms were asked to rank the factors influencing the choice of methods of selecting incentive schemes on a likert scale of: extremely significant, very significant, moderately significant, slightly significant and non significant. To arrive at the Incentive Schemes Selection Factor Index (ISSFI), the ratings earlier stated respectively were assigned values 4, 3, 2, 1, 0. The Total Weight Value (TWV) for each factor was obtained through the summation of the product of the number of responses for each rating to a factor and the respective weight value expressed mathematically as:

$$TWV = \sum_{i=0}^{4} P_i V_i$$

Where: TWV = Total Weight Value

P_i = Number of respondents assigned to factor i;

V_i = Weight assigned to factor i.

The Incentive Schemes Selection Factor Index (ISSFI) employed to arrive at each method was calculated by dividing TWV by the summation of the number of respondents to each of the five ratings. This is expressed mathematically as:

$$ISSFI = \frac{TWV}{\sum_{i=0}^{4} P_i}$$

Where: ISSFI = Incentive Schemes Selection Factor Index

Furthermore, the spearman's Rank Order Correlation variant of the bivariate correlation was employed in determining the factor(s) that influence each method of selecting incentive schemes. The Spearman's Rank Order Correlation was employed for this analysis because data were obtained using the ordinal scale. The Spearman's Rank Order Correlation Coefficient is denoted
by ρ (rho), and it is expressed mathematically as:

$$\rho = \frac{16 \sum d^2}{n(n^2 1)}$$

Where:

ρ = rho rank correlation

d = distance between corresponding ranks

n = number of observations

5.0   RESEARCH FINDINGS

The research findings are summarized presented under the sub-headings below:

5.1   Respondent's Demographic Attributes

Summarized in table 1 are attributes of the respondents in the study area. These are the number of respondent per firm, nature of work undertaken by firms, and scope of operation of respondents.

Investigation into the respondent's firm indicated that out of the one hundred and four (104) respondents surveyed, thirty nine (39) representing 37.5% of the respondents were from small sized firms; thirty six (36) representing 34.6% of the respondents were from medium sized firms; and twenty nine (29) representing 27.9%

of the respondents were from large sized firms. This result indicates that the three categories of firms in Lagos State were considerably represented in the study.

Investigation into the profession of respondents showed that out of the one hundred and four (104) respondents that provided responses to the questionnaire, twenty two respondents representing 21.2% were Builders; nineteen representing 18.3% were Quantity Surveyors; twenty three representing 22.1% were Engineers and forty representing 38.4% were Architects. The result clearly shows that the respondents were professionally qualified to supply the data necessary for the study.

Investigation into the working experience of respondents showed that out of the one hundred and four (104) respondents that provided responses to the questionnaire, a total of twenty four (24) respondents representing 23.1% have been working with their various firms in less than five (5) years; thirty five (35) respondents representing 33.7% have been working with their firms within the period of six to ten years; twenty two (22) respondents representing 21.2% have been working with their firms within the period of eleven to fifteen years, thirteen representing 12.5% have been working for a period of within sixteen to twenty years while ten (10) representing 9.6% have been working with their various firms for over twenty years.

Investigation into the nature of work undertaken by respondent indicated that out of the one hundred and four (104) respondents that provided responses to the questionnaire, thirty five (35) representing 33.7% undertake Building works only; twenty two (22) representing 21.2% of the firms undertake Civil Engineering works only; while forty seven (47) representing 45.2% undertake both Building and Civil Engineering works.

The scope of operation of respondents was further investigated and the result obtained indicated that fifteen (15) representing 14.4% limited their operations within the state; thirty (30) representing 28.8% limited their operations within the region; forty one (41) representing 39.4% restricted their operations within the nation while eighteen (18) representing 17.3% operates within and outside the country.

Table1: Demographic Attributes of Respondents.

Attribute	Frequency	Percentage
Number of respondents per firm		
Small Sized	39	37.5
Medium Sized	36	34.6
Large Sized	29	27.9
Profession of respondents		
Builder	22	21.2
Quantity Surveyor	19	18.3
Engineer	23	22.1
Architect	40	38.4
Working Experience of Respondents		
< 5	24	23.1
6-10.	35	33.7
11-15.	22	21.2
16-20	13	12.5
> 20	10	9.6
Nature of Work Undertaken by respondent		
Building works only	35	33.7
Civil Engineering works only	22	21.2
Building and Civil Engineering works	47	45.2
Scope of Operation of respondent		
State	15	14.4
Regional	30	28.8
National	41	39.4
Multi-National	18	17.3

5.2   Assessment of the Methods of Selecting Incentive Schemes

Table 2 shows the Mean Index of the overall methods employed by all the firms in the study area. The methods employed by construction firms in selecting incentive schemes within the study area were assessed and the result was displayed in table 4.9. The method with the highest rank was 'selection by discretion' (Mean Index = 2.50); 'selection by performance measurement' was ranked second (Mean Index = 2.30); while third in rank was 'selection by tradition (Mean Index = 2.23) and this was succeeded by 'study-based selection (Mean Index = 2.17). Selection by large group measure (Mean Index =0.95) was ranked lowest among the methods employed

by firms in selecting incentive schemes. Furthermore 'selection based on broad financial measure' (Mean Index = 1.88), and 'selection based on subjective performance measure' (Mean Index = 2.50) were also ranked low.

Table 2. Assessment of the Methods of Selecting Incentive Schemes

S/No	Methods	Mean	Standard Deviation	Rank
1.	Selection by subjective performance	1.88	1.409	5th
2.	Selection by tradition	2.23	1.450	3rd
3.	Study based selection	2.17	1.178	4th
4.	Selection based on performance measurement	2.30	1.253	2nd
5.	Selection based on large group measure	0.95	0.702	7th
6.	Selection based on broad financial measure	1.88	0.784	5th
7.	Selection by discretion	2.50	1.407	1st

Grand Mean = 1.99

Table 3. shows the variation of the Mean Indices of methods employed by firms within the study area in selecting incentive schemes about the grand mean. Two sets of methods were displayed in the table. The first set of methods which were positively deviated from the grand mean are considered to be very significant and are averagely employed by all the firms within the study area in selecting incentive schemes. These methods include: selection by discretion, selection by performance measure, selection by tradition, and study-based selection. Their deviation about the mean ranged between +0.51 and +0.18. The other set of methods have negative deviations about the Grand mean. These methods were selection by subjective performance measure, selection by broad financial measure and selection on large group measure. Their deviation ranged between -1.04 to -.011. These methods are considered as not significant and are rarely employed for the selection of incentive schemes in the study area.

Table 3. Grouping the methods of selecting incentive schemes based on Mean Indices

S/No	Methods	Deviation about Mean Index
1.	Selection by discretion	+0.51
2.	Selection based on performance measurement	+0.31
3.	Selection by tradition	+0.24
4.	Study based selection	+0.18
5.	Selection by subjective performance measure	-0.11
6.	Selection based on broad financial measure	-0.11
7.	Selection based on large group measure	-1.04

Furthermore, this research sought to ascertain the methods of selecting incentive schemes peculiar to each of the categories of firms in the construction industry. In order to achieve the data were sorted out and analyzed based on the size of firms of respondents and the result is displayed in Table 4.

Ranked highest among the methods employed by small sized firms in selecting incentive schemes was selection by discretion (Mean Index = 3.74), next in rank was selection by tradition (Mean Index = 3.69) and this is followed by selection by subjective performance measure. While selection based on large group measure was ranked lowest. The grand mean was 2.23. The methods of selecting incentive schemes with Mean Indices higher than the grand mean were selection by discretion, selection by tradition and selection by subjective performance measure. They have positive deviations +1.51, + 1.46, +1.21 respectively. The result clearly revealed that the methods mostly employed by small sized firms were selection by discretion, selection by tradition and selection by subjective performance measure.

The method adopted by medium sized firms in selecting incentive schemes with the highest Mean Index was selection by performance measure (Mean Index = 2.58), next in rank was study- based selection and selection by broad financial measure both with the same Mean Index (2.31), while selection subjective performance measure (Mean Index = 0.94) was ranked lowest. The grand mean was 1.87. The methods of selecting incentive schemes with Mean Indices higher than the grand mean were selection by selection by performance measurement, study-based selection, selection by discretion and selection by broad financial measure with positive deviations +0.71 + 0.44, +0.44, +0.41 respectively. The result also revealed that the methods mostly employed by medium sized

firms were selection by performance measurement, study-based selection, selection by discretion and selection by broad financial measure.

However, the method adopted by large firms in selecting incentive schemes with the highest Mean Index was selection by performance measurement (Mean Index = 3.48), next in rank was study-based selection (Mean Index = 3.34) and selection by broad financial measure (Mean Index = 2.0), while selection by large group measure (Mean Index = 0.66) was ranked lowest. The methods of selecting incentive schemes with Mean Indices higher than the grand mean were selection by study-based selection, selection by performance measurement, selection by broad financial measure and they have positive deviations +1.42, +1.56, +0.08 respectively. The result revealed that the methods mostly employed by large sized firms were selection by performance measurement, study-based selection, and selection broad financial measure.

Table 4. Mean indices and the deviation of MI about the grand mean of the Methods employed in selecting incentive schemes based on the category of firms.

S/N	Method	Small Sized Firms			Medium Sized firms			Large Sized firms		
		N	Mean	Deviation	N	Mean	Deviation	N	Mean	Deviation
1.	A	39	3.44	+1.21	36	0.94	-0.93	29	1.88	-0.04
2.	B	39	3.69	+1.46	36	1.61	-0.26	29	1.03	-0.89
3.	C	39	1.18	-1.05	36	2.31	+0.44	29	3.34	+1.42
4.	D	39	1.15	-1.08	36	2.58	+0.71	29	3.48	+1.56
5.	E	39	1.05	-1.2	36	1.08	-0.79	29	0.66	-1.26
6.	F	39	1.41	-0.82	36	2.28	+0.41	29	2.00	+0.08
7.	G	39	3.74	+1.51	36	2.31	+0.44	29	1.07	-0.85
Total		Grand Mean = 2.23			Grand Mean = 1.87			Grand Mean = 1.92		

Where: A - Selection by performance measure, B - Selection by tradition, C – Study-based selection, D - Selection by performance measure, E - Selection by large group measure, F - Selection by broad financial measure, G - Selection by discretion.

5.3   Assessment of the Factors influencing the Selection of Incentive Schemes

The result of the correlation analysis in Table 5 shows that there is a strong positive correlation between each of factors: culture (0.584), nature of task (0.585), capacity of company to pay (0.645), adequacy of work (0.630) and selection of incentive schemes by subjective performance measure at 0.01 level of significance whereas, a strong negative exists between each of factors- composition of workforce (0.656), system of governance and strategy (0.626), timing (0.628), presence of new workers (0.473), fluctuations in production (0.666), cost and benefit analysis (0.711), availability of standardized work measurement technique (0.692), availability of equitable wage structure (0.654), level of understanding of schemes by workers (0.594) and selection of incentive schemes by subjective performance measure at 0.01 level of significance The result showed that culture, nature of task, capacity of company to pay, adequacy of work are factors that have high significant influence on the selection of incentive schemes by subjective performance measure and are therefore considered to be the major factors influencing the selection of incentive schemes by subjective performance measure.

Furthermore, there is a strong positive correlation between each of factors- culture (0.560), nature of task (0.491), capacity of company to pay (0.640), and selection of incentive schemes by tradition at 0.01 level of significance; also a strong negative correlation between each of factors- composition of workforce (0.498), system of governance and strategy (0.626), timing (0.617), presence of new workers (0.539), fluctuations in production(0.624), adequacy of work (0.709), cost benefit analysis (0.711), availability of standardized work measurement technique (0.602), availability of equitable wage structure (0.651) , level of understanding of schemes by workers (0.683) and selection by tradition at 0.01 level of significance. The result clearly revealed that culture, nature of task, capacity of company to pay, adequacy of work are factors that have high significant influence on the selection of incentive schemes by tradition and are therefore considered to be the major factors influencing construction firms' selection of incentive schemes by tradition.

A strong positive correlation exists between each of factors- composition of workforce (0.520), system of governance and strategy (0.663), timing (0.639), presence of new workers (0.430), fluctuations in production (0.557), adequacy of work (0.653), cost benefit analysis (0.662), availability of standardized work measurement technique (0.590), availability of equitable wage structure (0.630), incentive term (0.263), level of understanding of schemes by workers (0.578) and the study-based selection of incentive schemes at 0.01 level of significance. Also, a strong negative correlation between each of factors- culture (0.533), nature of task (0.372) and the study-based selection of incentive schemes at the 0.01 level of significance. The result revealed that composition of workforce, system of governance and strategy, timing, presence of new workers, fluctuations in production,

adequacy of work, cost benefit analysis, availability of standardized work measurement technique, availability of equitable wage structure, incentive term, level of understanding of schemes by workers schemes are factors that have high significant influence on the study-based selection of incentive schemes and are therefore considered to be the major factors influencing the study-based selection of incentive by construction firms.

There is a strong positive correlation between each of factors- composition of workforce (0.618), system of governance and strategy (0.623), timing (0.639), presence of new workers (0.480), fluctuations in production (0.549), adequacy of work (0.698), cost benefit analysis (0.641), objective of the scheme (0.239), availability of standardized work measurement technique (0.739), availability of equitable wage structure (0.614), incentive term (0.263), level of understanding of schemes by workers (0.602) and selection of incentive schemes by performance measurement at 0.01 and 0.05 levels of significance; also, a strong negative correlation between each of factors- culture (0.513), nature of task (0.506), capacity of the company to pay (0.652) and the selection of incentive schemes by performance measurement at the 0.01 level of significance. The result clearly revealed that factors- composition of workforce, system of governance and strategy, timing, presence of new workers, fluctuations in production, adequacy of work, cost benefit analysis, objective of the scheme, availability of standardized work measurement technique, availability of equitable wage structure, incentive term, level of understanding of schemes by workers are factors that have high significant influence on the construction firms' selection of incentive schemes by performance measurement and are therefore considered to be the major factors influencing the selection of incentive schemes by performance measurement.

Furthermore, there is a strong positive correlation between each of factors- culture (0.423) and the selection of incentive schemes by large group measure at 0.01 level of significance while a a strong negative correlation exists between factors- composition of workforce (0.193), objective of the scheme (0.239) and selection of incentive schemes by large group measure at 0.05 level of significance. This revealed that culture has a high significant influence on the selection of incentive schemes by large group measure and thus, represents the major factor considered by construction firms when selecting incentive schemes by large group measure.

Also, there is a strong positive correlation between each of factors- composition of workforce (0.324), system of governance and strategy (0.346), incentive type (0.222), timing (0.374), presence of new workers (0.262), fluctuations in production (0.382), adequacy of work (0.315) cost benefit analysis (0.213), availability of standardized work measurement technique (0.317), availability of equitable wage structure (0.372), level of understanding of schemes by workers (0.224) and the selection of incentive schemes by broad financial measure at 0.01 and 0.05 levels of significance while, a strong negative correlation exists between each of factors - nature of tasks (0.440), capacity of company to pay (0.355) and the selection of incentive schemes by broad financial measure at the 0.01 level of significance. This showed that composition of workforce, system of governance and strategy, incentive type, timing, presence of new workers, fluctuations in production, adequacy of work, cost benefit analysis, availability of standardized work measurement technique, availability of equitable wage structure, level of understanding of schemes by workers are factors that have high significant influence on the selection of incentive schemes by broad financial measure and are therefore considered to be the major factors influencing construction firms' selection of incentive schemes by broad financial measure.

Finally, there is a is a strong positive correlation between each of factors- composition of workforce (0.324), system of governance and strategy (0.346), timing (0.374), incentive type (0.222), presence of new workers (0.262), fluctuations in production (0.382), adequacy of work (0.315), level of understanding of schemes by workers (0.224)) and selection of incentive schemes by discretion at 0.01 and 0.05 levels of significance while a strong negative correlation between each of factors- nature of tasks (0.440), capacity of company to pay (0.3555), cost benefit analysis (0.205), availability of standardized work measurement technique (0.317), availability of equitable wage structure (0.372) and selection by discretion at 0.01and 0.05 levels of significance. The result clearly revealed that composition of workforce, system of governance and strategy, timing, incentive type, presence of new workers, fluctuations in production, adequacy of work, level of understanding of schemes by workers are factors that have high significant influence on the selection of incentive schemes by discretion and are therefore, considered to be the major factors influencing construction firms' selection of incentive schemes by discretion.

Table: Correlation analysis of the factors influencing the choice of the methods employed in selecting incentive schemes.

Factor		Method of selecting incentive schemes						
		A (1.88)	B (2.23)	C (2.17)	D (2.30)	E (0.95)	F (1.88)	G (2.50)
Mean								
Composition of workforce	2.72	-0.656**	-0.498**	0.520**	0.618**	-0.193	0.324**	0.324**
Culture	2.57	0.584**	0.560**	-0.533**	-0.513**	0.423	-0.179	-0.179
External environment	3.29	-0.180	-0.282	0.140	0.196	-0.115	0.013	0.013
System of governance and strategy	2.92	-0.626**	-0.626**	0.663**	0.623**	-0.133	0.346**	0.346**
Incentive type	3.57	-0.024	-0.004	0.018	0.041	-0.101	0.222*	0.222*
Timing	2.92	-0.628**	-0.617**	0.639**	0.589**	-0.192	0.374**	0.374**
Nature of task	2.96	0.585**	0.491**	-0.372**	-0.506**	0.037	-0.440**	-0.440**
Presence of new workers	3.18	-0.473**	-0.539**	0.430**	0.480**	-0.077	0.262*	0.262*
Capacity of company to pay	2.34	0.645**	0.640**	-0.609**	-0.652**	0.078	-0.355**	-0.355**
Fluctuations in production	2.35	-0.666**	-0.624**	0.557**	0.549**	-0.065	0.382**	0.382**
Adequacy of work	2.18	0.630**	-0.709**	0.653**	0.698**	-0.154	0.315**	0.315**
Availability of improved and simplified work methods	1.45	0.129	0.092	-0.090	0.071	0.085	-0.189	-0.189
Cost and benefit analysis	2.63	-0.711**	-0.711**	0.662**	0.641**	0.173	0.213*	-0.213*
Objective of the scheme	3.52	-0.060	0.003	0.101	0.239*	-0.239*	-0.080	-0.080
Availability of standardized work measurement technique	2.84	-0.692**	-0.602**	0.590**	0.739**	-0.050	0.317**	-0.317**
Availability of equitable wage structure	2.75	-0.654**	-0.651**	0.630**	0.614**	-0.041	0.372**	-0.372**
Incentive scheme's term	3.64	-0.104	-0.107	0.263**	0.146	-0.171	-0.098	-0.098
Level of understanding of schemes by workers	2.76	-0.594**	-0.683**	0.578**	0.602**	-0.131	0.224*	0.224*
The need for completion of tasks	3.54	-0.006	0.024	0.021	0.010	-0.003	-0.157	0.157

Where: A - Selection by performance measure, B - Selection by tradition, C – Study-based selection, D - Selection by performance measure, E - Selection by large group measure, F - Selection by broad financial measure, G - Selection by discretion
** Correlation at the 0.01 level (2-tailed); *   Correlation at the 0.05 level (1-tailed)

6.0   CONCLUSION AND RECOMMENDATION
This paper has addressed issues on the methods of selecting incentive schemes and the factors that affect the choice of the methods employed by firms in selecting incentives. Faced by the challenge of selecting the right incentive schemes to appropriately incentivize workers, the selection of incentive schemes is an issue that

requires attention. The study showed that selection by discretion, selection by tradition, study-based selection and selection based on performance measurement were the major methods employed by construction firms in selecting incentive schemes. While selection by tradition and selection by discretion were methods majorly employed by small sized firms; study-based selection and selection based on performance measurement were rarely employed by these firms. However, study-based selection and selection based on performance measurement were majorly employed by medium and large sized firms.

The study has also shown that the method adopted by construction firms in selecting incentive schemes is a function of a number of factors. From the analysis of these factors, it can be concluded that construction firms':

  i.   selection of incentive schemes by tradition is majorly influenced by capacity of company to pay, culture and nature of task;

  ii. selection by discretion is majorly influenced by fluctuation in production, timing, and system of governance;

  iii. selection based on performance measurement is majorly influenced by availability of standardized work measurement technique, adequacy of work and cost benefit analysis; and;

  iv. study-based selection is influenced majorly by system of governance and strategy, cost and benefit analysis and adequacy of work.

The study therefore recommends that project managers of construction firms should give attention to methods of selecting incentive schemes that are cost effective and would not have negative results on workers. Furthermore, the factors that influence the selection of incentives should be critically examined before adopting a particular method for incentive schemes selection. This is important to ensure that incentive schemes are put to their optimum use. This has potential benefits to both the employer and the workers.

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