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Development of Motivational Strategies to Enhance Productivity in Small and Medium Scale Construction Firms in Ghana

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Abstract: ***The study sought to recommends and quantifies the effect of the effective motivational strategies on the productivity of small and medium scale construction firms in Ghana. Also to develop a framework for motivating employee of small and medium construction firms. Data collection was through well structured questionnaire administered to 164 respondents selected through simple random and systematic sampling techniques. The methods of analysis used were descriptive statistics and production function analysis using the Ordinary Least Square (OLS) criterion to estimate the parameters of the production function. The result showed that, majority of the respondents, 21% said job security was the most important driving force in their life so long as job is concern. Besides, it was realised that, an increase in the level of some motivational strategies: Job security, Opportunity for further studies, Employers' good relationship with employees, Involving employees in decision making and Employers' recognition of employees will improve productivity by 0.0255, 0.0342, 0.073, 0.067 and 0.036 respectively. A model for motivating employees was also developed base on the results. Workers of all organisations need to be motivated to facilitate their input towards the attainment of organisational goals. Construction workers like all other worker groups need this sort of motivation to enable them give off their best. It's incumbent upon management to be able to identify superior performances and reward them accordingly. This would lead to greater effort towards goal attainment.***

Keywords: Productivity, motivational, Construction, Employers and Employees

1. Introduction

The role construction industries play in a nation's economy cannot be overemphasized and the socio-economic development goals of every country cannot be achieved without the use of constructional activities such as provision of shelter, infrastructure and employment (Anaman and Osei-Amponsah, 2007). In the work of Lopes (1998), it was realised that countries that invest a minimum of 4% of their capital into construction industry stand the chance to grow faster in their Gross Domestic Product (GDP). This shows that there is a direct link between investment in construction and economic growth no wonder several attempts have been made by researchers to address the interdependence between the construction sector and economic development. The construction industry contributes to the achievement of socio-economic development goals in Ghana by the provision of shelter, infrastructure and employment, and above all contributing significantly to the GDP of the country. The industry has consistently provided an average GDP growth of 6.1% to the economy from 2003 to 2008 (IMF, 2009). The construction industry was Ghana's third largest growing economic sector exceeding the manufacturing industry in 2004 with a constant GDP growth of about 5.8 % from 2004 to 2005. This growth increased to 6.1 % by 2006. In 2007, it increased from 6.2% and reached 7.3% in 2008 (ISSER, 2005; IYF, 2009; IMF, 2009; DI, 2009). This is an indication that the industry has a huge potential of leading the path to the economic development of any developing country when well considered. Ghanaian construction industry could be the tool for achieving the infrastructural guidelines of the Millennium Development Goals (MDGs) and the Ghana Poverty Reduction Strategy II (GPRS II) agenda. One of the main agenda of MDGs and GPRS II is to address human development issues. This agenda is achievable by the provision of infrastructure for services and employment through the construction industry if workers' motivation is improved to promote and sustain efficiency.

Ghana is one of the countries flooded with small and medium construction firms, unfortunately the productivity of these small and medium construction firms need much to be desired. This is due to the fact that most of these firms have no motivational package for their workers, those who do, the kind of motivational package used is not yielding better results. Again little or no information is recorded about the kind of motivational strategies used by small and medium construction firms unlike large scale or expatriates firms. The study was design to develop motivational strategy to enhance productivity in small and medium scale construction firms in Ghana. Specifically: to recommend the most effective motivational strategy, to develop a framework for motivating employee and to quantify the effects of the motivational strategies on the productivity of construction firms.

2. Research Methodology

2.1 Study Area

The study was carried out in Ahafo Ano North District in the Ashanti Regional of Ghana. The Ahafo Ano North District is located between Latitude 6˚47'N and 7˚ 02'N and Longitude 2˚ 26'W and 2˚ 04'W. It shares boundaries with six districts, namely Tano North and Tano South to the North, Asutifi North and Asutifi South to the West, Ahafo Ano South District to the East and Atwima Mponua to the South. The 2010 Population and Housing Census indicate that the district covers a total land area of 593.7km^2.

2.2 Sampling Technique

The study used both primary and secondary data. Primary data was mainly cross-sectional. It was collected from eight companies randomly selected from lists of contructors in the district. Population studied included both management and non management staff of small (D3K3) and medium (D2K2) construction firm. A total of 164 workers in eight (8) companies (four small scale construction firms and four medium scale construction firms) in the Ashanti Region were selected for the study. The researcher limited himself toz these firms because of availability of time and resources. The sample size was obtained using multi-stage sampling method. A sample interval of two (2) was arrived at. At the department level, the first person according to their organisational structure was selected and subsequently every second person. This was done for both management and non-management.

2.3 Data Collection

The instrument the researcher used for the collection of data from the respondents was a questionnaire. Two sets of questionnaire were prepared which comprised both close-ended questions and open-ended questions.

2.4 Data Analysis

Descriptive statistics in the form of frequencies and percentages; graph such as pie charts and bar chart were used to describe the bio data; awareness, identification and implication of motivational strategies of the respondents while correlation and the multiple linear regression of the Ordinary Least Squares were used to analyze the impact of motivational strategies on productivity of small and medium construction companies.

Productivity of the respondents was also calculated using the Cobb-Douglas based models:

productivity $= \frac{\text{output}}{\text{input}}$, Jeremy (2011).

Multiple linear regression model was used. The model seeks to find the influence of motivational strategies on productivity in small and medium construction firms.

$PRODUCT=\beta 0+\beta 1COREGOE +\beta 2DECINVO +\beta 3EGODREL +\beta 4FAVWCO +\beta 5FURSTUD +\beta 6GOWAGE +\beta 7JOBSEC +\beta 8MOBOST +\beta 9PRESTIGE +\beta 10PROMO +\beta 11SALINPOL+\varepsilon i$

Where

PRODUCT = Total productivity (measured in cedis) of each respondent.

$\beta 0$ = constant/supporting factor showing the process underlying the time of series.

$\beta 1$, $\beta 2$....., $\beta 11$ = coefficient of predictors..

COREGOE = Company recognition of employees contribution. This is expected to contribute positively to the output of the employee in small and medium construction firms.

DECINVO = Involving employees in affaires concerning their area of work. It is expected to be positive since it affords the employee opportunity to be part the company.

EGODREL = Employers good relationship with employees. It is anticipated to be positive because winning the heart of someone is to relate well with the person.

FAVWCO = Favourable working condition. This is expected to be negative FURSTUD = Opportunity for further studies. It is expected to have a positive impact on the productivity hence its inclusion in the model.

GOWAGE = Employees receiving good wages

JOBSEC = Job security. This gives the employee room not to entertain fear at work and therefore expected to have positive impact on productivity.

MOBOST = Morale boosted when employee involve themselves in challenging work

PRESTIGE = Working with prestigious company

PROMO = Opportunity for promotion. It is expected to be negative

SALINPOL = Salary increase policy for employees. This assures the employees of good times ahead making them to aspire higher hence its inclusion in the model.

εi = is the error term assumed to fulfill all the assumptions of the classical linear regression model.

3. Results and Discussions

3.1Effective motivational strategy for small and medium scale construction firms

To be able to recommend motivational strategy to management of small and medium scale construction industries, employees were asked to come out with strategies that interest and drive them to give off their best at work.

Table 3.1: Preferred motivational strategies of workers

Motivational Strategies	Small Firm		Medium Firm		Total	Total
	f	%	f	%	f_1+f_2	(f_1+f_2) %
Job security	13	19.4	15	22.5	28	21
Salary increase policy	13	19.4	12	17.9	25	19
Further studies	12	17.9	12	17.9	24	18
Involve in decision making	12	17.9	10	14.9	22	16
Good relationship with employee	10	14.9	9	13.4	19	14
Recognition of employee's contribution	7	10.5	9	13.4	16	12
Total	67	100	67	100	134	100

Six motivational strategies came up as shown in table 3.1 above and among these; majority of the respondents, 21% said job security was the most important driving force in their life so long as work is concern. The next was salary increase policy 19%. Opportunity for further studies 18% was listed as third motivating factor with involvement in decision making 16% becoming the forth most preferred motivating factor. Good relationship with employees 14% and recognition of employees' contribution 12% were the fifth and sixth most preferred driving force respectively. Thus all the categories of staff in the companies that is, masonry, carpentry, drivers, security and labourers listed job security as their first priority. This choice is necessary so as to enable satisfy their safety or security needs which are fundamental in humans as identified by Stun in his hierarchy of needs model. The research, to some extend, is concern with the relativity of satisfying employees' needs to their working to achieve higher productivity.

The second best package for employees was salary increase policy. This is a course or action adopted or proposed by an organisation on how employees are to be paid. Company with better salary increase policy rests the minds of employees. The choice of this factor by the respondents was influenced by the need to meet the psychological needs of individual as indicated by Maslow in his hierarchy of needs model. This also ensures internal equity, starting salaries are determined based on the applicant's prior experience and/or education directly related to the position. This is in line with goal theory where equity types are given to employees based on fair pay for equal work. Hellwig and Irmen (2001) as cited in Meager (2011) suggested that a good salary policy increase productivity so much that an output gap open could not be closed. Bester and Petrakis (2003) take a similar view. The ratio of salary policy to labour productivity partly reflects an up skilling of the labour force and improvements in labour productivity (e. g. through the adoption of new technologies). While Bester and Petrakis (2003) assume some kind of dynamic innovation process, there remains ultimately a cost-push effect of salary growth. Hence, long run productivity growth at the level of individual industries is driven by the growth rate of salary policies.

The third was opportunity for further studies which ensures that employees advance in their career development as construction workers. A further study is technically the enrichment of one's knowledge on how things are done better. According to Connel (2011) report in his work "Education and Productivity'' the more educated workers are more productive and innovative they become. This means that if construction employees are given the chance to advance their level of education, the construction firms stand the chance of increasing productivity resulting maximization of profit. Opportunity for further studies was third in this study but was second in Nigeria construction industries' case. This implies that there is a strong relation between motivational strategies and employees performance. This is also in support of Fredrick Herzberg's Two-Factor Theory. The motivational factors are factors that are intrinsic to the job, such as achievement, recognition, interesting work, increased responsibilities, advancement, and growth opportunities.

Involvement in decision making was the forth motivational strategy that was of interest to the respondents. This preference was informed by the fact that lot of people wish to be in the boat than being with the boat. Productivity tends to be associated with supervisors who are friendly, supportive and allow workers to be involved in decision making. These supervisors tend to give workers encouragement and guidance whenever the need arises. This finding is consistent of a similar one by Bassett (1994) that a leader who welcomes diverse ideas generates high worker satisfaction resulting in increase productivity. The finding is also consistent with that of Bowen et al. (2008), Wilkinson (1999) and Mullins (2005) as cited by Oduro-Owusu (2010) findings that participative decision making is likely to lead to job satisfaction and high level of output.

Maintaining healthy employee relations in an organization is a pre-requisite for organizational success as this alleviate stress on employees. Good relationship with employees by employers was not left out by respondents as a driving force to increase productivity. Employee relations generally deal with avoiding and resolving issues concerning individual which might arise out of or influence the work scenario. The finding of the study corroborates with the finding of the study carried out in Nigeria on employee relations and it effects on employee productivity because the study indicated that strong employee relation was required for high productivity and human satisfaction. However, the finding contrast with Andy Core (2013) who indicated that relationship brings familiarity which may lead to low output.

The last but not the least strategy mentioned by the respondents was recognition of employees' contribution towards the growth of the construction firms. People who feel appreciated are more positive about themselves and their ability to contribute. To buttress this point, Spector (1997) emphasized that when people are treated fairly and with respect productivity increases. Therefore management of small and medium scale construction firms should show appreciation to their workers. This is an indication that construction workers of small and medium scale firms want to be respected and valued for their contribution. The choice of this motivational package is supported by the assertion of Harrison Kim in his article "why employees' recognition is so important" that when employees and their work are valued, their satisfaction and productivity rises and motivated to maintain or improve their good work.

3.2 Framework for motivating employees

To enhance productivity of the small and medium construction firms, a model on how an employee should be motivated was developed.

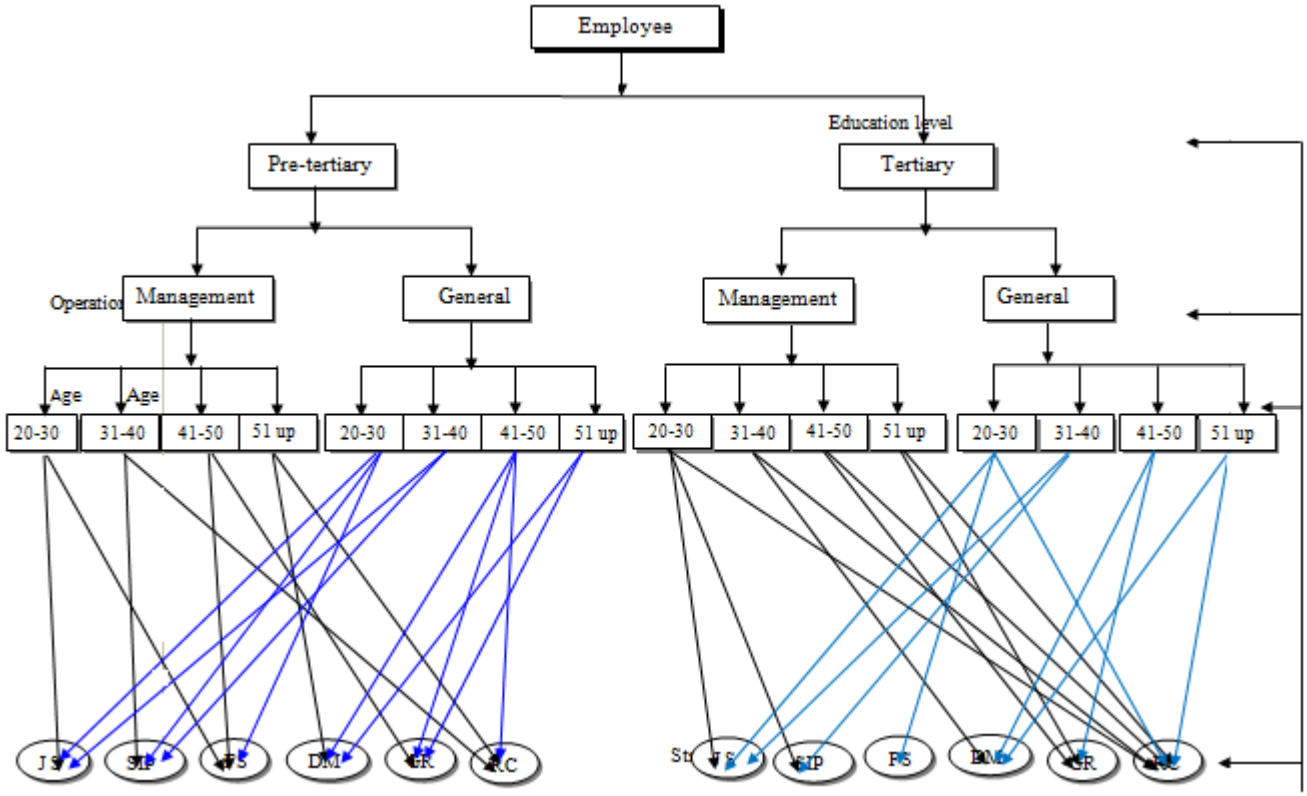

Figure 3.1: Framework for Motivating Employee of Small and Medium Construction Firms in Ghana

KEY
JS-Job Security
DM – Involvement in Decision Making
SIP-Salary Increase Policy
GR-Good Relationship with Employee
FS – Further Study
RC-Recognition of Employee

3.3 Quantification of the effects of the motivational strategies in small and medium construction firms

To quantify the effects of the motivational strategies in small and medium construction firms, the coefficients of determinants of productivity were estimated as indicated in the table below.

Table 3.2: Estimated coefficients of determinants of productivity in small and medium construction firms

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.605257	0.093543	17.16061	0.0000
COREGOE	0.035682***	0.040763	-0.875347	0.0028
DECINVO	0.066687**	0.042282	-1.577177	0.0168
EGODREL	0.073447**	0.041785	-1.757741	0.0808
FAVWCO	0.007223	0.042730	0.169045	0.8660
FURSTUD	0.034191**	0.041435	-0.825166	0.0106
GOWAGE	-0.019721	0.039256	-0.502370	0.6161
JOBSEC	0.025512*	0.042052	-0.131068	0.0959
MOBOST	-0.047742	0.040365	-1.182757	0.2388
PRESTIGE	0.019942	0.039994	0.498624	0.6188
PROMO	-0.028274	0.042215	-0.669753	0.5040
SALINPOL	0.014119**	0.041184	0.342831	0.0322
R^2	0.851579			
F-STAT	0.751496			
Prob (F-STAT)	0.000559			

Note: (***) indicates significance at the 1% level. (**) indicates significance at the 5% level. (*) indicates significance at the 10% level

Table 3.2 represent the summary of the parameter estimates for the factors that affect productivity of small and medium construction firms. The model, with an R^2-value of 0.851579shows that, the independent variables account for 85.15 percent of the variation in the productivity. The estimated *F-statistic* (0.751496) is significant at 1%, indicating that the model is adequate for use in further analysis.

Job security of an employee has a coefficient that is significant at 10 percent level and positive indicating that productivity increases when an employee's job security level increase (table 3.2).

The result shows that productivity increases by 0.0255. This is supported by Zubair (2005) who identifies factors that motivate employees in Pakistani organisations and realized from his study that the top five motivators in Pakistani organisations were job security, compensation, good relationship, image and teamwork. It is important to note that when construction workers have a feeling of job insecurity, they tend to be disorganised and live in perpetual fear of loosing their job unexpectedly thus declining productivity (Anwar, 2012).

The opportunity for further studies is significant at 5% and positively signed as expected. Increase in the level of education by a year will make productivity appreciate by 0.0342. Education serves as a tool to unlock the natural talents and enhances enterprising qualities, making the employees more skilled and amenable to risk taking and change than the non-educated people (Nwaru, 2004). Employers' good relationship with employees is significant at 5% maintaining the right a priori sign. A rise in employers' cordial relation with their employees will advance productivity by a factor of 0.073. This is supported by a study conducted by Freeman (2004) cited in Mullins (2005) in which 242 electronic worker were used, it was observed that 73% of all the respondents indicated that good relationship with employers was the incentives that most influence their work productivity.

According to Mullins (2005), the most important reason for productivity loss was poor working morale. This includes absence of low motivation, poor sense of belonging, people feeling undervalued and poorly rewarded. Involving employees in making decision concerning their area of operation is significant at 5% and is positively in line with a priori sign. The research shows that further involvement of employees in decision making will increase output of workers resulting in a factor of 0.067 rises in productivity. This agrees to what Silverman (2006) said in his work "how do you keep the right people on the bus", employees need to feel their stories are being heard, understood, and valued by those requesting the stories. By forging these relationships, the employee feels valued by the employer, supervisor, and organization as a contributor. This value translates into higher work performance and stake within the organization.

The result in table (3.2) also indicates that employers' recognition of employees' effort is significant at 1% and positively signed as expected. Taking recognition of the contributions of employees toward the growth of the company will increase productivity by 0.036 and corroborate with Kalimullah (2010) (0.65), Rizwan (2010) ($r=0.13$, $p<0.05$), Reena (2009) ($r=0.92$, $p<0.01$) and Salman (2010) (0.251) as cited by Manzoor (2012) in his work 'Impact of Employees Motivation on Organizational Effectiveness', appreciation and recognition of employees and employees' tasks fulfillment stimulates them towards working with more energy and dedication to the organization. This is also in support ofCarla V. (2004) who studied on motivation and productivity in workplace at Salt Lake City and reported that employees place a premium on esprit de corps or firm culture and congeniality and recognition of their effort. It behooves on management of small and medium scale construction firms to value the contribution of their employees and commend them as such.

4. Conclusion

Construction workers like all other worker groups need motivation to enable them give off their best. Majority of the respondents, 21% indicated that job security was the most important driving force in their life so long as job is concern. A motivational model was developed to serve as a road map for motivating employees of small and medium scale construction firms. The study also showed that, an increase in the level of some motivational strategies: Job security, Opportunity for further studies, Employers' good relationship with employees, Involving employees in decision making and Employers' recognition of employees would improve productivity by 0.0255, 0.0342, 0.073, 0.067 and 0.036 respectively. Thus to enhance the level of productivity in the small and medium scale construction firms contractors are encouraged to adopt a motivational model such as the one developed in this work.

References

[1] Alderfer, C. P. (1969). ERG Theory of Motivation. *http: //www.envisionsoftware. com*
[2] Anaman, K. A. & Osei-Amponsah, C. (2007), Analysis Of Causality Links Between The Growth Of The Construction Industry And Growth Of The Macro-Economy In Ghana: Construction Management & Economics, Vol 25, pp.951-961.
[3] Anwar, A. S. G. (2012), Motivation as a Tool for Effective Staff Productivity in the Public Sector: A case study of Raw Materals Research and Development Council of Nigeria. *www.questia. com*
[4] Bester, H & Petrakis E. (2003) "Wages and Productivity growth in a competitive industry" Journal of Economic Theory, Elsevier, vol.1C9 (1)
[5] Carla, V. (2004), Motivation and Productivity in the Workplace: Westminster College, Salt Lake City.
[6] Connell, M. and Roger, M. (2011), Education and productivity*www.thestar. com/opinion/editorialop*
[7] Jeremy, A. R. (2011), Productivity Modeling.1st Degree Dissertation, (Unpublished)
[8] Manzoor, R. (2012). Impact of Employees Motivation on Organizational Effectiveness. *www.iiste. org*
[9] Meager, N. (2011). Wages, Productivity and Employment: A review of theory and international datawww.ec. europa. eu/social
[10] Mullins, L. J. (2005). *Management and Organisational Behaviour*: Prentice Hall, 471-514.
[11] Nwaru, J. C. (2004), Socioeconomic determinants of profit in wholesale and retail banana marketing in Umuahia: *www.jsd-africa. com*
[12] Oduro-Owusu, K. N. (2010) *Factors* influencing Construction worker job satisfaction in the Ghanaian Consruction industry: Unpublished. *www.knust. edu. gh*
[13] Silverman L. (2006). How to keep the right people in the bus. *www2. warwick. ac. uk*
[14] Spector, P. E. (1997). Job Satisfaction: Application, assessment, causes and consequences. Thousand Oaks, CA: SAGE.
[15] Zubair, Z. R. (2005). What Motivates employees in Pakistani Organisation: An In-depth Study of Preferred Motivators. Pakistan Institute of management, Karachi, Pakistan.