COMPENSATION AND CAREER DEVELOPMENT POLICIES ON WORKERS' PRODUCTIVITY (A VIEW TO ENHANCING CONSTRUCTION PROJECTS DELIVERY IN GERMANY)

BY

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ABSTRACT

The study investigated compensation and career development policies on workers productivity in Germany. The population of this study comprised of large and medium (MCFs and ICFs) operating within Germany. The study adopted survey research approach. Data obtained from respondents was analysed using percentages, mean item score to analyse respondents' ranked opinions based on the 5-point Likert scale. Spearman Ranked Correlation was used to analyse effects of HRM practices on workers' productivity while Mann-Whitney U-test was used to compare the practices of MCFs and ICFs. It was concluded that there is significant influence of compensation on workers productivity in Germany. There is also significant influence of training and career development policies on workers productivity in Germany. It was therefore recommended that the construction organizations in Germany should maintain a clear and effective communication system with all levels of constructional staff in order to achieve competitive advantage.

KEY WORDS: **Compensation Policies Training, Career Development Policies, Workers' Productivity, Construction Projects Delivery, Construction Firms and Germany.**

INTRODUCTION

The construction industry in Germany is an upcoming industry, a sector regarded as catalyst for growth while its performance serves as an indicator for the nation's economy. The global construction industry is dubbed labour intensive. This trend has not shifted despite advancement in technology which promotes development in prefabrication and automation of construction product and processes. The human resource therefore drives the operation and functionality of this all-important sector.

Despite this pivotal role, the construction industry is affected by poor performance and less productivity. Kokkaew and Koompai (2012) attribute these outcomes to difficulty associated with human resources (HR). Conventional practices embrace human resource management (HRM) as an inclusive yardstick for productivity improvement, which was traditionally a function within the personnel management units of conventional firms (Anderson & Woodhead, 2005). HRM refers to the process of determining a course of action and the allocation of resources to facilitate action pursuit of set goals in acquiring workers, preparing them for work, overseeing their performance, and providing compensation (Kerzner, 2001).

The state of HRM practices generally in the country leaves room for improvement especially within the construction industry. Indigenous firms have not had a fair share of major construction activities in the country, as they are often awarded to their foreign counterparts whom are considered more technically and managerially more superior and efficient in funds acquisition, HRM and project execution (Ogbebor, 2002; Oseni, 2002; Akintude, 2003). However, a study that relates HRM practices on workers' productivity in Germany is not apparent; a need is therefore established to explore the correlation between HRM practices and workers' productivity in Germany. The organization's philosophy on how to manage its workforce, its practices and policies, therefore needs to be well defined to improve workers' productivity in the construction industry in Germany in order to provide it with the required competitive advantage of HRM practices that influenced workers productivity in the construction industry in Germany.

Preliminary studies conducted have shown that in Germany, few large companies control a large percentage of the total workload of the construction industry, while a large number of small and medium sized companies which make up the class of indigenous firms share a very low percentage of the construction workload. It is in this vein that this research seeks to review the HRM practices and policies of indigenous construction firms (ICFs) and multinational construction firms (MCFs) operating in Germany thereby identifying best practices and the level of use adopted by these MCFs to increase productivity of workers aimed at aiding the ICFs enhance their HRM practices for effective project delivery.

Statement of Research Problem

HRM and productivity is a widely considered concept in overall analysis of industrial success. Pfeffer (1994), noted that in order to achieve organisational goals and enhance productivity, flexible and capable workers play a crucial role. As a result, it is important that a construction firm adopts HRM practices that make the best use of its workers. HRM is the most important function in all organisations. It contributes to the success of the organization and creates competitive advantage for the organization. Construction-Based Organisations (CBO) exerts pressures on the workers by the very nature of their dynamic work environment which may affect their productivity, project performance and

delivery. One of the main causes of project failure is the lack of effective HRM practices (Berg and Karlsen, 2007; Schmid and Adams, 2008). The HRM practice-ways of handling workers' welfare issues, recruitment and selection, training and development, human resource (HR) planning and workers' skills may determine how the worker copes with temporary work structures that makes a worker to be uncertain about his/her future and leads to reduced productivity and thus poor project delivery. However, very few research documentation on HRM practices within the construction sector are available. In the overseas perspective, according to the author, managers who have little or no knowledge in the construction activities head some private construction firms; their perception of the industry is that construction is a business and that the only requirement is financial ability. Very few works are available on the level of use of HRM as a guide for companies, especially those in the construction industry in Germany. The problem of this study is therefore concerned with understanding the level of use of compensation and career development policies and its influence on construction workers' productivity in Germany.

Objective of Study

The aim of this study is to explore the effect of compensation and training/career development policies on workers' productivity with a view to enhancing construction projects delivery in Germany. The specific objectives of the study are:

1. To determine the relationship between compensation policies and workers productivity in construction firms.
2. To find out the relationship between training and career development policies and workers productivity in construction firms.

Research Questions

The following research questions will be answered:

1. What is the relationship between compensation policies and workers productivity in construction firms?
2. To what extent do training and career development policies relate with workers productivity in construction firms?

Research Hypotheses

The following hypothesis was formulated to aid in achieving the objectives of the study;

1. There is no significant relationship between compensation policies and workers productivity in construction firms.
2. There is no significant relationship between training and career development policies and workers productivity in construction firms.

Literature Review

The Construction Industry:

The construction industry accounts for a sizeable proportion of world- wide economic activity. For example, in Europe it accounts for some 10 per cent of gross domestic product (GDP) and in Australia it employs about 8 per cent of the nation's workforce (Proverbs et al. 1999). Human resource represents a large majority of cost on most projects, and the industry employs an extremely diverse range of people from a wide range of occupational cultures and backgrounds, including people in unskilled, craft, managerial, professional and administrative positions (Green 2001). In recent years there has been a widespread realization that construction must improve its HRM performance before it can improve its overall efficiency, productivity and cost effectiveness (Beardwell and Holden 2005). In the UK, for example, successive government-initiated reports have recommended action on improving the management of people as the cornerstone of increasing productivity thereby strengthening its business and management practices (Egan, 1998).

There are also countless examples of corporate and project crises in the construction industry which arises as a result of people's behaviour and mismanagement of human resource (Loosemore et al., 2003). According to the above mentioned authors, HRM has the potential of releasing a significant amount of productivity potential in the construction industry which has remained untapped because of widespread ignorance of good practices in this area. However, the construction industry remains one of the most problematic industries in managing people effectively, which is attributable to its unique

characteristics and nature. Researchers the world over, though concentrated in Europe and North America, have worked extensively on HRM with relatively little work in other African countries including Nigeria (Udeze, 2000), especially those in the construction industry, on how to develop appropriate policies. Also was the shortage of literature on the state of HRM practices within the construction industry.

Compensation Policies and Workers Productivity

Performance-based compensation is the dominant HRM practice that firms use to evaluate and reward workers' efforts (Collins and Clark, 2003). Evidently, performance-based compensation has a positive effect upon worker and organizational performance (Brown et al. 2003; Cardon and Stevens, 2000). However, there is scarce evidence on the effects of compensation policy on firm's growth. Empirical studies on the relationship between performance-related pay and company performance have generally found a positive relationship, but a growing body of empirical evidence suggests that it is not just pay level that matters, but pay structure as well (Wimbush 2002; Singh 2001).

Barringer et al. (2001) conducted a quantitative content analysis of the narrative descriptions of 50 rapid-growth firms and a comparison group of 50 slow-growth companies. Results demonstrated that workers incentives differentiated the rapid-growth from the slow-growth firms. Firms that were eager to achieve rapid-growth provided their workers financial incentives and stock options as part of their compensation packages. In doing so, firms managed to elicit high levels of performance from workers, provide workers the feeling that they have an ownership interest in the firm, attract and retain high-quality workers, and shift a portion of a firm's business risk to the workers. Delery and Doty (1996) identified performance-based compensation as the single strongest predictor of firm performance. Both performance-based compensation and merit-based promotion can be viewed as ingredients in organizational incentive systems that encourage individual performance and productivity (Uen and Chien, 2001, cited by Cho et al. (2002).

Paul and Anantharaman (2003) found that compensation and incentives directly affect operational performance. To be effective, compensation practices and policies must be aligned with organizational objectives. While performance-based compensation can motivate workers, sometimes workers perceive it as a management mechanism to control their behaviour (Lawler and Rhode, 1976).

Training and Career Development on Employees Productivity

Training and development may be related to firm performance in many ways. Firstly, training programmes increase the firm specific workers' skills, which, in turn, increases workers' productivity and reduces job dissatisfaction that results in workers' turnover

(Huselid, 1995). Training and developing internal personnel reduces the cost and risk of selecting, hiring, and internalizing people from external labour markets, which again increases workers' productivity. Training and development like job security requires a certain degree of reciprocity: A company that trains and develops its workers enhances their performance. This increases workers' productivity, commitment, and lowers turnover. Companies may also assist their workers in career planning. In doing so, companies encourage workers to take more responsibility for their own development, including the development of skills viewed as significant in the company (Doyle, 2001).

Barringer et al. (2003) compared rapid-growth and slow-growth firms and found that rapid-growth firms depend heavily on the ability and effort of their workers to maintain their growth-oriented strategies. The fast-growth firms used training programs to achieve their objectives and emphasized workers development to a significantly greater extent than their slow-growth counterparts. Therefore, training and worker development practices are more common in rapid-growth firms than slow growth ones. Zhu (2002) reviewed the changes in the area of human resource development in Japan and observed that some companies and industries have shifted towards a more strategic approach that emphasizes the impact of effective learning at both

Career management consists of the processes of career planning and succession management. Career planning shapes the progression of individuals within an organisation in accordance with assessment of organisational needs and the performances, potentials, and preferences of individual members of the organisation. Career planning can be regarded as forming part of a career system which, as defined by Sonnenfeld et al, (1992), is a set of policies and practices an organisation uses to provide for its human resource requirements. Career development describes how career progression takes place, the ways in which people move through their careers either upwards through promotion or by enlarging or enriching their roles to take on greater responsibilities or by making more use of their skills and capacities.

Miller and Wheeler (1992) found that lack of meaningful work and opportunities for promotion significantly affected employees' intention to leave an organisation. Thus, organisations were able to improve their employees' retention rate and commitment by adopting job enrichment programmes and enhancing their advancement opportunities. In addition to promotion opportunities, the evaluation criteria used in the promotion and reward system also had significant effects on employees' turnover intentions (Quarles, 1994). Ineffective performance appraisal and planning systems contributed to employees' perception of unfairness thereby making employees more likely to consider leaving than being committed and productive to the organisation (Dailey and Kirk, 1992).

Method

Research Design

This study adopted survey research approach. The design is necessary because it focuses on the examination of the extent and the influence of HRM practices on workers' productivity with a view to enhancing construction projects delivery in Germany.

Area of the Study

The study area for this research is Germany.

Population of the Study

The population of the study consists of large and medium (MCFs and ICFs) operating within the study area, who have valid registration with authorized bodies to practice in Germany. The reason for choosing this category of respondent is that they often head and make key HRM decisions in the construction industry.

Sampling Technique and sampling Size:

The sampling frame for this study consists of large and medium MCFs and ICFs executing public projects within the study area. The sample size for this study is sixty-two (62) construction firms.

Instrument for Data Collection:

This study adopted both primary and secondary data collection tools. The primary data was obtained from the field survey using questionnaires clearly aligned with the objectives of the study while secondary data was obtained from comprehensive HRM literature review from the various sources including books, referred print and electronic journals.

Methods of Data Analysis:

Data obtained from respondents was analysed using Percentages, mean item score to analyse respondents' ranked opinions based on the 5-point Likert scale to assess the level of use of HRM practices and evaluate factors influencing HRM practices of construction firms in the study area. Spearman Ranked Correlation was used to analyse effects of HRM practices on workers' productivity while Mann-Whitney U-test was used to compare the practices of MCFs and ICFs. All hypotheses were tested at 0.05 level of significance.

Research Question One

The research question sought to find out the significant relationship between compensation policies of the construction companies. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 1.

Table 1

Descriptive analysis of the relationship between compensation policies of the construction companies

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Compensation policies	62	13.97	12.5	0.75*	*Moderately Strong relationship

Construction companies		32.66	25		

Source: Field Survey

Table 1 presents the result of the descriptive analysis of the relationship between compensation policies of the construction companies. The two variables were observed to have moderately strong relationship at 75%. The arithmetic mean for compensation policies 13.97 was observed to be greater than the expected mean score of 12.5 In addition to that the arithmetic mean as regards construction companies 32.66 was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between compensation policies of the construction companies.

Research Question Two

The research question sought to find out the relationship between training and career development policies and workers productivity in construction firms. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 2.

Table 2

Descriptive analysis of the relationship between training and career development policies and workers productivity in construction firms.

Variable	**N**	**Arithmetic mean**	**Expected mean**	**R**	**Remarks**
Training and career development policies	67	16.68	12.5	0.94*	*Strong to perfect relationship
Workers productivity		32.66	25		

Source: Field Survey

Table 2 presents the result of the descriptive statistics of the extent through training and career development policies and workers productivity in construction firms. The two variables were observed to have strong to perfect relationship at 94%. The arithmetic mean for Training and career development policies 16.68 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards workers productivity (32.66) was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between training and career development policies and workers productivity in construction firms.

Hypotheses Testing

Hypothesis One

The null hypothesis states that there is no significant relationship between compensation policies of the construction companies. In order to test the hypothesis, two variables were identified as follows:-

1. Compensation policies as the independent variable
2. Workers Productivity as the dependent variable

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 3)

TABLE 3

Pearson Product Moment Correlation Analysis of the relationship between compensation policies of the construction companies.

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Compensation policies (x)	866	12332		
			28667	0.94*
Workers productivity (y)	2025	67253		

***Significant at 0.05 level; df =60; N =62; critical r–value = 0.254**

Table 3 presents the obtained r-value as (0.94). This value was tested for significance by comparing it with the critical r-value (0.254) at 0.05 levels with 60 degree of freedom. The obtained r-value (0.94) was greater than the critical r-value (0.254). Hence, the result was significant. The result therefore means that there is significant relationship between compensation policies of the construction companies.

Hypothesis Two

The null hypothesis states that there is no significant relationship between training and career development policies and workers productivity in construction firms. In order to test the hypothesis, two variables were identified as follows:-

1. Training and career development policies as the independent variable
2. Workers productivity as the dependent variable

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 4)

TABLE 4

Pearson Product Moment Correlation Analysis of the relationship between training and career development policies and workers productivity in construction firms

	$\sum x$	$\sum x^2$

Variable	∑y	∑y²	∑xy	r
Training and career development policies (x)	1034	17448	34219	0.75*
Workers productivity (y)	2025	67253		

***Significant at 0.05 level; df =60; N =62; critical r–value = 0.254**

Table 4 presents the obtained r-value as (0.75). This value was tested for significance by comparing it with the critical r-value (0.254) at *0.05* levels with 60 degree of freedom. The obtained r-value (0.75) was greater than the critical r-value (0.254). Hence, the result was significant. The result therefore means that there is significant relationship between training and career development policies and workers productivity in construction firms.

Discussion of Findings

The result of the data analysis in table 3 was significant due to the fact that the obtained r-value (0.94) was greater than the critical r-value (0.254) at 0.05 level with 60 degree of freedom. This result implies that the result therefore means there is significant relationship between compensation policies of the construction companies. The result is in agreement with the research findings Huemann, Keegan and Turner (2007) who observed that project management strategy; temporary nature of construction products, dynamisms, project portfolio, and management paradigm affects the use of HRM in the construction industry. The result of the analysis caused the null hypotheses to be rejected while the alternative one was retained.

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Conclusions

Based on the findings of the research work, the following conclusions are deemed necessary:

Based on the findings of this study, it is therefore, concluded that there is a strong relationship between good HRM practices and workers' productivity in construction firms in Germany. This shows that workers will be committed in construction firms where HRM practices are effective. The result indicates that a firm where HRM is characterized by inconsistency and deployment challenges, workers' productivity will be low. It is also concluded that there is significant influence of compensation policies of the construction companies and training and career development policies on workers productivity in construction firms.

Recommendations

Based on the findings of the research work, the following recommendations need to be implemented:

1. The construction organizations in Germany should embark on a serious employee training campaign in order to get more from her workers.

2. Competent workers with years of experience should be given important tasks to handle in the industry.

3. The construction industries in Germany should internalize good welfare services and effective labor policies.

REFERENCES

Anderson, M. (2000). An investigation of teacher's instructional problems in mathematics. *Benin Journal of Education Studies,* 11(3), 43-54

Barringer et al J. (2001). The responsibilities of schools in civic education. *Journal of Education,* 175(1): 105-119.

Barringer et al J. (2003). The responsibilities of schools in civic education. *Journal of Education,* 175(1): 105-119.

Beardwell U. & Holden I. (2005) Styles and effectiveness in education and training: A model for organizing teaching and learning. *International Science*, (Amsterdam) pp. 45-82.

Berg H. & Karlsen A. R. (2007). Teacher commitment, working conditions, and differential incentive policies. Review of Educational Research, 63(4), 489–525.

Schmid Y. & Adams Z. (2008). "Financial Incentives and Student Achievement: Evidence from
Ran-domized Trials." NBER Working Paper No. 15898Brown et al 2003;

Cardon I. & Stevens T. (2000). Learning principles. In John M. Ball (eds.), The *Social Sciences and Geographical Education*. New York: John Wiley and Sons Inc.

Collins U. & Clark C. (2003). Helping children like social studies. *Southern Social Studies Journal*, 16: 21-32.

Dailey D. & Kirk O. . (1992). Evaluating experienced teachers . *Educationa l Lea dership* , 58:48-51.

Delery I. & Doty L. . (1996) Rotten Apples: An Investigation of the Prevalence and Predictors
of Teacher Cheating." Quarterly Journal of Economics, 118(3): 843-877.Doyle 2001

Egan A. (1998). *Social studies education in Nigeria: A realistic approach*. Owerri: Whyte and
Whyte Publishers.Green 2001

Huemann K. & Turner J. . (2007). The relationship between classroom motivation and academic achievement in elementary school-aged children. *Family Consumer Science Research Journal,* 33(2), 106-120.

Huselid M. (1995). Factors that affect student achievement. Retrieved 17 September, 2013 from:

http//voices.yahoo.com/ factors-that-affect-student-achievement-738248.html?cat=4.

Kerzner K. (2001). Fostering content area literacy. Teacher Librarian. 35 (1). 65-68.

Kokkaew G. & Koompai D. 2012).Mathematics and science achievement: effects of motivation, interest and academic engagement. *Journal of Educational Research*. Available at: http://www.findarticles.com [Accessed 07/09/2006].

Lawler Y. & Rhode P. (1976). *Factors that affect student achievement*. Retrieved 17 September,2013from:http//www.educationspace360.com/index.php/factors-that-affect-student-achievement. *Revised National Policy on Education (RNPE).*

Loosemore et al C. (2003). Improving academic performance through the enhancement of teacher/student relationships: The relationship teaching model. *A journal of the international Christian community for teacher education*, 1(2), 1-2.

Miller G. & Wheeler O. (1992) Influence of principals' leadership styles on students' academic achievement in secondary schools. *Journal of Innovative Research in Management and Humanities*, 3(1), 113 -121.

Ogbebor R. (2002). The relationship between classroom motivation and academic achievement in elementary school-aged children. *Family Consumer Science Research Journal,* 33(2), 106-120.

Oseni M. (2002). Factors that affect student achievement. Retrieved 17 September, 2013 from: http//voices.yahoo.com/ factors-that-affect-student-achievement-738248.html? Cat=4.

Akintude J. (2003). The responsibilities of schools in civic education. *Journal of Education,* 175(1): 105-119

Paul H. & Anantharaman S. (2003) Styles and effectiveness in education and training: A model for organizing teaching and learning. *International Science*, (Amsterdam) pp. 45-82.

Pfeffer R. (1994). Teacher commitment, working conditions, and differential incentive policies. Review of Educational Research, 63(4), 489–525.

Proverbs et al H. (1999). Evaluating experienced teachers . *Educationa l Lea dership* , 58:48-51.

Quarles D. (1994) Rotten Apples: An Investigation of the Prevalence and Predictors of Teacher Cheating." Quarterly Journal of Economics, 118(3): 843-877.

Sonnenfeld et al A. (1984). *Social studies education in Nigeria: A realistic approach*. Owerri: Whyte and Whyte Publishers.

Uen I. & Chien X. R. (2001). The relationship between classroom motivation and academic achievement in elementary school-aged children. *Family Consumer Science Research Journal,* 33(2), 106-120.

Wimbush M. (2002). Factors that affect student achievement. Retrieved 17 September, 2013 from: http//voices.yahoo.com/ factors-that-affect-student-achievement-738248.html? Cat=4.

Singh C. (2001). Improving academic performance through the enhancement of teacher / student relationships: The relationship teaching model. *A journal of the international Christian community for teacher education*, 1(2), 1-2.

Zhu M. (2002). Factors that affect student achievement. Retrieved 17 September, 2013 from: http//voices.yahoo.com/ factors-that-affect-student-achievement-738248.html? Cat=4.