# EFFECT OF HRM PRACTICES ON WORKERS' PRODUCTIVITY WITH A VIEW TO ENHANCING CONSTRUCTION PROJECTS DELIVERY IN GERMANY

## BY

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## ABSTRACT

*The study investigated the effect of HRM practices on workers' productivity with a view to enhancing construction projects delivery in Germany. The population of this study consists of large and medium (MCFs and ICFs) operating within Germany. The study adopted survey research approach. Data obtained from respondents were analyzed using percentages, mean item score to analyze respondents' ranked opinions based on the 5-point Likert scale. Spearman Ranked Correlation was used to analyze the 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 realistic job information on workers' productivity in Germany. There is also significant influence of recruitment/ selection policies on workers' productivity in the state. 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:Realistic job information, Recruitment/selection policies, Workers productivity**

## INTRODUCTION

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;Loosemore, Dainty & Lingard, 2003).

Despite these publicised advantages, the level of use of this practice within the construction sector remains widely unknown. Its application in other sectors of the global economy is well documented. Very few research documentation on HRM practices within the construction sector are available. In the overseas perspective, Noe et al. (2010) studied factors

influencing HRM practices in Thailand. This study identified influences on slow adoption of HRM practices to culture, education-human capital, economic systems and political-legal system. Huemann, Keegan & Turner (2007) studied the context of HRM practice within the construction sector and other industries. This study found 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 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. However, a study that relates HRM practices on workers' productivity in Germany is not apparent; a need is therefore established to explore the correlate between HRM practices and workers' productivity in Germany.

**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. The HRM practices-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 make workers to be uncertain about his/her future and leads to reduced productivity and thus poor project delivery. The problem of this study is therefore concerned with understanding the level of use of HRM practices and its influence on construction workers' productivity in Germany.

**Objective of the Study**

The aim of this study is to explore the effect of HRM practices 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 realistic job information and workers productivity in construction firms.
2. To find out the relationship between recruitment/selection policies and workers productivity in construction firms.

**Research Questions**

The following research questions will be answered:

1. What is the relationship between realistic job information and workers productivity in construction firms?
2. To what extent do recruitment/selection policies relate with workers productivity in construction firms?

**Research Hypotheses**
1. There is no significant relationship between realistic job information and workers productivity in construction firms.
2. There is no significant relationship between recruitment/selection policies and workers productivity in construction firms.

**Literature Review**
**The Construction Industry and HRM**

HRM consists of the management activities related to investing in human resources: acquiring workers, assessing their performance, providing training and development, and determining the appropriate level and type of compensation (Sims, 2006), etc. In many medium-sized and large organizations, a functional specialist or department handles many HRM responsibilities. But regardless of whether the organization has a human resource manager or department, Eze (2008) maintains that each manager is responsible for assessing needs and for managing his or her own human resources from interviewing and selecting job applicants to estimating future needs, appraising performance, identifying training needs, and keeping workers who excel, because the organization's competitive advantage is tied so closely to its human resources.

Human resource activities help organizations obtain and manage workers who have the ability and motivation for high performance (Eze 2008). To ensure that the organization has workers with the needed abilities and skills, HRM helps plan and implement strategies for acquiring and training human resources. The combined effect of these practices can enable managers, employers and their workers to develop into a powerful source of sustainable competitive advantage. Construction activity is extremely diverse, ranging from simple housing developments to highly complex infrastructure projects (Belout, 2000). However, all types of construction project, regardless of size, have some common characteristics, which include the following:

- **Their unique nature**: unlike other sectors, where prototypes can be tested before real production gets underway, construction projects tend to be one-off, unique organizations that are designed and constructed to meet a particular client's product and service needs.
- **Their tendency to be awarded at short notice**: many construction projects are awarded following a period of competitive tendering, where possibilities for thorough planning are often limited. (Hillebrandt and Canon 1990).
- **Their reliance on a transient workforce**: construction projects are, for the most part, constructed in situ. Even with the increased use of off-site fabrication and the wider use of prefabricated components, the final product is normally assembled and completed in the required site location.
- **Increasingly demanding clients**: in recent years there has been a steady increase in the quality of service and product expected by clients procuring construction work. For example, in Australia it has been estimated that construction projects are being delivered in about half the time they were ten years ago (Respect for People 2000).
- **A male-dominated culture**: construction is one of the most male-dominated industries in virtually every developed society. Men dominate both craft trades and professional and managerial positions within the sector. This reliance on male employment leads to

many challenges, such as skills shortages caused by recruiting from only a portion of the population.

## Realistic Job Information and Employee Commitment

Pitt and Ramaseshan, (1995) found that individuals who displayed a higher tendency to leave their jobs were those who perceived that the job previews they received during the interview process were not realistic. Where job preview is perceived as realistic, organisational and job commitment is enhanced. Therefore, companies must state what must be done and spell out how it should be done. It is desirable to have the job preview procedures written down to ensure that HRM policies are applied consistently and in accordance with both legal requirements and ethical considerations. The existence of a written job description and well publicized procedures ensures that everyone knows precisely what steps to take when dealing with significant and possibly recurring employment issues.

## Recruitment and Selection:

Based on job analysis and design, an organization can determine the kind of workers it needs. With this knowledge, it carries out the function of recruiting and hiring workers. Recruitment is the process through which the organization seeks applicants for potential employment. Selection refers to the process by which the organization attempts to identify applicants with the necessary knowledge, skills, abilities, and other characteristics that will help the organization achieve its goals (Robinson 2000). An organization makes selection decisions in order to add workers to its workforce, as well as to transfer existing workers to new positions.

Robinson (2001) also termed this as selective hiring; this practice can ensure that the right people, with the desirable characteristics and knowledge, are in the right place, so that they fit in the culture and the climate of the organization. Moreover, pinpointing the right workers would decrease the cost of workers' education and development. Schuster (1999) argued that selective hiring is a key practice that creates profits. Huselid (2000) examined HR practices of high performance companies and found that attracting and selecting the right workers increase the workers' productivity, boost organizational performance, and contribute in reducing turnover.  Cohen and Pfeffer (2000) argued that selection or hiring standards reflect not only organizations' skill requirements but also the preferences of various groups for such standards and their ability to enforce these preferences. Michie and Quinn (2002) proposed that a possible indirect link between selective hiring and organizational performance can be the forging of internal bonds between managers and workers that creates the right culture for productivity growth. Paul and Anantharaman (2003) pointed out that an effective hiring process ensures the presence of workers with the right qualifications, leading to production of quality products and consequently an increase of economic performance and productivity. Cho et al. (2000) examined pre-employment tests as a key component of selective hiring and found that when employed, these tests can select workers that stay with a company longer. Passing pre-employment tests may give an applicant a stronger sense of belonging to the company, resulting in higher degrees of commitment if employed. Cardon and Stevens (2001) pointed out that for small companies recruiting is often problematic. This can be due to several reasons such as limited financial and material resources and jobs with unclear boundaries responsibilities, which decreases their potential to hire qualified candidates.

**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 analyzed using Percentages, mean item score to analyze 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 analyze 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.
**Data Analyses and Results**
**Research Question One**
The research question sought to find out the significant relationship between realistic job information 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 1.

**Table 1**
**Descriptive analysis of the relationship between realistic job information and workers productivity in construction firms**

| Variable | N | Arithmetic mean | Expected mean | r | Remarks |
|---|---|---|---|---|---|
| **Realistic job information** | | 14.84 | 12.5 | | |
| | 62 | | | $0.91^*$ | *Strong to perfect relationship |
| **Workers productivity** | | 32.66 | 25 | | |

**Source: Field Survey**

      Table 1 presents the result of the descriptive analysis of the relationship between realistic job information and workers productivity in construction firms. The two variables were observed to have strong to perfect relationship at 91%. The arithmetic mean for realistic job information 14.84 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards workers productivity in construction firms 32.66 was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between realistic job information and workers productivity in construction firms.

**Research Question Two**
The research question sought to find out the extent to which recruitment/selection policies relates with 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 extent through which recruitment/selection policies relate with workers productivity in construction firms**

| Variable | N | Arithmetic mean | Expected mean | r | Remarks |
|---|---|---|---|---|---|
| **Recruitment/selection policies** | | 13.50 | 12.5 | | |
| | 62 | | | $0.61^*$ | *Moderately Strong relationship |
| **Workers productivity** | | 32.66 | 25 | | |

**Source: Field Survey**

Table 2 presents the result of the descriptive statistics of the extent through which recruitment/selection policies relate with workers productivity in construction firms. The two variables were observed to have strong to moderately strong relationship at 61%. The arithmetic mean for Recruitment/selection policies 13.50 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards workers productivity in University of Uyo 32.66 was observed to be higher than the expected mean score of 25. The result therefore means that there is remarkable relationship between recruitment/selection policies and workers productivity in construction firms.

**Hypotheses Testing**

**Hypothesis One**

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

1. Realistic job information 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 realistic job information and workers productivity in construction firms.**

| Variable | $\sum x$ $\sum y$ | $\sum x^2$ $\sum y^2$ | $\sum xy$ | r |
|---|---|---|---|---|
| Realistic job information (x) | 920 | 13834 | | |
| | | | 30458 | 0.91* |
| 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 (0.91). 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 (0.91) was greater than the critical r-value (0.254). Hence, the result was significant. The result therefore means that there is significant relationship between realistic job information and workers productivity in construction firms.

**Hypothesis Two**

The null hypothesis states that there is no significant relationship between recruitment/selection policies and workers productivity in construction firms. In order to test the hypothesis, two variables were identified as follows:-
1. Recruitment/selection 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 recruitment/selection policies and workers productivity in construction firms**

| Variable | $\sum x$ $\sum y$ | $\sum x^2$ $\sum y^2$ | $\sum xy$ | r |
|---|---|---|---|---|
| Recruitment/selection policies (x) | 837 | 11465 | | |
| | | | 27598 | 0.94* |
| 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 (0.94). 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 recruitment/selection 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 (0.91) was greater than the critical r-value (0.254) at 0.05 level of significance with 60 degree of freedom. This result implies that there is significant relationship between realistic job

information and workers productivity in construction firms. The result is in agreement with the research findings of Anderson & Woodhead (2005), who stated that 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. The result of the analysis caused the null hypotheses to be rejected while the alternative one was retained.

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 there is significant relationship between recruitment/selection policies and workers productivity in construction firms. The result is in agreement with the research findings of Pfeffer (1994), who observed that in order to achieve organizational goals and enhance productivity, flexible and capable workers play a crucial role. The result of the analysis caused the null hypotheses to be rejected while the alternative one was retained.

**Conclusions**

Based on the findings of the research work, it is 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. It is also concluded that there is significant influence of realistic job information, recruitment/ selection policies.

**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.
4. 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.

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