

Effectiveness of Human Resources Development of Construction Firms in North Western Nigeria

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ABSTRACT

A strong human resources development has been recognised as an important prerequisite to the achievement of sustained competitive advantage to deliver products and services that can meet with client's needs and satisfaction. The study assesses the effectiveness of human resources development (HRD) strategies practice by construction firms in North Western Nigeria. A total of 360 structured questionnaires were administered with 61% response rate. Respondents were asked to assess the strength of improvement of determined variables in their respective organisations, the variables was tested using ANOVA- F and mean score under five sub-heading (information and communication issues, organizational productivity, corporate performance, and organizational culture and staff turnover). The findings of the study revealed that HRD strategies adopted showed strong improvement on: performance, minimized wastage, and ease of handling development challenges while enhanced corporate loyalty, construction planning and design, group thinking and desire for professional growth followed. However the study revealed that out of the forty two variables tested; sixteen were strongly improved. It is recommended that HRD strategies practice by the construction firms in the study area should be periodically accredited and reemphasized to improve understanding and increase willingness and commitment in implementing effective HRD strategies.

KEYWORDS: Construction firms, Human resource development strategies, North Western, Nigeria.

1.0 INTRODUCTION

Construction has impacts on the quality of life for building facilities and plays a major role in a nation's economy and development. According to Farooqui, Masood and Aziz (2008) construction sector is globally considered to be a basic industry on which the development of a country depends. To a great extent, the growth of a country and its development status is generally determined by the quality of its infrastructure and construction projects. According to Jackson (2004), quality is contained in the tripod of construction management; it does not only impact appearance and durability but also the performance of a project. Performance evaluation in construction project

generally focuses on a limited number of performance elements which is the act of achieving the project goals related to the product, which are completing the project on time, within budget and with the required quality and to client satisfaction (Blismas, Sher and Thorpe, 1999; Egemen and Mohamed, 2006). Nowadays, private sector place more emphasis on the profit rather than the quality and time which was the major concern in the past (Abdul-Rahman, Wang and Yap, 2010). Therefore, in order for construction firms to realize forgoing performance elements of construction project optimally, the concept of HRD strategies must be stressed in the firms to improve the quality of product and services (Idrus and Sodangi, 2010). The willingness to change the quality of HR will determine the success of total quality and time management in the firms (Zeynep, Ardit, Dikmen and Birgonul, 2008). Quality and efficiency HR have been identified as the major imperatives lacking in Nigeria's construction firms. Construction labours tend to focus more on the number of hours worked and quantity of work done rather than the quality of work executed and time taking to complete the work. In regard to this, all stakeholders involved in construction firms have a role to play in order to deliver a quality product within stipulated time. On this note, this study sets out to assess the effectiveness of HRD strategies of construction firms in North Western Nigerian.

2.0 LITERATURE REVIEW

Human Resource (HR)

The concept of HR refers to the managerial, scientific, engineering, technical, craft and other skills which are employed in creating, designing and developing organizations and managing and operating production and services of enterprises (American Society for Training and Development (ASTD) 2009, 2010; Oladeji, 2002). Human Resource (HR) is also defined as the knowledge, skill, experiences, energies and attitude employed by organizations which are potentially useful for the production of goods and services. HR is recognized not just in terms of hour work but also skill, knowledge, attitude, experience and similar attributes that affect particular human capabilities to do productive work and would be most suitable for the realization of their purposes, aspirations or objectives (Stephen, 2011). Corporate organizations appreciation of HR lays not so much in the human beings but in them having the requisite skill, training, education, experience and attitudes that would be most suitable for their purposes, aspirations or objective (Stephen, 2011).

Emergence of Human Resource Development

During the 1960s and 1970s, professional trainers realized that their role was extended beyond the classroom training. The move toward employee involvement in many organizations required trainers to also coach and counsel employees. Training and Development (T&D) competencies therefore expanded to include interpersonal skills such as coaching, group process facilitations, and problem solving. This additional emphasis on employee development inspired the ASTD to rename itself (Jon, Werner, & Randy, 2012).

At several ASTD national conferences held in the late 1970s and early 1980s, discussions centred on this rapidly expanding profession. As a result, ASTD approved the term Human

Resource Development (HRD). Since the 1990s, efforts have been made to strengthen the strategic role of HRD, that is, how HRD links to and supports the goals and objectives of the organization (Gilley & Maycunich, 1998). In 2010, ASTD had approximately 40,000 members in over 100 countries, including 132 U.S. local chapters and remains the leading professional organization for HRD profession (American Society for Training and Development (ASTD) 2009, 2010; Jon et al., 2012).

Definition of Human Resource Development (HRD)

Human resource development is an interdisciplinary field, which focuses on systematic training and development, career development, organizational development to improve process and enhance the learning and performance of individual and organizations. A central goal is to broaden understanding of the complex activities involved in assisting individuals or organizations to improve their ability to develop themselves (Academy of Human Resource Development, 1999).

Human resource development can be defined as planned activities designed by an organization to provide its members with the opportunities to learn necessary skills and knowledge with a view to meeting current and future job demands. HRD seeks to develop people's knowledge, expertise, productivity and satisfaction, whether for personal or group/team gain or for the benefit of an organization (McLean & McLean, 2001). HRD activities should begin when an employee joins an organization and should continue throughout their career, regardless of whether that employee is an executive or a worker on the assembly line (Dubem, *et al.*, 2012).

Swanson (2007) has defined HRD as a process for developing and unleashing human expertise through training, development and organization development for the purpose of improving performance. HRD is the part of people management that deals with the process of facilitating, guiding and coordinating work-related learning and development to ensure that individuals, teams and organizations performance is as desired. HRD process is more than provision of training courses in the work place. The definition adopted here is that HRD involves process of planning, implementation, observation, and review to manage the cognitive capacities, capabilities and behaviours needed to enable and improve individual, team and organizational performance within an organizations (Stephen, 2011).

HRD is the process of allowing staff to acquire knowledge, skills and attitudes for the sole purpose of executing specific task(s) more efficiently and effectively (Atiomo, 2000; Ogunlana, Thapa, & Dey, 2002). It is not a once and for all activity but an ongoing process. As new employees are trained, so also are other older employees either transferred to other jobs, promoted or trained for the more challenging jobs (Gann & Salter, 1998).

Need for HRD in Construction Industry

There is a consensus in literature that the conditions to which construction companies are expected to make meaningful impact on the economy requires a well trained workforce. For instance, (Chan, Suen, & Chan, 2005; Odusami, Oyediran, & Oseni, 2007) observed that skills

and knowledge have become the only sources of sustainable long term competitive advantage in the construction industry. There is an increased need for more varied skills in the construction industry including the ability to address, not only technical, but also financial, property management, and environmental concerns. Atiomo (2000) noted that these development needs could arise from the following main causes: one arising from changes in structure, policies process or procedure, the other arising from the desire to bring about changes in performance or improved productivity, attitudes, behaviour and relationships (culture). In the construction industry, the variability of construction project requires a continuous supply of trained personnel to match the numerous challenges that are often encountered. From the foregoing, the need for construction labour development can be categorized under the following interrelated points: Improving productivity, improving health and safety requirement and improving performance and profitability (Atiomo, 2000).

The need for HRD cannot be overemphasized at whatever level of organization, private or public, for the realization of corporate goals in terms of activities. HRD is concerned with providing education, learning and development opportunities, making training interventions and planning, conducting and evaluating training programed. It is therefore essentially a strategic process, which is concerned with meeting corporate and individual needs, depending on whose perspective HRD is being considered. The development of human resource requires investment in human capital which from the perspective of the corporate organization is the workforce of all cadres (Oladeji, 2002).

Apparently, all these will involve costs, but it really makes good economic sense for organizations to undertake appropriate human capital formation. HRD is not just a set of activities or investment/expenditure items; it is a process as well as a strategy. At whatever level, it is a continuous exercise that requires the backup of effective HR planning. It is a strategic move to avoid, address and resolves HR problems and of course, designed for realization of organizational goals. In view of its strategic nature, the pursuit of HRD has to be done within the context of overall development policy/corporate objective (Aidah, 2013).

Human Resource Development Functions

HRD as discussed can be a stand-alone function, or it can be one of the primary functions within the HR management department. An ASTD sponsored study (Mclagan, 1989) identified the HRD role and competencies needed for an effective HRD function. This ASTD study documented a shift from the more traditional training and development topics to a function that include career development and organization development issue as well. Training and Development (T&D) focus on changing or improving the knowledge, skill and attitudes of individuals. Training typically involves providing employees the knowledge and skill needed to do a particular task or job, though attitude changes (Swanson (2007).

Education

Education is the key to creating, adapting and spreading knowledge. It increases people's capability to learn and to interpret information. But higher education increases the technical

training needed to build a labour force that can keep up with a constant stream of technological advances, which compress production cycles and speed the depreciation of human capital, such as the construction industry (Aidah, 2013).

Education produces people, who can monitor technological trends, assess their relevance to an organization's prospects and help formulate an appropriate organizational strategy. It improves the construction organizational performance in terms of project delivery, reduce construction rework, and improve problems solving solutions and decision making. Laundon and Laundon (2003) stated that education is progressively considered as a survival tool in a dynamic and competitive environment. Education is primarily for the benefit of the recipient and gives a range of broad knowledge and skills which will be of use in life and work generally. However, Jayawardane and Gunawardena (1998) argue that absence of education among construction firms in developing countries resulting in poor quality, high wastage and long term productivity decline occurred in the construction industry. Similarly, Balogun (2005) identified that, poor education programed in most of construction firms in Nigeria has implications of poor performance which is characterized by poor workmanship, rework, low productivity, late completion and cost overruns, high accident rate and also poor work practice. Wahab (2005) noted that qualitative and quantitative deficiencies in workmanship are some of the factors militating against the attainment of success in the Nigerian construction industry. This, according to Bamisele (2004), is attributable to the no-permanence nature of the construction industry.

Training

There are number of literatures related to training, (Fagbola, 2012; Mahapatro, 2010) defined training as “an organized activity for increasing the knowledge and skills of the people for a definite purpose. It involves systematic procedures for transferring technical know-how to the employees so as to increase their knowledge and skills for doing specific job with proficiency (Mahapatro, 2010). In other words, the trainees acquire technical knowledge, skills and problem-solving ability by undergoing the training programed.

According to Edwin and flippo (1998) training is the act of increasing the knowledge and skills of an employee for doing particular job training involving the development of skills that are usually necessary to perform a specific job. Its purpose is to achieve a change in the behaviour of those trained and to enable them to do their jobs better. Training makes newly appointed workers fully productive in the minimum time. Training is equally necessary for the old employees whenever new machines and equipment are introduced and/or there is a change in the techniques of doing things. It brings about improvement in performance of work. In fact, training is a continuous process, which does not stop anywhere. Thus, training is narrow in scope and largely related to the acquisition of skills; it is more specific to a given job and therefore of more direct benefit to the employer.

Abiodun (1999) submitted that “training is a systematic development of the knowledge, skills and attitudes required by employees to perform adequately on a given task or job, it can take place in a number of ways-on the job or off the job; in the organization or outside organization (Mullins, 1999). Training is to improve knowledge and skills and to change attitude. The study

further argues that training is capable of producing the following benefits; increase the confidence, motivation and commitment of staff; provides recognition, enhanced responsibility and possibility of increased pay promotion; gives feeling of personal satisfaction and achievement and broaden opportunity for career progression; and helps to improve the availability and quality of staff.

Based on the foregoing, training is therefore the process of acquiring specific skills to perform a job better. It helps people to become qualified and proficient in their jobs. Cole (2002) Summarizes other training benefits as shown below;

- 1) High morale:-Employees to receive training have increased confidence and motivations
- 2) Lower cost of production:- Training eliminates risk because trained personnel are able to make better and economic use of material and equipment, thereby reducing and avoiding waste;
- 3) Lower turnover:-Training brings a sense of security at the work place which in turn reduces labour turnover and absenteeism is avoided;
- 4) Change management:-Training helps to manage change by increasing the understanding and involvement of employees in the change process and also provides skills and abilities needed to adjust to new situations;
- 5) Provide recognition: -Training enhanced responsibility and the possibility of increased pay and promotion.

Methods of Training

In order to effectively implement training and development programs, several methodologies have been put forward in previous studies. These include among the other training methods is On the Job Training's: This relates to formal training on-the job. A worker becomes experienced on the job over time due to modification of job behaviour at the point of the trainings or acquisition of skills. Atiomo (2000) identified on-the-job Training as the training in the normal work situation, in the attitude/knowledge/skill behaviour pattern appropriate to a task or job. In other words, the trainee learns as he does his job and with time, perfects completely. On-the-job training is the most effective method of training /staff development in the construction firms. This is largely expected as most duties in the construction industry are mostly carried out on-the-site giving opportunities to large groups of employees to be trained while on the job. It is given preference because of the following (ITF, 2005): The training takes place in the environment in which the trainee will work at the end of his training; the trainee works with equipment and materials which he will use at the completion of training; and the job procedures are the same as obtained after training. Atiomo (2000) identifies On-the-Job training as the training in the normal work situation, in the attitude/knowledge/skill behaviour pattern appropriate to a task or job. In other words, the trainee learns as he does his job and with time becomes perfect completely. On-the-job training is about getting the job done. On-the-job training is dynamic, situated and practice-oriented (Tabassi and Bakar, 2009).

Off-the-job training, on the other hand, is the training in the knowledge behaviour pattern required for a task, job or occupation away from the normal work situation and day-to-day

pressures (Smith (2002). Tabassi and Barker (2009) made a comparison between on-the-job and off-the-job training. According to the authors, in terms of emphasis, off-the-job training is about learning basic facts and skills while on-the-job is about getting the job done. The ultimate goal of off the- job is “knowledge” while that of on-the-job is developing “best practices”. The knowledge obtained from off-the-job training is static, decontextualized and general while the knowledge obtained from on-the-job training is dynamic, situated and practice-oriented. In terms of topics/problems, off-the-job training is given by curriculum while on-the-job training arises from and embedded on in work situation for on-the-job trainings. The scope of learning for off-the-job training is primarily individual while that for on-the-job training ranges from individual to group and organization (Tabassi & Barker, 2009).

Induction/Orientation: is carried out for new employees on the job to make them familiar with the total corporate requirements like norms, ethics, values, rules and regulations. Another training method practice in the construction industry is apprenticeship a method of training where an unskilled person understudies a skilled person. Apprenticeship programmes are more comprehensive trainings that combine on-the-job training with related classroom instruction and are available for electricians, iron workers, carpenters and other artisans.

Demonstration as a training method in the construction industry involve, teaching by example whereby the skilled worker performs the job and the unskilled worker closely observes so as to understand the job process. A conference is a training method that involves presentations by more than one person to a wide audience. It is more cost effective as a group of employees are trained on particular topics all at the same time in large audiences. This method, however, is disadvantageous because it is not easy to ensure that all individual trainees understand the topic at hand as a whole.

Coaching and Mentoring: This involves having more experienced employees(W McCourt & E Derek, 2003; Torrington, Hall, & Taylor, 2005). It is argued that mentoring offers a wide range of advantages for development of the responsibility and relationship building (Torrington & Tan, 1998). The practice is often applied to newly recruited graduates in the organization by being attached to a mentor who might be their immediate manger or another senior manager. This however, does not imply that older employees are excluded.

Vestibule is also another training method. This is done through industrial attachment for the purpose of skills and technology transfer. The effect is the acquisition of practical and specialized skills. Formal training method, this method involves practical and theoretical teaching process which could be done within or outside an organization. When training is carried out inside an organization, it is called an in-house training, while off-house training is carried out in professionalized training area outside organization such as universities, polytechnics and professional institutes;

Other training method include vocational training schools and vestibule schools which provide practical on –the – job knowledge and skills in diverse areas of human endeavour and is more formal than apprenticeship programed. Industrial training is a form of training that provides an on-the-job situation for trainees and is usually part of the curriculum for higher educational

programs in universities, polytechnics and lasts between 3 and 4 months. It is coordinated in Nigeria by the Industrial Training Fund (ITF). Conferences and Workshops are for professional peers and superiors to rub minds, interact and share ideas on developments within a profession or industry higher qualification programs include diploma, graduate and postgraduate programs offered in institutions of higher learning and companies and organizations alike use it as a platform to sponsor their staff to acquire knowledge at the higher level to equip them with requisite skill to face more daunting tasks in the organizations.

The various methods discussed above are complementary in ensuring that the goals of training and development are achieved in an organization. There is however the question of whether they are actually been utilized in the construction industry, especially in developing economies. Population of contractors registered with the Federation of Construction Industry (FCI) and practicing professionals registered with their various professional bodies, such bodies are Council of Registered Builders of Nigeria (CORBON), Architects Registration Council of Nigeria (ARCON), Quantity Surveyors Registration Council of Nigeria (QSRCON) and Council of Registered Engineers of Nigeria (COREN) (Dubem, *et al.*, 2012).

Objectives of HRD in Construction Industry

Since the advent of HRD training and development have formed a vital component in labour issues as indicated in the literature. According to (Tabassi, Ramli, & Bakar, 2011), HRD was designed to increase an individual's level of self-awareness, skills and motivation to perform duties well. Obiegbu (2003) in an effort to justify the importance of HRD to the construction industry outlines the following as its major objectives: Enabling that personnel acquire sufficient and relevant academic and technical knowledge and skills for dealing with problems of the construction industry; acquiring practical field exposure and laboratory/workshop study that bear on enlightened application of the problems in the Industry; appreciating through theoretical and practical field work exposure the problem confronting the Nigerian Construction Industry with the aim of satisfying the need for sourcing local construction materials, and in so doing, sustaining Nigeria's goal in the nation building process by providing the technical ability to visualize and solve practical construction problems. Providing managerial knowledge to make sound decisions and implement them on a prudent and economic basis and enhancing the safety of workmen in the use of machines (Obiegbu (2003).

These objectives have further reinforced the belief that a construction workforce well trained and motivated will impact significantly on project delivery. Tabassi *et al.*, (2011) argued that training plays a critical role in increasing workers' adaptability and flexibility which employers have found to be increasingly important. Thus, it is imperative to admit that every necessary step should be adopted to meet the basic objectives of training and development.

Other objectives of staff training and development are to improve the qualities of the trainee, formulation of objectives for different needs and ways of achieving it. The training objective is very important because it determines the design and content of the training programs. Contents of the training remain the same no matter the type of training involved. It is to increase personnel efficiency, professional growth, and smooth and more effective organization's operations.

Training and development are the heart of a continuous effort designed to improve the employee competency and organizational performance. Some managers use this term interchangeably. It prepares employees to keep pace with the organization as it changes and grow. Training and development activities have the potential to align firm's employees with its corporate strategies (Fagbola, 2012).

The purpose of training and development is as follows: Creating a pool of readily available and adequate replacements for personnel who may leave or move up in the organization; enhancing the company's ability to adopt and use advanced technology because of a sufficiently knowledgeable staff and building a more efficient, effective and highly motivated team, which enhances the company's competitive position and improves employee morale; and ensuring adequate human resources for expansion into new programs.

Training and development was some time use as synonyms terms. However, some view the two concepts as being different; (Jones, G eoge, & Hill, 2000) believe that training primarily focuses on teaching organizational members how to perform their current jobs and helping them acquire the knowledge and skills they need to be effective performers. Development, on the other hand, focuses on building the knowledge and skills of organizational members so that they will be prepared to take on new responsibilities and challenges. In the view of (Adamolekun, 1983), staff development involves the training, education and career development of staff members. The purpose of training and development has been identified to include: creating a pool of readily available and adequate replacements for personnel who may leave or move up in the organization; enhancing the company's ability to adopt and use advances in technology because of a sufficiently knowledgeable staff and building a more efficient, effective and highly motivated team, which enhances the company's growth.

Strategies for Human Resource Development

There is a debate on what determine HRD strategy. Sergey (2011) described the strategy-making process as an on-going process whereby the business organization's objectives and means to achieve them are determined. Strategies are general program action and implied development of emphasis and resources to attain comprehensive objective. The purposes of strategy is to determined and communicate through a system of major objective and policies. Strategic planning seeks to ensure that various sections of the organization support each other to overcome potential adverse environments. The environment refers to all the factors within or outside the organization, which affect or are affected by the strategic business unit (Dansoh, 2004). Bratton and Gold (2003) recorded that a range of business-HRD links have been classified in terms of proactive-reactive continuum. (Bratton & Gold, 2003) recorded that different HRD strategies are called 'third order' strategic decisions because they establish the basic parameters to develop people in the workplace, what actually determines HRD strategy, According to (Purcell, Kinnie, Hutchinson, Rayton, & Swart, 2003) in a major study of HRD in multidivisional companies, decisions will be determined at all three levels of organizational decision making. Colling (1995) added that the concept of strategic choice might exaggerate the ability of managers to make decisions and take action independent of the environmental context in which they do business. Bratton and Gold (2003) indicated however that case study analysis has highlighted the

problematic nature of strategic choice model-building. Additionally, they noted that in the descriptive and perspective management texts, strategic management appears as a cycle in which several activities follow and feed on each other. They described five main steps in their strategic management model and how they interact: Step 1. Mission and goals, for example, management philosophy values; Step 2, environmental analysis, internal and external; Step 3, strategic formulation, strategic choice, corporate, business functional; Step 4 strategic implementation for example leadership, structure, control systems and human resources and; Step 5 strategic evaluation for example operation performance, financial performance (Bratton & Gold, 2003).

HRD policy of an organization is a laid down statement setting out what the organization is prepared to do in terms of developing its employees. Additionally policies are statements which guide or channel thinking and action in decision making (Odusami *et al.*, 2007). This policy document may contain such clauses relating to providing opportunities for selected employees to participate in training activities such as attending conferences, workshops, and seminars to prepare them for new roles (Cole, 2002). A HRD policy is concerned with the quality of labour force and the regulation of the labour market. Quality in turn is a function of basic and higher education. Training programs, the quality and adaptability of the labour force are the key driver in creating a favourable environment to grow through new investment and to adapt quickly to changing circumstances. Their relative roles and the overall importance of HRD depend on individual circumstances (Aniekwu and Ozochi (2010).

HRD policies can contribute to an environment that is attractive to domestic and foreign investors and can enhance the benefits of investment to the society. The policy framework needs to be flexible in order to respond to the new skill needs, created by changing technology and economic structure (Peansupap (2012)). The rising quality of information and communication technologies, for example, is raising the demand for skilled workers. At the same time, these forces also offer an opportunity for emerging economies to integrate more quickly into the global economy, as business organizations restructure their supply chain and operations to gain from regional comparative advantage (Peansupap (2012)). HRD policies must therefore be adaptable and constantly fine-tuned in order to quickly respond to the changing skill needs created by new challenges and to ensure the contribution of investment for development. For this to happen close cooperation between policymakers and the main stakeholders and periodic assessment of the impact of HRD policies on the business and investment environments are needed (Organization for Economic Development and corporation, [OECD] (2004).OECD (2004)

As part of HRD strategy, crucial factors should be explicitly addressed, via HRD policies and appropriate funding of HRD programmes. These are crucial success factor and they indicate organizational commitment to HR planning and thus the development of human resources in an organization. HRD policies are meant to provide guideline in such area as;

- a) **Human resource planning:** policy of commitment by the organization to plan a head.
- b) **Quality of employees:** a policy expressing dedication to the pursuit of excellence and professionalism in all it does.
- c) **Promotion:** a policy stating the organization's intention to promote from within as much as practicable.

- d) **Employ abilities:** a policy of increasing individual employability by providing career development and learning opportunities.
- e) **Redundancy:** policy expressing the organization's intention to avoid involuntary redundancy through redeployment and retaining procedures

Effectiveness of HRD in the Construction Industry

HRD involves education, training and development of workforce (Briscoe, 1995). HRD is effective if it closes the needs between current performance and expected future performance and also organization goals (Weil & Wooll, 2005). Amongst the functions activities of this is the identification of the needs for training and development and selecting methods and programs suitable for these needs, plan how to implement them and finally evaluating their outcome result (W McCourt & E Derek, 2003). Atiomo (2000) revealed that the effectiveness of HRD strategies is the ability to bring about changes in corporate performance, improved productivity, attitudes, behaviour and also relationships communication and information management, corporate performance, productivity, organization culture and staff turnover in the construction industry. .

Guest (1997) argues that policies are necessary to ensure that employee performance is evaluated, which in turn ensures that the appropriate education, training and development take place. With the help of the performance appraisal reports and findings, the organization can be able to identify the effectiveness' of HRD. However, individuals themselves can help to indicate the areas requiring improvement as a result of the issues raised in the performance appraisal process and their career path needs.

3.0 METHODOLOGY

Using purposive sampling technique, the study selected three states namely: Sokoto, Kebbi and Zamfara states from North Western Nigeria. The population for the study consisted of all registered construction firms in the selected states. The number of registered construction firms was obtained from the State Tender Board in each state. Twenty per cent (20%) of the construction firms with offices in the three states were selected using random sampling, yielding 66 firms. In each firm, 6 staff members were selected making a total of 396 respondents; hence, a total of 396 questionnaires were administered out of which 238 were retrieved. The primary data for the study was collected through the administration of structured questionnaires the data collected were analysed using percentage, frequency, mean score, factors analysis and F- value.

4.0 RESULTS AND DISCUSSION

The study also examined the effectiveness of HRD strategies adopted in the sampled construction firms. To this end, each of the variables was rated by respondents using five-point likert scale as follows: "strongly improved", "improved", "moderately improved", "fairly improved" and "not improved" with weight values 5, 4, 3, 2 and 1 respectively. Based on literature, there are a number of variables used to determine effectiveness of construction firms; those variables are further grouped into five categories, namely: improvement on information and communication issues, organizational productivity, corporate performance, and organizational culture and staff turnover. The strength of effectiveness was measured using mean

score, called employees effectiveness score. Mean score was employed for the purpose of this study to rank the variables used, while ANOVAF=Value was used to test the degree of improvement. All variables with ANOVAF=values of 3.00 and above were considered strongly improved by HRD strategies adopted in the firms; the test of improvement was carried out through ANOVA procedure. The effectiveness of HRD strategies adopted by firms was evaluated and the results were presented in Tables, 1, 2, 3 and 4. Atiomo (2000) revealed that the effectiveness of HRD strategies is the ability to bring about changes in corporate performance, improved productivity, attitudes, behaviour and relationships in the construction industry.

Effectiveness on Information and Communication

The study sought to examine the extent of employees' improvement on information and communication variables as a result of HRD strategies practiced in their firms. The results (Table 1) showed that HRD strategies adopted by sampled construction firms significantly improved the following variables: construction planning and design with highest (4.19) and strongly improved at (F=5.032, p<0.05), on-site data collection and information transfer with (3.64) and strongly improved at (F=4.671, p<0.05), building production information (3.59) and strongly improved (F=3.670, p<0.05). However the HRD strategies did not strongly improved integration of business and strategies, documentation of technical and personal information and integration of business and strategies. However the transfer of information from one individual to another is absolutely essential in construction firms; communication is the means by which organized activities are unified. Indeed group activities, coordination and changes cannot be effective without communication in construction firms.

Table 1. Effectiveness of HRD on Information and Communication

| Effectiveness of HRD on Information and Communication | % | | | | | Mean Score | Rank | ANOVA F |
|--|-------------------|----------|---------------------|-----------------|--------------|------------|------|---------|
| | Strongly Improved | Improved | Moderately Improved | Fairly Improved | Not Improved | | | |
| Construction planning and design | 41.4 | 39.7 | 15.5 | 3.4 | 0 | 4.19 | 1 | 5.032** |
| On-site data collection, coordination and information transfer | 21.9 | 28.1 | 43.8 | 4.7 | 1.6 | 3.64 | 2 | 4.671** |
| Building production information and transfer | 20.0 | 38.3 | 28.3 | 11.7 | 1.7 | 3.63 | 3 | 3.670** |
| Documentation of technical and personal information | 23.2 | 32.1 | 28.6 | 12.5 | 3.6 | 3.59 | 4 | 1.247 |
| Integration of business and | 31.6 | 40.4 | 1.78 | 8.8 | 1.8 | 3.44 | 5 | 1.074 |

strategies

** Strongly improved at 5% level

Effectiveness on Organizational Productivity

This section of the study examined the degree of employees' improvement on productivity variables as a result of HRD strategies practiced in their firms. The examination was done using seven (7) productivity variables with each rated by respondents using a five point-Likert scale: "strongly improved", "improved", "moderately improved", "fairly improved" and "not improved" with weight values 5, 4, 3, 2 and 1 respectively. The degree of improvement was measured using ANOVA F=Value. The result in (Table 2) shows that numbers of variables were evaluated to test the effectiveness of HRD strategies adopted by sampled construction firms on organization productivity, namely: minimized rework and scrap (3.81) and significant at (F 5.473, p<0.05) and minimized wastage (3.63) significant at (F 4.031, p<0.05) (Table 2). However, the HRD strategies adopted were not effective on maturity of processes, clarity of goals, and elimination of scope and profitability/profit margin. However, according to Abiola (2004), productivity improvement is a central challenge for managers in all types and sizes of organizations. It is defined as reaching the highest level of performance with the least expenditure of resources; and also defined as ultimately the ability to produce and the desire to produce. Training offers the employees the ability to perform their work effectively and efficiently (Abiola, 2004).

Table 2 Effectiveness on Organizational Productivity

| Effectiveness on Organizational Productivity | % | | | | | Mean Score | Rank | ANOVA F |
|--|-------------------|----------|---------------------|-----------------|--------------|------------|------|---------|
| | Strongly Improved | Improved | Moderately Improved | Fairly Improved | Not Improved | | | |
| Minimized rework and scrap | 31.6 | 33.3 | 24.6 | 5.3 | 5.3 | 3.81 | 1 | 5.473** |
| Minimized wastage | 20.0 | 38.3 | 28.3 | 11.7 | 1.7 | 3.63 | 2 | 4.031** |
| Work procedure | 25.9 | 27.6 | 29.3 | 17.2 | 0 | 3.62 | 3 | 1.730 |
| Elimination of scope | 19.0 | 12.1 | 43.1 | 22.4 | 3.4 | 3.21 | 4 | 1.639 |
| Delay | 10.5 | 28.1 | 35.1 | 19.3 | 7.0 | 3.16 | 5 | 1.327 |
| Clarity of goals | 27.3 | 32.7 | 2.36 | 9.1 | 7.3 | 2.99 | 6 | 1.004 |
| Profitability/profit margin | 5.4 | 3.4 | 44.6 | 16.1 | 3.6 | 2.10 | 7 | 0.582 |

** Strongly improved at 5%

Effectiveness on Corporate Performance, Organization Culture and Staff turnover

Results in Tables 3 highlighted the effectiveness of HRD strategies adopted by construction firms on corporate performance. The findings revealed that HRD strategies adopted did not improve several variables on corporate performance, namely: maturity of processes (3.46), project quality (3.44), employee confidence (3.41) and better use of skill set (3.27). It is however

confirmed that the strategies adopted strongly improved effectiveness on work efficiency (3.52) and handling development process challenges (3.62), and significant at (F=3.987, P<0.05) and (F=6.231, P<0.05) respectively in corporate performance.

Table 3. Effectiveness on Corporate Performance

| Effectiveness on Corporate Performance | % | | | | | Mean Score | Rank | ANOVA F |
|--|-------------------|----------|---------------------|-----------------|--------------|------------|------|---------|
| | Strongly Improved | Improved | Moderately Improved | Fairly Improved | Not Improved | | | |
| Handling development challenges | 46.9 | 21.9 | 25.0 | 6.3 | 0 | 3.62 | 1 | 6.231** |
| Work efficiency | 33.3 | 38.3 | 11.7 | 11.7 | 5.0 | 3.52 | 2 | 3.987** |
| Maturity of processes | 31.0 | 32.8 | 19.0 | 3.4 | 13.8 | 3.46 | 3 | 1.735 |
| Project quality | 17.7 | 48.4 | 27.4 | 4.8 | 1.6 | 3.44 | 4 | 1.043 |
| Employee confidence | 31.6 | 29.8 | 22.8 | 8.8 | 7.0 | 3.41 | 5 | 0.720 |
| Minimal scrap and re-work | 21.9 | 43.8 | 20.3 | 10.9 | 3.1 | 3.32 | 6 | 0.582 |
| Better use of skill set | 14.3 | 16.1 | 41.1 | 17.9 | 10.7 | 3.27 | 7 | 0.321 |

** F- Value strongly improved at 5%

The results in Table 4 revealed information on organization culture and staff turnover, the following variables were found to be effective and strongly improved on organization culture namely: client satisfaction/requirement (mean score=4.34) and significant at (F=5.99, P<0.05), group thinking mean score=2.67 and significant at (F=6.144, P<0.05), systematic thinking (mean score=2.73) and significant at (F=4.211, P<0.05), high performance (mean score=2.61) and significant at (F=9.440, P<0.05) on organization culture.

With regard to organization Staff turn-over (Table 4) the result revealed that there were improvement on, corporate loyalty (mean score=3.48) and significant at (F=7.3529, P<0.05), elimination of cultural shock (mean score=2, 05) and significant at (F=3.074, P<0.05) and team work (mean score=2.28) and significant at (F=3.944, P<0.05). Employees' turnover is the difference between the rate of employees leaving a company and new employees filling up their positions. (Danial *et al.*, 2012). As the world progress towards globalization, this has become a serious issue which has serious effects on productivity as well as corporate financial outlay. The tendency is much higher in those companies who offer low paying jobs. Numerous factors significantly contribute towards employees' turnover. Such factors can stem from companies as well as the employees. When an employee leaves the company the employer has to incur a considerable amount of direct and indirect expenses. These costs normally include advertising expenses, headhunting fees, resources management expenses, loss of time and productivity, work imbalance, employee training and development expenses for new joiners (Danial *et al.*, 2012).

Table 4 Effectiveness on Organization Culture and Staffs Turnover

| ORGANIZATION CULTURE | % | | | | | Mean Score | Rank | ANOVA F |
|--|-------------------|----------|---------------------|-----------------|--------------|------------|------|---------|
| | Strongly Improved | Improved | Moderately Improved | Fairly Improved | Not Improved | | | |
| Client satisfaction/requirements | 23.1 | 3.1 | 10.8 | 10.8 | 52.3 | 4.34 | 1 | 5.99** |
| Corporation between project participants | 30.2 | 29.4 | 21.4 | 11.1 | 7.9 | 3.63 | 2 | 0.987 |
| Meeting with legal requirements | 26.2 | 31.7 | 27.8 | 4.0 | 10.31 | 3.59 | 3 | 2.53 |
| Health and safety requirements | 50.8 | 12.3 | 3.1 | 3.1 | 30.8 | 3.49 | 4 | 1.308 |
| Competitive advantage | 19.0 | 34.9 | 28.6 | 7.1 | 10.3 | 3.45 | 5 | 1.781 |
| Integration of project organization | 14.3 | 35.7 | 32.5 | 11.16 | 3.2 | 3.37 | 6 | 5.77** |
| Work procedure | 20.6 | 23.0 | 33.3 | 14.3 | 8.7 | 3.32 | 7 | 0.56 |
| Overall project delivery | 32.3 | 4.6 | 9.2 | 15.4 | 38.5 | 2.76 | 8 | 1.976 |
| System thinking | 26.2 | 13.8 | 7.7 | 10.8 | 42.1 | 2.73 | 9 | 4.211** |
| Group thinking | 16.9 | 13.8 | 23.1 | 10.3 | 36.9 | 2.67 | 10 | 6.144** |
| High performance and innovation of employees | 26.2 | 4.6 | 15.4 | 12.3 | 41.2 | 2.61 | 11 | 9.440** |
| Absenteeism of employees | 15.4 | 9.2 | 9.2 | 16.9 | 49.2 | 2.28 | 12 | 1.782 |
| ORGANIZATION STAFF TURNOVER | | | | | | | | |
| Right person for right job | 31.0 | 34.1 | 25.4 | 4.0 | 5.6 | 3.81 | 1 | 4.061 |
| Corporate loyalty | 15.9 | 40.5 | 24.6 | 13.5 | 5.6 | 3.48 | 2 | 7.352** |
| Elimination of job stress and unfair treatment | 46.2 | 10.8 | 9.2 | 6.2 | 29.2 | 3.43 | 3 | 0.141 |
| Professional commitment to organization | 41.3 | 21.5 | 3.1 | 3.1 | 30.8 | 3.39 | 4 | 1.721 |
| Judicial utilization of human resource | 6.2 | 13.5 | 23.0 | 40.5 | 16.7 | 2.52 | 5 | 1.424 |
| Elimination of communication gap | 7.1 | 15.1 | 18.3 | 36.5 | 23.0 | 2.47 | 6 | 0.321 |
| Learning curve | 4.8 | 15.1 | 23.8 | 33.3 | 23.0 | 2.45 | 7 | 0.7921 |
| Improvement in work environment | 0.0 | 17.5 | 17.5 | 51.6 | 13.5 | 2.39 | 8 | 1.043 |
| Teamwork and comradeship | 18.5 | 15.4 | 0.0 | 7.7 | 58.5 | 2.28 | 9 | 3.944** |
| Desire for professional growth | 1.6 | 7.9 | 17.5 | 48.4 | 24.6 | 2.14 | 10 | 5.117** |
| Elimination of culture shock | 8.7 | 1.0 | 29.4 | 26.2 | 16.7 | 2.05 | 11 | 3.074** |

**strongly improved at 5%

CONCLUSIONS

The results of this study shows that there is need for construction industry in North western, Nigeria to focus on improving the practices and implementation of human resource development, especially reward and recognition, training and education, in order for human resource development to be wholly embraced and implemented. To assure quality of construction projects, clients should pay attention on quality of manpower to handle construction projects and subcontractors. To a limited extent, some factors of human resource development are prevailing in construction works in Nigeria while others are still in their formative and or maturing stage. However, other factors like training and education, teamwork, suppliers' partnership, quality planning, process management, communication, reward and recognition people management and empowerment are still in their maturing stage in the industry. Training should be considered as primarily a vehicle for implementing and reinforcing quality practices. Moreover, clients should advance from the accustomed practice of awarding tenders to the lowest price and promote rewarding the best team and suppliers who could provide the best service. With proper training and quality awards, the quality awareness can spread widely throughout the construction industry in Nigeria and the achievement of human resource development can be maintained. In addition to the aforesaid, great effort is required from the management to develop the whole company human resource development. The paper recommends that professional bodies and stake holders should embark on human resource audits before contract awards so that shared values, objectives and behaviours can be aligned to the goals of the quality plan. Also, an extensive awareness and training programs be initiated to improve the clients' understanding and approach toward quality and hence increase their achievement of human resource development, which would in turn improve coordination, teamwork, productivity, and construction industry performance.

REFERENCES

- Abiodun, E. J. A. (1999). Human Resources Management, an overview. Concept Publication. 110-121.
- Academy of Human Resource Development (Ed.). (1999). *Standards on Ethics and integrity*. United State of America: Darlene russ-Eft, AHRD Ethics. Library of congress cataloging-in- publication data
- Adamolekun, L. (1983). *public Administration: Nigeria and Comparative perspective*, London. Longmans.
- Aidah, N. (2013). *effects of training on employee performance Evidence from Uganda*. (M. Sc.), Vaasan AmmaTikorkeakoulu University of Applied Science.
- American Society for Training and Development (ASTD) 2009. (2010). 2009 Annual report. Accessed. doi: at: [http:// www.astd.org/NR/rdonlyres/7F55BD31-BE7D-A5057A3ADA75/0/2009Annualreportwebversion.pdf](http://www.astd.org/NR/rdonlyres/7F55BD31-BE7D-A5057A3ADA75/0/2009Annualreportwebversion.pdf)
- Aniekwu, N., & Ozochi, A. (2010). Restructuring education and human - resource development in the Nigerian construction industry. *journal of science and technology education research*, 1(5), 92-98. doi: <http://www.academicjournals.org/JSTER>
- Atiomo, A. (2000). *Human Resource Management*.
- Bratton, J., & Gold, J. (Eds.). (2003). *Human resource management theory and practice* palgrave Macmillan, UK.
- Briscoe, D. R. (1995). *International Human Resource Management*. New Jersey: Prentice Hall.

- Chan, Suen, & Chan. (2005). An integrated project extranet design phototype: e-AEC for architects, engineers and contractors in hong kong mainland china *construction research*, 6(2), 253-271.
- Cole, G. A. (2002). *personnel and human resource management*. london York publishers.
- Colling, T. (1995). Experiencing Turbulence: Competition, strategic Choice and the management of human resource in British Airways. *Human resources management* ,, 5(5), 18-32.
- Dansoh, A. (2004). Dstrategic planning practices of consrtuction Firms in Ghana. *construction management and economic*, 23, 163-168.
- Edwin, **B.**, & **flippo**. (1998). Principles of personnel management, McGraw- Hill, Tokyo, . 209.
- Fagbola, T. O. (2012). *Manpower development and efficiency of employees in the food and beverage indutry in south western nigeria*. (M. Phil), Obafemi Awolowo University Ile- Ife Osun State nigeria.
- Gann, D. M., & Salter, A. (1998). Learning and innovation management in project-based, service-enhanced firms, . *international journal of of innovation management*, 2(4), 431-454.
- Gilley, J. W., & Maycunich, A. (1998). strategically integrated HRD: partnering to maximize organizational performance.
- Guest, D. E. (1997). Human Resource Management and Industrial Relations. *Journal of Management Studies*, 24,(5), 503-521.
- Jon, M., Werner, D., & Randy, L. (2012). Human resource development.
- Jones, G. R., G eoge, J. M., & Hill, C. W. L. (2000). Contemporary Management, New York: Irwin and Mc Graw Hills.
- Laundon, K. C., & Laundon, P. L. (2003). *Essentials of management information systems, managingthe digital firms*, (fifth ed.). New jersey: prentice-hall,Englewood cliffs.
- Mahapatro, B. M. (2010). Human resource management, New Age publisher, New Delhi.
- McCourt, W., & Derek, E. (2003). *Global Human Resource Management Developing and Transitional Countries*. Cheltenham, UK: Edward Elgar.
- McCourt, W., & Derek, E. (2003). global human resource management: managing people in developing transitional countries. *Cheltenham. UK: Edward Elgar*.
- Mclagan, P. A. (1989). Models for HRD practice. . *Training and Development journal*, 4(9), 49-59.
- Mclean, G. N., & Mclean, L. (2001). If we can't define HRD in one country, how can we define it international contex? *Human resources Development International*, 4(3), 313-326.
- Mullins, L. J. (1999). Management and organization behaviour, prentice Hall, London.
- Obiegbu, M. (2003). Education and training of Builders Towards proactive Roles in the 21st century Building Industry in Nigeria. seminar for lecturers of Building programme in Tertiary Institutions. Nigerian Institute of Building (NIOB), 13th December.
- Odusami, K., Oyediran, O., & Oseni, A. (2007). Training needs of construction site managers. . *Emirate journal for Engineering Research*,, 12(1), 73-81.
- OECD, O. f. E. C. a. D. (2004). OECD 2004b, "Recommendation of the council on Broadband Development", C(2003) 259/FINAL.
- Ogunlana, S., Thapa, S., & Dey, P. K. (2002). Assessing engineering training needs, methods and effectiveness In: SO Ogunlana(Eds): Training for construction Industry Development.,, *Rotterdam:CIB Publication*, 94-102.
- Oladeji, S. O. (2002). *Approaches to Human Resources Development*. Paper presented at the training programme on management of human resources, , Ibadan, Nigeria.
- Peansupap, v. (2012). An exploratory approach to the diffusion of ICT in project environment.
- Purcell, J., Kinnie, N., Hutchinson, S., Rayton, B., & Swart, J. (2003). Understanding the people and performance link: Unlocking the Black-box. research report, CIPD, london.

- Sergey, k. (2011). Information and communication technology in construction industry.
- Smith, P. J. (2002). Modern learning methods rhetoric and reality - further to sadler-smith et al .. person rev. 31(1), 103-113.
- Stephen, g. (2011). human resource development.
- Swanson, R. A. (2007). Defining intergalactic human resource development (HRD). *Human resources Development International*, 10(4), 455-457.
- Tabassi, A. A., & Barker, A. A. H. (2009). Training, Motivation and Performance: The Case Of human resource Management in Construction Projects in Mashhad, Iran. . *international journal of project management*, 27, 471-480.
- Tabassi, A. A., Ramli, M., & Bakar, A. H. A. (2011). Training, Motivation and Teamwork improvement: The case of construction firms. . *African journal of business management*, 5(14), 5627-5636.
- Torrington, D., Hall, L., & Taylor, S. (2005). *human resources development* (6th Ed. ed.). London: prentice Hall.
- Torrington, D., & Tan, C. H. (1998). Human resource management for Southeast Asia and Hong Kong prentice hall.
- Weil, A., & Wooall, J. (2005). HRD in France: the corporate perspective. *Journal of European Industrial Training*, 29(7), 529-540.

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