Impact of Coaching and Mentoring in the Nigeria Liquefied Natural Gas Company Limited, Bonny

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ABSTRACT
The paper examined the impact of coaching and mentoring in the Nigeria liquefied natural gas company limited, bonny. The research question addressed the extent at which improved employees job performance/reduced employees turnover is influenced by the implementation of coaching and mentoring program in the Nigeria liquefied natural gas company limited, bonny. It views coaching and mentoring as learning relationships that improve employees’ job skills and develop their potentials for better performance. The core aspect of the study is the use of cross-sectional survey research design in generating the required primary data. The place of study is the bonny industrial area of the Nigeria liquefied natural gas company while the duration of study is between December 2013 and November 2014. A sample of 370(184 Direct staff, 150 Contract staff and 36 Seconded staff) respondents determined at 5% level of significance for sample error, using Yamane’s formula, was selected from a population of 4,895 employees using stratified random sampling method for the purpose of questionnaire administration. The results indicated that implementation of coaching and mentoring program in the Nigeria liquefied natural gas company limited bonny, to a large extent influenced improved employees’ performance(74.32% response rate) and reduced employees turnover(67.57% response rate). It therefore recommends among others: sustenance of the current coaching and mentoring program, regular appraisal of employees job skill requirements, continuous staff development, regular improvement of employees’ condition of service and sustenance of current team building efforts/ incentive scheme.

Keywords: Coaching and mentoring, employees’ performance, employees’ turnover, organizational performance, NLNG bonny.

1. Introduction
1.1 Background of the study
The Nigeria liquefied natural gas company limited Bonny, was incorporated as a limited liability company on May 17, 1989, to harness Nigeria’s vast natural gas resources and produce liquefied natural gas (LNG) and natural gas liquids (NGLs) for export. It is jointly owned by Nigerian National Petroleum Corporation (49%), Shell (25.6%), Total LNG Nigeria Ltd (15%) and Eni (10.4%). Its workforce comprises of 2,430 direct hire
staff, 1,980 contract staff and 485 seconded staff from shareholder companies. With six trains currently operational, the entire complex is capable of producing 23.5 metric tons per annum (mtpa) of LNG, 4 mtpa of LPG and 2.4 mtpa of condensate from 3.5 billion cubic feet feedgas intake (NLNG, 2013).

In the period 1999–2011, NLNG converted about 92 billion cubic metres or 3.3 trillion cubic feet of Associated Gas (AG) to export LNG/NGL products (equivalent to about 968 LNG/NGL cargoes) which otherwise would have been flared. Presently, the company has the capacity to load and safely deliver over 340 cargoes of its products annually. It also delivers about 8% of the world’s liquefied natural gas demand, supplies over 70% of Nigeria’s liquefied petroleum gas needs and contributes about 7% of Nigeria’s gross domestic product (NLNG, 2013).

With a mission to grow the company and its human resources to their full potential, a learning department was established to coordinate training/development of employees. The learning department regularly identifies employees’ specific knowledge gaps in relation to their jobs (present or future) and arranges internal coaching and mentoring programmes to bridge the identified knowledge gaps. This suggests that the company values employees’ capacity building in achieving its mission of a global LNG company renowned for its operational excellence, cost leadership, high HSE standards, honesty and integrity.

Coaching is the art of facilitating performance, learning and development of another. It is individualized training for particular skill development (Flory, 1965). Mentoring is a role relationship where one person, the mentor, offers assistance, guidance, advice, encouragement and support to another, the mentee, in order to foster vocational and professional development (Whitney, 2006). Organizations can no longer expect to be competitive unless they retain employees, inspire and support them to learn continuously. Coaching and mentoring enhance the personal skills of employees through an effective learning process that is beyond the traditional training methods. They develop learning relationships that are solely based on trust and mutual support (Whitmore, 1998). Both are increasingly being seen as essential aspects of effective organizational learning strategy. They are the best means of providing support to individuals in achieving their goals, increasing their potentials and capitalizing on their strengths to improve organizational performance (Edwards, 2003). The constructive feedbacks provided by these two HR practices help employees in changing their work behaviors to overcome performance barriers (Sosik, 2002).

The ultimate goal of coaching and mentoring is to change the organizational culture so that learning becomes ubiquitous. It entails collaborative efforts on learning in the workplace. In a learning organization, people do not just perform tasks – they are always developing their capacity and knowledge for improved performance. Similarly, managers are never just organizing tasks, assigning responsibilities or ensuring that tasks are done – they are actively involved in improving their subordinates skills and knowledge through coaching and mentoring. Coaching and mentoring, combines with other workplace learning initiatives, to yield high employees performance, greater employees’ commitment to organizational goals and constructive employees’ relationships (Pavlovic, 2000). It is against this background that it becomes pertinent to examine the impact of coaching and mentoring in the Nigeria liquefied natural gas company limited, Bonny.
1.2 Statement of the Problem

The major challenge of coaching and mentoring in NLNG Bonny is the conflict in the interest of managers and subordinates in the chosen area of skill development. The managers chosen area of skill development for their subordinates may not be attractive to the latter while the latter’s desired area of skill development may be available in other departments that may not be willing in coaching/mentoring them to acquire the desired skill. Also, inadequacy of coaching/mentoring time constitutes another major challenge, especially where managers and subordinates are in agreement in the identified area of skill development.

The conflict in interest of managers and subordinates/inadequacy of coaching/mentoring time may result in loss of employees’ morale, commitment, productivity, efficiency and organization’s competitive advantage. Human resource being the most vital factor of production requires an integrated coaching and mentoring program for organizational efficiency and effectiveness (Solkhe and Chaudhary, 2011).

1.3 Research Objectives

The objectives of the research are as follows:

1. To determine the extent at which improved employees’ job performance is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.
2. To determine the extent at which reduced employees’ turnover is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.

1.4 Research Questions

Despite the conflict in interest of managers and subordinates in the chosen area of skill development/inadequacy of coaching/mentoring time in the Nigeria liquefied natural gas company limited, Bonny, the various milestones recorded by the company could not have been possible without the development of its human resources through coaching and mentoring thus prompting the following research questions:

1. To what extent is improved employees’ job performance influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny?
2. To what extent is reduced employees’ turnover influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny?

1.5 Research Hypotheses

In view of the above research questions, the following null hypotheses were formulated:

1H₀: Improved employees’ job performance is not influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.
2H₀: Reduced employees’ turnover is not influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.
1.6 Literature Review

Organizations are striving hard to develop and retain high performing work force for uninterrupted organizational operations (Lewis, 1996). In today’s competitive global environment, coaching and mentoring is considered an important part of new HR practices, because they inspire employees to increase their commitment to the organization thus ensuring increased organizational productivity and success (McLead, 2003). Since people are the most important assets of organizations, increasing employees’ skills and abilities through coaching and mentoring is expected to create future returns in the form of increased productivity and improved business performance (Shih, Chiang, & Hsu, 2006). Coaching and mentoring have a direct impact on employees’ attitude i.e. motivation, commitment and satisfaction (Wright et al., 2003). Specifically, a large body of research considers coaching and mentoring to be a key determinant of employee performance (Hardre, 2003). Rowden and Conine (2003) observed that a large part of the workers sense of job satisfaction can be attributed to availability of workplace learning opportunities. It has been argued that employees’ turnover is heavily influenced by job satisfaction, motivation and organizational commitment, because no employee would like to stay with an organization that is not satisfied with his work (Chiu & Francesco, 2003).

Coaching and mentoring enhance the personal skills of employees through an effective learning process that is beyond traditional training methods. It identifies skill deficiencies and arranges/organizes internal development programs to bridge the identified skill gaps with a view to changing employees’ behaviours and improving job performance (Gilley, 1996). The major focus of coaching and mentoring is on individual development (Rolfe, 2003). Nowadays, many organizations are keeping their eyes on implementing successful coaching and mentoring programs in order to increase employees’ morale and productivity (Hahn, 2008). For this purpose, they must justify their investment in such programs by ascertaining its relevance to the existence and survival of the organization (Stewart, 2006). Every firm wants to boost their performance due to increased customers’ expectations and changing demands. Also firms recognize the importance of human capital as a means of improving their performance (Pfeffer, 1994). Tannenbaum, (1997), emphasized coaching and mentoring as an imperative source of better employee performance.

Coaching and mentoring is emerging as a critical activity in achieving knowledge transfer. However, a study by Accenture in 2005 found that over 40% of organizations have no formal processes for passing on the knowledge of retiring employees. Of the organizations that have addressed the issue, in many cases the process amounts to no more than an informal chat with colleagues before leaving. A study published by the International Personnel Management Association compared outcomes from training with outcomes obtained when training was combined with coaching/mentoring (Laabs, 2000). The productivity gains for training alone were 22%, but when coaching/mentoring was used as well, the gains were 88%; the gains of training increased fourfold when it was combined with coaching/mentoring. An Australian study by Moy and McDonald (2000) analyzed a large number of other studies on returns on investment (ROI) in training. They concluded that the economic benefits of training were greatest when training was integrated with coaching and mentoring. One US study on the
benefits of coaching and mentoring (Clutterbuck, 2000/2001) found that new insurance agents with coaches/mentors outperformed other new agents by 20% in their first year. Structured programs aim to extend the benefits of coaching and mentoring more widely and reliably through the organization. The aim of a structured mentoring program (Stolmack and Martin, 2005) is to create effective mentoring relationships, guide the desired professional development of those involved and evaluate the results for the mentees, the mentors, and the organization. If the program is directed at coaching for executives, then the aims are similar – to foster the skills and confidence of executives, and to achieve measurable improvements for the business. However, if the aim is to build the skills of line managers to incorporate coaching into their normal management style, then the outcomes are of a different nature. The changes to be expected include a widespread cultural shift, which may be reflected in increased job satisfaction across the workforce and within teams, and increased innovation as well as the financial indicators of increased revenue and profits.

According to Ragins, Cotton & Miller (2000), research on coaching and mentoring programs has shown that if the program is implemented effectively and the coachees/mentees are satisfied with the coach/mentor, the coachees/mentees will show greater job satisfaction, positive career attitudes and greater commitment to the organization. Studies have also shown that mentoring and coaching has positive impact on employees and the organization. It provides employees with the communication network that will enable them to accomplish their social needs (Garvey, 2004). It transforms managers and employees strategies into better productive outcome. It helps employees to discover and utilize their hidden potentials (Starcevich, 1998). It also encourages employees’ to mention their problems openly (Hahn, 2008).

Bartlett (2001) observed a positive relationship between coaching/mentoring and employees’ commitment and recommended that HR professionals should adapt new research methods to demonstrate to organizational decision makers that coaching and mentoring contributes to desired workplace attitudes which may in turn influence behaviours such as absenteeism and turnover.

Lee and Bruvold (2003) stated that comprehensive coaching and mentoring programs are positively associated with productivity; reduced staff intention to leave and organizational effectiveness. Raghuram (1994) observed that coaching and mentoring is the bedrock of developing the necessary skills for maintaining competitive advantage and organizational performance. Although it is true that the source of competitive advantage refers to the human resources themselves and not to the policies employed to attract, utilize and retain them, coaching and mentoring may be considered to be a good starting point for building a pool of superior employee resources and capabilities.

1.7 Conceptual Framework

Coaching is the art of facilitating performance, learning and development of another. It is individualized training for particular skill development (Flory, 1965). While mentoring is a role relationship where one person, the mentor, offers assistance, guidance, advice, encouragement and support to another, the mentee, in order to foster vocational and professional development (Whitney, 2006). It is considered as a “learning adventure” that focuses on the connection of mentor and mentee (Kram, 1985). Coaching is a kind
of consultation for professional development. The job of a coach is to determine powers, drawbacks, objectives and needs of an employee. Bentey (1996) identified four main parts of coaching as follows: support, modeling, step-by-step development and encouragement. While Weaver (1999) viewed mentoring is a process in which an experienced professional person provides support, help and guide to less experienced person and steer career progress of the mentee. In many organizations, coaching and mentoring are occurring daily or unconsciously most of the time (Starcevich, 1998). Both share the same principles but differ in their procedure.

Mentoring consists of face to face meetings between mentor and mentee (learner), the mentor advises employees’ on how to do their work, suggests how they can improve their performance and gives instructions (Lewis, 1996). While coaching occurs in more formal settings where both coach and coachee use informal tone of conversation. The coach makes a formalized plan which states activities during the whole session and measures progress (Tyler, 1998). In mentoring, the mentor provides the solution while the coachee provides the solution in coaching (Lewis, 1996). The catalyst in coaching engagement is the coach (Bell, 2002). Coach can be a mentor but a mentor cannot be a coach at the same time. When a coach acts as a mentor, he or she uses his/her experiences to remove any sort of doubts, between his/her professional role and personal life. The whole process of mentoring is based on one’s experiences. Mentoring basically discusses goals, action plans and different ways to achieve those plans (Lewis, 1996). Based on such experiences, the mentor crafts an action plan for the future (Barbian, 2002). Then this action plan is given to the mentee to act upon.

Coaching aims at enhancing the “self-propelling force” of an individual to work well. Hay (2003) highlighted two styles of coaching: “pull style” and “push style”. Push style occurs when the major power resides with the coach. In this case, the coach dominates the relationship, where he/she has authority and decision making power and demands employees to do what he/she says. Pull style occurs when the coach empowers employees to make their own decisions and find optimal solution of problems while being provided with guided and constructive feedbacks.

Mentoring deals with enhancement of one’s career. Individuals, who need advancement in their career path, may need a mentor for guidance. The establishment of a structured coaching or mentoring program enables the organization to determine the approach that is appropriate to its culture and strategy. There are many possible objectives and approaches for structured programs: • leadership development and succession planning • enhancement of the company’s investment in training • improved induction and socialization in order to improve retention • improved opportunities for disadvantaged people (e.g. gender, race) • transfer of knowledge from experts near retirement to younger employees. A structured program should deliver greater benefits to the organization than an informal approach for a number of reasons. It will: • focus energy towards a particular objective • be planned and organized rather than ad hoc • offer recognition to all participants for their effort • provide training, structure and support to all participants • establish suitable guidelines and policies • monitor and evaluate the process.

Although there are differences between the roles of coaches and mentors, there is also much common ground. Both roles require a balance between nurturing the learners and
stretching them in order to develop new skills. Coaches may challenge their learners more directly than mentors do, but both coaches and mentors act as “critical friends” (Clutterbuck, 2000/2001). According to Whitney (2006), the skills of coaches and mentors can be grouped into three categories: emotions, cognition and values. 

Emotions: Coaches and mentors need the skills of emotional intelligence – being aware of their own strengths, weaknesses and motivations, being able to manage their own behaviour, being aware of the other person’s strengths, weaknesses and motivations (i.e. empathy) and having the interpersonal skills to manage the situation. They are able to establish a foundation of trust for the relationship.

Cognition: Coaches and mentors also need business or professional acumen in order to establish their credibility. They need the intellectual skill to conceptualize the learner’s situation and work with them to explore new options. They are able to use their knowledge to collaborate with the learner on setting goals that are achievable. They understand the learning process, and the difficulties that people may face in acquiring new skills.

Values: Coaches and mentors, even with the above skills, are not effective unless they demonstrate ethical conduct. The values pertinent to the coaching or mentoring situation include respect for the learner’s dignity, fairness, compassion, honesty and integrity.

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**Figure 1:** Coaching/mentoring and improved employees’ performance model

Source: Khakwani et al (2012). Coaching and Mentoring For Enhanced Learning of Human Resources in Organizations: (Rapid Multiplication of Workplace Learning to Improve Individual Performance). Journal of Educational and Social Research Vol. 2 (1) January 2012.
1.8 Theoretical Framework/Methodology

This research is based on Khakwani et al (2012) coaching/mentoring and improved employees’ performance model which states that coaching/mentoring impacts new knowledge and skills on employees’ which changes their behaviour and increases their motivation/commitment to the organization thus resulting in better performance and reduced employees’ turnover as shown in figure 1 above.

Employees consent is required for the implementation of the plan. Here goals are established first before the development of the action plan. In this case, employees and coach would devise ways of solving the performance problems. Sixthly, after making an improvement plan, the coach gets employees commitment to it. Here employees are required to willingly change their behaviours and work to improve their performance in accordance with the plan (Waugh, 1997). Once, employees become committed, the coach would ask them to provide a summary of the whole discussion (Lawson, 2007). Seventhly, the coaching session cannot be concluded until the coach gets progress report from the employees’. Eighthly, once the report has been provided, the coach comments on it and gives recommendations.

On the other hand, mentoring also helps employees to acquire new knowledge and skills for better job performance (Kram, 1985). Here the agenda is set by the mentee based on his/her needs while guidance is provided by the mentor (Barbian, 2002). It is helpful in increasing employees’ performance because the mentee lacks the essential skills to execute required tasks, hence the mentor enrich the mentees with the required skills and make them experts (Crow, 1998). Mentoring improves employee’s performance by: widening their business insights and encouraging information exchange.

2. Method

2.1 Research Scope/Design

The scope of this research is limited to the direct staff, contract staff and seconded staff working at the industrial area of the Nigeria liquefied natural gas company limited, Bonny. It is assumed that responses obtained from the sample respondents would be representative of the opinions of all categories of employees at the industrial area of the company on the impact of coaching and mentoring in their company. The duration of study is between December 2013 and November 2014. The core aspect of the study is the use of cross sectional survey research design in generating the required primary data.

A sample of 370 randomly selected respondents from a population of 4,895 NLNG employees consisting of 2,430 direct staff, 1,980 contract staff and 485 seconded staff at the industrial area of the company in Bonny Island was used for questionnaire administration. The sample size of 370 was determined from the population size using Yamane 1964 sample size determination formula at 5% level of significance for sampling error. The sample respondents were selected using shuffling of cards method (without replacement) in which all the names of the three categories of employees’ were separately written on small cards and the name on the topmost of each of the three group of cards was selected each time, the cards were shuffled until all the sample respondents were selected.
Data collected were analyzed using descriptive and inferential statistics. The questionnaire was designed to obtain a fair representation of the opinions of 370 sample respondents (184 Direct staff, 150 Contract staff and 36 Seconded staff) using a four-point Likert type scale. The questionnaire responses of the sample respondents were presented using tables analyzed and interpreted using simple percentages while the formulated hypotheses were tested using the chi-square ($\chi^2$). A total of 370 copies of the questionnaire were administered, collected and used for the analysis.

2.2 Calculation of Sample Size

The sample size was determined from the population of 4,895 NLNG employees at the industrial area of the company in Bonny Island using Yamane (1964) formula for sample size determination thus:

$$n = \frac{N}{1+N(e)^2}$$

Where: $n =$ sample size, $N =$ population size, $e =$ level of significance/sample error factor.

$$n = \frac{4,895}{1+4,895(0.05)^2} = 369.78 = 370$$

3. Results and Discussion

3.1 Distribution of Responses on Research Questions

3.1.1 Question number 1

To what extent does your company implement coaching and mentoring programs in the training and development of its employees? Table 1 indicates that a total of 238 i.e. 64.32% of the entire respondents across the three categories of employees were of the opinion that their company to a large extent implements coaching and mentoring programs in the training and development of its employees. 80(21.62%) respondents were of a mild extent opinion while 52(14.05%) respondents were of the opinion that their company to a poor extent implements coaching and mentoring programs in the training and development of its employees. We therefore conclude that there is a strong evidence that Nigeria liquefied natural gas company limited, Bonny implements coaching and mentoring programs in the training and development of its employees as buttressed by the 64.32% large extent response of the sample respondents.

Table 1: Response pattern on the extent Nigeria liquefied natural gas company limited, implements coaching and mentoring programs in the training and development of its employees

| Category of Respondents | Responses Provided |
|-------------------------|--------------------|
|                         | Large extent       |
| Direct staff            | 120                |
| Contract staff          | 100                |
| Seconded staff          | 18                 |
| Total                   | 238                |
|                         | Mild extent        |
| Direct staff            | 40                 |
| Contract staff          | 30                 |
| Seconded staff          | 10                 |
| Total                   | 80                 |
|                         | Poor extent        |
| Direct staff            | 24                 |
| Contract staff          | 20                 |
| Seconded staff          | 8                  |
| Total                   | 52                 |
|                         | Total              |
| Direct staff            | 184                |
| Contract staff          | 150                |
| Seconded staff          | 36                 |
| Total                   | 370                |

Source: Field Survey, 2014.
Question Number 2:
To what extent is improved employees’ job performance influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny? Table 2 shows that a total of 275 i.e. 74.32% of the entire respondents across the three categories of employees were of the opinion that improved employees’ job performance is to a large extent influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny. 58 (15.68%) respondents were of a mild extent opinion while 37 (10.00%) respondents were of the opinion that improved employees’ job performance is to a poor extent influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny. We therefore conclude that there is a strong evidence that improved employees’ job performance in Nigeria liquefied natural gas company limited, Bonny is influenced by the implementation of coaching and mentoring programs as buttressed by the 74.32% large extent response of the sample respondents.

This conclusion is supported by the outcome of empirical studies conducted by the International Personnel Management Association, in which they observed that productivity gains for training alone were 22%, but when coaching/mentoring was used as well, the gains were 88%; the gains of training increased fourfold when it was combined with coaching/mentoring (Laabs, 2000). Also, a US study on the benefits of coaching and mentoring (Clutterbuck, 2000) found that new insurance agents with coaches/mentors outperformed other new agents by 20% in their first year. Tannenbaum (1997) observed that coaching and mentoring is an imperative source of better employee performance.

Table 2: Response pattern on the extent improved employees’ job performance is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny

| Category of Respondents | Responses Provided |
|-------------------------|--------------------|
|                         | Large extent | Mild extent | Poor extent | Total |
| Direct staff            | 154         | 23          | 7           | 184   |
| Contract staff          | 110         | 25          | 15          | 150   |
| Seconded staff          | 11          | 10          | 15          | 36    |
| Total                   | 275         | 58          | 37          | 370   |

Source: Field Survey, 2014.

Question Number 3:
To what extent is reduced employees’ turnover influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny? Table 3 indicates that a total of 250 i.e. 67.57% of the entire respondents across the three categories of employees were of the opinion that reduced employees’ turnover is to a large extent influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny. 55 (15.68%) respondents were of a mild extent opinion while 37 (10.00%) respondents were of the
opinion that reduced employees’ turnover is to a poor extent influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny. We therefore conclude that there is a strong evidence that reduced employees’ turnover in Nigeria liquefied natural gas company limited, Bonny is influenced by the implementation of coaching and mentoring programs as buttressed by the 67.57% large extent response of the sample respondents. This conclusion is supported by the findings of Clutterbuck, a British authority on mentoring, who observed in a US study (2000/2001) that employees’ intention to change jobs was 35% generally, but among employees involved in mentoring programs it was down to 16%. Also, Chiu & Francesco (2003) observed that employees’ turnover is heavily influenced by job satisfaction, motivation and organizational commitment, because no employee would like to stay with an organization that is not satisfied with his work.

Table 3: Response pattern on the extent reduced employees’ turnover is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny

| Category of Respondents | Responses Provided |
|-------------------------|--------------------|
|                         | Large extent       | Mild extent | Poor extent | Total  |
| Direct staff            | 146                | 30          | 8           | 184    |
| Contract staff          | 98                 | 32          | 20          | 150    |
| Seconded staff          | 6                  | 11          | 19          | 36     |
| Total                   | 250                | 73          | 47          | 370    |

Source: Field Survey, 2014.

4.2 Test of Hypotheses
4.2.1 Test of the First Hypothesis
(i) $H_0$: Improved employees’ job performance is not influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.

$H_1$: Improved employees’ job performance is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.

(ii) $\alpha = 0.05$

(iii) Degree of Freedom ($df = (r-1)(c-1) = (3-1)(3-1) = 4$

(iv) Decision Rule: Reject $H_0$ if $\chi^2_c > \chi^2_{0.05}$, Accept $H_0$ if $\chi^2_c < \chi^2_{0.05}$

(v) Chi-square critical table value ($\chi^2_{0.05} = 9.49$

(vi) Chi-square critical computed value ($\chi^2_c$) from table 5 = $\chi^2_c = 11.4172$ (see appendix one)

Since $\chi^2_c > \chi^2_{0.05}$, i.e.11.4172 > 9.49, we reject the null hypothesis and accept the alternative hypothesis that improved employees’ job performance is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny, as buttressed by the 74.32% large extent response of the sample respondents in table 2.
4.2.2 Test of the Second Hypothesis

(i) $H_0$: Reduced employees’ turnover is not influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.

$H_1$: Reduced employees’ turnover is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny.

(ii) $\alpha = 0.05$

(iii) Degree of Freedom (df) = $(r - 1)(c - 1) = (3-1)(3-1) = 4$

(iv) Decision Rule: Reject $H_0$ if $\chi^2_c > \chi^2_t$, Accept $H_0$ if $\chi^2_c < \chi^2_t$

(v) Chi-square critical table value ($\chi^2_{0.05}$) = 9.49

(vi) Chi-square critical computed value ($\chi^2_c$) from table 7 = 11.3424 (see appendix two)

Since $\chi^2_c > \chi^2_t$, i.e. 11.3424 > 9.49, we reject the null hypothesis and accept the alternative hypothesis that reduced employees’ turnover is influenced by the implementation of coaching and mentoring programs in the Nigeria liquefied natural gas company limited, Bonny, as buttressed by the 67.57% large extent response of the sample respondents in table 3.

5.1 Conclusion and Recommendations

The paper examined the impact of coaching and mentoring in the Nigeria liquefied natural gas company limited, Bonny. It assumes that coaching and mentoring enhance the personal skills of employees through an effective learning process that is beyond traditional training methods. The main thrust of the paper is based on three principles:

- Coaching and mentoring is an imperative source of better employee performance.
- Coaching and mentoring contributes to desired workplace attitudes which may in turn influence behaviours.
- Comprehensive coaching and mentoring programs are positively associated with productivity; reduced staff intention to leave and organizational effectiveness.

Arising from the findings of this paper, it is suggested that Nigeria liquefied natural gas company limited, Bonny should take the following measures to sustain the current gains of its coaching and mentoring programs:

1. **Sustenance of the current coaching and mentoring programs**: This is necessary for the sustenance of the current gains of the existing coaching and mentoring programs.

2. **Regular appraisal of employees’ job skill requirements**: This will ensure that employees’ are coached/mentored in the company area of needs.

3. **Continuous staff development**: This will ensure that employees’ possess the relevant skills and knowledge required for the execution of the company’s activities.

4. **Regular improvement of employees’ condition of service**: This will ensure that employees’ are adequately motivated to become committed to the organizational activities.

5. **Sustenance of current team building efforts/ incentive scheme**: This will create room for collaboration among employees in the execution of organizational assignments.
6. **Seeking employees’ consent on areas of skill development:** This will go a long way in the elimination of conflict of interest and discontent in the selection of the desired areas of skill development between superiors and subordinates.

7. **Regular management communication with employees’ on their expectations:** This will ensure that employees’ are aware of the company’s expectations from them thus eliminating employees’ abnormal behaviours.

8. **Provision of equal coaching/mentoring opportunities for all categories of staff:** This will create a sense of belonging for all categories of staff and ensure team spirit in the execution of organizational assignments.

**References**

NLNG. (2013). Facts and figures on NLNG. Lagos: NLNG public and government affairs department.

Flory, D. (1965). *Managers for Tomorrow*. New York: New American Library.

Garvey, B. (2004). The Mentoring/Counseling/Coaching debate. *Emerald Group Publishing Limited*, 18 (2), 6-8.

Edward, K. C. (2003). Craving for Coaching: a case study from kwik-Fit insurance services. *Journal of Financial Services Marketing*, 167-173.

Whitney, K. (2006). Strong Growth Forecast for Executive Coaching Industry.

Sosik, J. A. (2002). Mentoring in Organizations: A Social Judgment Perspective for Developing Tomorrow’s Leaders. *The Journal of Leadership Studies*, 8(3), 17-32.

Solkhe, A., & Chaudhary, N. (2011). HRD climate and job satisfaction: An empirical investigation. *Int. J. Computer. Bus. Res.*, 2(2).

Lewis, G. (1996). *The Mentoring Manager*. London: Institute of Management.

McLead, A. (2003). Performance Coaching and Mentoring in Organization.

Shih, H. A., Chiang, Y. W., & Hsu, C. C. (2006). Can high performance work systems really lead to better performance? *International Journal of Manpower*, 27(8), 741-763.

Wright, P. M., Gardner, T. M., & Moynihan, L. M. (2003). The impact of HR practices on the performance of business units. *Human Resource Management Journal*, 13, 21-36.

Hardre, P. L. (2003). Beyond two decades of motivation: A review of the research and practice in instructional design and human performance technology. *Human Resource Development Review*, 2(1), 54-81.

Rowden, R. W., & Conine Jr. C. T. (2003). The relationship between workplace learning and job satisfaction in US small commercial banks. *AHRD 2003 Conference Proceeding*, 1, 451-466.

Chiu, R. K., & Francesco, A. M. (2003). Dispositional traits and turnover intention: Examining the mediating role of job satisfaction and affective commitment. *International Journal of Manpower*, 24(3), 284-299.

Gilley, J. W. (1996). *Stop Managing Start Coaching: How Performance Coaching can Enhance Commitment and Improve Productivity*. Chicago: Irwin Professional Publishing.

Rolfe-Flett, A. (2003), *Mentoring in Australia: A Practical Guide*, Pearson Education, Sydney, NSW.

Hahn, D. J. (2008). Hahn Training, LLC.

Stewart, D. (2006). Generational Mentoring. *Continuing Education in Nursing*, 113-120.

Pfeffer, J. (1994). *Competitive Advantage through People*. Harvard Business School Press.

Tannenbaum, S. (1997). Enhancing Continuous Learning: Diagnostic Findings from Multiple Companies. *Human Resource Management*, 437-452

Laabs J (2000), “Need peak HR performance? Consider a coach”, *Workforce*, 79 (10), 132-135.

Moy, J. and McDonald, R. (2000), *Analyzing Enterprise Returns on Training*, National Centre for Vocational Education Research, Leabrook SA.
Clutterbuck, D. (2000/2001), “Quiet transformation: The growing power of mentoring”, Mt Eliza Business Review, Summer/Autumn, 47-52.
Stolmack, M. and Martin, G (2005), Introducing Mentoring into Your Organization, Training Point.Net, Rowville, Victoria.
Ragins, B., Cotton, J. and Miller, J. (2000), “Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes”, Academy of Management Journal, 43(6), 1177-1194.
Garvey, B. (2004). The Mentoring/Counseling/Coaching debate. Emerald Group Publishing Limited, 18 (2), 6-8.
Stacevich, M. M. (1998). Coach, Mentor: Is there a difference.
Hahn, D. J. (2008). Hahn Training, LLC.
Bartlett, K. R. (2001). The relationship between training and organizational commitment: A study in the health care field. Hum. Resour. Dev. Quart., 12(4), 335-352. http://dx.doi.org/10.5958/j.2231-069X.3.2.007
Lee, C. H., & Bruvold, N. T. (2003). Creating value for employees’ investment in employee development. Int. J. Hum. Resour. Manage., 14, 981-1000. http://dx.doi.org/10.1080/0958519032000106173
Raghuram, S. (1994). Linking staffing and training practices with business strategy: A theoretical perspective. Human Resource Development International, 5(3), 237-251.
Kram, K. (1985). Mentoring at Work: Developmental relationships in organizational life. Glenview, IL: Scott: Foreman.
Bentley, T. J. (1996). Bridging the Performance Gap. England: Gower.
Weaver, M. A. (1999). A Mentoring Model for Management in Sport and Physical Education, 24-28.
Tyler, K. (1998). Mentoring Programs Link Employees and Experienced Execs. HR Magazine.
Bell, C. R. (2002). Managers as Mentors. San Francisco: Berrett-Koehler Publishers.
Barbian, J. (2002). The Road But Travelled.
Hay, J. (2003). Coaching, Train the Trainer. No.7.
Khakwani, S., Aslam, H.D., Azhar, M.S. & Mateen, M.M. (2012). Coaching and Mentoring For Enhanced Learning of Human Resources in Organizations: (Rapid Multiplication of Workplace Learning to Improve Individual Performance). Journal of Educational and Social Research Vol. 2 (1) January 2012.
Serrat, O. (2009). Coaching and Mentoring. Asian Development Bank.
Waugh, T. A. (1997). Coaching for Success. CPA Journal, 15.
Lawson, K. (2007). Coaching for Improved Performance. Lawson Consulting Group Inc.
Crow, G. A. (1998). Finding one's way: How Mentoring can lead to dynamic Leadership. Thousand Oaks, CA; Corwin Press.
Yamane, T. (1964). Statistics: An Introduction Analysis (3rd. ed.). New York: Harper and Row Publishers.

**Appendix One**

Computation of Expected Frequencies and Calculated Chi-Square Critical Computed Value ($\chi^2$) for The First Hypothesis

**Table 4:** Observed and expected frequencies of question number 2 (from table2)

| Category of Respondents/Workers | Responses Provided | | | |
|---|---|---|---|---|
| | Large extent | Mild extent | Poor extent | Total |
| Direct staff | 154(136.76) | 23(28.84) | 7 (18.40) | 184 |
| Contract staff | 110 (111.49) | 25 (23.51) | 15 (15) | 150 |
| Seconded staff | 11 (26.76) | 10 (5.64) | 15 (3.60) | 36 |
| Total | 275 | 58 | 37 | 370 |

Source: Field Survey, 2014.
Table 5: Computation of Chi-square critical computed value ($\chi^2_c$) from table 4

| Fo  | Fe     | (Fo-Fe) | (Fo-Fe)/Fe | (Fo-Fe)^2/Fe |
|-----|--------|---------|------------|--------------|
| 154 | 136.76 | 17.24   | 0.1261     | 0.0159       |
| 23  | 28.84  | -5.84   | -0.2025    | 0.0410       |
| 7   | 18.40  | -11.40  | -0.6196    | 0.3839       |
| 110 | 111.49 | -1.49   | -0.0134    | 0.0002       |
| 25  | 23.51  | 1.49    | 0.0634     | 0.0040       |
| 15  | 15     | 0       | 0          | 0            |
| 11  | 26.76  | -15.76  | -0.5889    | 0.3468       |
| 10  | 5.64   | 4.36    | 0.7730     | 0.5976       |
| 15  | 3.60   | 11.40   | 3.1667     | 10.0278      |

$\chi^2_c = 11.4172$

Appendix Two

Computation of Expected Frequencies and Calculated Chi-Square Critical Computed Value ($\chi^2_c$) for The Second Hypothesis

Table 6: Observed and expected frequencies of question number 3 (from table 3)

| Category of Respondents/Workers | Responses Provided |
|---------------------------------|--------------------|
|                                 | Large extent | Mild extent | Poor extent |
| Direct staff                    | 146(124.32)   | 30 (36.30)  | 8(23.37)    |
| Contract staff                  | 98(101.35)    | 32(29.59)   | 20 (19.05)  |
| Seconded staff                  | 6(24.32)      | 11(7.10)    | 19 (4.57)   |
| Total                           | 250           | 73          | 47          |

Source: Field Survey, 2014.

Table 7: Computation of Chi-square critical computed value ($\chi^2_c$) from table 6

| Fo  | Fe     | (Fo-Fe) | (Fo-Fe)/Fe | (Fo-Fe)^2/Fe |
|-----|--------|---------|------------|--------------|
| 146 | 124.32 | 21.68   | 0.1744     | 0.0304       |
| 30  | 36.30  | -6.30   | -0.1736    | 0.0301       |
| 8   | 23.37  | -15.37  | -0.6577    | 0.4325       |
| 98  | 101.35 | -3.35   | -0.0331    | 0.0011       |
| 32  | 29.59  | 2.41    | 0.0814     | 0.0066       |
| 20  | 19.05  | 0.95    | 0.0499     | 0.0025       |
| 6   | 24.32  | -18.32  | -0.7533    | 0.5674       |
| 11  | 7.10   | 3.9     | 0.5493     | 0.3017       |
| 19  | 4.57   | 14.43   | 3.1575     | 9.9701       |

$\chi^2_c = 11.3424$
