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Exploring the Role of Human Resource Management Practices on Labour Productivity in Libyan National Oil Corporations

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ABSTRACT

This study aims to explore the effect of human resource management practices on labour productivity in the Libyan national oil corporation. Labour productivity demands high staff selection and job training, decentralised decision making and high employees' motivation of the human factors. Hypothetical deductive approach was used to carry out the research through structural equation modelling. This study involved a cross sectional survey through 339 respondents among three top Libyan national oil corporation. Results revealed that decentralised decision making and on-the-job training had a positive and significant relationship with labour productivity. Meanwhile, employees' motivation and staff selections were found to be non-significant in the Libyan context. The findings implied that the oil and gas industry must concentrate on the key antecedents of HRM in order to increased long-term productivity and turnover. The role of employees' motivation and staff selection as HRM practices contradict the results of previous studies that found these factors to be crucial for labour productivity. Thus, such relationships need to be further explored and investigated. The study commemorates the rising argument among researchers that organisational human resource policies can improve labour productivity and organisational goals. Labour productivity is significantly influenced by two major dimensions towards progressive HR practices. This

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study contributes to the existing empirical analyses of HRM practices and labour productivity.

Keywords: HRM practices, Staffing, on-the-job training, decentralised decision, employee motivation, labour productivity

INTRODUCTION

Some previous studies have shown that labour productivity is the central theme of all productive units. This productivity can either be measured in direct units of out per worker or in terms of sale volume per worker. Productivity of labour is a direct proxy of organisational output such as production and revenue generation. Therefore, increasing labour productivity means improvement in organisational objectives. A prior study has confirmed that labour productivity is majorly influenced by progressive HR practices (Ruël & Bondarouk, 2014). HRM practices used in this study are derived from the study performed by Masood (2010) who mentioned that HRM practices like staffing, training and employee motivation are crucial for any organisation. Human capital supports this relationship and provides a theoretical basis.

Standard HR practices and labour productivity among employees of oil producing companies are still very much lacking. This has necessitated key issues that need urgent solutions especially in the Libyan national oil corporation. There are many issues in relation to optimal productivity by employees, followed by standardised enrolment and staffing policies by the HRM within the oil sector. HR practices, like selection of staff, hiring employees, along with their motivation, decentralised decisions, job security, pay for performance and internal career ladders for employees, have great impacts on organisational objectives. HRM practices in the oil and gas sector, especially in an emerging and developing country like Libya, are of primary importance due to the huge reliance of its economy accounting for over 90% of the country's GDP. Thus, it is obvious that the pros and cons of Libyan energy in relation to labour productivity must be investigated, with a special focus on HRM practices. Bloom and Reenen (2011), Delaney and Huselid (1996) and Park and Shaw (2013) concluded that HR practices have positive influences on organisational outcomes across countries. Even though many studies have discussed the linkage between HRM practices and labour productivity, revenue and performance, other studies are critical of the relationship (see for instance, Tharenou, Saks, & Moore, 2007; Ruël & Bondarouk, 2014; Woodrow & Guest, 2014), citing concerns over the methods employed to determine the relationship between HRM practices and labour productivity. Thus, it is a challenging issue to compare the findings across studies with the acceptable HRM practices for enhancing employee labour productivity and organisation outcomes (Delaney & Huselid, 1996; Huselid, 1995). Additionally, this study aims to identify the relationship between HR practices and low labour productivity.

Investigation and improvement in the labour productivity of oil sector is imperative for the Libyan economy to increase the total oil production and hence annual revenue from the export of petroleum products. The oil and gas sector added up to 71% in 2007 and 97% in 2009 the total export earnings to the Libyan economy (Mobbs, Taib, & Wallace, 2012). Petroleum products, being the dominant exporting products and a major source of revenue for the Libyan economy, the labour productivity analyses of the oil sector is indispensable to identify pros and cons of this important sector and suggest ways for smooth economic activities so as to accelerate the growth of the sector. As a sole dominant exporting product and major source of export revenue for the Libyan economy, the investigation of how HR practices effect labour productivity through the mediating effect of social skills is a central question. This investigation can help in designing optimal policy agenda to stabilise the production and suggest ways for further improvements in the production of oil by improving HR practices and labour productivity.

Investigating the reasons for low oil production in Libyan companies resulting from inefficient human resource practices through the mediating effect of social skills will help to pinpoint the reasons which adversely affect labour productivity. Enhancing labour productivity in Libyan oil companies requires a careful integration of social skills practice, as well as strategic implementation of the key HRM practices, especially staffing, on-the-job training, decentralised decision and employee motivation.

This study is significant in many contexts. This is a well-documented evidence that the Libyan economy is a highly hydrocarbon dominated export economy (Ahlbrandt, 2010; Chami et al., 2012; AEO, 2013). Examining reduced oil production by investigating labour productivity reveals the extent inefficient HR practices effect productivity. As the crude oil production in Libya is decreasing, while the crude oil reserve of the country is increasing, the issue seems to be one of productivity. Thus, an analysis of labour productivity will help to understand whether the labour productivity is up to standard. It will also help identify the sources of inefficiencies of these companies. This study will also help to decompose the sources of labour inefficiency in terms of HR practices and individual characteristics. This information may further help to design optimal policy agenda to enhance labour productivity.

The measurement of labour productivity is essential, especially in the Human Resource Management (Fletcher, 2001). Historically, organisations had always come out with methods to measure performances. However, traditional performance measures, which are based on cost accounting information, only served organisations in little way to determine organisation's quality journey. There are various theories used in the past in relation to labour productivity and HRM practices. For the purpose of this study, human capital

theory and contingency theory are used to measure labour productivity and HRM practices in the Libyan context.

LITERATURE REVIEW

Definition of Terms

Labour productivity is defined by actions that are relevant to the organisations desired outcomes and which are controllable by the individual employees (Campbell et al., 1993). The direct determinants of job performance as referred to by Campbell et al. (1993) are skills and motivation. Labour productivity is measured from the skills, as well as from HR practices. From the HR perspective, employment selection process and decentralisations play important roles. Employees' skills and motivation to work are other important factors for labour productivity. These are based on the reasoning that individual performance is a function of the aptitude and effort/ motivation at the individual level of analysis (De Grip & Sauermann, 2013). Numerous researchers have suggested that employee skills, incentives to use the skills (motivation) and progressive HR practice such as a decentralised decisions making process contribute to an organisation's productivity improvement (Sun et al., 2007; Fallahi et al., 2010; De Grip & Sauermann, 2013). According to Bowen and Ostroff (2004), human resource management should consider how it can alter the organisational environment to promote certain traits in employees because it contributes to the organisational performance such as labour productivity and organisational outcome. Labour productivity, through the HR system, may contribute to organisational effectiveness. The employees in an organisation play a vital role to determine the organisational objectives. The employees help to achieve a desired goal (Klein, & Kozlowski, 2000). This shows a link between HR practices and organisational goals through labour productivity.

Labour Productivity (Organisation Performance)

Siebers et al. (2008) revealed that research findings on HRM practices and labour productivity are mixed. Some studies have found a positive relationship between HRM practices and labour productivity, while some revealed negative and no association between them. The lack of universal consensus on the effects of HRM practices might be driven either by measurement issues or by the level of analysis. Using 144 firms, Gamage (2015) examined the relationship and mediating link of HR outcomes between HRM practices and labour productivity and found a strong positive relationship between HRM practices and labour productivity mediated by HR outcomes in manufacturing SMEs in Japan. Sang (2015) used structural equation modelling to analyse the relationship between HRM practices and labour productivity. The findings showed that HRM practices have a positive and significant effect on Labour productivity while employee motivation have an overall

enhancing effect indicating a strong significant moderation effect on labour productivity. This shows that the nation's prosperity depends on the efficiency of labour towards output generation. Labour productivity has been discussed in relation to manufacturing, public sector and other related services but minimal studies have discussed labour productivity in relation to the oil and gas sector.

Some studies have pointed out decentralisation and on-the-job training as the main determinant of labour productivity. Employees' motivation and labour productivity have been shown to have a positive relationship, while staff selection based on favouritism has a negative effect on productivity. A progress in the level of productivity may suggest scrimping on the use of inputs. The general idea of productivity is a supply-side measure, that is, it pertains to the technical production relationships between inputs and outputs. However, the underlying idea of this term may also be about the production of desired, valued, as well as demanded goods and services. Meanwhile, productivity can be expressed as a physical and monetary measure. Within this specified measure, inputs can be broadly defined according to principle as to cover the aspects such as people's time, their skills, land, raw materials, machinery, equipment and energy. However, inputs are commonly defined in terms of labour (i.e., the number of employees or hours of work) and capital (buildings, machinery and equipment, etc.).

Among other types of productivity measures, labour productivity is significant in the economic and econometric analyses of a country. Labour productivity indicates economic status as it gives a view on the dynamic measure of economic growth, competitiveness, and living standards within an economy (McGuckin & Van, 2003). Hence, it is the measure of labour productivity (and all that this measures takes into account) which crucially forms the understanding of the principal economic groundwork that is necessary for both economic growth and social development.

Determinant Factors of Human Resource Management Practices

Staff Selection. Staff selection is an important process in an organisation as it determines the portfolio of workers as per required job specifications (Iles, 1998). Gemage (2015) defines staffing as "the process of acquiring, deploying, and retaining a workforce of sufficient quantity and quality to create positive impacts on the organization's effectiveness". Job specification should be based on areas of expertise. Mangaleswaran and Kirushanthan (2015) argued that staff selection and job specification should provide a basis for attracting qualified applicants and discouraging unqualified ones in order for the organisation to select appropriate staff in the production process. Professional expert needs to be hired in order to improve labour productivity. In simpler words, staff selection is the process

of making decision about employment opportunity for a candidate (Mohamed et al., 2015). This process (staff selection) is based on the match and mismatch between job requirements and a candidate skills, qualifications and his/her willingness about the persuasion of that position (Iles, 1998). Despite the importance of qualifications, people should be hired based on their ability to perform. This shows that staff selection should be based on quality and not quantity. This process is supported by some previous studies that a careful recruitment process may bring a balance between what is needed (organisational requirements) and what is provided (candidate abilities) to satisfy organisational needs (Martín-Alcázar et al., 2008).

Staff selectivity is an important HR practice that directly and indirectly affects organisational outcomes such as productivity and sale (Huselid et al., 2005). Organisations can apply various HR practices to enhance employee skills and labour productivity. Previous research have pointed out that staff selection has positive relationship between labour productivity and organisational performance (Huselid et al., 2005). Katou and Budhwar (2007) revealed that there is a strong relationship between organisational goals and staff selection. On the basis of these discussions, the following hypothesis is formed:

H1: There is a positive and significant relationship between labour productivity and HRM practices (staffing).

On-the-Job Training. Gemage (2015) defines on-the-job training as the HRM function that systematically provides new learning to increase employees' capabilities. One major HRM practices that is used in training and re-training the workers is on-the-job training. On-the-job training improves the skills from traditional methods to technological routine. Consistent on-the-job training will improve labour productivity. This is supported by a prior study that states on-the-job training enhances the productive capacity of workers and helps them achieve their organisational goals. It also helps the workers to reduce their anxiety level during working hours and reducing the turnover rate (Sahinidis & Bouris, 2008).

Workers' skills are important for the progress of organisational productivity. A recent study shows that a large gap between the skills leads to a higher lack of job satisfaction among the employees and reduced their productivity. Hassan (2016) determined the impact of HRM practices on employees' productivity using 68 employees of an industry. The results indicated that HRM practices (such as training) have a positive impact on employees' productivity. Antwi et al. (2016) also examined the impacts of these HRM practices on the productivity of employees using 80 employees. Training of employees was found to be a significant slot and accounted for about 21% of the variance in the overall impacts of the measurement dimensions on employees' productivity. If employees are trained, the productivity of the organisation will increase. Therefore,

organisations can improve the quality of their current employees by providing comprehensive training and development activities after selecting them. Meanwhile, considerable evidence suggests that investments in training produce beneficial organisational outcomes such as increasing labour productivity and optimal achievement of organisational goals (Bartel, 2004). Job-related training increases employees' stability. On the basis of these discussions, the following hypothesis is formed:

H2: There is a positive and significant relationship between Labour productivity and HRM practices (On-the-Job Training)

Decentralised Decision Making. Decentralisation is an HRM practice to improve labour productivity. Giving positions to lower level employees will motivate them to improve their productivity. It will also reduce workload on the top management. This will also improve the timing of production and welfare of the employees. Bloom et al. (2012) surveyed decentralisation across 4000 different firms located in three different regions. The results revealed that decentralisation could improve aggregate labour productivity. The results further pointed out that many factors had allowed decentralisation to improve labour productivity of organisations. Richardson et al. (2002) noted that there are many benefits involved in the decentralization of decision making ranks to low level employees.

Decentralisation is indispensable for the formation of large firms because it is not possible for a CEO to go through each and every small matter of the company. Decentralising some positions towards will improve the timing of production. Menial activities can be carried out with passion by lower level employees. Thus, we can conclude that decentralisation is related to firm productivity because the CEO of a more centralised firm does not make all decisions due to a lack of time. High performance also requires commitment to high performance goals that reward the organisation and its workers. On the basis of these discussions, the following hypothesis is formed:

H3: There is a positive and significant relationship between labour productivity and HRM practices (Decentralized Decision Making).

Employee Motivation. Motivation is one way of encouraging workers to improve their productivity level. This can be achieved through promotion, rewards and compensations, etc. Employee motivation is crucial to the growth of a firm. The process of motivating employees through compensation and reward will lead to higher productivity (Abozed et al., 2009; Kanfer et al., 2012). Employee competencies improve organisational performance, enhance effectiveness and encompass all forms of monetary returns. Mathis (2004) suggested if a reward is competitive and balanced, it can motivate productivity.

Strategic human resource management has played a key role in management practice and contributed towards organisational success in the past thirty years (Boxall & Purcell, 2011). However, integrating HRM into an organisation's strategy and applying specific sets of human resource (HR) policies and practices introduce complexities in managing employees effectively. Therefore, performance of individuals and organisations could be hampered as well (Holbeche, 2001; Farnham, 2010). Douangphichit (2015) measured employees' motivation and job performance. The findings revealed that money, opportunities for growth and fairness are the most influential factors that motivate employees to work and satisfy them at workplace. Antwi et al. (2016) examined the impacts of HRM practices on the productivity of employees using 80 employees; however, employees' motivation was found to be significant and accounted for 22.9% of the overall variance in employees' productivity. Therefore, in this study, employees' motivation was explored to support productivity in the oil companies in Libya. This tends to circumvent constrains associated with the previous policies applied in organisations with the intention to curtail HR role.

Järvalt and Randma-Liiv (2010) found that policies change across regions. This affects the level of productivity, especially in situations where no central HRM strategy is in place. The integration of HRM in the present study provides opportunities to explore the potential capabilities to enhance labour productivity in Libyan oil companies. This need arises from high dependency of the Libyan economy on oil. On the basis of these discussions, the following hypothesis is formed:

H3: There is a positive and significant relationship between labour productivity and HRM practices (Employees' Motivation).

Research Framework

Before discussing the research framework, this study defines the underlying concepts, variables and their mutual relationship. This study focuses on the HR practices to gauge the cause of low labour productivity in selected oil companies. After going through various HR practices and their influences on the labour productivity and link with labour productivity, the study proposed the following research framework (see Figure 1).

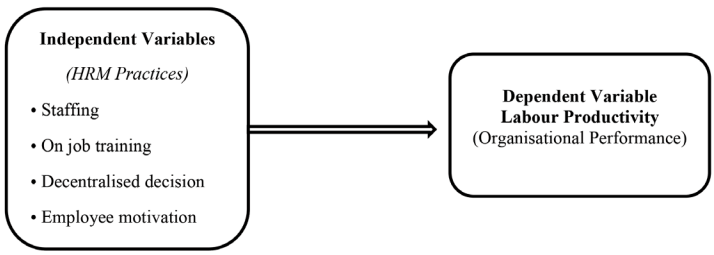

Figure 1. Research framework

MATERIALS AND METHODS

Research Design

This study is descriptive in nature. The unit of analysis is at the firm level (workers). The methodology of this study is quantitative using Covariance-Based SEM analysis (CB-SEM). The time horizon is cross sectional, while the selected companies represent 70% shares of the total oil sector output. The survey design is quantitative and deductive in approach. Meanwhile, the sampling design is simple random sampling.

Population and Sample size

This study uses the 5-point Likert scale. Primary data were collected through the survey of 600 employees of some selected oil companies in Libya. A total of 378 questionnaires were returned and 339 questionnaires were useable for the study. Therefore, the sample size is 339. The sampling frame is based on the following top government owned oil companies in Libya. Waha Oil Company with total employees (3200), Arabian Gulf Oil Company (2400) and Sirte Oil Company employees (6652). Thus, the total population is 12,252 employees working across the three companies at different managerial levels.

Table 1
Population and Sample Size

Names of Oil Companies	Year of establishment	Total Employees (Populations)	Samples	Number of Questionnaire (%)
Waha oil Company (C1)	1956	3200	Total Questionnaire distributed	600 (100%)
The Arabian Gulf Oil Company (C2)	1979	2400	Completed Questionnaire Received	378 (63.0%)
Sirte Oil Company (C3)	1981	6652	Unusable Questionnaire	39 (< 20% unanswered items)
			Usable Questionnaire	339 (89.6 %)

Data Screening. The process of data analysis was begun with coding, detecting and screening for missing data and outliers. Date screening ensures that the data are correctly entered without any outliers to determine normal construct distribution. Confirming normality is similarly important and fundamental to performing SEM (Hair et al., 2006).

Response Rate. Purposive sampling technique was utilised to select the sample for the study. Purposive sampling is a technique that is used to glean knowledge from individuals who have particular knowledge or expertise. In order to achieve an appropriate response rate, 600 questionnaires were distributed to the selected government oil companies

in Libya that represent the NOC. Of the 600 questionnaires distributed, 378 were received with an equivalent percentage of 63%. However, 39 questionnaires were found to be unusable due to missing data or provided the same responses to all the questions. Thus, overall, 56.5% of the total questionnaires were usable, with an effective sample of 339.

Coding and Editing of Data. Editing of the raw collected data was performed after the data had been collected through surveys. According to Zikmund et al. (2012), it is important to check the quality of the data in the form of its omissions, legality and consistency. However, Sekaran (2006) mentioned that considering and fulfilling the purpose of the study, the respondents must be able to answer at least 75% of the questionnaire. Statistical package of social science (SPSS) software was used for coding and keying the data collected through the survey.

Homoscedasticity. Homoscedasticity assumes that the standard deviations of error of prediction are approximately equal for all predicted DV's scores. The band enclosing the residual is approximately equal in width at all values of the predicted DV. Thus, when the band becomes wider at larger predicted values, heteroscedasticity is diagnosed (Tabachnick & Fidell, 2013). Homoscedasticity can be due to the presence of outliers or measurement error at some levels (Kline, 2011). Figure 2 shows the scatterplot for labour productivity variable.

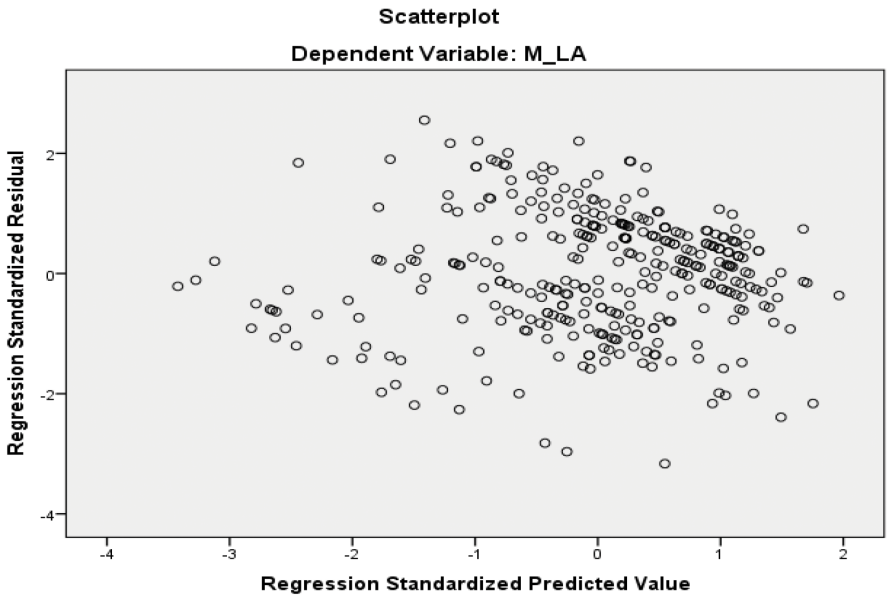

Figure 2. Homoscedasticity for labour productivity

In addition, Hair et al. (2010) recommended scatter plot diagram for detecting homoscedasticity. From Figure 4.2, the scatter plot diagram of standardised residuals shows no sign of curve pattern or residual existence on one side of the diagram. This indicates that there is no issue of heteroscedasticity and therefore, the assumption for homoscedasticity is accepted.

Measurement Model

For the CFA procedure, every model is required to measure the validity and reliability of the construct. According to Zainudin (2014), the assessment for unidimensionality, validity and reliability for the model is necessary for modelling the structured model. Using AMOS software, the data for the current research were subjected to CFA, following the recommendations of several studies (see for instance, Mallinckrodt et al., 2006; Babin et al., 2008; Schlomer et al., 2010; Oke et al., 2012). Two-stage SEM was used to test the hypothesised model. The first stage model was performed in order to confirm the reliability and validity of the data. Figure 2 represents the measurement model. This measurement model is used to carry out the multi-group Confirmatory factor analysis. This is very essential in order to identify items that are reliable and valid for the structural analysis. After confirming the valid and reliable data, the next stage is to perform the structural model known as Regression Analysis to test the hypotheses of the study. The structural analysis is represented by Figure 3. The factor loadings for these measures were all above 0.60 thereby meeting unidimensionality. The loadings of items range from staff selection (from 0.72 to 0.77), job training (from 0.69 to 0.74), decentralisation (from 0.67 to 0.76), employee motivation (from 0.64 to 0.76) and labour productivity (from 0.66 to 0.79). From the measurement model, it is confirmed that the all factor loading levels have been achieved. Hair et al. (1995, 2010) and Holmes-Smith (2006) recommended using at least one fitness index from each category of model fit. The three model fit categories are Absolute Fit, Incremental Fit, and Parsimonious Fit. The choice of index to choose from each category to report depends on which literature is being referred (Zainudin, 2014). This study used Discrepancy Chi Square (Wheaton et al., 1977), Root Mean Square of Error Approximation-RMSEA (Browne & Cudeck, 1993) and Goodness of Fit Index-GFI (Joreskog & Sorbom, 1984) for absolute fit index. For Incremental fit Index, this study used Adjusted Goodness of Fit- AGFI (Tanaka & Huba, 1985) and Normed Fit Index- NFI (Bollen, 1989). For Parsimonious fit index, this study used Chi Square/Degrees of Freedom (Marsh & Hocevar, 1985). All fit indices were met, as shown in Figure 3 below.

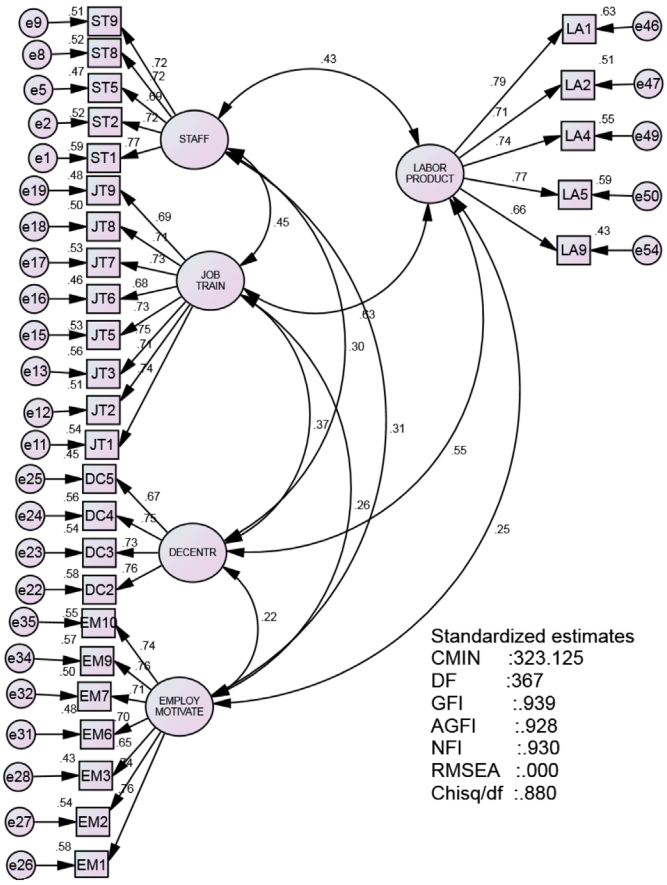

Figure 3. Measurement Model of HRM Practices and Labour Productivity

Table 2
Reliability and Validity of Measurement Model

Model Construct	Number of Items	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Staff Selection	5	0.873	0.8570	0.5248
On Job Training	8	0.874	0.8947	0.5153
Decentralisation	4	0.844	0.8185	0.5305
Employees' Motivation	7	0.913	0.8848	0.5239
Labour Productivity	5	0.907	0.8304	0.5409

From Table 2, all the constructs achieved Average Variance Extraction (AVE) ranging from 0.5153 to 0.5409, which are greater than the 0.5 threshold (Zainudin, 2014). Another requirement for discriminant validity is the correlation

between exogenous constructs should be less than 0.85 (Zainudin, 2014). As depicted in Figure 3, the correlation of this study ranges from 0.31 to 0.45. Some of the items with MI greater than 15 were deleted (Zainudin, 2014). All the constructs (Cronbach's Alpha coefficients) are above the 0.7 threshold. All the composite reliability values are higher than 0.6 thresholds ranging from 0.8185 to 0.8947. Labour productivity has the strongest AVE of 0.5409 and others are greater than the 0.5 threshold, as shown in Table 1.

RESULTS

Table 3 and Figure 4 show the unstandardized regression results of the independent constructs (Staff Selection, on-the-job training, Decentralisation and Employees Motivation) on the dependent construct (Labour Productivity).

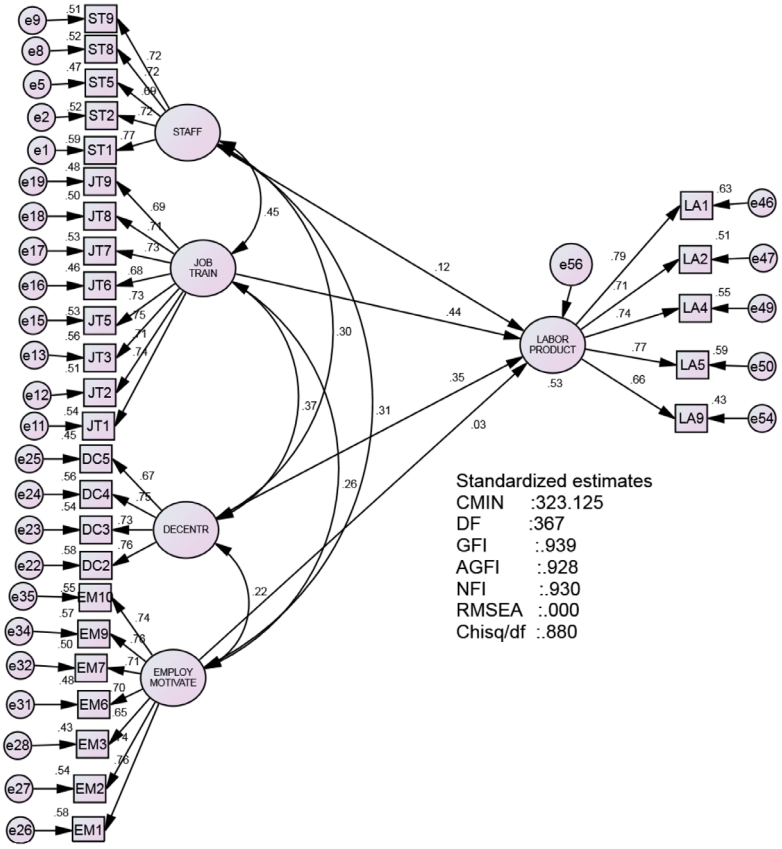

Figure 4. Structural model of HRM Practices on Labour Productivity.

Table 3
Regression Weights

Construct	Path	Construct	Estimate	P-value	Hypothesis Result
Labour Productivity	<---	Staff Selection	.12	0.278	Positive and Not Significant
Labour Productivity	<---	On Job Training	.44	0.045	Positive and Significant
Labour Productivity	<---	Decentralization	.35	***	Positive and Significant
Labour Productivity	<---	Employees Motivation	.03	0.299	Positive and Not Significant

Goodness of fit:
Absolute fit: *χ2 = 323.125 (p-value=0.000); RMSEA=0.000; GFI=0.939.*
Incremental fit: AGFI=0.928; NFI=0.930
Parsimonious fit: χ2 /d. f. =0.880.
Note. * P < .05; ** P < .01; *** P < .001 (two-tailed). n = 339. R^2*=0.53*

Considering the effects, the results presented in Table 2 revealed that staff selection, on-the-job training, decentralisation and employees motivation are the determinant factors of labour productivity because all of them have shown positive effects. As shown in Table 3, Labour productivity in the Libyan national oil corporations are positively and significantly influenced by Decentralisation *(β = 0.35, P < .001)* and On-the-Job Training *(β = 0.44, P < 0.05)*. However, no significant effect was found for the construct - Staff Selection *(β = 0.12, P < 0.05)* and Employees Motivation (β = .03, P < 0.05), despite the positive effects of the latter two variables. The *χ2 = 323.125, absolute fit incremental fit and parsimonious fit shows that the constructs measure and fit the model of the study*. The R^2 of the four constructs explains 53% of the variance of labour productivity. Therefore, hypotheses H2 and H3 are supported, while H1 and H4 are not.

DISCUSSION AND CONCLUSION

The research findings revealed that HRM practices such as decentralisation and on-the-job training have significant impacts on labour productivity in Libyan national oil corporations. The study further revealed that both employees' motivation and staff selection have positive, but not significant, impacts on labour productivity. Meanwhile, the finding for Staff selection is consistent with Huselid et al. (2005), i.e. positive relationship occurs. The result for the on-the-job training of this study is also consistent with De Grip and Sauermann (2013). In addition, result for decentralisation shows higher impacts on aggregate labour productivity, which is consistent with Bloom et al. (2012). The finding for employees' motivation is consistent with Chiu and Xihua (2008), i.e. there is a positive relationship between employee motivation and labour productivity. This shows that the areas of employee motivation and staff selection in

productivity need to be further examined. Despite the fact that rewards are very important towards higher productivity, it should be done with care in order not to have negative influence on productivity. Staff selection on productivity in Libyan national oil corporations should be based on areas of expertise and not favouritism. This will not only improve labour productivity but also have larger effects on the economic growth in Libya.

The main contribution of the research is the development of a new model for measuring labour productivity and HRM practices in Libyan national oil corporations. This will not only help production processes but also improve motivation, hiring and firing processes, as well as the required skills to improve the expertise and oil production in Libya. Libya is one of the largest oil producing countries in Africa and one of the top influential countries of the Organisation of the Oil Exporting Countries (Annual Statistical Bulletin, 2012). Unfortunately, in spite of these facts, the average oil production of Libya is decreasing due to administrative and political issues.

The employee recruiting process through the oil sector does not show standard HRM recruitment practices and this has become a major issue that has affected labour productivity. Investigation into reduction of oil production, done through the investigation of labour productivity, reveals these factors and the extent to which this important sector is affected by the lack of well-established HR practices. Thus, investigating the reasons for low oil production via labour productivity, with respect to employees' characteristics and progressive human resource practices, will help to pinpoint the reasons that adversely affect labour productivity.

The limitation of this research is that the study used the quantitative and cross-sectional approach for testing the relationships of HRM practices and labour productivity in Libyan national oil corporations. A longitudinal study might have yielded richer insights. In addition, existing time and resource constraints did not allow this study to consider other oil companies especially the private-owned oil companies in Libya. Therefore, future research should consider either using qualitative or triangulation to further contribute to a better understanding of labour productivity in Libya.

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