Strategic Human Resource Management and Organizational Performance in the Nigerian Oil and Gas Industry: The Mediating Role of Organizational Climate

Awolusi Olawumi Dele¹, Magaji Nanle², Akpa Victoria Ozioma²

¹Department of Business Management, College of Business and Social Sciences, Covenant University, Canaanland, Ota, Ogun State, Nigeria
²Department of Business Administration and Marketing, Babcock Business School, Babcock University, Ilishan-Remo, Ogun State, Nigeria

Email address
awosco44@yahoo.com (Awolusi O. D.), mnanle@yahoo.com (Magaji N.), voakpa@yahoo.com (Akpa V. O.)

Citation

Abstract
The purpose of this paper is to evaluate the effects of strategic human resources management (SHRM) practices on the primary measures as expressed by the Organisational Climate and the secondary measures as expressed by the organizational performance, and to find out the effect of the Organisational Climate on the organizational performance of Nigerian oil and gas companies. To achieve these objectives, an empirical study was conducted via the administration of 450 self-administered copies of questionnaire to a randomly selected senior and management staff often (10) Oil and Gas Companies, that have implemented SHRM in Nigeria. Organizational climate was measured through a set of questionnaire that we developed based on the eight organizational climate dimension proposed by Litwin and stringer (1968). Strategic human resources management (SHRM) practices was measured using six dimensions (strategic HRM alignment, selection system, training and development system, performance appraisal system, compensation system, and career planning system) proposed by Abdulkadir (2012). Organizational performance was measured by the following variables: profitability, growth, sustainable competitive advantage and customer service dimensions. Using the framework from Abdulkadir (2012), data collected was subjected to regression and correlation analysis. The three-step regression procedure was used to corroborate the seven hypotheses. Findings based on the survey revealed that strategic human resources management (SHRM) practices positively affected both performance measures in the Nigerian oil and gas companies. Specifically, apart from career planning system, in descending order, the results suggest that, Strategic HRM alignment, training and development, Compensation System, Selection System, and Performance appraisal system and are the key SHRM practices that influenced both organizational climate and performance in the Nigerian oil and gas industry. Results also suggest that the relationship between SHRM practices and organizational performance in the Nigerian oil and gas industry is moderately influenced by organizational climate. The model provides predictive implications on improved organizational climate and organizational performance, given the activities of some factors manifesting strategic
human resources management (SHRM) practices. Hence, to improve both organizational climate and organizational performance, oil and gas companies could control their strategic human resources management (SHRM) practices.

1. Introduction

Due to the rapid globalization of production and markets world-wide, oil and gas companies are faced with a changing competitive environment. They are competing in creating the conditions that will enable them to be competitive in both domestic and international markets. Accordingly, oil and gas companies seek to adopt and implement a set of strategic management practices that have been successful elsewhere and that will help them to respond proactively through improvements in major performance indices (Awolusi and Akinruwa, 2014; Awolusi, 2013; Koys and De Cotiis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999; Abdulkadir, 2012). One of such strategic management practices is strategic human resource management (SHRM), which has received great attention in the last two decades (Budhwar, 2000). Companies use SHRM to improve performance substantially on key processes that impact both climate and organizational performance (Koys and De Cotiis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995). There has been a considerable deal of research focusing on the relationship between strategic Human Resource management (SHRM) practices and organizational performance in the past few years (Koys and De Cotiis, 1991; Abdulkadir, 2012). Many of the studies have actually demonstrated that SHRM practices, either individually or as a system, are associated with higher levels of performance (Koys and De Cotiis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995).

However, despite the significant growth of the SHRM practices, not all organizations embarking on it achieve their intended result. This is attributed to poor implementation of SHRM rather than a problem with the concept itself (Budhwar, 2000; Teo, 2002). Such contradictory outcomes raise concerns among companies evaluating SHRM as a crucial strategic initiative (Abdulkadir, 2012). Consequently, Abdulkadir (2012) sustained these contradictory findings, and posit for future studies to identify critical factors that can influence the success of SHRM effort. In addition, Past empirical research has mostly investigated the effects of SHRM practices on financial performance (Delery and Doty, 1996) and some on efficiency and employee turnover (Huselid, 1995). However, very few studies have examined the impact of SHRM practices on organizational performance, given the mediating role of organizational climate, an intangible performance measures (Kalleberg and Moody, 1994; MacDuffie, 1995). This is on the premise that, the strategic implications of SHRM practices make tracking intangible performance measures important. Consequently, the main objective of this study is to determine the impact of SHRM practices on organizational performance of Nigerian oil and gas companies. The specific objectives are as follows: (1) to examine the effectiveness of SHRM on organizational climate (primary measures); (2) to examine the relationship between SHRM efforts and organizational performance (secondary measures); and (3) to determine whether the effectiveness of SHRM practices on organizational performance is contingent on organizations’ work place climate.

This study was motivated by the submissions of past studies (Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999; Abdulkadir, 2012). According to Budhwar, (2000), despite the significant investments in SHRM initiatives made by organizations around the world, formal efforts to determine their success and the underlying causes have been very limited. Contending with the measurement of business performance, which was often focused on financial metrics, Khatri (1999) and Abdulkadir (2012) specifically identified this gap in the literature. This is on the premise that many researchers often use objective measures such as turnover and profit as a form of measuring performance. However, according to Khatri (1999) and Abdulkadir (2012), perceived measures can replace objective measures of business performance.

2. Review of Relevant Literature

2.1. Theoretical Frameworks and Model

SHRM and organizational performance relationships can be deduced from existing theories within organization, marketing, and economic theories. In this study, market power theory, transaction cost economics, increasing returns theory and resource-based theory was adopted as the theoretical framework. The market power theory is concerned with the ways in which firms can improve their competitive success, which is the ultimate goal of SHRM, by securing a stronger position in their market (Talwar, 1993). Transaction cost economics also holds an assumption that SHRM are implemented in order to lower the transaction costs. The resource-based view suggests that valuable firm resources are usually scarce, imperfectly imitable, and lacking in direct substitutes; It is about producing the most value from one's existing capabilities and resources by combining these with others' sources of advantage (Schuler and Jackson, 1999; Milkovich and Boudreau, 1998; Johanson, 1990). The conceptual model of the current study is drawn from two streams of research, i.e. operations management literature and organizational performance literature. Figure 1 illustrates the conceptual model with the arrows depicting the hypothesized relationships between the constructs. These relationships deal with three sets of hypotheses: (1) The effects of the SHRM on the organizational climate (primary measures); (2) The relationship between the SHRM efforts and organizational performance (secondary measures); and (3) The influence of the primary measures (as expressed by the organizational climate) on the secondary measures (as
expressed by the organizational performance).

2.2. Empirical and Conceptual Frameworks

Thus far, much has been written on SHRM and its importance in improving the performance of manufacturing industries in developed and emerging economies. The concept of Strategic Human Resource Management (SHRM) evolved in the 1990s with an increased emphasis on a proactive, integrative and value-driven approach to human resource management (Abdulkadir, 2012; Schuler, 1992). This is aimed at identifying fit between human resource management practices and organizational strategic goals, as well as, the involvement of human resource function in senior management teams, the devolvement of human resource practices to line managers and taking of strategic approach to employee selection, compensation, performance appraisal and the value that is added to both organizational climate and performance (Abdulkadir, 2012). Many studies have dealt with the impact of SHRM on organizational performance measures (Koys and De Cotiis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999; Abdulkadir, 2012). By considering a few definitions given by previous authors, Strategic Human Resource Management (SHRM) implies a managerial orientation that ensures that human resources are employed in a manner conducive to the attainment of organizational goals and mission (Koys and De Cotiis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999; Abdulkadir, 2012). This is on the premise that human resource is argued to represent an asset that can provide a source of competitive advantage because it’s often difficult to duplicate by competitors and hard to substitute even within the same organization (Abdulkadir, 2012).

In focusing this study, the operationalisations of the SHRM (Table 1) were distilled from various articles and empirical research on SHRM implementations. They were then categorised into a number of subgroups, similar to Abdulkadir (2012) six dimensions. These dimensions are as follows: strategic HRM alignment, selection system, training and development system, performance appraisal system, compensation system, and career planning system (Abdulkadir, 2012).

Strategic HRM alignment refers to the involvement of HRM in the formulation and implementation of organizational strategies and the alignment of HRM with the strategic needs of an organization (Schuler and Jackson, 1999; Abdulkadir, 2012). This view is also supported by Buyens and De Vos (1999). They argue that in order for human resource to be a strategic partner, human resource personnel should be involved in strategic decision making alongside other senior managers, providing greater opportunity to align HR goals, strategies, philosophies and practices with corporate objectives and the implementation of business strategy (Chaddie, 2001; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995). A documented HRM strategy helps the organization to develop an HRM vision and objectives and to monitor performance (Abdulkadir, 2012; Khatri, 1999). According to Abdulkadir (2012), a rigorous, valid and sophisticated recruitment and selection system helps in identifying a right candidate with potential to perform, generates a sense of elitism, creates high expectations of performance, and signals a message of importance of the people to the organization (Pfeiffer, 1994; Terpsra and Rozell, 1993).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description of factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>HR managers are involved in strategic decision making alongside other senior managers, providing greater opportunity to align HR goals, strategies, philosophies and practices</td>
</tr>
<tr>
<td>A2</td>
<td>HRM strategy is formulated based on our company’s vision and mission</td>
</tr>
<tr>
<td>A3</td>
<td>Our HR managers are equipped with the knowledge of core markets, competitors, cost, profit indicators and stakeholders</td>
</tr>
<tr>
<td>A4</td>
<td>There is a documented HRM strategy in our company</td>
</tr>
<tr>
<td>A5</td>
<td>The role and authority of HR managers in corporate decision making are documented in our organization</td>
</tr>
<tr>
<td>B1</td>
<td>The selection system followed in our company are highly scientific and rigorous</td>
</tr>
<tr>
<td>B2</td>
<td>A rigorous, valid and sophisticated recruitment and selection system helps in identifying a right candidate with potential to perform in our organization</td>
</tr>
<tr>
<td>B3</td>
<td>A rigorous selection system generates a sense of elitism, creates high expectations of performance in our organization</td>
</tr>
<tr>
<td>B4</td>
<td>A rigorous selection system in our company signals a message of importance of the people to the organization</td>
</tr>
<tr>
<td>C1</td>
<td>The quality of current employees are enhanced by providing comprehensive training and development in our organization</td>
</tr>
<tr>
<td>C2</td>
<td>There is a high investments in training employees in problem-solving, teamwork and interpersonal relations in our organization</td>
</tr>
<tr>
<td>C3</td>
<td>Employees in each job will normally go through training programs every year in our company</td>
</tr>
<tr>
<td>C4</td>
<td>Training and development needs in our organizations are identified and met</td>
</tr>
<tr>
<td>D1</td>
<td>In our company salary and other benefits are comparable to what is generally obtainable in the industry</td>
</tr>
<tr>
<td>D2</td>
<td>In our organization, performance of the employees is measured on the basis of objective quantifiable results</td>
</tr>
<tr>
<td>D3</td>
<td>Performance is evaluated on the basis of performance appraisal data</td>
</tr>
<tr>
<td>D4</td>
<td>Appraisal-based information are used for changing the selection and training of employees in our organization</td>
</tr>
<tr>
<td>E1</td>
<td>Compensation is based on employees’ performance for achieving specific goals and objectives</td>
</tr>
<tr>
<td>E2</td>
<td>Compensation is linked to the qualification of employees in their organizations</td>
</tr>
<tr>
<td>E3</td>
<td>In our organization salary and other benefits are comparable to what is generally obtainable in the industry</td>
</tr>
<tr>
<td>F1</td>
<td>Employees in my organization are encouraged to take more responsibility for their own development, including the development of the skills viewed as critical in the company</td>
</tr>
<tr>
<td>F2</td>
<td>Internal advancement opportunities in my organization are based on merit</td>
</tr>
<tr>
<td>F3</td>
<td>Our company provides clear career path information to employees</td>
</tr>
<tr>
<td>F4</td>
<td>There is clarity and usage of career planning system in our organizations</td>
</tr>
</tbody>
</table>

Adequate training and development system is also desirable in developing and enhancing the quality of the current employees, especially in problem-solving, teamwork and interpersonal relations result in beneficial firm level outcomes (Barak et al., 1999; Abdulkadir, 2012). In addition, a robust performance appraisal system is also desirable in monitoring the development of desired employee attitudes and behaviours through the use of the appraisal mechanisms (Schuler and Jackson, 1999; Abdulkadir, 2012). SHRM also involve a good compensation system, especially, the use of performance-based compensation system to provide rewards to employees for achieving the specific goals and objectives of the firm (Schuler and Jackson, 1999; Abdulkadir, 2012; Milkovich and Boudreau, 1998).

The last SHRM dimension posits for an effective career planning system. A well-functioning career planning system along with internal advancement opportunities based on merit, results in high motivation among employees may also encourage employees to take more responsibility for their own development, including the development of the skills viewed as critical in the company, as well as, the consequential impact on firm performance (Schuler and Jackson, 1999; Abdulkadir, 2012; Milkovich and Boudreau, 1998). In summary, operationalisation of SHRM in this study is tabulated in table 1, depicting the various six dimensions. The relationship between the SHRM variables and organizational climate and performance are depicted in the conceptual model, shown in figure 1.

2.3. Organizational Climate

The term organizational climate has been defined in numerous ways (Jensen, 2003; James and Jones, 1974). In this study, organizational climate is defined as the average meanings that employees attach to a particular work setting, at both individual level (in terms of their meaning and significance for individual employees in organizations) and psychological climate (meanings that individuals attach to their work context) (Jensen, 2003; James and Jones, 1974; Litwin & Stringer, 1968; Pritchard & Karasick, 1973). This is similar to French et al (1985), which sees organizational climate as measures to assess organizations in term of dimensions that are thought to capture or describe perceptions about the climate (Ainuddin and Ling, 1998). The increasing number of studies focusing on the relationship between strategic human resource management (SHRM) practices and organizational climate in the past few years were fuelled by the argument that access to capital and technology, are becoming less effective as they can be easily imitated by competing organizations (Koys and De Cotis, 1991; Abdulkadir, 2012).

2.4. Organizational Performance

Several empirical studies have been conducted to establish the link between SHRM effort and organizational performance (Koys and De Cotis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999;
Abdulkadir, 2012). The results of these studies indicated that there are various measures (i.e. organizational performance, organizational climate, business performance, financial and non-financial performance e.t.c). As adapted in this study, Budhwar (2000) and Abdulkadir (2012) measured performance in two dimensions: organizational climate and organizational performance. Organizational climate is considered as primary measures because they follow directly from the actions taken during the implementation of SHRM, while organizational performance measured via different dimensions such as profitability, growth, sustainable competitive advantage and customer services. They are called secondary measures because they are a consequence of SHRM implementations (Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999). The measures of organizational climate and organizational performance are depicted in table 2.

Table 2. The measure of Organizational Climate and Organizational Performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational Climate:</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>feelings about constraint and freedom to act and the degree of formality or informality in the working atmosphere</td>
<td>Structures</td>
</tr>
<tr>
<td>G2</td>
<td>the feeling of being trusted to carry out important work</td>
<td>Responsibility</td>
</tr>
<tr>
<td>G3</td>
<td>the sense of riskiness and challenge in the job and in the organization</td>
<td>Risk</td>
</tr>
<tr>
<td>G4</td>
<td>the existence of friendly and informal social groups</td>
<td>Warmth</td>
</tr>
<tr>
<td>G5</td>
<td>the perceived helpfulness of managers and co-workers</td>
<td>Support</td>
</tr>
<tr>
<td>G6</td>
<td>the perceived importance of implicit and explicit goals and performance standards; the emphasis of doing a good job</td>
<td>Standards</td>
</tr>
<tr>
<td>G7</td>
<td>the feelings that managers and other workers want to hear different opinion</td>
<td>Conflict</td>
</tr>
<tr>
<td>G8</td>
<td>the feeling that you belong to a company; that you are valuable member of a working team</td>
<td>Identity</td>
</tr>
</tbody>
</table>

ORGANISATIONAL PERFORMANCE

Profitability Dimension

H1       | Our Organisation’s Net profit position improves relative to competition |
H2       | Management is satisfied with return on corporate investment |
H3       | Management is satisfied with return on sales |
H4       | Our Returns on investment (ROI) position improves relative to competition |
H5       | Our Organisation’s Return on Assets (ROA) position improves relative to competition |
H6       | Our Organisation’s Financial liquidity (cash) position improves relative to competition |

Growth Dimension

H7       | Our deposits growth position improves relative to competition |
H8       | Management is satisfied with our deposits growth rate |
H9       | Our Market share gains relative to competition |

Sustainable Competitive Advantage Dimension

H10      | Our competitive advantage in BPR implementation is difficult for competitors to copy because it uses resources that we only have access to. |
H11      | It took our Organisation time to build the competitive advantage and competitors would find it time-consuming to follow a similar route. |
H12      | Possession of unique proprietary technology, tacit know-how, and firm reputation/image induces our companies propensity to transfer new management techniques |

Customer Services Dimension

H13      | Market research is conducted to discover customers expectation and changes in customer satisfaction |
H14      | There is a record of customers’ requests, complaints and transactions for future reference |
H15      | Customers’ complaints, lost customer analysis and feedback are used to improve the products/services |
H16      | Customers are satisfied with the customer service and Customers relationship management of my organization |

Source: Koys and De Cotiis (1991); Abdulkadir (2012); Budhwar (2000); Litwin and stringer (1968); Awolusi and Akinruwa (2014); Awolusi (2013).

Relationships among Strategic Human Resource Management Practices, Organizational Climate and Organizational Performance

There is a common assumption in the literature that the SHRM have a positive impact on many performance indices (Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999). Ferris et al. (1990) made one of the first major attempts to examine how effective management of human resources might contribute to positive organizational performance. In addition, David et al. (2002) also examined the relationship between SHRM and organizational financial and human resource performance in Singapore. Using descriptive statistics and regression to analyze the data, the results indicate that with the exception of team-based work and
performance-based pay, all the other strategic HRM components have a positive impact on the financial performance of a firm (Abdulkadir, 2012).

Singh (2004) and Green et al. (2006) also reported that organizations that vertically aligned and horizontally integrated HR function and practices performed better and produced more committed and satisfied HR function employees who exhibited improved individual and organizational performance.

Most of these studies (Tessember and Soeters, 2006; Kai et al., 2007; Dimba and K’Obonyo, 2009) indicated that SHRM firms outperform non-SHRM firms in major performance indices, such as improved organizational climate, improving flexibility, improving employee relations, operating procedures and improving the quality of products. However, to investigate the previous mentioned relationship, the following hypotheses are therefore proposed:

\[ H_1: \text{Strategic HRM alignment has positive relationship with organizational climate} \]

\[ H_2: \text{Selection system has positive relationship with organizational climate} \]

\[ H_3: \text{Training and development system has positive relationship with organizational climate} \]

\[ H_4: \text{Performance appraisal system has positive relationship with organizational climate} \]

\[ H_5: \text{Compensation system has positive relationship with organizational climate} \]

\[ H_6: \text{Career planning system has positive relationship with organizational climate} \]

Furthermore, the relationships between SHRM practices and organizational performance have been addressed in several studies (Koys and De Cotis, 1991; Abdulkadir, 2012; Budhwar, 2000; Litwin and stringer, 1968). They indicated a positive association between SHRM practices and improved organizational performance. In other words, the results of those studies demonstrated the crucial role of SHRM practices in enhancing the organizational performance. Therefore, it is hypothesized that:

\[ H_{1A}: \text{Strategic HRM alignment has positive relationship with organizational climate} \]

\[ H_{2A}: \text{Selection system has positive relationship with organizational climate} \]

\[ H_{3A}: \text{Training and development system has positive relationship with organizational climate} \]

\[ H_{4A}: \text{Performance appraisal system has positive relationship with organizational climate} \]

\[ H_{5A}: \text{Compensation system has positive relationship with organizational climate} \]

\[ H_{6A}: \text{Career planning system has positive relationship with organizational climate} \]

3. Research Methodology

Survey research design was adopted in this study. This involved the use of questionnaire, as the primary source of data collection for this research. This is on the premise that survey research is an appropriate method to generalize from a sample to a population, allowing in this sense, to establish inferences over the entire population (Budhwar, 2000; Litwin and stringer, 1968). The populations consist of all staff in the Nigerian oil and gas industry. The study made use of a sampling frame consisting of 10 oil and gas companies listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2013. The unit of analysis in this study is the firm and multi-rater (multi respondents) response approach was adopted. Gerhart et al. (2000) contended that SHRM effects based on single respondent surveys were significantly undermined by the presence of measurement error in the SHRM measures. To minimize this error, a personally-administered questionnaire was primarily adapted from earlier studies (Koys and De Cotis, 1991; Abdulkadir, 2012; Budhwar, 2000; Litwin and stringer, 1968; Awolusi and Akinruwa, 2014; Awolusi, 2013) and it was modified where necessary. All the items in the questionnaire were measured with a five-point Likert scale ranging from 1 to 5, where “1=strongly disagree, 2=Disagree, 3=neither disagree nor agree, 4=Agree, 5= strongly agree and n/a is ‘not applicable’ or ‘no comments”. This scale was also pre-tested several times by three professors in Management studies and six experts in SHRM implementation, specifically in the Nigerian oil and gas context and it was found to be valid on the basis of this study.

In the questionnaire, participants were asked to answer three important sections; section A with regards to the demographic data, section B, SHRM and section C contains items measuring both organizational climate and organizational performance. In items measuring SHRM practices, respondents were asked to rate the degree of usefulness of 24 variables (table 1) in association with their company’s strategic human resource strategies. In performance measures, they were asked to rate 8 and 16 variables (table 2) in relation to their companies’ organizational climate and organizational performances respectively. During the main study, a multi-stage sampling technique was adopted (Abdolvand et al., 2008). The first stage entailed the use of clustering and purposive sampling techniques in selecting the participating companies. Thus there were two clusters, Multinationals and Local Companies. Then purposive sampling of the companies was done to ensure that the two clusters were adequately represented. Consequently, five (5) companies each were selected from the two clusters. These companies selected adequately represented SHRM perspective in the Nigerian oil and gas context, since all the ten companies accounted for over 70 percent of Nigeria daily crude oil production (Osu, 2011). The second stage involved
the use of proportionate sampling method in allocating copies of questionnaire to the participating companies (Khong, 2005). The last stage involved the use of random sampling method, in selecting the final respondents for each oil and gas company, based on the total allotted questionnaires. Overall, the total questionnaires were settled at 450. Consequently, a total of 450 questionnaires were administered to the respondents, after obtaining necessary authorization from the management of these companies (Khong, 2005). A total of 320 questionnaires were returned to the researcher within one month. Out of the 320 questionnaires, 19 questionnaires were discarded due to incorrect fillings by the respondents. In all 301 usable questionnaires, (67% response rate) were analysed. Using SPSS 20.0 (Statistical Package for Social Sciences) version, the data from the copies of questionnaire were analysed using the following methodologies in sequential order: reliability and validity analysis, and multiple regression analysis.

4. Results and Discussion of Findings

4.1. Reliability and Validity Analysis

In order to measure the internal consistency of variables, measured by interval scale items, in a summated scale (Hair et al., 1998), Cronbach’s alpha scores were computed for each construct and to indicate how different items can reliably measure the construct. In this research, all scales have reliability coefficients greater than 0.7 (see Table 3). Thus, the scales used in this research could be considered as reliable (Khong and Richardson, 2003). Specifically, from the results of the reliability analysis, shown in table 4, the cronbach’s alpha, CR and AVE of all the eight constructs measuring SHRM, organizational climate and organizational performance were well above the recommended minimum of 0.70, 0.70 and 0.50 respectively. Hence, the set of variables were consistent in what they were intended to measure (Hair et al., 1998). In addition, this research utilised convergent and discriminant validity tests, to demonstrate various aspects of construct validity- the ability of the measurement items to measure accurately the constructs of the study (Hair et al., 1998). Factor Analysis, via “Principal Components extraction”, was the technique used to test discriminate Validity. Factoring method used was “Principal Components”, applying an Orthogonal Varimax rotation with Kaiser’s normalization (Khong, 2005). Based on these conditions, eight (8) factors were obtained (Kaiser’s criterion of retaining factors with eigenvalues greater than 1), which was consistent with the eight variables used in the model (Asteriou and Hall, 2007). Verification of the pearson correlation matrix also validated this study. According to Hair et al. (1998) the correlation matrix should be analyzed to detect any correlation among predictors with values > 0.80. We observed that not obvious collinearity problem appears in this study.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Questionnaire Items</th>
<th>Cronbach’s Alpha (mean)</th>
<th>Composite Reliability(CR)</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic HRM alignment</td>
<td>5</td>
<td>0.744</td>
<td>0.734</td>
<td>0.722</td>
</tr>
<tr>
<td>Selection system</td>
<td>4</td>
<td>0.867</td>
<td>0.778</td>
<td>0.754</td>
</tr>
<tr>
<td>Training and development system</td>
<td>4</td>
<td>0.722</td>
<td>0.788</td>
<td>0.787</td>
</tr>
<tr>
<td>Performance appraisal system</td>
<td>4</td>
<td>0.833</td>
<td>0.734</td>
<td>0.734</td>
</tr>
<tr>
<td>Compensation system</td>
<td>3</td>
<td>0.856</td>
<td>0.745</td>
<td>0.763</td>
</tr>
<tr>
<td>Career planning system</td>
<td>4</td>
<td>0.722</td>
<td>0.754</td>
<td>0.698</td>
</tr>
<tr>
<td>Organizational Climate</td>
<td>8</td>
<td>0.776</td>
<td>0.787</td>
<td>0.732</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>16</td>
<td>0.766</td>
<td>0.732</td>
<td>0.799</td>
</tr>
</tbody>
</table>

4.2. Multivariate Analysis-Regression Analysis

In this study, the underlying hypotheses were analyzed using regression analysis. According to Hair et al. (1998), multiple regression analysis is a convenient statistical technique to be used when the researcher requires analyzing the relationship between a single dependent variable and several independent variables. However, since a mediating effect (organizational climate) was defined in the model, the Path Analysis Technique was applied to test proposed hypotheses. Path Analysis is a regression-based technique widely used for analyzing the direct and indirect effects in model encompassing mediating variables (Asteriou and Hall, 2007). It must follow a three-step regression procedure to assess the hypotheses, as suggested by Baron and Kenny (1986), Frazier et al. (2004) and Hair et al. (1998):
  • Step 1: Regression between Mediator and Independent Variables.
  • Step 2: Regression between Dependent Variable and Independent Variables.
  • Step 3: Regression between Dependent Variable and Independent Variables plus Mediator.

4.3. Hypothesis Testing

In order to examine the relationships between SHRM and business performance (as represented by organizational climate and organizational performances) of Nigerian oil and gas companies, the hypothesized relationships were tested, using multiple regression tool in SPSS (Statistical Package...
for Social Sciences) 20.0. The results are shown in Table 4.

Table 4. Testing the Hypotheses.

a. Step 1. Regression between Mediator and Independent Variables.

<table>
<thead>
<tr>
<th>Construct Association</th>
<th>‘α’ Level</th>
<th>Beta</th>
<th>p-value</th>
<th>Significant (yes/no)</th>
<th>Hypothesis</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic HRM alignment with Organizational Climate</td>
<td>0.05</td>
<td>0.32</td>
<td>0.040</td>
<td>Yes</td>
<td>Accept H1A</td>
<td>Yes</td>
</tr>
<tr>
<td>Selection system with Organizational Climate</td>
<td>0.05</td>
<td>0.25</td>
<td>0.048</td>
<td>Yes</td>
<td>Accept H2A</td>
<td>Yes</td>
</tr>
<tr>
<td>Training and development system with Organizational Climate</td>
<td>0.05</td>
<td>0.37</td>
<td>0.027</td>
<td>Yes</td>
<td>Accept H3A</td>
<td>Yes</td>
</tr>
<tr>
<td>Performance appraisal system with Organizational Climate</td>
<td>0.05</td>
<td>0.35</td>
<td>0.033</td>
<td>Yes</td>
<td>Accept H4A</td>
<td>Yes</td>
</tr>
<tr>
<td>Compensation system with Organizational Climate</td>
<td>0.05</td>
<td>0.33</td>
<td>0.043</td>
<td>Yes</td>
<td>Accept H5A</td>
<td>Yes</td>
</tr>
<tr>
<td>Career planning system with Organizational Climate</td>
<td>0.05</td>
<td>0.05</td>
<td>0.181</td>
<td>No</td>
<td>Reject H6A</td>
<td>No</td>
</tr>
</tbody>
</table>

b. Step 2. Regression between Dependent Variable and Independent Variables.

<table>
<thead>
<tr>
<th>Construct Association</th>
<th>‘α’ Level</th>
<th>Beta</th>
<th>p-value</th>
<th>Significant (yes/no)</th>
<th>Hypothesis</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic HRM alignment with organizational performance</td>
<td>0.05</td>
<td>0.38</td>
<td>0.022</td>
<td>Yes</td>
<td>Accept H1B</td>
<td>Yes</td>
</tr>
<tr>
<td>Selection system with organizational performance</td>
<td>0.05</td>
<td>0.22</td>
<td>0.036</td>
<td>Yes</td>
<td>Accept H2B</td>
<td>Yes</td>
</tr>
<tr>
<td>Training and development system with organizational performance</td>
<td>0.05</td>
<td>0.21</td>
<td>0.047</td>
<td>Yes</td>
<td>Accept H3B</td>
<td>Yes</td>
</tr>
<tr>
<td>Performance appraisal system with organizational performance</td>
<td>0.05</td>
<td>0.22</td>
<td>0.025</td>
<td>Yes</td>
<td>Accept H4B</td>
<td>Yes</td>
</tr>
<tr>
<td>Compensation system with organizational performance</td>
<td>0.05</td>
<td>0.25</td>
<td>0.023</td>
<td>Yes</td>
<td>Accept H5B</td>
<td>Yes</td>
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<tr>
<td>Career planning system with organizational performance</td>
<td>0.05</td>
<td>0.06</td>
<td>0.115</td>
<td>No</td>
<td>Reject H6B</td>
<td>No</td>
</tr>
</tbody>
</table>

c. Step 3. Regression between Dependent Variable and Independent Variables plus Mediator.

<table>
<thead>
<tr>
<th>Construct Association</th>
<th>‘α’ Level</th>
<th>Beta</th>
<th>p-value</th>
<th>Significant (yes/no)</th>
<th>Hypothesis</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic HRM alignment with organizational performance</td>
<td>0.05</td>
<td>0.35</td>
<td>0.022</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Selection system with organizational performance</td>
<td>0.05</td>
<td>0.24</td>
<td>0.0411</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Training and development system with organizational performance</td>
<td>0.05</td>
<td>0.17</td>
<td>0.0367</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Performance appraisal system with organizational performance</td>
<td>0.05</td>
<td>0.15</td>
<td>0.0460</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Compensation system with organizational performance</td>
<td>0.05</td>
<td>0.18</td>
<td>0.0380</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Career planning system with organizational performance</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.1621</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Organizational Climate with organizational performance</td>
<td>0.05</td>
<td>0.25</td>
<td>0.0341</td>
<td>Yes</td>
<td>Accept H7</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: α level denotes significant level

4.4. Discussion of Findings

Findings based on the survey revealed that SHRM efforts positively affected the two performance variables (Organizational climate- p=0.000 and organizational performance- p=0.0001). Except for career planning system (β=-0.07, p=0.1621), the results suggests the positive effects of the SHRM on both organizational climate and organizational performance in Nigerian oil and gas companies, and were corroborated empirically in this study.

As shown in Table 4, there is a strong positive relationship between SHRM practices and both organizational climate and organizational performance with a multiple correlation (R) of 0.4002 and 0.3446 respectively. The adjusted $R^2$ of 0.7332 and 0.6556 implies that 73.32% and 65.56% of the variations in both organizational climate and organizational performance are adequately explained by SHRM practices used in this study. All results are significant at $p<0.05$. Other model fit indices indicate a reasonable fit with $X^2= 703.34$ and 303 degrees of freedom, $p< 0.01$; normed fit index
personnel or consultants, especially in highly technical Nigerian oil and gas industry, based on the dataset of this study. The relationship between SHRM efforts and organizational performance in the Nigerian oil and gas industry.

Secondary measures (organizational performance) (Peppard and Fitzgerald, 1997; Salaheldin, 2009).

The results indicate that SHRM is impressively being practiced in the Nigerian oil and gas industry. Specifically, apart from career planning system, in descending order, the results suggest that, Strategic HRM alignment, training and development, Compensation System, Selection System, and Performance appraisal system are the key SHRM practices that influenced both organizational climate and performance in the Nigerian oil and gas industry. It therefore, implies that companies operating in the Nigerian oil and gas industry should pay more attention to these practices with a view to improving their implementation and the performance related outcomes across the industry.

The only surprising result of this study was the inability to corroborate the influence of career planning system on both organizational climate and organizational performance, as a result of SHRM implementation effort in Nigerian oil and gas companies. This unique finding was contrary to many empirical findings (Koys and De Cotis, 1991; Budhwar, 2000; Teo, 2002; Cunningham and Deborah, 1995, Khatri, 1999; Abdulkadir, 2012). There are few possible explanations for this result. The first one can be drawn from empirical research by Budhwar, (2000). In this study, it was found that many Nigerian companies often failed to attract the needed personnel or consultants, especially in highly technical industry like the oil and gas. Hence, SHRM effort is often characterized by poor career planning support (Teo, 2002).

Validating the mediating role of organizational climate (H_2) was done based on Baron and Kenny (1986) established conditions for mediation: (1) the independent variables must affect the mediator in Step 1 (table 4a confirms this condition). (2) The independent variables must be shown to affect the dependent variable in Step 2 (table 4b confirms this condition). (3) The mediator must affect the dependent variable in the Step 3 (table 4c confirms this condition). (4) The effect of the independent variables on the dependent variable must be less in the Step 3 than in the Step 2 (this was also confirmed by the difference between tables 4b and 4c). Meaning that, organizational climate moderately mediated between SHRM efforts and organizational performance in the Nigerian oil and gas industry, based on the data set of this study. One possible explanation could be due to the success of SHRM efforts as measured by organizational climate variables like structures, responsibility, risk, warmth, support, standard, conflict, and identity would lead to success in the secondary measures (organizational performance) (Peppard and Fitzgerald, 1997; Salaheldin, 2009).

5. Conclusion and Implications for Practice

The purpose of this paper is to evaluate the effects of strategic human resources management (SHRM) practices on the primary measures as expressed by the Organisational Climate and the secondary measures as expressed by the organizational performance, and to find out the effect of the Organisational Climate on the organizational performance of Nigerian oil and gas companies. The results obtained from this study indicate that SHRM is moderately practiced by companies operating in the Nigerian oil and gas industry. Specifically, apart from career planning system, in descending order, the results suggest that, Strategic HRM alignment, training and development, Compensation System, Selection System, and Performance appraisal system are the key SHRM practices that influenced both organizational climate and performance in the Nigerian oil and gas industry.

This practice is symbolized by improvements in both performance measures (organizational climate and organizational performance), as well as, the moderating influence of organizational climate on organizational performance of Nigerian oil and gas companies during the study period. In addition, improvements in both organizational climate and organizational performance are reasonably enhanced by five out of the six SHRM practices tested.

5.1 Theoretical Implications

Traditionally, the operations management literature has paid little attention to human resources issues. The present study brings some of these issues into focus in the context of oil and gas companies in a developing nation. Although, the empirical validation for the efficacy of the six SHRM practices proposed by Abdulkadir (2012) was the focal research issue, the findings and implications of our study go beyond just testing the potency of Abdulkadir’s six SHRM practices. Specifically, the present study investigates the mediating effect of organizational climate which helps us better understand the nature of the relationship between SHRM practices and organizational performance. In addition, this study seems to be among the few examining the outcome of SHRM effort, in the perspective of how organizations fare after its implementation. Another contribution of this study is the measurement of performance, which was not limited to or focused on financial metrics, but encompasses diverse business indicators and perspectives, like organizational climate, profitability, growth, customer services and sustainable competitive advantage (Khong and Richardson, 2003). In addition, this study seems to be one of the few that aims at investigating SHRM’s success in a developing economy, like Nigeria, by proposing a model and attempting to validate it empirically. In addition, this study offers a theoretical model that can be considered as a step forward in developing an integrated model toward investigating the relationship between SHRM efforts, SHRM effectiveness as
expressed by the organizational climate and SHRM success as expressed by the organizational performance and might serve as a basis for future research.

5.2. Managerial Implications

Based on findings from this study, Nigerian oil and gas companies should consider SHRM as an innovative tool for improving organizational climate and organizational performance. In addition, the corroborated findings provide valuable implications for practice. This study is expected to provide specific direction to companies contemplating a SHRM programme, hence, the study is expected to be beneficial to Nigerian oil and gas companies, policy makers in private and public sectors of the Nigerian economy by, enabling better strategic and tactical judgments with regards to SHRM implementations. It therefore, implies that companies operating in the Nigerian oil and gas industry should pay more attention to these practices with a view to improving their implementation and the performance related outcomes across the industry. It will help Nigerian companies understand SHRM as a business philosophy, its key components and benefits. It will also explore imperatives for successful implementation. In addition, this study empirically validates an ideal-type SHRM system for the oil and gas companies. The findings of this study are expected to help operations and human resource managers recognize the potential of these six SHRM practices and assist them in designing human resource management systems at the plant level to gain superior performance. Lastly, the study emphasizes the moderating role of organizational climate; and posits that organizational climate moderately influenced the relationship between SHRM effort and organizational performance in the Nigerian oil and gas industry.

However, this research is subject to the normal limitations of survey research. The study used perceptual data provided by members of staff which may not provide clear measures of performance. However, this can be overcome using multiple methods to collect data in future studies. This may include the use of additional guidelines to minimize this potential limitation, including: the use of different methods to measure the hypothesized relationships. In addition, due to the limitations of our data, we did not investigate the impact of organizational strategy on these SHRM practices. Further research is needed to understand how an organization’s strategic context influences the choice of SHRM practices and its impact on the various performance indices. Also, whether these findings are generalizable across country and/or industry needs to be investigated.

References


