

HUMAN RESOURCE MANAGEMENT PRACTICES AND HEALTH AND SAFETY OF EMPLOYEES IN SAIPEM OFFSHORE, EGINA UFR PROJECT, NIGERIA

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Abstract

The study focused on the link between Human resource management practices and health and safety management system within Saipem Offshore activities of EGINA UFR Project in Nigeria. The objective was to determine the empirical link between recruitment, training and compensation management practices, and Employees Health and Safety Management System (HSE.MS). The study was underpinned by the Human Capital, Resource Based View, and Person Fit Environment Theories. The population of interest consisted of Nigerian employees and sub-contractor personnel of Saipem Contracting Nigeria working in Saipem 3000 Vessel, Saipem FDS2 Vessel, Normand Maximus Vessel, Skandi Skansen and MSV Bourbon Evolution Vessels in EGINA UFR Project, Nigeria. A cross sectional survey research design was used to capture opinions of a sample of 125 respondents from a target population of 192 personnel. Primary data, collected by a self-administered structured questionnaire was summarized using descriptive statistics to establish the mean agreement with statements on human resource management practices adopted and Employee Health and Safety management system. The findings were presented using tables and regression results obtained with the aid of SPSS v.22. Multiple regression analysis was used to test the significance of the relationship amongst the log10 of predictor and outcome variable. The study provided empirically derived recommendations for HRM practitioners and academics for enhancing EHSE.MS by adoption of potent HRM practices within Saipem Offshore activities of EGINA Project in Nigeria, and beyond.

Keywords: Human resource management practices, Employees health and safety management system, Saipem Contracting Nigeria Limited.

1.0 Background to the study

The study investigates the effect of Human resource management (HRM) practices on employees' health, safety and environment management system (EHSE. MS) in Saipem Offshore of EGINA project in Nigeria. HRM is regarded as vital for the successful realization of organizational objectives. For instance, Anderson (2017) pointed out that in offshore operations, efficient management of HR is essential for the delivery of efficient and effective health and safety services and to achieve employee satisfaction. It is argued that adoption of high performance HRM (HP- HRM) practices in offshore operations are associated with significantly

lower incident rates, Lost Time injury (LTI) and better financial performance of employees (Cline & Guynes, 2017). Further, the incorporation of HR personnel, within Saipem Offshore managerial hierarchy, has been recommended as a strategy to boost the ability of health, safety and environment (HSE) professionals to manage HR at Saipem Offshore (Izuogu, 2018).

It is therefore surprising that, within Saipem Offshore, EHSE .MS is yet to be conceptualized as a function of HRM practices yet these Offshore operations not only comprised high risk health and safety activities but also are tasked with transportation of personnel via surfer in place of chopper to EGINA Field. To execute their mandates, Saipem Offshore has an imperative in line with offshore requirement to not only recruit a sufficiently trained and specialist employees, but to also manage their health and safety, performance and compensate them adequately. However, few studies are conceptualized to enhance our understanding of the relative importance of the various HRM functions to reduce risk of health and safety of employees in the area of transporting personnel to offshore location with surfer boat in place of chopper in the contract agreement of Saipem with Total EGINA UFR project. It may be argued that lack of knowledge of the relative importance of the effects of the various HRM functions in driving incident free in employee health and safety systems may be dysfunctional. The aim of this study is to determine the relative significance of HRM practices that have the potential to enhance the ability of Saipem Offshore to achieve their mandates. The focus of the current investigation is on establishing the relevance of recruitment, training, employee movement to offshore via surfer boat, compensation and performance management as predictors of employee HSE.MS within Saipem offshore operations in Nigeria. In particular, it focuses on the offshore activities of Saipem 3000 Vessel, Saipem FDS2 Vessel, Normand Maximus Vessel, Skandi Skansen and MSV Bourbon Evolution Vessel in Nigeria offshore, which are the vessels working for Saipem offshore in Nigeria and whose HRM and HSE challenges are yet to be investigated empirically.

HRM challenges in the provision of health and safety system for employees are not just universal, but have also attracted a lot of research attention both locally and globally. Despite being acknowledged that the number of health and safety employees working in Saipem Offshore is a key indicator of Saipem's capacity to deliver EGINA project without LTI, little attention has been focused on the role of HRM in employee HSE.MS by Saipem Offshore. Ramson (2017) argues that since knowledge, skills and motivation of HR determines employee HSE.MS a need exists to examine the question of what kind of HRM practices can lead to an enhancement in the EHSE MS. More work is needed to solve the problem of identifying which HRM practices are significant predictors of employee HSE.MS (Okoronkwo, 2017). So far, the significance of HRM in organizational performance is yet to be proven empirically (Andrew, 2017; Jude, 2015). Further, researchers are investigating whether claims of evidence of a universal link between HRM and performance are overstated (Aguinis, 2017). In particular, attention has been drawn to the methodological limitations and heterogeneity of the measures for HRM practices and employee HSE.MS. There is agreement that EHSE .MS results from the interaction between various offshore personnel and depends on the characteristics and behaviour of employees and HSE practitioners (Gayle and Obert, 2016).

Employee HSE.MS is dependent on what happens in the offshore vessels, although combinations of several basic elements have to be present in order for employee HSE.MS to be accessible and produced by both HSE personnel and HR personnel in each vessel at onshore (Kelvin, 2017). Although provision of employee HSE.MS is a human resource responsibility, yet few studies focus on HRM as a driver of HSE. In the context of Saipem offshore operations in

Nigeria, empirical studies have focused on the role of installation, buoyancy tank deployment, flexible jumper installation, dynamic umbilical installation, mooring line hook-up and other UFR activities and less on that of HSE. For instance, studies done in the context of Saipem offshore activities in Nigeria, such as Izuogu (2018) focused on assessing the effect of HRM practices on organizational growth in Saipem. Kelvin (2017) focused on factors hindering HSE professionals from achieving injury free statistics at Saipem Offshore activities. The study recommended the incorporation of HR personnel, within Saipem Offshore managerial hierarchy, to boost the ability of HSE professionals to manage HR in the industry. It can be argued that HR intensive nature of employees' health and safety provision justifies an empirical investigation to identify the HRM practices that significantly predict Employee HSE.MS as a way to enhance the role of HRM in Saipem Offshore activities in Nigeria.

1.1 Statement of the Problem

Saipem Offshore, EGINA UFR Project, Nigeria is one of the projects carried out by Saipem Contracting Nigeria Limited and employee health and safety management system requires the adoption of high impact HRM practices. Paradoxically, Saipem offshore activities face the challenge of having adequate HSE personnel with the motivation to deliver efficient safety performance. This challenge is further aggravated by the decentralization in management of HR and low salary payment with little or no offshore allowance to the senior staff working offshore. It is seen that offshore allowance of intermediate management staff is 156% higher than the senior staff offshore allowance, while both category of staff do the same work and face the same risk working offshore (Ayode & Nwanjo, 2017). The continued lack of focus on the contribution that HRM may have on employee HSE.MS in Nigeria has resulted in staff dissatisfaction, strikes and desire to withdraw professional services. In particular, it has not been possible to identify the significance of HRM practices as determinants of employee HSE.MS. The current study is motivated by the need to establish if the existing HRM capacity can adequately motivate staff in Saipem offshore activities in Nigeria with well compensated and motivated HSE professionals for employee HSE.MS. The current focus on the link between HRM practices and EHSE.MS fills the empirical, contextual, and conceptual gaps in the HSE practices literature on HRM performance link. Previous work did not provide an empirically derived understanding of the significance of HRM in employee HSE.MS. For instance, the study by Ayode and Nwanjo (2017) focused on implications of the devolved system of HR management in the HSE sector on retention of HSE personnel working offshore. Other related studies, such as Obert and Gayle (2017) focused on the implementation of devolution in management of HSE within offshore field, and improving employees safety in offshore field. Such studies are not predictive of the effect that HRM practices may have on employee HSE.MS in the context of Saipem offshore, EGINA UFR project in Nigeria. This has made it difficult to make inferences on the best HRM practices to manage in employees' health and safety in Saipem offshore, EGINA UFR Project in Nigeria. The current study fills this empirical gap by establishing the nature of the relationship between HRM practices and EHSE.MS in Saipem offshore, EGINA UFR Project Nigeria by examining the use of Surfer Vessel (Boat) in transporting personnel to offshore field of about 1200 nautical miles from Port Harcourt instead of Chopper Air Craft. In addition to filling the above empirical gap, the current study also fills a conceptual gap in this

understanding of the link between the HRM practices and EHSE.MS. Previous studies have had a much restrictive conceptualization of the role of HRM in employees' health and Safety.

For instance, Ayode and Nwanjo (2017) studied the role of HRM on retention of HSE offshore professionals. They did not address the recruitment, training, compensation and performance management issues that have been suggested to influence performance of HSE personnel working offshore (Arabah, 2018). This study provides a more comprehensive conceptualization of the role of HRM in enhancing EHSE.MS in Saipem offshore, EGINA UFR project Nigeria, which views performance of HSE personnel from their roles and intervention in unsafe situations point of reference. Further, it fills contextual gaps since differences in employment laws and governance structures make results of previous studies unsuitable for basing HR decisions that target improvement on EHSE.MS. An indicator used in one oil and gas industry may be unsuitable owing to lack of data and operational factors of each organisation (Dunleavy and Carrera, 2016). This study presents a useful test of the hypothesis that HRM practices can predict EHSE.MS in the context of offshore operations, likely to be less endowed with the facilities that Saipem offshore, EGINA UFR project, Nigeria require for EHSE.MS. To fill the empirical, contextual and conceptual gaps, a need exists for a study that focuses on the link between HRM practices and EHSE.MS. The current study focuses on establishing the empirical link between HRM practices of recruitment, training, compensation and performance management, and EHSE.MS at Saipem offshore, EGINA UFR project, Nigeria. The key question answered in this study is: What is the effect of recruitment, training, compensation and performance management practices on EHSE.MS within Saipem offshore, EGINA UFR project in Nigeria?

1.2 Objectives of the Study

The overall objective of this study was to assess the influence of human resource management practices on employee health and safety management system in relation to employee transportation from Saipem yard in Port Harcourt to offshore location at Saipem offshore, EGINA UFR project, Nigeria.

The specific objectives are:

- i. To determine the relationship between recruitment practices and employees' health and safety management system at Saipem offshore, EGINA UFR project, Nigeria.
- ii. To ascertain the relationship between training practices and employees' health and safety management system at Saipem offshore, EGINA UFR project, Nigeria.
- iii. To establish the relationship between compensation practices and employees' health and safety management system at Saipem offshore, EGINA UFR project, Nigeria.

2.0 Theoretical Framework

The current study tested the connection between HRM practices and EHSE.MS using the Human Capital, the Resource Based View and, the Person Environment Fit theories.

2.1 Human Capital Theory

The Human Capital Theory (HCT) by Baker (1964) considers people as assets and stresses that investment in people by organizations brings worthwhile returns. According to HCT, the human capital they bring to work consists of elements like innate abilities, behaviour and personal energy. HCT was used as suitable framework for unlocking the connection between recruitment and training as HRM practices and EHSE.MS. The HCT was considered as being

relevant to this study because human resources are one of the three principles of health and safety system inputs (Spence and Lewis, 2018). It is an asset that must be handled properly, since performance depends largely upon the knowledge, skills and motivation of health and safety professional responsible for employees' safety intervention (Wood, 2016). As Armstrong (2011) suggests, HRM should focus on attracting, retaining and developing human capital because it is individuals that generate, retain and use the knowledge and skills that create intellectual capital. Further, the level of human capital has an influence on firm performance HRM-performance link (Yaping, Kenneth, Song and Katherine, 2016). This study considered HCT a suitable theoretical framework to test the connection between HRM practices of selection, training and EHSE.MS at Saipem offshore, EGINA UFR project, Nigeria given the importance of human capital in the oil and gas offshore sector and the acknowledged role of HR practitioners in ensuring a sufficient level of HR, HCT and HSE. The second theory that underpinned this study is the Resource Based View that Armstrong (2011) notes is closely linked to the HCT.

2.2 Resource Based View of the Firm

The Resource Based View (RBV) by Penrose (1959) as reviewed by Yasemin and Joseph (2004), is considered suitable for analyzing the link between HRM practices and EHSE.MS. The relevance of RBV in understanding the HRM practices and EHSE.MS link derives from the recent development of research interest in the internal operation of the organization. RBV and the associated capabilities framework have been viewed as an increasingly important, yet somewhat controversial, approach. A resource-based view of a firm explains its ability to deliver sustainable competitive advantage when resources are managed such that their outcomes cannot be imitated by competitors, which ultimately creates a competitive barrier (Rugman and Verbeke, 2012: 2014). RBV explains that a firm's sustainable competitive advantage is reached by virtue of unique resources being rare, valuable, inimitable, non-tradable, and non-substitutable, as well as firm-specific (William, 2017). Varying performance between firms is a result of heterogeneity of assets (Loasby, 2012) and RBV is focused on the factors that cause these differences to prevail (Mahoney, 2015). Fundamental similarity in these writings is that unique value-creating resources generate a sustainable competitive advantage to the extent that no competitor has the ability to use the same type of resources, either through acquisition or imitation.

Major concern in RBV is focused on the ability of the firm to maintain a combination of resources that cannot be possessed or built up in a similar manner by competitors. Further, such writings provide us with the base to understand that the sustainability strength of competitive advantage depends on the ability of competitors to use identical or similar resources that make the same implications on a firm's performance. This ability of a firm to avoid imitation of their resources should be analyzed in depth to understand the sustainability strength of a competitive advantage.

The RBV postulates that firms can develop sustained competitive advantage only by creating value in a way that is rare and difficult for competitors to imitate (Loasby, 2012). Two reasons explain why it may be difficult to imitate human resource strategies that are deeply embedded in an organization (Wernerfelt, 2014). First, it is difficult to grasp the precise mechanisms by which the interplay of human resource practices and policies generate value. To imitate a complex system, it is necessary to understand how the elements interact, in particular, whether the effects are additive or multiplicative, or they involve complex nonlinearities.

Researchers are a long way from understanding the precise nature of these interactions and without being able to understand how an HR system works, it is not possible to imitate it by, for instance, reverse engineering it. It is even difficult for a competing firm to imitate a valuable HR system by hiring away one or a few top executives because the understanding of the system is an organizational capability that is spread across many people in the firm.

HR systems are path dependent, they consist of policies that are developed over time and cannot be simply purchased in the market by competitors. A competitor can understand that a system is valuable but is precluded from immediate imitation by the time required to fully implement the strategy. Further, there may be limits on management's ability to successfully replicate socially complex elements such as culture and interpersonal relationships. Thus, given the possibility that they are not easy to imitate, human resource strategies may be an especially important source of sustained competitive advantage (Pitelis, 2012). Theoretical work in business strategy has given a boost to the prominence of HR in generating sustained competitive advantage. Technology and capital can be acquired by most firms anytime, for a price, but it is not easy to acquire a ready pool of highly qualified and motivated employees (Vyas, 2009). Thus, to be differentiated, the companies need to be very careful with the recruitment and selection process. The theory is relevant to this study since researchers in the field of HRM have increasingly relied on RBV of the firm to explain the role of HR practices on firm performance (Wright, 2011). Following successful use of RBV in strategic HRM this study adopts RBV as a suitable theoretical framework for examining the link between HRM practices and EHSE.MS at Saipem offshore, EGINA UFR project, Nigeria.

2.3 Person Environment Fit Theory

Person Environment Fit (P-E fit) Theory, attributed to Kristof (1996), is premised on the notion of how well characteristics of the person and the environment of the organization fit one another. As such a theoretical framework that focuses on the degree to which a person matches with a job or organization is useful in explaining the relationship between HRM practices of recruitment, selection, training, development, remuneration and performance evaluation and EHSE.MS at Saipem offshore, EGINA UFR Project, Nigeria. The P- E fit theory holds that attitudes and behaviour are caused by the compatibility between individual and environmental characteristics ((Kristof-Brown et al., 2015). In the literature, a distinction is often made between Person- Organization fit (P-O fit) and Person-Job fit (P-J fit). P-O fit refers to the compatibility between a person and the organization, emphasizing the extent to which a person and the organization share similar characteristics and/or meet each other's needs (Kristof, 1996). P-O fit is embedded in the broader concept of Person -Environment (P-E) fit. While P-E fit is defined generically as the compatibility between attributes of the person and the environment (e.g. Aguinis, Edwards, & Bradley, 2016), in P-O fit the environmental referent is simply defined as the organization. As such, P-O fit addresses the compatibility between people and organizations (Kristof-Brown et al., 2015). Like P-E fit, P-O fit has been linked to job choice, selection decisions, job satisfaction, performance, organization commitment, turnover, and psychological well-being (Kristof-Brown et al., 2005). Also linked to the EHSE.MS at Saipem Offshore, EGINA UFR Project, Nigeria predictor variables is P-J fit aspect of P-E fit theory. In P-E theory, the environment referent is simply defined as the Job. As such P-J fit measures the compatibility between people and jobs. As Edwards (2015) explains, P-J fit refers to the match between the abilities of a person and the demands of a job or the desires of a person and the attributes of a job.

These two dimensions of person-environment fit are simply attempts to explain different sets of attitudes and behaviour that follow from the P-O or P-E fit or misfit. For example, person- organisation fit has been found to influence organisational attraction and organisational citizenship behaviour, while person-job fit has been found to influence job attraction, job satisfaction and intentions to pursue a job offer (Kristof-Brown et al., 2015). This study proposes that P-O fit and P-J fit offer utility in explaining the link between HRM practices and EHSE.MS at Saipem Offshore, EGINA UFR Project, Nigeria. The predictor variables represent practices that determine the extent of fit between a person and job or an organization. The P-O fit and P-E fit theories offer explanations of people's attitudes and motivations. For instance, P-O fit was found to be correlated with work attitudes such as job satisfaction and organizational commitment (McDuffie, 2012). Also, P-O fit predicts intention of quit and turnover (O'Reilly, Chatman, and Caldwell, 2011), and was related to prosocially behaviour such as organizational citizenship behaviour (Meyer, Hecht, Gill, and Toplonysky, 2012), self-reported teamwork (Edwards, 2015). The review of the P-J fit literature by Edwards (2015) identified job satisfaction, low job stress, motivation, performance, attendance, and retention as outcomes that are positively affected by P-J fit. Although the idea that people should be compatible with their organization may seem simplistic, few studies have considered it a basis for underpinning a study that links recruitment, selection, training, compensation and appraisal and EHSE.MS. This study proposes that because P-E fit theory offers an explanation of the motivation and attitudes of employees it is a suitable lens from which to understand the link between the four HRM practices, considered in this study, and EHSE.MS within Saipem offshore, EGINA UFR project, Nigeria.

3. Research Methodology

Descriptive research design was considered appropriate for gathering data on HRM practices and EHSE.MS in this study, and for describing existing conditions of employees' health and safety in the offshore oil and gas activities. This method was adopted to facilitate description of existing phenomena by asking Saipem employees working offshore in EGINA UFR project about their perceptions, attitudes, behaviour and values towards the working conditions. The population of interest consisted of all the HSE engineers, medical doctors, and many other employees at Saipem offshore, EGINA UFR project, Nigeria. From the list of all the 192 Nigerian staff working in the five offshore vessels at Saipem offshore, EGINA UFR project, Nigeria, a population of 110 staff formed the population of study. Stratified sampling technique was used in this study to select a representative sample from the population of study. Primary data were collected using four research assistants trained prior to the exercise. The researcher supervised the assistants to ensure completeness of the instrument. The questionnaire used a four point Likert rating scale to ascertain the perception of employees of the HRM practices and the perceived level of EHSE.MS. The copies of questionnaire were administered through the HSE engineers in each of the vessels. The quantitative data were analyzed using descriptive statistics and presented using distribution tables. The study applied multiple regression analysis to the log₁₀ of the dependent and independent variables.

4. Data Analysis and Results

The research applied Statistical Package for Social Sciences (SPSS) to develop a log-log level model of the effect of HRM practices on EHSE.MS. Using SPSS version 22 it was possible to carry out log₁₀ transformations on the dependent and predictor variables. Table 1 presents the coefficient of determination of the log-log level multiple regression model.

Table 1: Sample Size Based on Category of Staff

Company	Category of staff	Total number of staff by strata	Number of staff sampled	Percentages
Saipem	Intermediate Management Staff	7	4	3.2%
	Total number of Senior Staff	35	27	
	Project Engineers	7	5	21.6%
	Method Engineer	5	4	
	Operation Engineer	3	3	
	HSE Engineer	6	4	
	Field Engineer	6	5	
	Purser	3	3	
	Technical Engineer	5	3	
	Skilled Employees			
	Pipe Welders	37	24	19.2%
	Pipe Fitters	37	23	18.4%
	Rigger	11	9	7.2%
	Able sea Man	10	6	4.8%
	Cadet	12	6	4.8%
	Oilers	16	9	7.2%
	2 nd Engineer	9	7	5.6%
	3 rd Engineer	11	6	6.8%
	Bosun	9	4	3.2%
TOTAL		192	125	100%
Total returned			110	88%

Staff Category	Number of Questionnaire Distributed	Number of responses	Percentage of response rate
Management Staff	4	4	3.63%
Senior Staff	27	22	20%
Skill Personnel	94	84	76.36%
TOTAL	125	110	99.99%

Table 2: Copies of Questionnaire Distributed and Total Received with Percentage

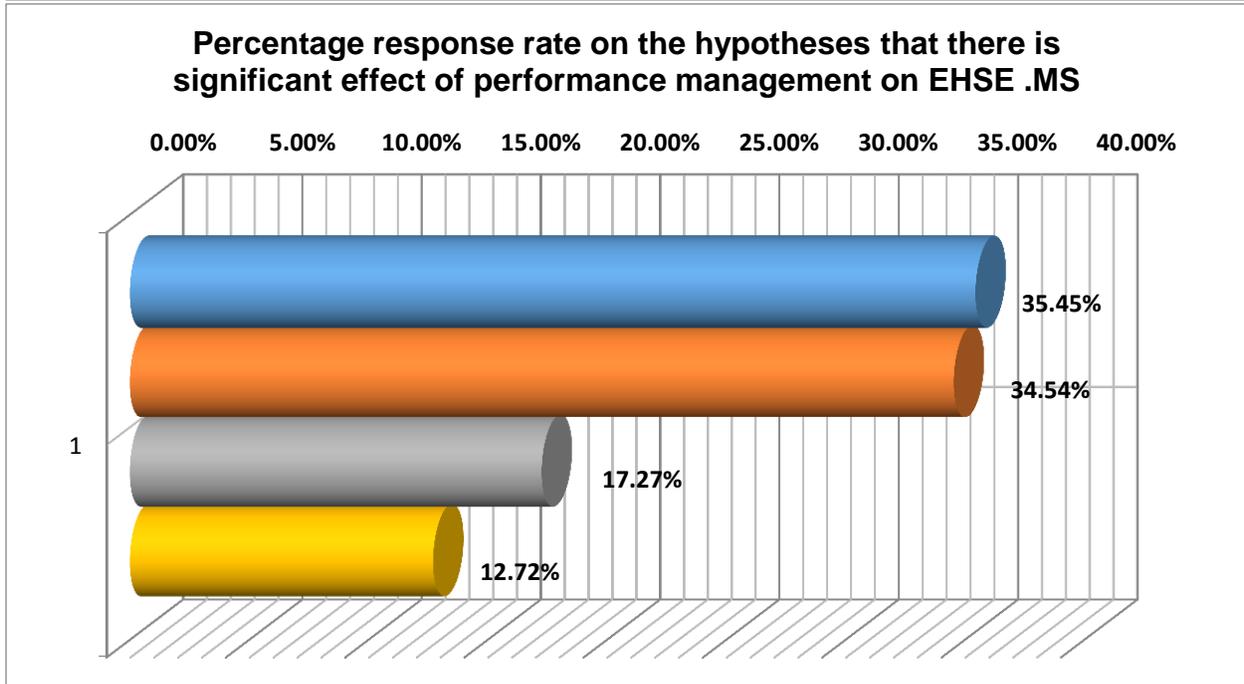
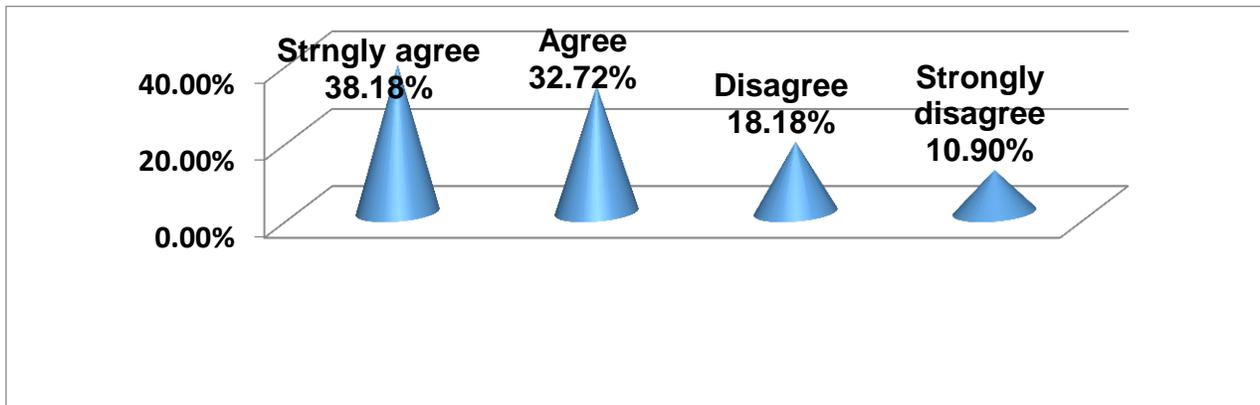
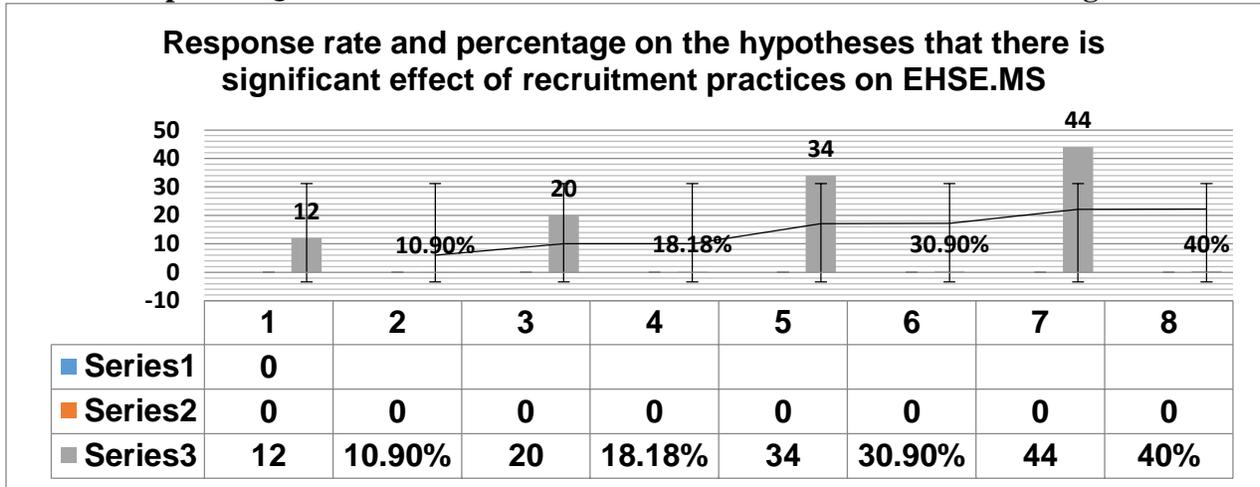


Table 3: Coefficient of Determination for HRM Practices

R	R Square	Adjusted R Square	Std. Error of the Estimate
.470a	0.221	0.178	0.07682

a. Predictors: (Constant), log10 Performance Management Practices, log10Rec Practices, log10 Training Practices, log10Comp Management Practices.

The R Square value in regression model in Table 3 provides an indication of the explanatory power of the regression model. R square is simply the percentage of variance in the dependent variable explained by the collection of independent variables. The value of 0.221 means that 22.1% of the variability EHSE.MS can be explained by the predictor HRM variables considered in the study. The next part of the output shows the SPSS test of the significance of the correlation coefficient by analysis of variance (ANOVA). The ANOVA report in Table 4 assesses overall significance of the regression model.

Table 4: ANOVA

Sum of Squares	df	Mean square	F	Sig.
Regression 0.122	4	0.031	5.18	.001a
Residual 0.431	73	0.006		
Total 0.553	77			

a. Predictors: (Constant), log10PerfromanceManagementPractices, log10RecPractices, log10TrainingPractices, log10CompManagementPractices

b. Dependent Variable: log10 EHSE.MS

Testing of the null hypothesis was achieved by running SPSS for the parameter coefficients in the multiple regression model relating the predictor variables to the response variable. Table 5 presents the parameter coefficients of the regression model.

Table 5: Coefficients of HRM Practices

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.377	0.167		8.231	0.000
log10RecPractices	-0.044	0.083	-0.057	-0.529	0.598
log10TrainingPractices	0.167	0.113	0.159	1.47	0.004
log10CompManagement Practices	-0.079	0.063	-0.142	-1.263	0.21
log10PerfromanceManag ementPractices	0.33	0.082	0.431	4.044	0.003

a. Dependent Variable: log10 EHSE.MS

Table 5 presents predictor variables coefficients together with p-values. The hypothesis was tested by comparing the decision rule p value of 0.05 with predictor variable p values. The decision rule states that if $p < 0.05$ reject the null for non-significance and

conclude that the independent variable is a significant predictor of the dependent variable. The study hypothesized that:

Ho1: There is no significant effect of recruitment practices on employee HSE.MS.

Ho2: There is no significant effect of training practices on employee HSE.MS.

Ho3: There is no significant effect of compensation management practices on employee HSE.MS.

5. Discussion of Results

The results of the test of significance shown in Table 5 indicate that the p-value of recruitment practices is >0.05 ($p = .598$). It then accepted the first null hypothesis, Ho1 that there is no significant relationship between RP and Employee HSE.MS. Thus it can be concluded that recruitment practice is not a significant predictor of the Employee HSE.MS given the p-value (.598) is greater than the decision p-value $p < 0.05$. The result that recruitment practices adopted by Saipem offshore, EGINA UFR project do not significantly predict the employee HSE.MS provided at Saipem offshore, EGINA UFR project does not support previous studies. For instance, Izuogu (2018) found that HRM practices such as employee recruitment and selection processes have a significant impact on employee retention in Saipem.

Finding of a non-significant and negative relationship between recruitment and employee HSE.MS may come as a surprise to many HR practitioners and theorists alike. However, in the context of Saipem offshore, EGINA UFR project, the result is understandable since recruitment is not a function of HR within Saipem offshore, EGINA UFR project. In the current study, respondents consisted of intermediate management staff, senior staff and shop floor personnel working in Saipem offshore, EGINA UFR project. In regard to the second hypothesis, the result of the hypothesis test in Table 5 indicates that the p-value of training practices ($p = 0.004$) is less than the decision p-value ($p < 0.05$) hence we reject the second null hypothesis, Ho2, that there is no significant effect of training practices on Employee HSE.MS. It is therefore concluded from the test that training practices is a significant predictor of Employee HSE.MS at Saipem offshore, EGINA UFR project.

The third hypothesis tested related to the relationship between compensation management practices and employee HSE.MS at Saipem offshore, EGINA UFR project. The p-value of compensation management practices ($p = .210$) is greater than the decision rule p-value ($p < 0.05$) hence we accept the third null hypothesis, Ho3, that there is no significant effect of compensation management practices on Employee HSE.MS at Saipem Offshore, EGINA UFR project. Thus, it is concluded from the results of this hypothesis test that compensation management is not a significant predictor of employee HSE.MS at Saipem offshore, EGINA UFR project. The finding that compensation practices do not predict employee HSE.MS at Saipem offshore, EGINA UFR project is contrary to findings in previous studies such as Izuogu (2018) in Saipem contracting Nigeria limited. He found that one of the reasons for poor performance of employees was lack of interest by the head of departments in Saipem contracting Nigeria limited to provide better conditions to Saipem employees thereby enhancing employee retention as industrial growth indicator.

6. Conclusion

The results of the study are valuable addition to the literature on the link between HRM practices and employee HSE.MS in Saipem offshore of EGINA project, Nigeria and beyond. This study concludes that employee HSE.MS is linked to HRM practices as specified in the

log-log regression model: $\text{Log}_{10}(\text{EHSE.MS}) = 1.377 - 0.044(\text{Log}_{10}\text{RP}) + 0.167(\text{Log}_{10}\text{TP}) - 0.079(\text{Log}_{10}\text{CMP}) + 0.330(\text{Log}_{10}\text{PMP}) + e$. The negative coefficients of recruitment and compensation management practices provide empirical evidence that these practices do not drive health and safety of employees in Saipem offshore of EGINA project, Nigeria. Further, training and performance management practices are significant predictors of employee HSE.MS in Saipem offshore of EGINA UFR project, Nigeria. The model shows 1% change in performance management and training practices leads to increases in employee HSE.MS by 33 and 16.7 percent respectively. Interestingly, the negative coefficients show a 4.4 percent and 7.9 percentage reduction in employee HSE.MS will follow from changes in recruitment and compensation management practices. In conclusion, by revealing the most potent predictors of employee HSE.MS, this study provides an empirical basis for prescribing high impact HRM practices within Saipem offshore of EGINA project, Nigeria.

7. Recommendations

- Since over 77.9 percent of the variations in employee HSE.MS arose from HRM practices, it is recommended that HRM deficiency within Saipem offshore of EGINA UFR Project is addressed. This can be done by integrating HSE personnel in HRM departments to entrench the effective role of employee health and Safety management system in Saipem offshore of EGINA Project, Nigeria in relations to their recruitment and compensation in the project. This will address the perennial problems of strikes and complaints among workers in the offshore sector.
- It is the avowed opinion of this treatise that if the identified lapses and challenges in HR practices are addressed, and the roles of HSE professionals are integrated into HR roles, the current institutional and regulatory frameworks vests recruitment and remuneration functions on HR will enhance employees' health and safety in Saipem. Since HSE Professionals are the executors of health and safety management provided by the organization, it is a key to ensure integration of HSE into HR for effective management system of Saipem offshore activities and good management of health and safety system.
- It is recommended that further studies be made to identify non HRM safety drivers in Saipem offshore activities. In particular, a focus needs to be made on environmental factors, such as deep offshore conditions and personnel exposure to such environment, in addition to working conditions of personnel staying offshore for two months before vacation. Such focus will help identify other teamsters of employee HSE.MS in Saipem offshore of EGINA Project, Nigeria and beyond.
- There is need to re-examine the offshore bridging documents of Saipem in relation to employee duration offshore. The document states that employees are to stay offshore for maximum of thirty days and go for vacation. It is the view of this paper that if such is maintained, employee health and safety will be enhanced.
- The study recommended the adoption of HSE incentive system and rewards for staff who perform well in Saipem offshore, EGINA UFR Project. This HSE incentive system will motivate employees in ensuring that working safely will earn them some incentives.
- To curtail the industrial discontent in the offshore sector, there is need to further investigate the potential of recruitment and compensation in ensuring a sufficiently motivated HSE

personnel in Saipem offshore. In particular, the non-significance recruitment and compensation practices given to the employees, point at more work to understand the effect of current practices on employee complaining of not being satisfied with the remunerations within Saipem offshore of EGINA Project, Nigeria.

Reference

- Aguinis, H. (2017). "Human resource outsourcing: Issues and challenges", *The Journal of Nepalese Business Studies*, IV (1): 347-365
<https://www.researchgate.net/publication/279482544>
- Aguinis, H., Edwards, J. R., & Bradley, K. J. (2016). "Improving our understanding of moderation and mediation in strategic management research". *Organizational Research Methods*. V(3): 212-227
- Anderson V. (2017). "Human resource development review: Integrative literature review" 14(3): 259–278; sagepub.com/journals. Permissions.nav.
- Andrew, S. A. (2017). "Writing integrative literature reviews": Guidelines and examples *Human Resource Development Review*, V(4): 356-367.
- Arabah, J. R. (2018). "Recruitment, training, compensation and performance management issues in Offshore operations", *Journals of Health and Safety Management*; Apr 15;20 XVII(8):985-986. doi: 10.1164/rccm.201802-0362 ED
- Armstrong , M., (2011). *Armstrong's handbook of human resources management practice*. London and Philadelphia: Kogan
- Ayode, E. & Nwanjo, K.N (2017). "Factors affecting employees' health and safety in oil and gas industry in Nigeria", *International Journal of Humanities and Social Science*, 2 (13): 321-338
- Baker (1964). "Human Capital Theory (HCT)" University of Plymouth Business School, Plymouth, UK , and Len Holden, Vol. 28 (5/6), MCB University Press.
- Cline, M., & Guynes, C. S (2017). "Recent trends in offshoring relationships". *Review of Business Information Systems (RBIS)*, VI(19): 1-4. Retrieved from <http://www.cluteinstitute.com/ojs/index.php/RBIS/article/view/9252/9308>
- Dunleavy and Carrera, (2016). "Measuring employee health and safety"; *Journal of health and Safety*; 4(25): 516-521
- Edwards, J. R., & Christian, M. S. (2014). "Using accumulated knowledge to calibrate theoretical propositions". *Organizational Psychology Review*, V(4): 279-291.
- Edwards, J. R. (2015). "The fallacy of formative measurement". *Organizational Research Methods*, VI(14): 370-388.

IZUOGU, S. A. & ONYEKWERE, I. A.: *Human Resource Management Practices and Health and Safety of Employees in Saipem Offshore, Egina UFR Project, Nigeria*

Gayle, H., and Obert, P. (2016). (2016), “Human resources management outsourcing: The make or buy decision”, *Academy of Management Journal*. XI(12): 456-471

Izuogu, S.A. (2018). “Human resource management practices in Nigeria’s oil and gas industry, A study of Saipem Contracting Nigeria Limited, Port Harcourt, Nigeria”, A PhD. Dissertation, Imo State University, Owerri, <https://www.researchgate.net/publication>.

Jude, T. (2015). “Ethics and human resource management and development in a global context”: A case study of an Indian multinational. *Human Resource Development International*, VI(16):106-115.

Kelvin, F (2017). “Human resource challenges of global offshoring”; *European Journal of International Management*, January 2017; DOI: IX(10). <https://www.researchgate.net/publication/247835184>

Kristof, A.L. (1996). Person-Organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49: 1-15.

Kristof-Brown, Amy L; Zimmerman, Ryan D;Johnson, Erin C (2015). *Personnel Psychology*; Summer ; 58, 2; Pro Quest Central

Loasby, B. J. (2012). “The significance of Penrose’s theory for the development of economics”. In Pitelis, C. (Ed.), *The growth of the firm: The legacy of Edith Penrose*. New York: Oxford University Press, VI(10): 45–59.

Mahoney, J. T. (2015). “The management of resources and the resource of management”. *Journal of Business Research*,33(2): 91–101.

Meyer, J. P., Hecht, T. D., Gill, H., and Toplonysky, L. (2012). “Person–organization (culture) fit and employee commitment: A longitudinal study”. *Journal of Vocational Behavior* 76(3): 458–473.

McDuffie, J. P. (2012). “Human resource bundles and manufacturing performance” *Industrial and Labour Relations Review*, 48(2): 197-221

Obert, P and Gayle, H. (2017). “Implementation of devolution in management of HSE within offshore field”, *Education and Health*, Kenya, KIPRA and Kimetrics. IX(7): 567-571

Okoronkwo, E. O. (2017). *Markets and hierarchies: Analysis and antitrust implications*. New York, NY: Free Press.

O’Reilly, C. A., Chatman, J., and Caldwell, D. F.(2011). “A profile comparison approach to assessing person-organization fit”. *Academy of Management Journal* 34(3): 487–516.

Pitelis, C. (2012). "On the garden of Edith". In Pitelis, C. (Ed.), *The growth of the firm: The legacy of Edith Penrose*. New York: Oxford University Press, 1–15.

Ramson, P. (2017). "Human resource development: Performance is the key". *Human Resource Development Quarterly*, IX(6): 207-213.

Rugman, A. M. and Verbeke, A. (2002). "Edith Penrose's contribution to the resource-based view of strategic management". *Strategic Management Journal*,23(8): 769–80.

Rugman, A. M. and Verbeke, A. (2004). "A final word on Edith Penrose". *Journal of Management Studies*, VI (41): 205–217.

Spence M. and M. Lewis. (2018). *Health, safety and growth*. Washington, D.C. World Bank, c2018

The WHO 2016 Hand Hygiene Campaign: Make a Difference-Prevent Sepsis in Health Care. PMID

Vyas S. (2009). "Employee involvement –key of success in change management", *HRM Review* , ICFAI University Press, Hyderabad, Vol. IX ,Issue VII, 46 51.

Wernerfelt, B. (2014). "A resource-based view of the firm". *Strategic Management Journal*, V(5): 171 80.

Wood, G. N. (2016). "Enhancing performance through best HRM practices, organizational learning and knowledge management:: A conceptual framework", *European Business Review*, 20(3): 185 – 207.

William, S. (2017). "Firm resources and sustained competitive advantage". *Journal of Management*, 17 (1): 99 -120

Wright, P. (2011). "The 2011 CHRO challenge: *Building organizational, functional, and personal talent*". Cornell Center for Advanced Human Resource Studies (CAHRS)

Yaping, G., Kenneth, L. S., Song, X and Katherine, R. (2016). "Human resources management and firm performance: The differential role of managerial affective and continuance commitment". *Journal of Applied Psychology*, 94(1): 263-275.

Yasemin Y. Kor and Joseph T. Mahoney (2004) Edith Penrose's (1959) "Contributions to the resource-based view of strategic management" *Journal of Management Studies* 41(1) 0022-2380.