HRM Practices and Organizational Performance: An Empirical Analysis

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Abstract
We theorize about the assessment of HRM practices on perceptions of firm performance through Monte Carlo Method (MCM), and the Hausman’s Specification Test (HST) in the Ivorian framework. 320 enterprises were surveyed and factor analysis of 13 bundles of HRM practices was undertaken. The confirmation of the findings through simulation (MCM) permitted the examiner to authenticate the reliability of the results in using the HST. The results of this paper highlight that in the Ivorian context there are significant connections between HRM practices and firm performance; that the strategic alignment of HRM is also a driver for firm performance.

Keywords: Monte carlo method, Hausman’s specification test, Human resource management, Firm performance, Côte d’Ivoire

1. Introduction
Monte Carlo Methods (MCM) are being utilized for a growing variety of issues. They have been used productively to handle deterministic problems and stochastic problems. There is indeed a great scope for ingenuity both in modeling of the problem and in developing special methods of simulation. Given a model and data in which fixed effects (FE) estimation would be appropriate, a HST tests whether random effects (RE) estimation would be almost as good. In a FE kind of case, the HST is a test of \( H_0 \): RE would be consistent and efficient, versus \( H_1 \): that RE would be inconsistent (Note that FE would certainly be consistent). The result of the test is a vector of dimension \( k \) which will be distributed chi-square (\( k \)). So if the HST statistic is large, one must use FE. If the statistic is small, one may get away with RE. As the intention of this paper is to lay the emphasis on the influence of HRM practices on perceived firm performance in the Ivorian setting, we resort to MCM and HST to authenticate and test the reliability of the results.

2. Literature Review
Researchers have indicated a positive interconnectedness between bundles of HRM practices, such as, training (Bartel, 1994), information sharing (Kleiner & Bouillon, 1998), employment security (Pfeffer, 1995; Delery & Doty, 1996), strategic alignment of HRM to business strategy (Becker & Gerhardt, 1996; Bjookman and Fey, 2000) and those researches that look into the influence of bundles of HRM mechanisms and the perceptions of enterprise performance (MacDuffie, 1995; Ichniowski et al. 1994). Studies have demonstrated that the investment in HRM practices and the Strategic alignment of HRM to corporate strategy is a driver for moving the enterprises from mediocrity to excellence.

2.1 Human Resources’ Development
2.1.1 The Investment in Technical and Non-Technical Training
Training is a significant component of organizations’ success even if it is not the end. Rather, training is characterized as a means to an end—the end being productive, efficient work organizations, populated by informed employees who see themselves as significant factors in the success of their organizations. The investment for enterprises in technical and non-technical training can positively impact the performance of organizations.

2.1.2 The Employment Security
Employment protection calls for a meaningful tool in the performance of high HRM practices (Pfeffer, 1995). Studies by Delery and Doty (1996); Bjookman and Fey (2000) have emphasized the significant correlation between
employment security and organizational performance. By stimulating the congruence of employees, the security of employees goes along with their commitment to tie that congruence to the organization’s goals. Enterprises that are able to provide their employees with job security will favor employees’ congruence.

2.1.3 The Career Management Programs

Enterprises that care and have concern for employee development need to stimulate commitment through the enterprise to help the employees understand the organization’s mission statement, vision, and values. The management of a career planning system (CPS) is to be efficient and effective as the enterprise’s career management policies and employees’ beliefs regarding their career need to be altered to satisfactorily meet up viable challenges. Enterprises that have a career management program for assisting the human resources (HRs) will favor their motivation and increase in productivity.

2.1.4 The Promotion of the Workforce within Enterprises

An employee that gets promoted is much more committed to the enterprise goals and objectives attainment. Nothing great can be achieved out of competency and employees need to work hard as much as possible to get the required skills to progress within the organization. When promotion takes place in enterprises, we should expect the ensuing: care and concern for the workers, trust in the HRs, and provision of personal growth opportunities. An atmosphere that stimulates and compensates employees brings the understanding of those employees to feel that they are also “living” in the enterprise.

2.1.5 The Development of Human Resources in Abidjan

Training is an essential tool for the management and development of HRs. The commitment to investments in development-oriented HRM practices is likely to improve an enterprise’s ability to retain valuable HRs. Enterprises that offer such programs get more high-quality applicants. Promotion and career management programs (CMP) should be important for enterprises in Abidjan to stand for competitive edge. HRM practices that contribute to the development of managerial workers in Abidjan can be expected to be positively related to enterprise performance. That is why the researcher proposes that there is an outstanding correspondence between how enterprises value their managerial HRs and the performance of their enterprises in Abidjan (A1); that there is also an outstanding correspondence between how enterprises value their non-managerial HRs and the performance of their enterprises in Abidjan (A2).

2.2 The Pay/Organization Issue

2.2.1 Team-Based Enterprises

Seers (2004) holds that teams are the backbone of the flexible organizational designs required to cope with the new knowledge economy. Teams increase the likelihood that employees will be innovative, creative and able to quickly react to changing market needs and customer preferences for products and services (Anthony & Buzzotta, 1993). Team-based organizations give employees, confidence to pool their ideas to come up with creative solutions to problems. Communication is difficult to take place in a power-distance enterprise.

2.2.2 The Decentralized Decision Making

The growing adoption of flat or non-hierarchical organizational structures (NHOSs) and the consequent empowering of employees to create effective workplaces suggest that delegation will become an increasingly popular managerial technique or leader behavior (Zhen & Samuel, 2007). The NHOSs reduce status difference as hierarchical organizations ranks high on power distance. The reduction of status difference is part of the characteristics of high HRM practices emphasized by Pfeffer (1998).

2.2.3 The Performance-Based Compensation System

Studies (See for instance Huselid, 1995) have emphasized the optimistic correlation between perceptions of firm performance and the execution of good performance-based compensation system (PBCS). Hence, implementing a PBCS that attracts high-quality applicants (HQAs) is just such an important issue. A HQA is one who has the ability and disposition to produce more than a low-quality applicant. Correspondingly, Copeland (2002) admits that firms should be able to offer an equitable and original compensation so as to attract competent job-seekers.

2.2.4 The Compensation Issue in Abidjan

A review of literature (See for example Beugre, 2004) indicates that the compensation system in Côte d’Ivoire is based on salary, bonus and benefits. Few enterprises operating in Abidjan use pay as performance tool for their employees. The use of 360-degree feedback for objectivity and for better performance appraisal is altered by many considerations (nepotism, ethnicity…). In the business environment, compensation and bonus systems are extremely significant, as they attract and retain skilled and competent HRs. From the ongoing, we propose that there is a substantial link between managerial HRM practices that impact the design of work and a subsequent compensation scheme, and enterprise performance in Abidjan (A3); that a substantial link between non-managerial HRM practices that impact the design of work and a subsequent compensation scheme, and enterprise performance in Abidjan (A4) exists as well.
2.3 The Feedback System Issue

2.3.1 The Sharing of Information
An enterprise that makes real a shared culture that is in actual fact unbreakable through information flow will be a competitive one. When the sharing of information is a vital component of the entire enterprise’s culture, this can surely impact the effectiveness of the enterprise. When people work together, share ideas, and sometimes wrangle, they build on one another’s ideas for the benefit of the enterprise. The lack of communication and information sharing disrupts works and brings about enterprise mediocrity.

2.3.2 The Complaint Resolution Systems

2.3.2.1 The Problem of Injustice within Enterprises
Conflicts often occur in enterprises or firms due to the lack of opportunity, ability, or motivation to communicate effectively. When parties lack the opportunity to communicate, they tend to use stereotypes to explain past behaviors and anticipate future actions (Steven & Glinow, 2000). The complaint resolution system (CRS) in enterprises can help handle situations of conflicts that can distort work and negatively impact productivity, commitment, satisfaction and performance of enterprises. When complaints are dealt with delicateness, workers feel valued, supported, respected and dedicated. Complaints adequately settled make the workers be more inclined to keep up an elevated level of dedication, and congruence to the enterprises. To better understand the opinion of employees, the attitude surveys may be significant. The utilization of attitude survey has also been found beneficial as using such a survey helps top management understand the desires and ideas of employees.

2.3.2.2 The Value of Attitude Survey
Employees can be surveyed vis-à-vis their job satisfaction, opinions about supervisors, operating effectiveness, and training and development matters. Enterprises survey employee levels of job satisfaction as a measure of executive and enterprise performance. Performance appraisals (PAs) are a formal management system that provides for the evaluation of the quality of an employee’s performance in an organization. The objectives of PAs are the following: provide feedback to employees about their performance; determine which employee gets promoted; encourage performance improvement; motivate superior performance; find out individual training and development wants or needs; develop overall enterprise performance.

2.3.3 The Feedback Systems Issue in Abidjan
Abhishek et al (2006) wrote that “knowledge sharing (KS) can be defined as team members sharing task-relevant ideas, information, and suggestion with each other”. Liebowitz (1999) observes that KS is a central component of knowledge management (KM), as it helps in codifying the repository of available knowledge in an organization and increasing it overtime. Exchanging information supposes that information is exchanged and it gets to those who need it to do their work. When the workplace is an inciting one and there is a strong and effective information sharing system (ISS), it is essential for a given enterprise to operate well. Feedback by superiors on employee functional behaviors and personal praise confidently influence productivity and this paper acknowledges that there is a need to recognize that there is a constructive link between enterprise strategy and enterprise performance. It is against the ongoing that the investigator proposes that there is a great link between managerial HRM practices that make possible opinion and enterprise performance in Abidjan (A5); and that a great link is also effective between non-managerial HRM practices that make possible opinion and the performance of enterprise in Abidjan (A6).

2.4 The HRM Strategy Alignment and the Strategy Alignment of HRM Issues in Abidjan
Beugre (2004) indicates that the compensation system in Côte d’Ivoire is based on monetary compensation (salary, bonus) and benefits (health insurance and pension contributions). The performance-based compensation issue, the teamwork, the reduction of power-distance will help enterprises in Abidjan be competitive. The strategic alignment of HRM to business strategy leads to firm performance as it is admitted (See Guest, 1997) that those organizations that have a fit between strategy, structure and HRM policy will have significant performance and increase productivity. This paper admits that aligning HRM practices with corporate strategy can be a source of enterprise performance in Abidjan, as well. Hence we theorize that aligning the management of HRs with corporate strategy can bring about enterprise performance in Abidjan (A7).

3. Methods

3.1 Data Collection and Method
The platform which helped the researcher choose the sectors and the organizations is the “Repertoire des Entreprises Commerciales Industrielles et de Service: Annuaire: Chambre de Comerce et d’Industrie de Côte d’Ivoire, 2007” which contains information about the listed enterprises involved in our study. We identified a sample of 500 enterprises. But only 320 showed interest in the study which represented a 64% response. Questionnaires were disseminated in the
enterprises. Questionnaire was designed depending upon the extensive literature review (Barney, 1991; Delany & Huselid, 1996; Delery & Doty, 1996; Eisenhardt, 1998; Forster, 2004; Bjookman & Fey, 2000). We coded and analyzed the data. The commercial software package (SPSS, Version 11.0) permitted data coding, storage and analysis.

We used a predetermined draft for questionnaires. The conclusions of this modus operandi were 320 participants (117 General Managers or Human Resource Managers or Personnel Managers), categorized as managerial HRs and 203 Production workers identified as non-managerial HRs. We noticed that there were 105 enterprises having between 20 and 399 workers, 195 having between 400 and 599 workers, 12 having between 600 and 900 workers, and 8 having over 900 workers.

3.2 Measures

3.2.1 Control Variables

Our research includes several variables to capture other organizational and environmental factors that are in conjunction with the adoption of HRM practices and enterprise performance. Our control variables include the size of the enterprises in the organizations. It was useful for the investigator as on a theoretical basis, significant organizations in terms of size utilize formal HRM practices than those who have “insignificant” number of workforce. The age of the enterprises was also important as there can be optimistic connection between enterprises’ years of operations and the adoption of bundles of HRM practices.

3.2.2 Independent Variables

The information about the HRM practices is highlighted in Table 1. As HRM-strategy alignment leads to organizational performance (Becker & Huselid, 1996), we need to stress that the strategic alignment (SA) of HRM practices to business strategy was focused on predisposed evaluation with a view to figure out how strategic HRM is appreciated in the enterprises under study. We considered HRM-strategy alignment and participants’ perceptions about the effectiveness of the SA of HRM practices with their enterprise strategy, utilizing a likert scale that ranged from 1 “To little importance” and 5 “To a great importance” as studies (Becker & Huselid, 1996; Bjookman & Fey, 2000) used this kind of likert scale.

3.2.3 Dependent Variables

Studies have been carried out to find measures of perceptions of firm performance to correlate specifically with measure of enterprise performance. The variables were market share, quality of products or services, profitability, and sales growth. Each of the dependent variables is based on questionnaire items responses on likert scales like Bjookman & Fey (2000); Becker and Huselid (1996) also ranging from 1 “Poor” to 5 “Exceptional” where on a biased foundation, the participants were asked to state how those variables were effective and efficient in their enterprises. The subjective basis of the assessment does not negate this measure as studies (See for example Youndt et al., 1996; Powell, 1992; Bjookman & Fey, 2000) have indicated that biased of enterprise performance undeniably presents a relation with the objective assessments of the performance of enterprises. Therefore, the issue of biases is outweighed in this paper.

4. Results

We need to draw reasonable conclusions from the data collected. So, we found it essential to deal with a principal component factor analysis (Table 1) with varimax rotation about the different HRM practices considered in the extensive literature review.

(Insert Table 1 and Table 2 about here)

Table 1 highlights the different factors identified for this research inquiry. Totally, we have three different factors. “Development factor” contains trainings (technical training (0.856); non-technical training (0.902); non-entry jobs filled from within enterprises (0.896); assisting in career planning (0.929); and job security (0.437)). While “feedback factor” is composed of information sharing programs (0.931), complaint resolution system (0.916), and attitude surveys (0.851), the “pay/organization factor” deals with performance appraisals (0.826); group/company performance in pay (0.767); teamwork (0.860); decentralized decision making (0.751); and interdepartmental communication (0.911). When we look at Table 1, we observe the results of the three different Cronbach’s Alphas (0.732; 0.672; 0.713). They imply that they are acceptable because they are in line with the credibility level of 0.70 emphasized by Nunnally (1999); Bjookman and Fey (2000); Price and Mueller (1986) in this kind of research. The correlation matrix (Table 2) presents the intercorrelations among the identified variables. The findings highlight that interconnectedness exits among the variables. As stated earlier, we need to test propositions. That is why we utilized regression analysis on enterprise performance in Table 3 and Table 4 as they respectively indicate the results of findings for model 1 (managerial workers) and model 2 (non-managerial workers). Regression equation that is used to test the research model for managerial workers (Table 3) is as under:

Equation 1:
\[ \ln(P)_i = \lambda_1(L)_i + \delta_1 AE_i + \beta_1 H_i + \gamma_1 MD_i + \mu_1 MP_i + \theta_1 FDM_i + \varepsilon_{1i} \]

Enterprise Performance = Coefficient (Number of employees) + Coefficient (Age of enterprises) + Coefficient (HRM-Strategy fit) + Coefficient (Manager development) + Coefficient (Manager pay/organization) + Coefficient (Feedback to managers) + Residuals

(Insert Table 3 about here)

The alignment of HRM strategy to corporate strategy was confidently in conjunction with enterprise performance as p value was inferior to 0.05. Considerable associations were of use. As we need to substantiate theories, the researcher led regression analysis on enterprise performance (See Table 3). In Table 3, the model 1 highlights the outcomes of the regression analysis on enterprise performance and emphasizes the HRM practices for managerial workers. The model was acceptable because we have \( R^2 \) being 0.531 and Adjusted \( R^2 \) is 0.487. The variable related to the management of employees also has a positive and significant coefficient.

Regression equation that is used to test the research model 2 for non-managerial workers (Table 4) is as follows:

Equation 2:
\[ \ln(P)_i = \lambda_2(L)_i + \delta_2 AE_i + \beta_2 H_i + \gamma_2 ED_i + \mu_2 EP_i + \theta_2 FDE_i + \varepsilon_{2i} \]

Enterprise Performance = Coefficient (Number of employees) + Coefficient (Age of enterprises) + Coefficient (HRM-Strategy fit) + Coefficient (Employee development) + Coefficient (Employee pay/organization) + Coefficient (Feedback to employees) + Residuals.

(Insert Table 4 about here)

The model 2 (See Table 4) permits us to appreciate the contribution of the employees in terms of performance and the relation between the identified variables and organizational performance (OP) for non-managerial workers. The estimated models (model 1, table 3; model 2, table 4) have equal dependent variable: performance. The main variables are utilized in the regression analysis and this is important for this paper as preceding researches (See for instance, Guest, 1997; Bjookman & Fey, 2000; Delany & Huselid, 1996) have emphasized connections between HRM practices and firm performance. The correlation between bundles of HRM practices for the different categories of employees (managerial workers; non-managerial workers) and OP is remarkable and considerable. Additionally, the alignment of HRM practices to organizations’ strategy was appreciably interrelated with OP. To put it in a nutshell, we notice that noteworthy and important relation existed between bundles of HRM practices for the two sorts of employees in our study. The employees with a good human potential are more productive and they bring appreciative and meaningful added value to the enterprises. The findings indicate that the level of employee pay is a decisive factor for the explanation of performance within the enterprise. The findings reveal the significant correspondence of the variable “variance explained” whatever the factor that is involved in. The “development factor”, and the variables such as “job security”, “technical training”, “non-technical training”, and “assisting in career planning” highlight an optimistic correspondence. When we change the reference factor by considering the “feedback factor”, the correlation becomes much more important between that factor and the following variables: “Complaint resolution systems”, “Information sharing programs”, and “Attitude survey”. As for the factor about “Pay/Organization”, we observe new variables with a remarkable correlation between that factor and the variables of the model used. Except the variables “Information sharing programs”, all the other variables are optimistically correlated with the “development factor”. As for the “feedback factor”, only two variables are negatively interrelated. Those variables are the ensuing: “Job security” and “Group/company performance in pay”. With reference to the “Pay/organization factor”, the variables of the model have an encouraging correspondence. The findings of this research are based on the different hypotheses.

To test our specific propositions, a factor analysis for separate practices for non-managerial workers was used as well (See Table 1); regression analysis was also effective (See Table 3 and Table 4). To confirm the findings from Table 1, Tables 3 and Table 4, a simulation approach (See Table 5) based on Monte Carlo Method (MCM) was important.

(Insert Table 5 about here)

Table 5 gives room to validate our various research hypotheses. The standard error (SE) values which are similar to the standard deviation (SD) and to the one of the coefficient of sensibility (CS) will bring us to appreciate the impacts of a variation on the explanatory variables about the performance of enterprises in the Ivorian setting. The results indicate that there is no very important deviation between the explanatory variables; that the distribution principles are therefore normal and stable. The most important deviation is seen from the variables such as “manager development” with 3.675 SE and the log of numbers of employees with 2.543.10^{-2} CS. An interpretation of the results can be found in the difference in initial training of the managers. In our sample, we have important enterprises with important number of
employees and the results point out that enterprises with high number of employees perform better than those with a smaller number of employees. This fact indicated above gives an explanation of the origin of the SE. The CS is a way to consider the nature of simulations of the explanatory variables about the performance of enterprises in Abidjan. From the MCM analysis, it can be observed that all the explanatory variables positively impact the performance of enterprises in the Ivorian setting. The variables related to the development of HRs, that is, “employee development” with 2.014 SE and 2.45.10^{-2} CS and “manager development” with 3.675 SE and 3.65.10^{-1} CS positively and statistically influence the performance of enterprises. Our results show that “managerial HRM practices” and “non-managerial HRM practices” variables have an optimistic influence on the performance of enterprise and that the “HRM-strategy alignment” variable with 1.690 SE and 3.17.10^{-2} CS influences the performance of enterprise. For the consistency of the findings of this paper, we conducted a credibility test using the Hausman’s Specification Test (HST).

When we have a model with individual effects (IE), the first concern is to know how these IE must be specified. Should we adopt the hypothesis with fixed effects (FE) or the hypothesis with the random effects (RE)? One of the problems that can occur with the model with RE comes from the probable correlation between the explanatory variables and the IE. On the economic plan, this correlation points out the influence of the structural individual specifications on the determination of the level of the explanatory variables. The HST (1978), or m-statistic, can be used to test hypotheses in terms of bias or inconsistency of an estimator and can be applied to many issues of specification in econometrics. However, its application the most known is the Specification Test of IE in panel. Therefore, the HST is used to discriminate the FE and RE. The general idea about the HST is both simple and interesting. Let’s suppose that the inquirer tries to test the probable existence of a correlation or a defect of specification. Furthermore, let us admit that we have two sorts of estimators for the parameters of the model to be studied. The first estimator is supposed to be the non-biased estimator with minimum variance with the right null hypothesis of specification of the model (no correlation). Besides, with the alternative hypothesis of bad specification, this estimator is supposed to be biased. We suppose that the second estimator is non-biased in both cases. As such, there will be a need to compare a vector of dimension by a matrix of variance, covariance among the two estimators to be able to determine whether the specification is correct or not. If the distance is statistically null it means that the specification is correct and we then choose the first estimator. If the distance is significant it means that the model is not well specified. The hypothesis that is tested concerns the correlation of the IE and the explanatory variables. The random effects refer to the fact that the results of analysis are not caused by the variables of the model. The fixed effects highlight that the results of the findings are the consequence of the choice for the variables. The test for the hypothesis is as follows:

H_{0}: Consistency and efficiency of RE
H_{1}: Existence of FE

Under H_{0}, the statistic H of this test has a chi-square distribution with k degrees of freedom, k being the number of the explanatory variables:

\[ H = \frac{(\hat{\beta}_1 - \hat{\beta}_2)}{\text{Var}(\hat{\beta}_1) - \text{Var}(\hat{\beta}_2)} \]

Where \( \hat{\beta}_1 \) and \( \hat{\beta}_2 \) represent the estimators of the generalized least squares (GLS) and within. The statistics test follows (as we stated earlier) a chi-square with k degrees of freedom where k is the number of estimated coefficients. An important or interesting value of this statistics H, associated with a critical probability (the level of probability that we fix) for a very weak H_{0} is conducive to the rejection of the null hypothesis. Hence, we test whether RE estimation will be good. To conduct the HST, we utilized STATA, Version 9 (Table 6).

(Insert Table 6 about here)

\[ Ch 2(13) = (b - B)'[(V_b - V_e)^{-1}](b - B) = 275.44 \]

Pro > Chi2 = 0.0000

In the estimation of the chi-square, we have two methods to verify our hypotheses’ test. The first hypothesis test consists in calculating the value of chi-square that we compare to a theoretical value of chi-square in the “chi-square table”. If from this operation, the value that is calculated is superior to what is tabulated; we then reject the null hypothesis. If the opposite happens, we subsequently accept the null hypothesis. The second hypothesis test consists in fixing a level of probability that we compare with what is calculated (p-value). If the p-value is inferior to the level that we fixed, the null hypothesis is not validated. If this is not the case, then, the null hypothesis is to be accepted. In our case, we used the second approach. As a consequence, the commercial software package (STATA, Version 9.0) that was utilized for the test of credibility gave us the two values and that is why we have both of them in our table and analysis. The probability of rejecting the null hypothesis H_{0} is given by the following:
The level of significance is 5%, and even 1%. Therefore, we can reject H0 without any risk of mistaking. This brings the researcher to positively appreciate the hypothesis H1 for the existence of FE. The model that the research accepted for estimation is the model with FE. Therefore, the findings of this research inquiry confirm the validity of our model and the results that this investigation highlights.

5. Discussion and Conclusion

The findings make it clear that investing in HRM leads to organizational performance. The different results indicate that there is a couple of significant correlation between the practices of HRM and the performance of enterprise. As Guest (1997) has emphasized the relationship between HRM practices and enterprise performance, our findings are in line with those results in the context of enterprises located and operating in Abidjan. It could be observed that the different identified factors did not highlight the same results for the investment in HRM practices and perception of enterprise performance. The findings draw attention to noteworthy connection of the variable “variance explained” whatever the factor that is involved in. The “employee development” factor and the variables such as “technical training”, “non-technical training”, “non-entry jobs filled from within”, “assisting in career planning” and “job security” all have a high and positive correlation with the enterprise performance. When we change the reference factor by considering the “feedback factor”, the correlation becomes much more important between that factor and the following variables: complaint resolution system”, “information sharing programs”, and “attitude survey”. Additionally, in taking into account the “pay/organization” factor, we observe new variables with a remarkable correlation between that factor and the variables of the models used in this investigation. The results of this paper also indicate that there is a correspondence between the alignment of HRM to corporate strategy and the performance of organization. As a consequence, our different propositions (A1; A2; A4; A5; and A7) are all verified and confirmed by our results. This investigation implies that the investment in HRM practices is a driver for enterprise performance; that all the HRM practices are not compulsory to value or consider as there should be HRM practices for managerial HRs and HRM practices related to the management of non-managerial HRs. Knowing which HRM practices bring about enterprise performance in the Ivorian context for the two types of workers will help top leaders make their organization be effective and efficient in not wasting time to find out how to boost their enterprise performance.

This investigation admits some limitations. The size of the sample used in this paper will be for us, a premature way of asserting that the management of HRs in the participating enterprises is similar to many other enterprises. The sample is not sufficient to reflect the realistic picture of the enterprises established and operating in Côte d’Ivoire through the evaluation of the influence of HRM practices on OP. Consequently, this paper suggests directions for possible prospective researches. Accordingly, a longitudinal study should be carried out all through the country for a much more considerable assessment of the connection between HRM practices and the performance of enterprises in Côte d’Ivoire. Questionnaire techniques were utilized to collect the data with a view to analyze them and draw conclusions. For prospective research, it will also be interesting to do with forum discussions or group discussions. This study purely gives us an idea about the assessment of HRM practices enhancing performance in some industrial enterprises in Abidjan, Republic of Côte d’Ivoire. Since there is in this article a constrained conclusion for an optimistic link between the alignment of HRM practices with business strategy and OP, the research inquirer thinks that there should be much more important development of refined measures of organizations strategy to give a hand in investigating the substance of HRM practices for enterprises in Abidjan, to attain maximum performance. This paper makes important contributions to the perception of the correspondence between HRM and OP in Abidjan (Republic of Côte d’Ivoire), a West African country with a developing economy.

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Table 1. Results of Principal Component Factor Analysis with Varimax Rotation

| Variables                                      | Development Factor | Feedback Factor | Pay/organization Factor |
|------------------------------------------------|--------------------|-----------------|-------------------------|
| Technical training                            | 0.856              | 0.634           | 0.303                   |
| Non-technical training                        | 0.902              | 0.582           | 0.582                   |
| Non-entry jobs filled from within enterprises  | 0.896              | 0.399           | 0.592                   |
| Assisting in career planning                  | 0.929              | 0.626           | 0.303                   |
| Job security                                  | 0.437              | -0.517          | 0.435                   |
| Information sharing programs                  | -0.302             | 0.931           | 0.525                   |
| Complaint resolution system                   | 0.531              | 0.916           | 0.297                   |
| Attitude survey                               | 0.475              | 0.851           | 0.042                   |
| Performance appraisals                        | 0.547              | 0.411           | 0.826                   |
| Group/company performance in pay              | 0.301              | -0.304          | 0.767                   |
| Teamwork                                      | 0.630              | 0.659           | 0.860                   |
| Decentralized decision making                 | 0.569              | 0.492           | 0.751                   |
| Interdepartmental communication               | 0.444              | 0.649           | 0.911                   |
| Eigen Value                                   | 2.825              | 2.515           | 2.445                   |
| Variance Explained (%)                        | 19.735             | 17.375          | 16.795                  |
| Cronbach Alpha                                | 0.732              | 0.672           | 0.713                   |

Table 2. Results from the Correlation Analysis

| Variables                                      | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|------------------------------------------------|------|------|------|------|------|------|------|------|------|-------|
| 1. PERFORMANCE                                 | 1     |      |      |      |      |      |      |      |      |       |
| 2. Manager Development                        | 0.422** | 1    |      |      |      |      |      |      |      |       |
| 3. Manager Pay/Organisation                   | 0.947** | 0.293** | 1    |      |      |      |      |      |      |       |
| 4. Manager Feedback                           | 0.247** | 0.905** | 0.213** | 1    |      |      |      |      |      |       |
| 5. Employee Development                       | 0.693** | 0.955* | 0.613** | 0.208** | 1    |      |      |      |      |       |
| 6. Employee Pay/Organisation                  | 0.972** | 0.448** | 0.239** | 0.801** | 0.093** | 1    |      |      |      |       |
| 7. Employee Feedback                          | 0.615** | 0.326** | 0.492** | 0.446** | 0.056** | 0.735** | 1    |      |      |       |
| 8. HRM-Strategy Fit                           | 0.428* | 0.485* | 0.145* | 0.983 | 0.450** | 0.118** | 0.875** | 1    |      |       |
| 9. #Years Enterprise in Côte d'Ivoire         | 0.431 | 0.300 | 0.636** | 0.550** | 0.897 | 0.585* | 0.366* | 0.628 | 1    |       |
| 10. Log of # Employees                        | 0.768** | 0.762** | 0.271** | 0.145 | 0.269* | 0.273** | 0.778 | -0.968 | 0.901 | 1     |

Note: N=320, *p<0.05; **p<0.01
| Independent Variables | Model 1 |
|-----------------------|---------|
| Log of number of employees | 0.231* |
| Age of enterprise in years | 0.128 |
| HRM – strategy fit | 0.144* |
| Manager development | 0.205* |
| Manager pay/organization | -0.075 |
| Feedback to manager | 0.252* |
| \( R^2 \) | 0.531 |
| Adjusted \( R^2 \) | 0.487 |
| F | 10.56**** |
| N | 320 |

Table 3. Regression Analysis on Enterprise Performance for Managerial Workers

Note: a. Dependent variable=enterprise performance, b. Standardized regression coefficients are shown, c. * p<0.05, **** p<0.01

| Independent variables | Model 2 |
|-----------------------|---------|
| Log of number of employees | 0.134* |
| Age of enterprise in years | 0.052 |
| HRM – strategy fit | 0.099 |
| Employee development | 0.351* |
| Employee pay/organization | 0.123**** |
| Feedback to employees | 0.093 |
| \( R^2 \) | 0.504 |
| Adjusted \( R^2 \) | 0.395 |
| F | 12.912**** |
| N | 320 |

Table 4. Regression Analysis on Enterprise Performance for Non-Managerial Workers

Note: a. Dependent variable=enterprise performance, b. Standardized regression coefficients are shown, c. * p<0.05, **** p<0.01

| Independent Variables | Monte Carlo Methods |
|-----------------------|---------------------|
|                        | Standard-Error      | Coefficient of Sensibility |
| Log of number of employees | 2.543 | 2.21.10^{-2} |
| Age of enterprise in years | 1.518 | -3.31.10^{-1} |
| HRM – strategy fit | 1.690 | 3.17.10^{-2} |
| Employee development | 2.014 | 2.45.10^{-2} |
| Employee pay/organization | 1.776 | 1.06.10^{-1} |
| Feedback to employees | 2.312 | 2.39.10^{-1} |
| Manager development | 3.675 | 3.65.10^{-1} |
| Manager pay/organization | 1.641 | 2.11.10^{-2} |
| Feedback to manager | 2.128 | 2.72.10^{-1} |
| N | 320 |
Table 6. Results of the Credibility Test: The Hausman’s Specification Test (HST)

|                                | (b) Fixed | (B) Random | (b-B) Difference | Sqrt (diag (V_b-V_B)) S.E. |
|--------------------------------|-----------|------------|------------------|-----------------------------|
| Technical training            | 0.0053989| -0.082022  | 0.08742139       | 0.00048740                  |
| Non-technical training        | -0.014457| 0.2208101  | -0.23526800      | 0.01408882                  |
| Non-entry jobs filled from within enterprises | 0.0529661| -0.384845  | 0.43781199       | 0.00046771                  |
| Assisting in career planning  | -0.259259| -0.046851  | -0.21240787      | 0.00800000                  |
| Job security                  | -0.003755| -0.301285  | 0.29753009       | 0.11111111                  |
| Information sharing programs  | 0.0148760| 0.0028427  | 0.01203333       | 0.00048540                  |
| Complaint resolution system   | 0.0081461| -0.001110  | 0.00925638       | 0.00004052                  |
| Attitude survey               | -0.005783| 0.0491397  | -0.05492277      | 0.00218341                  |
| Performance appraisals        | -0.004569| 0.2196950  | -0.22426459      | 0.15772871                  |
| Group/company performance in pay | 0.0249777| 0.0716212 | -0.04664356      | 0.10840704                  |
| Teamwork                      | 0.0609523| -0.085065  | 0.14601744       | 0.01425373                  |
| Decentralized decision making | -0.782178| -0.226355  | -0.55582276      | 0.00112893                  |
| Interdepartmental communication | -0.008332| -0.074021  | 0.06568914       | 0.00179351                  |

Note: b = consistent under $H_0$ and $H_1$
B = inconsistent under $H_1$, efficient under $H_0$