

# AN ANALYSIS OF HUMAN RESOURCE MANAGEMENT PRACTICES IN POLYTECHNICS IN GHANA: THE IMPACT OF PRACTICE AND SIZE

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## **Abstract**

*This study examines the relationship between size of the organization and human resource management (HRM) practices that have been found to contribute to organizational productivity. We draw on the resource-base view of the firm and hypothesize that a large polytechnic, defined as having more than 100 academic and administrative staff can be differentiated from a small polytechnic, defined as employing less than 100 academic and administrative staff, in their use of human resource management (HRM) practices. Contrary to prior research findings, we found that size did not correlate with the use of the best HRM practices. Both large and small polytechnics used identical HRM practices. In other words, size did not differentiate between the human resource management practices employed. The findings and implications of the study are discussed in detail in the paper.*

## **Introduction**

The public sector in Ghana is undergoing reforms as part of the country's structural adjustment programme (Boey-Ocansey, 2005). The significance of the public sector reforms is exemplified by the on-going educational reforms culminating in the passage of the Polytechnic Act 745 of 2007 by the Ghanaian Parliament. The new Polytechnic Act of 745 makes the Polytechnics autonomous tertiary institutions and places them in a unique position to play a leading role in helping Ghana to meet its manpower and technological needs (Apori & Elijah-Mensah, 2008). It is significant to note that both the former law, PNDC Law 321 of 1992 and the new polytechnics Act 745 of 2007 did not prescribe a set of best HRM practices that all Ghanaian polytechnics must comply with. It is therefore to be expected that each polytechnic will adopt HRM practices that best meet its needs resulting in diversity in practices among the polytechnics.

Admittedly, HRM practices are critical to the realization of the above national objective. The polytechnics must attract, develop and maintain an energetic and efficient workforce to support their goals and strategic plans. High commitment theories suggest a link between certain HRM practices and improved organizational performance. It has been found that comprehensive employee recruitment and selection procedures, extensive employee involvement and training, and formal performance appraisal approaches linked to incentives were likely to have higher productivity and enhanced corporate financial performance.

Prior studies have generally addressed the relationship between HRM practices and performance in large private sector organizations (Carlson, Upton, & Seaman, 2006). There is a dearth of research on the relationship between HRM practices and performance in educational settings such as polytechnics. This study fills the identified gap in literature by examining the impact of size on HRM practices in a non-private sector business setting, more specifically in a tertiary educational setting. While it is arguable whether the findings can be applied to public sector organizations, the results of prior empirical studies provide the basis for theoretical investigation of HRM practices in Ghana.

## **Empirical and Theoretical Perspectives**

It is acknowledged that the strategic use of a set of HRM practices positively impacts on organizational performance (Carlson et. al., 2006; Pfeffer 1994). Positive relationship has been established between HRM practices and productivity, turnover, and firm performance (Huselid 1995). Prior empirical research shows that there exist a bundle of HRM practices that can influence the performance of the firm (Huselid, et al 1997).

This study is anchored on the resource based view (RBV) because it is one of the major theoretical perspectives of HRM research (De Kok et. al., 2006). RBV assumes that the difference in the physical, organizational and human resources between firms cause a fundamental heterogeneity in their productive potential (Priem and Butler 2001).

The resource-based view supports various organization characteristics associated with greater organizational complexity and resource richness. In this study, we choose firm size as the organization characteristic because prior empirical studies suggest a size effect in the use of HRM practices (De Kok et. al., 2006). The link between firm size and professional HRM practices is well established (De Kok 2003). Firm size is often used to show lack of specific resources such as financial, organizational and/or human resources. There is empirical evidence that formal HRM practices entail developmental costs (Klaas, et al 2000). Larger firms tend to benefit from resource availability while smaller firms are constrained by the lack of resources. For instance, smaller firms generally make use of best HRM practices less than larger firms. More specifically, they use less formalized recruitment appraisals (De Kok et. al., 2006). There is less use of HRM practices in small firms due to lack of resources, or lack of specific knowledge (Hendry et. al., 1991). The lack of usage of professional HRM practices can be explained by the lack of specific organizational and human resources.

Company growth theories indicate a positive link between firm size, complexity and HRM best practices. As firms grow in size they become more complex and develop more formalized procedures and policies. Larger firms have a greater demand for human resources. It is reasonable to expect that complexity in terms of layers of management would lead to a greater demand for practices such as recruitment, selection terms and performance appraisal. Similarly, as firms increase in size, it is expected that specialization increase in tandem (Wagar 1998). There is positive correlation between firm size and HRM specialization (Cyr et al 2000). Specialization is consistent with the resource-based view and a greater specialization is related to greater knowledge resources (Damanpour 1996).

## **Hypotheses**

Based on the forgoing, coupled with the fact that the PNDC Law 32 of 1992 and the Polytechnic Act 745 of 2007 did not prescribe any HRM practices, we argue that large polytechnics defined as those employing more than 100 academic and administrative staff will apply HRM best practices such as recruitment, selection, performance appraisal of their staff more than small Polytechnics, defined as those employing less than 100 academic and administrative staff. Specifically, we state the following hypotheses.

- H1: The recruitment and selection practices in a large polytechnic will be different from those in a small polytechnic.
- H2: The performance appraisal and training practices in a large polytechnic will be different from those in a small polytechnic.
- H3: the development and maintenance of record in a large polytechnic will be different from those in a small polytechnic.

## Methodology

### Sample and data collection

The population for the study comprised all the 10 polytechnics in the ten administrative regions of Ghana. The Rectors, Registrars, Deputy Registrars, Deans, Head of Departments/Units/Sections comprising the polytechnics' senior management team were contacted for their participation in the study. Questionnaires, informed by instruments used in earlier studies by Kotey and Slade (2005) were mailed to 200 senior officers in the 10 polytechnics. After several telephone reminders, 121 usable responses were received representing 60.5% response rate.

### Variables

The dependent variables comprised HRM practices namely: recruitment and selection, performance appraisal, training and the development of policies and maintenance of records. The Literature shows a positive relationship between these functional areas and size (Kaman et. al., 2001) Size the independent variable, has been identified as one factor that accounts for varying degrees of complexity in the HRM practices of firms and organizations (Kotey and Slade, 2005). Contextual differences give rise to variations in the definition of "size". For the purpose of this study, we define a small polytechnic as one with less than 100 employees, and a large polytechnic as one with more than 100 employees.

### Analysis

Considering that the numbers of respondents from the various polytechnic were not the same we converted the frequencies corresponding to the items on the questionnaire to percentages, thereby providing reasonable grounds for comparison. The main statistical tool used in the analysis was the chi squared test of independence because it helped to establish whether or not the proportion of positive responses corresponding to the test items were roughly the same as one moved from one polytechnic to the other.

### Test of hypotheses and results

According to the criteria for size in this study, four of the eight responding polytechnics are classified as large because they have over 100 employees, while the remaining four are small because they have staff strength of less than 100.

### Statistical analysis

We performed chi-square test on the hypotheses. To test H1, we asked the respondents to choose from a range of recruitment and selection methods that were applicable in their polytechnics. The number of positive responses on a method received from respondents in a particular polytechnic was indicative of the use of the method in that institution.

The table below shows the p-values of recruitment of academic and administrative staff in the various Polytechnics.

	p-values Academic Staff	p-values Administrative Staff
Recruitment	0.14505	0.166
Selection method	0.6312	0.2114
Induction and Content of appointment letter	0.6839	0.2365

The results showed p-values of 0.14505 for the recruitment of academic staff in the various polytechnics, and 0.166 for administrative staff. Analysis of the selection method for academic and administrative staff had p-values of 0.6312 and 0.2114 respectively. The p-values for the analysis of coverage of induction and contents of appointment letter were also

0.6839 and 0.2365 respectively. Since all the p-values are greater than 0.1, the maximum significant level permissible, we reject H1 and conclude that recruitment and selection practices in a polytechnic are not related to size. In other words, no significant differences exist between the recruitment and selection practices of large and small polytechnics.

We used the chi-square test to test H2. We asked the respondents to choose from a range of performance appraisal and training methods, the ones that were applicable in their polytechnics. The higher the number of positive responses a technique received from respondents in a particular polytechnic was indicative that the technique was used in that institution. The table shows the p-values of assessment methods for academic and administrative staff in the various Polytechnics.

	<b>p-values Academic Staff</b>	<b>p-values Administrative Staff</b>
Assessment method	0.7556	0.03069
Training methods	0.0946	0.2724
Performance of appraisal information	0.13353	0.13353

The p-values are as follows: performance assessment methods and administrative staff are 0.7556 and -0.3069 respectively; methods of training for academic and administrative staff are - 0.0946 and 0.2724 respectively; and use of performance appraisal information - 0.13353. Once again, with the exception of the p-value for methods of training for academic staff (i.e. 0.0946) all the p-values are greater than 0.1, the maximum significant level permissible. In the case of method for training for academic staff this recorded a p-value of 0.0946, that is very close to 0.1, and therefore presents a very weak significance level. We reject H2 and conclude that performance appraisal and training practices in polytechnics is not related to size. No significant differences exist between the performance appraisal and training methods employed by both large and small polytechnics.

Thirdly, we asked the respondents to choose from a range of policies and records the ones which were available in their polytechnics. The higher the number of positive responses a type of policy or record received from respondents in a particular polytechnic indicated the availability of such policies or record in the particular polytechnic. The results showed p-value of 0.8589 for the types of written policies available in the responding polytechnics, 0.439 for grounds for termination and 0.8817 for the types of records kept by these polytechnics. All the p-values are greater than 0.1, the maximum significant level permissible. Therefore, H3 is also rejected with the conclusion that development of policies and maintenance of records in a polytechnic is not related to size. No significant differences exist between the policies and maintenances of records in both large and small polytechnics.

## **Discussion**

Firstly, both large and small polytechnics used identical formal recruitment and selection methods such as advertising in newspapers and professional journals, conducting formal interviews, giving appointment letters with conditions of service, and organizing induction training sessions. This finding is consistent with studies that found that small organizations prefer informal recruitment and selection methods because these are inexpensive, convenient and suitable to their less complex needs, while larger organizations require larger workforce and use a wider range of techniques and methods to attract and select the best workforce (De Kok et. al., 2006; Coetzer et. al., 2000; Kotey and Slade 2005).

To explain our findings, we speculate that though the Polytechnic Act 745 does not compel the polytechnics to comply with a specific set of HRM practices, they may be employing similar practices due to the fact that when the polytechnics gained tertiary status, they recruited most of their staff especially those in management positions, from the civil

service, specifically from the Ghana Education Service (GES). Being highly bureaucratic, the civil service is characterized by extreme use of documentation and the application of consistent rules and /or administrative manual (Borgatti, 2002). It is plausible that the staff imported such administrative practices to the polytechnics. It is therefore not surprising that the recruitment and selection practices of the polytechnics are generally more formal and similar to what pertains in the Ghanaian civil service and other public sector organizations.

Secondly, the finding that there was no significant difference between performance appraisal and training practices in both large and small polytechnics is inconsistent with prior research which established a positive relationship between the amount of training that is provided and the size of an organization (Lerman et. al., 1998), and between performance appraisal techniques and size (Coetzer et al., 2000). Similar to the explanation in the preceding section, we contend the fact that majority of the core administrative staff who were recruited to start the polytechnics came from the GES and the civil service can explain the current finding. We surmise the introduction of civil service practices which are highly formalized can explain the finding that large and small polytechnics have similar practices in appraising and training their staff.

Thirdly our hypothesized relationship between HR policy development and the maintenance of records and size of polytechnics is at variance with the search indicating that small organizations do not develop and implement HR policies that differ from those of large organization as a result of differences in size (Kotey and Slade, 2005; Hernandez and Franklin, 2004). We argue that the presence of civil service practices in the polytechnics may explain this finding.

## **Conclusions**

In this study, we set to find out and to extend our understanding of the effect on HRM practices in a public sector organization setting. Most of the prior HR studies have focused largely on private sector organizations. Polytechnics in Ghana were the focus of this study due to the crucial role they are expected to play in providing the requisite technical and skilled manpower for the socio-economic development of Ghana (Apori, 2008). Drawing on the resource-base view, we generated and tested three hypotheses. However, none of the hypothesized relationships was supported. Even though the laws establishing the polytechnics do not prescribe any HRM practices, we found that HRM practices in the polytechnics were similar, irrespective of size. This led us to conclude that the polytechnics imported such administrative practices such as the extreme use of documentation and the application of consistent rules and/or administrative manuals to the polytechnics from the civil service..

The findings have implications for polytechnic management as well as for future research. Firstly, for the polytechnic to successfully achieve the goals set for them in the Polytechnic Act 745, it is imperative for them to pay attention to HRM practices. In particular, they must pay attention to systematically recruit; select, develop, utilize, reward and maximize the potential of the available human resources because of the link between certain HRM practices and improved organizational performance. (Megginson, et al, 1995). Secondly, since HRM practices are similar in both large and small polytechnics, it is possible that the polytechnics will be employing HRM practices that may not be cost effective, suitable or relevant for their needs. Management of the various polytechnics must determine the most appropriate HRM practices rather than use one size-fits-all measures. This calls for further research.

The findings also have implications for research. While this study focuses on polytechnics, the study provides an avenue for a comparative study of the HRM practices in other tertiary institutions like the universities. For instance, the study could be replicated in privately and publicly funded universities to see if the findings hold. Similarly, a comparative

study involving public sector and private sector to see if the current findings hold would not be out of place.

### Limitation

Since the study was carried out in public polytechnics, the findings are strictly applicable to such institutions. Generalizations may therefore be done with caution.

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