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**Human Resource Management As A Competitive Tool In
Europe**

ELENI STAVROU, CHRIS BREWSTER AND CHRIS CHARALAMBOUS

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Prof. Dr. Stefan Zagelmeyer, International University of Applied Sciences Bad Honnef-Bonn
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ABSTRACT

This study uses an innovative methodology (Self-Organizing Maps) to explore the connection between human resource management as a source of competitive advantage and perceived organizational performance in Europe. We found three emerging HRM models within the EU, each of which involved a different set of member states. Training and Development practices were strongly related to performance in all three models and Communication practices in two. Further, Training and Development was the only important category of practices in the model involving southern EU member states, while Communication practices were most important to the model involving northern EU member states.

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Mick MARCHINGTON
Professor of Human Resource Management
Manchester Business School
The University of Manchester
Booth Street West
Manchester M15 6PB
United Kingdom

Phone: +44 (0) 161 306 3415
Fax: +44 (0) 161 306 3505
Email: mick.marchington@mbs.ac.uk

Stefan ZAGELMEYER
Professor of Economics and HRM
Department of Management
International University Bad Honnef
Muelheimer Strasse 38
53604 Bad Honnef
Germany

Phone: +49 (0) 2224 9605 206
Fax: +49 (0) 2224 905 500
Email: s.zagelmeyer@fh-bad-honnef.de

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HUMAN RESOURCE MANAGEMENT AS A COMPETITIVE TOOL IN EUROPE

Eleni Stavrou, Chris Brewster and Chris Charalambous ^a

1. INTRODUCTION

The importance of human resource management (HRM) as a competitive tool has been acknowledged widely in research (Wright, Dunford and Snell, 2001; Truss, 2001; Pickles, Bookbinder and Watts, 1999; Wood, 1999; Pfeffer and Veiga, 1999; Huselid, 1995). Snell, Youndt and Wright (1996, p. 62) defined the strategic role of HRM as *'organizational systems designed to achieve competitive advantage through people.'* In this respect, the main focus of strategic HR management is on integrated combinations of HR practices, through which organizations should create competitive advantage rather than simply adapting to the existing context (Snell, Youndt and Wright, 1996; Pickles, Bookbinder and Watts, 1999).

Within this framework, researchers identified and examined certain HRM practices as crucial to developing organizational competitive advantage (e.g. see Flanagan and Deshpande, 1996; Pfeffer and Veiga, 1999; Ferris *et al.*, 1999). Researchers also found connections between HRM and other measures of organizational performance (e.g. see Truss, 2001; Huselid, 1995; Delery and Doty, 1996; Becker and Gerhart, 1996). However, the majority of those studies have been conducted in the US. The role of HRM elsewhere, especially within Europe, is understudied. Although a few researchers have investigated the link between HRM practices and competitive advantage and performance in Europe, their investigation was country specific, focused on the UK context or generalized across Europe (see Guest, Michie, Conway and Sheehan, 2003; Cunha, Cunha, Morgato and Brewster, 2002; Wood, 1999).

^a University of Cyprus, Department of Public and Business Administration, 75 Kallipoleos Avenue, Nicosia, Cyprus, Tel. +357-22892480, Fax. +357-22892460, E-mail: eleni1@ucy.ac.cy.

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Brewster (1995) identifies the need for introducing European models of HRM, pointing out that the European business environment differs in many respects from the US. European organizations are less autonomous than US ones due to the restrictions faced at national and organizational levels from culture, legislation, and patterns of ownership; and at HRM levels from bargaining patterns, consultative arrangements and trade union involvement (Brewster, 1995; Guest, 1990). While the European scene is not homogenous (Ronen and Shenkar, 1985; Sparrow and Hiltrop, 1997), European Union (EU) member states form a collective context, abiding to certain regulations, practices and norms (Brewster, Mayrhofer and Morley, 2004; Thurley, 1990). Furthermore, Sparrow and Hiltrop (1997) claim that although a clear model of European HRM does not exist yet, many European organizations already display some pan-European HRM characteristics.

In addition, previous studies on this subject have focused on the private sector to the neglect of the wider public sector. However, Duffey (1988) argues that human capital can be the greatest source of competitive advantage in a nation's effort to serve the public and to be strategically effective within and beyond its borders. This may be especially true within the European Union context where Member States' public sectors practices are influenced directly by one another as well as by EU Directives. As Wood (1999) argues, the issue of environmental fit and contextual variables should be addressed directly in empirical studies.

A final weakness of the extant research base involves the paradigms used: the majority of research has had either a universal or a contextual perspective (Brewster, 1999). Youndt et al. (1996, p.836) suggested combining the two, with the universal approach helping document HR benefits across all contexts and the contingency perspective leading to deeper insights into organizational phenomena to derive situational theories and management lessons. This study borrows from both contingency and universal approaches to explore the relationship between HRM as a source of competitive advantage and organizational performance in private and public sectors in Europe. Competitive advantage in this study is defined as a set of capabilities or resources giving an organization an advantage which 'ceteris paribus' leads to superior performance relative to that of competitors (Wiggins and Ruefli, 2002, p. 84). Thus an organization may have multiple sources of competitive advantage, one of which is HRM, that may help the organization to be more effective and achieve superior performance.

From a comprehensive review of the literature, key practices of HRM associated with competitive advantage can be grouped into five main HRM categories: Planning, Staffing, Training and Development, Compensation, and Communication and Participation (see Table 1). We adopted the general belief that HRM practices “cannot be implemented effectively in isolation, and that it is the combination of practices into a coherent package that matters” (Marchington and Grugulis, 2000, p. 1112). We want to explore the combinations that work best within Europe.

(Insert Table 1 about here)

We adopted service quality, productivity and profitability as indicators of organizational performance (Fox, Byrne and Rouault, 1999; Ichniowski, Shaw and Prennushi, 1997; Anderson, Fornell and Rust, 1997; Delery and Doty, 1996; Huselid, 1995). We were interested in the notion of superiority *in all three* of our selected measures of performance combined, an examination missing from existing literature (Guest *et al.*, 2003). Thus, organizations were superior if they excelled *in all three* measures and lower-performers if they did *not* excel *in all three* measures of performance.

We hypothesize that superior organizations will be differentiated from lower-performing ones through their use of a combination of key HRM practices linked in the literature with organizational competitive advantage and grouped into the five HRM categories. The geographic context is the EU and the organizational context involves the private and wider public sectors,

The paper takes the following format. We discuss a number of studies that connect human resource management to organizational performance and explore human resource management as a source of competitive advantage. From this we draw a number of hypotheses. Then, we discuss the methodology we used to test them and discuss the results we obtained. We conclude with suggestions for future research.

2. HUMAN RESOURCES , COMPETITIVE ADVANTAGE AND PERFORMANCE

Today’s organizations must gain competitive advantage through the effective utilization of their human resources, since organizational performance arises mainly from employees, as they are the prime movers of all organizational resources (Kolay and Sahu, 1995; West and Patterson, 1998). In turn, the strategic value of human resources could be reflected in how effectively these resources are managed in order to improve performance (Pfeffer, 1994). But questions are raised as to the

extent to which organizations actually exploit the strategic importance of their human resources. Brewster (1995) and Truss (2001) assert that even large firms do not realize the potentially strategic role of HRM. Organizations are criticized also for focusing on the administrative aspects of the HRM function. As a result, HRM practices are often too operational, narrow and generic to become sources of sustainable competitive advantage (Walker, 1999).

In addition to the above, several researchers challenge existing frameworks connecting HRM with performance (Marchington and Grugulis, 2000; Guest, 2001), arguing that such frameworks ignore active input by employees, use different definitions to measure HRM practices and performance and focus on cross-sectional rather than on longitudinal studies, substantially weakening the possible effects of HR on performance. Existing literature also has been criticized with regard to the methods used to explore the link between human resources and performance, questioning the use of conventional statistical techniques and suggesting that the quality of the research base supporting this link is relatively weak (Wood, 1999; Gerhart, Wright, McMahan and Snell, 2000; Gerhart, Wright and McMahan, 2000; Wright *et al.*, 2001).

2.1 Organizational Performance

While acknowledging the criticisms of existing literature, the majority of studies exploring the connection between HRM and performance argue for a significant relationship (see Guest *et al.*, 2003 and Wood, 1999 for comprehensive overviews). Explored mainly from a universal perspective, most of these relationships are positive (Truss, 2001; Pfeffer and Veiga, 1999; West and Patterson, 1998; Huselid, 1995). Specifically, HRM has been linked to increased productivity (Huselid, 1995; Ichniowski, Shaw and Prennushi, 1997; Fox, Byrne and Rouault, 1999), good customer service (Fox, Byrne and Rouault, 1999), improved efficiency (Becker and Gerhart, 1996), increased firm value (Huselid, 1995), greater profitability (Delery and Doty, 1996; Fox, Byrne and Rouault, 1999) and overall organizational survival (Welbourne and Andrews, 1996). Anderson, Fornell and Rust (1997) suggest that organizations should pursue superiority in both customer satisfaction and productivity, while Savery (1998) and Singh, Motwani and Kumar (2000) explain that the pressures of an increasingly global economy have compelled organizations to place a greater emphasis on productivity improvement strategies. Zeithaml, Berry and Parasuraman (1996) emphasize the importance of understanding the impact of

service quality on organizational performance. Given these studies, it is reasonable to expect that:

H1. Superior EU organizations are differentiated from lower-performing ones on the basis of the HRM practices identified in this study as a competitive tool.

2.2 Human Resources as a Competitive Tool

Researchers investigating the link between HRM as a competitive tool and its connection to organizational performance have developed five approaches. The *resource-based approach* of competitive advantage focuses on the relationships between a firm's internal resources, its profitability and the ability to stay competitive through its strategy formulation (Wright, Dunford and Snell, 2001; Ferris *et al.*, 1999; Koch and McGrath, 1996; Wright, Mahan and Williams, 1994). The *organizational learning approach* claims the firm's ability to learn faster than its competitors is its only sustainable competitive advantage, as organizational learning expands the firm's knowledge base, the range of potential behaviors and its capacity for adaptation (Barney, 1991; Snell, Youndt and Wright, 1996). The approach based around *integration of organizational resources, practices and capabilities* points to sustainable competitive advantage being achieved through internal (horizontal) fit and external (vertical) fit (Ferris *et al.*, 1999). Finally, Bernadin and Russell (1993) proposed an *active adaptive implementation and integrative role* for HRM, while Lado and Wilson (1994) have proposed a *competency-based model* for sustainable competitive advantage.

On the basis of the above five approaches, researchers proposed a number of HR practices that could lead to competitive advantage (see Table 1). While clearly rooted in the American culture, most researchers have relied on the practices of Pfeffer (1994), selecting those that they considered the most important and in some cases making appropriate adjustments (Guest, 2001; Pfeffer and Veiga, 1999; Luthans, 1998; Flanagan and Deshpande, 1996; Delery and Doty 1996; Terpstra, 1994). Practices additional to those of Pfeffer (1994) include performance-based rewards and flexibility (Flanagan and Deshpande, 1996); performance appraisal, grievance procedures, attitude assessment, and labor-management participation (Delaney *et al.*, 1989); recruiting intensity, more training hours per year and published criteria for promotion (Huselid, 1995). Delery and Doty (1996) also identified some alternative practices, namely appraisal measures, profit sharing, voice mechanisms and job

definition, while, Koch and McGrath (1996) suggested HR planning and employee development. As Guest (2001) explains, despite a growing consensus, current literature provides a weak basis for deciding which practices to include or exclude, leaving open the possibility of empirically driven exploration. Although the bulk of this research is US-based, it can also provide a foundation for exploring the European context. We therefore decided to operationalize the HR practices and categories cited in Table 1 (grouped into the five major human resource management categories, namely Training and Development, Staffing, Compensation, Communication and Participation, and Planning) and test their relationship to performance empirically within the European context.

As shown in Table 1, certain *Training and Development* practices can be sources of competitive advantage, allowing employees to acquire the necessary skills to perform at their peak level and to grow in their professions. Training and development can be very costly, but are critical to organization's ability to achieve high performance in the long run (Jackson and Schuler, 2000; Koch and McGrath, 1996; Peteraf, 1993). While the number of training days *per se* may not be as significant (see Cunha, et al, 2002), research studies revealed a positive relationship between training and development activities and organizational performance (Youndt, Snell, Dean and Lepak, 1996). Therefore, we suggest that:

H2. The set of Training and Development practices identified in this study as a competitive tool are related to superior performance in EU Organizations.

An organization's *Staffing* practices also have an important strategic role. Effective recruitment has to be consistent with the organization's vision, goals, strategy and values (Jackson and Schuler, 2000; Pfeffer, 1994) to provide management with the ability to select the right people for the right place who will contribute towards superior organizational performance over the long run (Koch and McGrath, 1996; Youndt, Snell, Dean and Lepak, 1996). Therefore, we posit a positive relationship between superior performance and the staffing practices identified in the literature as sources of competitive advantage.

H3. The set of Staffing practices identified in this study as a competitive tool are related to superior performance in EU Organizations.

In conjunction with an organization's staffing, its *Compensation* system also can help ensure that rewards are sufficient to attract the right people at the right time for the

right jobs (Cable and Judge, 1994). It must be fair and externally competitive to attract and retain the best possible talented employees (Trevor, Gerhart and Boudreau, 1997), and will motivate them to do a good job, to remain in the organization and to contribute towards its superior performance (Pfeffer and Veiga, 1999; Koch and McGrath, 1996; Cunha et al., 2002). We posit that:

H4. The set of Compensation practices identified in this study as a competitive tool are related to superior performance in EU Organizations.

Organizations that want to establish sustainable competitive advantage through their human resources must also take into consideration certain *Communication and Participation* practices. Employees need to know all the information necessary to accomplish their tasks (Pfeffer and Veiga, 1999; Pfeffer, 1994) Although many managers fear sharing valuable information with employees will lead to it leaking to competitors, Pfeffer (1994) suggests that sharing information on various issues such as the organization's strategy or vision shows employees that they are trusted and given a significant job to do. In turn, employees will reciprocate this trust through their efforts to improve organizational performance. We therefore propose that:

H5. The set of Communication and Participation practices identified in this study as a competitive tool are related to superior performance in EU Organizations.

Many organizations increasingly integrate the human resources function into the decision making process through certain *Planning* practices (Jackson and Schuler, 2000; Koch and McGrath, 1996). By participating in the organization's strategy formulation, HR managers can understand the organization's needs and develop the necessary practices to maintain a competent workforce. Furthermore, the involvement of the human resources function in strategy formulation leads to an effective co-ordination of all HR practices, thus helping towards sustainable competitive advantage and higher performance (Wright, Dunford and Snell, 2001; Koch and McGrath, 1996). Cunha et al. (2002) report European research as showing positive correlations between the degree of planning formality and firm performance, and we therefore posit the following:

H6. The set of Planning practices identified in this study as a competitive tool are related to superior performance in EU Organizations.

2.3 Geographic Context

Looking at the above-hypothesized relationships between HRM and performance from a contingency perspective (Youndt, Snell, Dean and Lepak, 1996), factors that are country-contingent or unique to geographic clusters could be considered important. Several researchers have developed a number of international patterns explaining the role of HRM from an inter-country comparative perspective.

In their review and synthesis of the literature, Ronen and Shenkar (1985) report eight empirical studies using general work-related attitudinal data to develop eight country clusters, four of which are European-based: the Nordic, Germanic, Anglo and Latin European. Filella's (1991) European study found three different patterns of HRM within the European Union, namely the Nordic, Central European and Latin ones. Filella's (1991) Latin countries surrounded the western Mediterranean Sea (Portugal, Spain, southern France, Corsica, Sardinia and Italy); UK, the Netherlands, Germany and Switzerland made up the central European group while the Nordic one included Denmark, Norway and Sweden. This separation echoes that of Hofstede's (2001) general cultural classification into Latin, Anglo-Saxon and North European cultures.

In a different analysis, Sparrow, Schuler and Jackson (1994) developed a worldwide pattern concerning the importance of HRM practices to organizations forming five country clusters including the UK in an Anglo-Saxon cluster and France as a 'cluster' of its own. Similar clusters are reported in Moss-Kanter's worldwide survey concerning HRM issues, although here Germany and France were judged to share the same pattern of HRM (Sparrow and Hiltrop, 1997). Ignjatovic and Sveltic (2003) also identified clusters of European countries in which all facets of HRM can be seen to take distinctive forms, different aspects of HRM being emphasized in their Central Southeastern, Nordic, Western, and Peripheral clusters

These different geographic patterns of HRM practice may reflect both different research foci and a variety of cross-border political, economic, social and cultural considerations (Sparrow and Hiltrop, 1997). These considerations create convergence or divergence among the practices of the various business structures in Europe (see Brewster, Mayrhofer and Morley et al., 2004), and it is interesting to explore whether geographic context in the EU serves as a moderating factor in the relationship between the different HR practices used in this study and organizational performance.

2.4 Organizational Context

In addition to geographic context, the private and wider public sector organizational context could also serve as moderators. This is in line with the suggestion of Youndt, Snell, Dean and Lepak (1996) that organizational characteristics other than manufacturing strategy as moderators can offer further insights into the HR-performance relationship. First, the strategic positions of organizations in the private and public sectors seem to be inherently different (Boyne, 2002) and second, this organizational context seems meaningful in the EU. Brewster et al. (2004) suggest the relative strength of the private and public sectors across Europe is important. Countries like Italy have particularly large public sectors, institutionally separate from private ones, leading to a social focus in public sector personnel management, while the situation may differ in some other European countries (Filella, 1991).

The traditional HRM role of record keeping and dealing with functional personnel issues in a public organization is being challenged by the changes faced by both private and public organizations (McHugh, O'Brien and Ramondt, 1999; Klingner and Lynn, 1997). Boyne (2002) suggested that public sector managers may derive useful lessons from private sector management once they establish more clearly the determinants of performance in private firms, while Braddon and Foster (1996) suggest a strategy of commercialization through which private sector management techniques and processes are used towards a more effective and efficient public sector, a transition which may be facilitated through appropriate HRM functions and their contribution towards organizational effectiveness (Brown, Ryan and Parker, 2000).

Given these arguments, researchers and administrators have been questioning the appropriateness of transferring effective managerial processes from the private to the public sector, a debate based on the contention that practices and strategies in public and private sectors are fundamentally dissimilar. But Boyne's (2002) critical investigation of 34 empirical studies on the subject has provided little evidence to support the notion that public and private management are necessarily different, although he proposes that a wide range of nations and organizations in a variety of industries be further investigated. Thus it remains to be explored whether HR practices of superior organizations are similar between the private and wider public sector or whether organizational context is a significant moderating factor in the HR-performance relationship

3. METHODOLOGY

The key HR practices and categories found in the literature (see Table 1) were operationalized into 80 questions measured on a binomial scale as to whether the specific practice was used or not (yes or no) by the organization. (The specific questions are reported in the Appendix.) We used *Organizational Context* as a moderator to check for differences between the private and public sectors, specifically separating organizations into private sector 'for profit' businesses and organizations and services belonging all or in part to the government (the wider public sector). In addition, we chose EU countries as moderators for the *Geographic Context* of the study in order to investigate possible European HRM patterns of competitive advantage.

The dependent variable *Organizational Performance* included Profitability, Productivity and Service Quality. We were interested in the superiority of performance in relation to these three measures collectively, combining all three instead of using one measure for organizational performance to overcome a significant problem about single-item measurement highlighted by Guest (2001). Performance was deemed superior if our respondents (senior people in corporate HR) perceived it to be amongst the top 10% in its field: in other words, superior performers were organizations in the top 10% in productivity, profitability *and* service quality (1,1,1) while lower performers were organizations *not* at the top 10% in productivity, profitability *and* service quality (0,0,0). A natural distinctiveness defined these two groups of organizations: all other in-between cases were excluded from the analysis. Borrowing from other disciplines, we chose this measure of performance since often - implicitly or explicitly - a 0-100% evaluation scale is used, and the minimum for excellence is to be among the top 10% (Blum, E. and Clegg, 2003; Kerr and Beaujot, 2002; Rank and Hirschl, 2001; Hax and Wilde, 1999). All performance measures were posed at the end of the questionnaire and after a set of organizational demographic information.

Consistent with prior research (e.g. Jap, 2001, Smith and Barclay, 1997; Perry-Smith and Blum, 2000), we used perceptual performance measures because: (a) No uniform index of performance exists (Kouzes, Loffler, Klages and Kakabade, 1999). Finding common indicators of performance across the public and private sectors is very difficult, non-financial performance measures proving more feasible (Boyne, 2002; Medori and Steeple, 2000). (b) Obtaining financial outcome or productivity measures - especially among European organizations - is not easy and

the popular solution of using subjective indicators also overcomes to some extent the problems of cross-sector comparison across sectors (Guest, 2001). Brewster, Mayrhofer and Morley (2004) confirm the benefits of using perceptual measures of performance, especially in international comparative studies. (c) Guest *et al.* (2003, p. 294) explain that, regardless of the attraction of objective performance measures, the accountancy protocols behind financial indicators have been scrutinized recently as a result of numerous corporate scandals. (d) Finally, evidence suggests that managers are likely to act on the basis of their subjective perceptions of firm performance, often in relation to that of competitors, rather than on the basis of objective indicators (Day and Nedungadi, 1994; Guest *et al.*, 2003).

3.1 Data Collection

In conducting the present study, we drew on data collected from organizations in the EU with at least 200 employees, using the CRANET questionnaire (see Brewster, Mayrhofer and Morley, 2004). Designed by a multi-cultural team, the questionnaire is originally written in English and then translated into the spoken language(s) of each country. Potential problems are handled through back-translating the questionnaire into English (Brislin, 1976; Brislin, Lonner and Thorndike, 1973). On each occasion, the questionnaire is piloted to a group of HR practitioners before distribution of the final version, a standard questionnaire with closed-ended questions, identical across countries.

For the present study, the total sample for the EU member states was 4,759, of which 3,559 were private sector businesses and 1,200 were governmental and semi-governmental public sector organizations. The questionnaire's analysis unit was the organization and the respondent was the highest-ranking officer from the corporate HR team.

3.2 Study Procedure

Since the variables used for the study were dichotomous, the best models for the analyses were non-linear and, as the variable combinations of the study's framework were complex and multidimensional, conventional methods of statistical analysis were sub-optimal. As a result, we deviate from what Guest (2001) describes as a traditional research paradigm, towards a more appropriate method for this data-set -

Kohonen's (1995) Self-Organizing Maps (SOMs). SOMs belong to the broad category of unsupervised neural networks based on competitive learning (Kohonen, 1995). This procedure is superior to other methods, not only reducing multi-dimensional data through clustering, but also projecting them non-linearly in a two-dimensional map (Vesanto, 1999). Furthermore, it detects clusters existing in the original data while avoiding creating artificial ones, providing a true representation of the original data's characteristics.

Thus Deichmann et al. (2003) point out that SOMs are superior to typical clustering techniques in that they preserve the topology of the initial high-dimensional data set by locating data points which have similar vectors of variables near one another on the map. Smith (1999) also explains that when compared with traditional clustering algorithms such as K-means, Kohonen's SOMs are able to outperform traditional techniques in both speed and quality of solution. In addition, Mazanec (1995) explains that even though a common objective for all data reduction methods (e.g. multidimensional scaling, factoring, clustering or correspondence analyses) is to preserve the topologic relationships within a set of objects through condensing multidimensional information into a low-dimensional spatial representation, SOMs are superior because they not only present clusters and mapping simultaneously, but also automatically generate perceptually homogeneous samples. SOMs may be viewed as a combination of principal components and cluster analyses with both procedures influencing each other in the algorithm (Deichmann et al., 2003). They need no a priori assumptions about the distribution of the sample and have the capacity to operate on very large samples (Deboeck and Kohonen, 1998).

4. ANALYSIS AND RESULTS

In order to explore the hypothesis (H1) that superior EU organizations are differentiated from lower-performing ones on the basis of the HRM practices identified in this study as a competitive tool, we used the U-matrix, the most widely used distance matrix in the visualization of the cluster structure of SOM. We also wanted to explore whether Geographic Context was a significant moderator, and we therefore visualized the position of superior and lower-performing organizations on the map for each EU member state separately.¹ From these visualizations, superior organizations among EU member states formed three regions which we named

¹ Because they were too many, these visualizations are not depicted in the present study, but are available from the lead author upon request.

Cluster A, B and C. Cluster A includes superior organizations in Sweden and Finland; Cluster B includes superior organizations in the UK and the former W. Germany;² and Cluster C includes superior organizations in Greece, Portugal, Spain, Italy, France, Ireland and Belgium. EU member states that did not form any clusters include Denmark, Austria, the Netherlands and the former East Germany (GDR). With the exception of these member states, the visualizations and the probabilities among superior organizations in the study yielded strong results.

The visualizations lead us to conclude that three different HRM models of competitive advantage exist among EU countries corresponding to the three specified clusters. We proceeded to explore *Organizational Context* as a potential moderator. In order to differentiate superior EU organizations between private and public sectors we examined the representation of our original set of organizations in the SOMs. According to Simula *et al.* (1999), the simplest way to locate a given organization on the SOM was to find the prototype vector closest to representing that organization, called the organization's Best Matching Unit (BMU).³ In this way, we could visualize an organization's position on the U-matrix on the basis of them belonging to the public or private sector. We found that superior organizations in both sectors follow the basic shape relating to their respective Cluster, except in Cluster B where no specific pattern was found for superior public organizations. The preceding analysis is depicted in Table 2.

(Insert Table 2 about here)

Comparing the numbers in Table 2, the likelihood that superior private organizations may be differentiated from lower-performing ones given certain HR management practices is greatest in Cluster B (76% versus 52%). A greater proportion of private than public superior organizations exists in the three clusters, but, nevertheless, the likelihood that superior private and public organizations will be located in their respective clusters is high, and is also higher than that of lower-performing organizations. Lower-performers may be found also in those clusters: HR practices are evidently not the only factors that define superior performance in EU organizations.

² Organizations in the former East and West Germany were originally studied separately and that was continued as we wanted to measure the socio-economic differences of the two former states that are now united

³ An organization which is a unit from the original sample is visualized on the U-Matrix through the cell which holds the average Euclidean distance of the Best Matching Unit of that sample unit to its neighbors. This is useful to identify more clearly essential characteristics of that organization.

Nevertheless, certain HRM practices seem to be more connected with superior than with lower-performing organizations. We therefore explored hypotheses two to six (H2-H6) to investigate the sets of HR practices found in the literature that contribute most to the creation of the SOMs' cluster structure. Such a contribution is indicated by the correlation among the cluster structures revealed by the U-matrix when all sets of practices are considered together as well as the cluster structures revealed by the U-matrix when each practice or set is considered separately (Kaski, Nikkila and Kohonen, 1998; Vesanto, 1999).⁴

In addition to examining the contribution of practices to the SOM cluster structure, we calculated the average values of prototype vectors for each practice within each cluster. Both methods provided similar results. In the calculations, we investigated the magnitude of value differences among vectors forming the three clusters and those outside the three clusters, considering differences of at least .40 of primary significance and those between .30 and .40 of secondary significance (Kaski, Nikita and Kohonen, 1998).

(Insert Table 3 about here)

According to these analyses, *Training and Development* and *Communication and Participation* are the sets of practices contributing most to the cluster structure of superior EU organizations. In fact, *Training and Development* constitutes a very important set of practices for all three clusters, and is the only significant set of practices for Cluster C. Also, the specific set of practices related to *Training and Development* is used the least among lower-performer organizations (0.17 compared to over 0.50 among superior ones in all clusters). *Communication and Participation* is most important for Cluster A and of secondary importance to Cluster B. Finally, *Planning, Staffing* and *Compensation* practices are not contributors of primary significance to the cluster structure of superior EU organizations.

The specific HR practices of primary significance related to *Training and Development* common to all three clusters were monitoring the effectiveness of training (var 26) and evaluating training through behaviors, results and reactions (var 28, 29, 30). Of secondary significance to all clusters was analyzing employee training

⁴ Because they were too many, the U-matrices for each HR practice are not depicted here but are available from the lead author upon request.

needs (var 25), while common only to Clusters B and C was evaluation of training through learning (var 27). Unique to Cluster B was the use of evaluations to determine career development (var 37).

Key HR practices in relation to *Communication and Participation* (of primary significance to Cluster A, and secondary significance to Cluster B) include briefing professional staff about organizational strategy (var 68) as well as briefing clerical and manual staff about the financial performance and corporate strategy of their organization (var 71, 72, 74, 75). Unique to Cluster A (though of secondary significance) were briefing professional staff about organizational financial performance (var 69) and briefing manual staff about work organization (var 76).

Table 3 also provides support to the overall results of the study.⁵ Overall, organizations in Cluster A use these practices the most (.54), followed by those of Cluster B (.53) and then those of Cluster C (.49). Therefore, we conclude that relationships in Hypotheses 1, 2 and 5 are supported, where geographic context is a significant moderator in these relationships while organizational context is not.

4. DISCUSSION, IMPLICATIONS AND CONCLUSIONS

At the organizational level, the diagnosis developed and tested in the framework of this study reveals that superior EU organizations of the private and public sectors do not differ significantly in their use of practices. As in Boyne (2002), the balance of evidence does not support the argument that superior public organizations have distinctive HRM compared to private ones: at this level the results support the universal approach to the HR-performance relationship.

At the EU level, organizations display some common HRM principles in a distinct form, as Sparrow and Hiltrop (1997) envisioned, while different aspects of HR management depending on geographic context are also emphasized. Combining the contingency and universal perspectives, three different, yet overlapping, “HR models of competitive advantage” emerged in the EU, namely Clusters A, B and C. Superior organizations in Cluster A use HR practices identified in the literature as sources of competitive advantage the most, followed by those of Cluster B and then Cluster C. The appearance of three overlapping instead of a single ‘HR model of competitive

⁵ The average of prototype vectors and the average of real data are consistently very close, suggesting that the algorithm has successfully captured the structure of HR practices among superior and lower-organizations in the sample.

advantage' in the present study may be contingent upon the different yet overlapping national cultures, labor practices and business structures (Ferner and Hyman, 1998; Brewster, Mayrhofer and Morley, 2004).

The present study differs from Sparrow and Hiltrop, (1997) in finding the former W. Germany to be applying similar key practices to the UK. Further, a large number of southern and Latin EU countries fall together in Cluster C of the present study while previous studies make reference to Latin, Central and/or Mediterranean nations as separate groups (Sparrow and Hiltrop, 1997; Filella, 1991). Finally, previous studies have placed Denmark in a Nordic grouping (Brewster, et al 1993; Filella, 1991; Hofstede, 2001) while in the present study it was not. Such differences and similarities demonstrate that comparative international studies of HRM need to be very clear as to the relationships they explore if rigorous comparisons are to be drawn. Going beyond previous studies, this paper shows that management among superior EU organizations is linked with the use of HRM as a competitive tool but that, depending on the country cluster, certain practices were more important while others were of little importance.

Specifically, the set of *Training and Development* practices is of primary importance among superior organizations in all three clusters. The results here are different from those in Cunha et al (2002) because we considered here factors related to the way that training is managed as well as its extent. Thus, monitoring and evaluating training were of primary importance, while analyzing employee training needs was of secondary importance. While common to all three clusters, *Training and Development* seems to be the only set of practices contributing to differentiating superior from lower-performing organizations in Cluster C, suggesting it would be worthwhile to explore this emphasis further.

This significance of training and development is consistent with existing research suggesting that training and development add value to an organization by maximizing productivity, enriching employee skills and helping it confront external pressures more effectively (Peteraf, 1993). However, where the majority of *training* practices were important contributors to the EU Clusters, the majority of *development* practices were not, with only Cluster B organizations in emphasizing the use of evaluations to determine career development. It might be that career development based on evaluations might work better in the UK and the former W. Germany (labeled by Hofstede (2001) as individualistic, masculine societies), but it is perhaps surprising

that only this and not other similar practices - such as assessment centers or high flyer schemes - seem important for superior organizations in this Cluster.

Another difference among clusters is that superior organizations in Clusters A and B (as opposed to those in Cluster C) emphasize *Communication and Participation* practices. Many HR practices related to the briefing of employees were widespread amongst superior organizations within Clusters A and B, supporting the notion that both know-how and knowledge are essential to allow all levels of employees to be effective in their tasks. Agreeing with Hofstede's (2001) work, such emphasis is primary among organizations in Cluster A and secondary in Cluster B. As Pfeffer and Veiga (1999) find, sharing information is a very important component of high performance work systems and consequently of achieving competitive advantage.

Despite the above significant relationships, *Planning*, identified in the literature as a source of competitive advantage, was not strong among superior EU organizations of any cluster. Maybe HRM does not hold yet a clearly strategic role among EU organizations, leaving HR somewhat disconnected from organizational strategy and performance (Truss, 2001) or maybe the key here is responsiveness rather than planning. Like *Planning*, the use of *Compensation* and *Staffing* to differentiate superior organizations in the EU is weak. Both superior and lower-performing organizations are found within these clusters, suggesting that HR is not the only differentiating factor of competitive advantage for EU organizations.

4.1 Limitations and Future Research

Large-scale questionnaires with many varied questions and respondents are a good method for researching international differences. The fact that the questionnaire was completed by one person was sub-optimal, even though Huselid and Becker (2000) defend single-source measures, explaining that their validity depends on the size of organizations in the sample, the source responding to the questions and the clarity of items comprising the survey. Our survey met their requirements: the average number of employees in the organizations of our study was 3340 while the respondents were members of the corporate HR team. The international CRANET team took great care to make the questionnaire specific and clear, leaving little room for ambiguity.

Despite this, and even though a number of studies reported a high degree of correlation between "objective" and perceptual measures of performance (see Perry-Smith and Blum, 2000), researchers could complement the former with the latter;

supplementing questionnaires with interviews or other data collection methods. Finally, longitudinal data may be used from various rounds of the CRANET survey once those are available for a large group of countries.

Clearly, investigation is also required into each cluster and, particularly, into HR practices in Denmark, Austria, the Netherlands and Germany's *Neue Laender*, in order to understand why they did not follow any of the three EU "HR Models on Competitive Advantage."

And, of course, similar studies could be conducted for other parts of the world. Since comparable data exist through CRANET in over 30 countries around the globe, it would be useful to repeat this research among different nations. Such an exploration would provide enriched information, analyzing the private and wider public sectors as well as each sector among different countries or between the EU and other parts of the world.

5. CONCLUSIONS

Despite its limitations, this study provides evidence from a large sample reflecting the diversity in national contexts within the EU. It breaks new ground in terms of methodology and advances the field by showing empirically a link between human resource management as a competitive tool and performance in the EU irrespective of organizational context. Furthermore this study is the first to show that this link varies with geographical location. Given the evidence here, it seems that the contingency and universal approaches of the HR-performance relationship are not necessarily mutually exclusive; on the contrary, they may be combined to provide a more holistic picture of the subject under investigation.

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TABLE 1

Summary of main HR practices identified in the literature as sources of competitive advantage grouped into the five HRM categories

| Human Resource Planning | Staffing | Training and Development | Compensation | Communication and Participation |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning (Koch and McGrath, 1996) | Selective hiring (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Delaney et al., 1989; Huselid, 1995; Koch and McGrath, 1996) | Extensive training (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Pfeffer, 1994; Perry, 1991; Huselid, 1995; Delery and Doty, 1996) | High compensation (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Pfeffer, 1994; Delaney et al., 1989; Huselid, 1995) | Information sharing (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Pfeffer, 1994; Luthans, 1998; Delaney et al., 1989; Huselid, 1995) |
| Long-term perspective (Pfeffer, 1994) | Recruiting (Flanagan and Deshpande, 1996; Pfeffer, 1994; Perry, 1991; Terpstra, 1994) | Cross utilization and cross training (Pfeffer 1994) | | |
| Measurement of practices (Pfeffer, 1994) | Biographical information blanks and structured interviews (Terpstra, 1994) | Employee development (Koch and McGrath, 1996) | | Grievance procedures (Delaney et al., 1989; Huselid, 1995) |
| Overarching philosophy (Pfeffer, 1994) | Recruiting intensity (Huselid, 1995) | Performance appraisal (Delaney et al., 1989; Huselid, 1995; Delery and Doty, 1996) | Performance-based rewards (Flanagan and Deshpande, 1996; Pfeffer, 1994; Luthans, 1998) | Voice mechanisms (Delery and Doty, 1996) |
| Decentralization of organizational design (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996) | Job definition (Delery and Doty, 1996) | Internal career opportunities (Delery and Doty, 1996; Pfeffer, 1994) | | Reduction in status differences (Pfeffer and Veiga, 1999) |
| | Job design (Delaney et al., 1989; Huselid, 1995) | Criteria for promotion (Huselid, 1995) | Employee ownership (Pfeffer, 1994) | Participation and empowerment (Flanagan and Deshpande, 1996; Pfeffer, 1994; Luthans, 1998; Delaney et al., 1989; Huselid, 1995) |
| | Flexibility (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996) | Cognitive aptitude (Terpstra 1994) | Wage compression (Pfeffer, 1994) | |
| Validation studies (Terpstra, 1994) | Employment security (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Pfeffer, 1994; Luthans, 1998; Delery and Doty, 1996) | Self managed teams (Pfeffer and Veiga, 1999; Flanagan and Deshpande, 1996; Pfeffer, 1994) | | |
| Goal setting (Terpstra, 1994) | | Attitude assessment (Delaney et al., 1989; Huselid, 1995) | Profit sharing (Delery and Doty, 1996) | Symbolic egalitarianism (Pfeffer, 1994) |

TABLE 2

The relative frequency of organizations in EU countries that are located in the relevant Cluster.

| Country | Cluster | Superior Organizations | | Lower-Performer Organizations | |
|--------------|----------|------------------------|---------------|-------------------------------|---------------|
| | | Private Sector | Public Sector | Private Sector | Public Sector |
| U.K | B | 0.77 | 0.57 | 0.65 | 0.57 |
| W.Germany | B | 0.74 | 0.67 | 0.34 | 0.15 |
| <i>Total</i> | <i>B</i> | <i>0.76</i> | <i>0.60</i> | <i>0.52</i> | <i>0.50</i> |
| Sweden | A | 0.62 | 0.67 | 0.55 | 0.48 |
| Finland | A | 0.78 | 0.64 | 0.71 | 0.60 |
| <i>Total</i> | <i>A</i> | <i>0.71</i> | <i>0.65</i> | <i>0.60</i> | <i>0.53</i> |
| Spain | C | 0.90 | 1.00 | 0.78 | 0.48 |
| Italy | C | 0.90 | 1.00 | 0.74 | 0.60 |
| Ireland | C | 0.77 | 0.67 | 0.61 | 0.46 |
| Portugal | C | 0.87 | 0.50 | 0.56 | 0.56 |
| Greece | C | 0.88 | N.A | 0.73 | 0.45 |
| Belgium | C | 0.83 | N.A | 0.67 | 0.42 |
| France | C | 0.97 | 1.00 | 0.88 | 0.81 |
| <i>Total</i> | <i>C</i> | <i>0.84</i> | <i>0.80</i> | <i>0.72</i> | <i>0.52</i> |

The relative frequencies represent the number of Best Matching Units (BMUs) of organizations for each country separately that belong to the categories specified in the table (cluster, superior or other organizations, public or private sector). To illustrate, 77% of BMUs of superior private organizations in the UK belong to Cluster B.

TABLE 3

Average values of prototype vectors for each variable in specific areas of the SOM map.

| Variable Code ^a / HR Category | Values out- side Clusters | Values inside all Clusters | Cluster A | Cluster B | Cluster C | Prototype vectors | Original data |
|---------------------------------------------|------------------------------|-------------------------------|--------------|--------------|--------------|----------------------|------------------|
| 1 | 0.89 | 0.95 | 0.93 | 0.95 | 0.94 | 0.92 | 0.91 |
| 2 | 0.46 | 0.65 | 0.62 | 0.58 | 0.56 | 0.52 | 0.53 |
| 3 | 0.64 | 0.91 | 0.88 | 0.87 | 0.83 | 0.77 | 0.76 |
| 4 | 0.36 | 0.65 | 0.62 | 0.56 | 0.51 | 0.47 | 0.47 |
| 5 | 0.19 | 0.58 | 0.47 | 0.48 | 0.46 | 0.35 | 0.36 |
| 6 | 0.14 | 0.48 | 0.39 | 0.39 | 0.37 | 0.28 | 0.29 |
| 7 | 0.08 | 0.35 | 0.28 | 0.27 | 0.25 | 0.18 | 0.19 |
| 8 | 0.05 | 0.23 | 0.19 | 0.17 | 0.16 | 0.12 | 0.12 |
| 9 | 0.07 | 0.29 | 0.22 | 0.23 | 0.21 | 0.15 | 0.16 |
| 10 | 0.31 | 0.46 | 0.41 | 0.43 | 0.40 | 0.36 | 0.35 |
| 11 | 0.30 | 0.43 | 0.37 | 0.42 | 0.40 | 0.35 | 0.35 |
| 12 | 0.32 | 0.48 | 0.41 | 0.47 | 0.44 | 0.39 | 0.38 |
| 13 | 0.28 | 0.43 | 0.39 | 0.41 | 0.37 | 0.34 | 0.33 |
| 14 | 0.24 | 0.32 | 0.28 | 0.32 | 0.30 | 0.27 | 0.27 |
| Planning | 0.31 | 0.52 | 0.46 | 0.47 | 0.44 | 0.39 | 0.39 |
| 15 | 0.33 | 0.39 | 0.41 | 0.39 | 0.35 | 0.36 | 0.35 |
| 16 | 0.30 | 0.38 | 0.41 | 0.37 | 0.32 | 0.33 | 0.32 |
| 17 | 0.17 | 0.26 | 0.25 | 0.24 | 0.22 | 0.20 | 0.20 |
| 18 | 0.40 | 0.61 | 0.56 | 0.57 | 0.53 | 0.48 | 0.48 |
| 19 | 0.68 | 0.81 | 0.79 | 0.8 | 0.76 | 0.73 | 0.72 |
| 20 | 0.61 | 0.68 | 0.68 | 0.68 | 0.63 | 0.63 | 0.62 |
| 21 | 0.44 | 0.61 | 0.59 | 0.55 | 0.51 | 0.49 | 0.48 |
| 22 | 0.41 | 0.60 | 0.59 | 0.55 | 0.50 | 0.47 | 0.46 |
| 23 | 0.42 | 0.60 | 0.57 | 0.54 | 0.49 | 0.47 | 0.46 |
| 24 | 0.25 | 0.52 | 0.49 | 0.44 | 0.40 | 0.35 | 0.35 |
| Staffing | 0.40 | 0.55 | 0.53 | 0.51 | 0.47 | 0.45 | 0.44 |
| 25 | 0.51 | 0.93 | 0.85 | 0.90 | 0.87 | 0.74 | 0.72 |
| 26 | 0.16 | 0.92 | 0.72 | 0.89 | 0.94 | 0.63 | 0.61 |
| 27 | 0.02 | 0.36 | 0.27 | 0.33 | 0.32 | 0.20 | 0.20 |
| 28 | 0.02 | 0.68 | 0.50 | 0.64 | 0.68 | 0.41 | 0.41 |
| 29 | 0.02 | 0.62 | 0.46 | 0.56 | 0.58 | 0.36 | 0.35 |
| 30 | 0.10 | 0.84 | 0.64 | 0.80 | 0.84 | 0.54 | 0.53 |
| 31 | 0.16 | 0.45 | 0.37 | 0.36 | 0.34 | 0.27 | 0.27 |
| 32 | 0.12 | 0.30 | 0.27 | 0.26 | 0.23 | 0.19 | 0.20 |
| 33 | 0.25 | 0.61 | 0.53 | 0.53 | 0.47 | 0.39 | 0.39 |
| 34 | 0.16 | 0.47 | 0.41 | 0.41 | 0.38 | 0.30 | 0.31 |
| 35 | 0.22 | 0.54 | 0.46 | 0.43 | 0.38 | 0.32 | 0.32 |
| 36 | 0.08 | 0.41 | 0.34 | 0.31 | 0.27 | 0.20 | 0.21 |
| 37 | 0.33 | 0.72 | 0.62 | 0.64 | 0.61 | 0.50 | 0.49 |
| Training and Devel. | 0.17 | 0.60 | 0.50 | 0.54 | 0.53 | 0.39 | 0.39 |
| 38 | 0.11 | 0.35 | 0.29 | 0.29 | 0.25 | 0.20 | 0.20 |
| 39 | 0.06 | 0.22 | 0.18 | 0.18 | 0.15 | 0.12 | 0.12 |
| 40 | 0.06 | 0.19 | 0.16 | 0.16 | 0.14 | 0.10 | 0.11 |

| | | | | | | | |
|-----------------------|------|------|------|------|------|------|------|
| 41 | 0.04 | 0.17 | 0.14 | 0.14 | 0.11 | 0.08 | 0.09 |
| 42 | 0.25 | 0.42 | 0.38 | 0.38 | 0.32 | 0.30 | 0.30 |
| 43 | 0.15 | 0.37 | 0.32 | 0.32 | 0.26 | 0.22 | 0.23 |
| 44 | 0.12 | 0.34 | 0.29 | 0.29 | 0.23 | 0.19 | 0.20 |
| 45 | 0.10 | 0.29 | 0.25 | 0.24 | 0.19 | 0.16 | 0.17 |
| 46 | 0.11 | 0.28 | 0.23 | 0.25 | 0.22 | 0.17 | 0.18 |
| 47 | 0.11 | 0.24 | 0.20 | 0.21 | 0.19 | 0.16 | 0.16 |
| 48 | 0.10 | 0.20 | 0.17 | 0.19 | 0.17 | 0.14 | 0.15 |
| 49 | 0.10 | 0.22 | 0.20 | 0.20 | 0.18 | 0.15 | 0.16 |
| 50 | 0.28 | 0.59 | 0.55 | 0.59 | 0.52 | 0.44 | 0.44 |
| 51 | 0.25 | 0.51 | 0.51 | 0.55 | 0.46 | 0.40 | 0.40 |
| 52 | 0.20 | 0.40 | 0.42 | 0.44 | 0.36 | 0.32 | 0.32 |
| 53 | 0.18 | 0.30 | 0.34 | 0.33 | 0.27 | 0.26 | 0.26 |
| 54 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 |
| 55 | 0.07 | 0.12 | 0.11 | 0.11 | 0.11 | 0.09 | 0.10 |
| 56 | 0.17 | 0.27 | 0.23 | 0.23 | 0.23 | 0.20 | 0.21 |
| 57 | 0.27 | 0.32 | 0.32 | 0.30 | 0.28 | 0.28 | 0.27 |
| 58 | 0.22 | 0.25 | 0.25 | 0.24 | 0.21 | 0.22 | 0.22 |
| 59 | 0.53 | 0.69 | 0.63 | 0.67 | 0.62 | 0.58 | 0.57 |
| 60 | 0.43 | 0.48 | 0.47 | 0.45 | 0.42 | 0.42 | 0.42 |
| Compensation | 0.17 | 0.32 | 0.29 | 0.30 | 0.26 | 0.23 | 0.23 |
| 61 | 0.96 | 0.98 | 0.98 | 0.97 | 0.95 | 0.95 | 0.95 |
| 62 | 0.95 | 0.97 | 0.97 | 0.97 | 0.95 | 0.95 | 0.94 |
| 63 | 0.75 | 0.86 | 0.86 | 0.84 | 0.78 | 0.78 | 0.77 |
| 64 | 0.84 | 0.95 | 0.94 | 0.94 | 0.89 | 0.88 | 0.87 |
| 65 | 0.92 | 1.00 | 1.00 | 0.98 | 0.95 | 0.95 | 0.94 |
| 66 | 0.91 | 0.99 | 0.99 | 0.98 | 0.95 | 0.94 | 0.93 |
| 67 | 0.78 | 0.94 | 0.92 | 0.9 | 0.87 | 0.84 | 0.83 |
| 68 | 0.40 | 0.86 | 0.85 | 0.71 | 0.63 | 0.58 | 0.57 |
| 69 | 0.61 | 0.94 | 0.94 | 0.90 | 0.75 | 0.73 | 0.71 |
| 70 | 0.68 | 0.92 | 0.91 | 0.87 | 0.80 | 0.77 | 0.76 |
| 71 | 0.21 | 0.75 | 0.73 | 0.52 | 0.43 | 0.38 | 0.40 |
| 72 | 0.46 | 0.89 | 0.90 | 0.79 | 0.62 | 0.60 | 0.59 |
| 73 | 0.65 | 0.89 | 0.89 | 0.83 | 0.77 | 0.75 | 0.74 |
| 74 | 0.07 | 0.66 | 0.63 | 0.41 | 0.33 | 0.27 | 0.29 |
| 75 | 0.25 | 0.78 | 0.78 | 0.64 | 0.49 | 0.44 | 0.45 |
| 76 | 0.52 | 0.83 | 0.83 | 0.73 | 0.67 | 0.64 | 0.64 |
| 77 | 0.90 | 0.95 | 0.95 | 0.94 | 0.90 | 0.91 | 0.9 |
| 78 | 0.97 | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 0.96 |
| 79 | 0.83 | 0.91 | 0.91 | 0.88 | 0.83 | 0.84 | 0.82 |
| 80 | 0.76 | 0.93 | 0.92 | 0.91 | 0.85 | 0.83 | 0.81 |
| Communic. and Par. | 0.67 | 0.90 | 0.89 | 0.83 | 0.77 | 0.75 | 0.74 |
| Overall average | 0.35 | 0.57 | 0.54 | 0.53 | 0.49 | 0.44 | 0.44 |

^a See Appendix for the corresponding name to each variable code number

APPENDIX: KEY HRM PRACTICES USED AS INDEPENDENT VARIABLES

HRM CATEGORY SETS / NUMBERED KEY HRM PRACTICES

Planning

1.Organisations with HR Dept. 2. Head of HR on governing board. 3. Organizations with HR strategy. 4.HR involvement in corporate strategy. 5. Performance of HR Dept. Evaluated. Evaluations taking into account the views of: 6. top management,7. line management, 8. employees, 9. HR managers. HR Dept. with line managers have primary responsibility for: 10.compensation and benefits, 11.recruitment and selection, 12.training and development, 13.industrial relations, 14.staff reduction/expansion

Staffing

15.Staff decreased by voluntary redundancy. 16.Staff decreased by redeployment. 17.Outsourcing used instead of staff reduction. Vacancies filled internally for: 18.senior, 19.middle, 20.junior management. Jobs made wider for: 21.management, 22. professional staff, 23.clerical staff, 24.manual staff.

Training and Development

25.Analyse employee training needs. 26.Monitor effectiveness of training. Evaluate training: 27.learning, 28.behavior, 29.results, 30.reaction. Regularly use: 31.formal career plans, 32.assessment centers, 33.succession plans, 34.planned job rotation, 35.high flier schemes, 36. international experience schemes. 37. Evaluation system used in career development.

Compensation

Offer employee share options for: 38.management, 39.professional staff, 40.clerical staff, 41.manual staff. Offer profit sharing options for: 42.management, 43.professional staff, 44.clerical staff, 45.manual staff. Offer group bonus for: 46.management, 47.professional staff, 48.clerical staff, 49.manual staff. Offer merit pay for: 50.management, 51.professional staff, 52.clerical staff, 53.manual staff. 54.Offer workplace childcare. 55.Offer childcare allowances. 56.Offer career break scheme. 57.Offer maternity leave. 58.Offer paternity leave. 59.Offer pension scheme. 60.Offer education/training break.

Communication and Participation

61.Communication verbally direct to employees. 62.Communication written to employees. 63.Communication in use of computer mail. 64.Communication through team briefings. Management briefed about: 65.strategy, 66.finance, 67.organization of work. Professional staff briefed about: 68.strategy, 69.finance, 70.organization of work. Clerical staff briefed about: 71.strategy, 72.finance, 73.organization of work. Manual staff briefed about: 74.strategy, 75.finance, 76.organization of work. Employee ideas communicated: 77.directly to senior management, 78.through the immediate supervisor, 79.through workforce meetings, 80.through the use of team briefings.

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