

Human Resource Management: A Complexity Perspective

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Abstract

In this paper, we present preliminary findings from an empirical study that seeks to address the question of how HRM can contribute to organisational success by adopting a complexity theory approach. By viewing organisations as non-linear systems, focusing on interconnections between points in the system, and stressing the importance of network nodes in mediating organisational outcomes, complexity theory suggests, at a conceptual level, that the significance of HRM may lie more in processes than in policies or strategies.

In our research, we take three pairs of organisations in the public sector, matched as closely as possible for task and size (two Metropolitan Police Boroughs, two Local Authorities, and two NHS Trusts), and use the lens of complexity theory to explore the processes by which HR departments contribute to a major organisational change initiative. By shifting the focus of attention away from HR's contribution to performance at an aggregate level, towards a more finely-grained analysis focusing specifically on the processes adopted by HR in helping to achieve organisational objectives, it is hoped that this study will contribute significantly to the HRM literature, as well as to the literature on complexity theory and organisations. In this paper, we present preliminary findings from the first stage of two of the case studies.

Introduction

Whilst a considerable amount of research has been conducted into human resource management, existing theories tend to be dominated by rationalistic assumptions regarding people and organisations. For example, although traditional frameworks have recognised a plurality of factors that may influence the relationship between HR practices and organisational outcomes, the assumption underpinning this strand of research is that the causality is linear and mono-directional.

This notion has been challenged by recent case-study based research that has highlighted the extent to which causal inferences regarding this relationship are extremely problematic (Truss, 2001; Gratton et al., 1999). These studies have shown that HR's contribution to organisational outcomes is, in almost all cases, unpredictable based simply on an understanding of HR policies and strategies. However, despite the contribution of this research, it still fails to present an alternative framework or explanation as to how and why HR may influence organisational effectiveness.

In this paper, we present preliminary findings from an empirical study that seeks to address this issue by adopting a complexity theory approach to help understand the role of HR in organisations. By viewing organisations as non-linear systems, focusing on interconnections between points in the system, and stressing the importance of network nodes in mediating organisational outcomes, complexity theory suggests, at a conceptual level, that the significance of HRM may lie more in processes than in policies or strategies.

In our research, we take three pairs of organisations in the public sector, matched as closely as possible for task and size (two Metropolitan Police Boroughs, two Local Authorities, and two NHS Trusts), and use the lens of complexity theory to explore the processes by which HR departments contribute to organisations both in a general sense and through a major organisational change initiative. By shifting the focus of attention away from HR's contribution to performance at an aggregate level, towards a more finely-grained analysis focusing specifically on the processes adopted by HR in helping to achieve organisational objectives, it is hoped that this study will contribute significantly to the HRM literature, as well as to the literature on

complexity theory and organisations. In this paper, we present preliminary findings from the first stage of two of the case studies.

Human Resource Management and Organisational Contribution

Within the field of strategic human resource management (SHRM), a dominant concern has been to find a sound theoretical framework, or set of frameworks, that can be used as a foundation for building valid explanations and predictions of the nature and effects of SHRM interventions. An important quest within this has been to find the 'dependent variable' that the theory should seek to explain. Increasingly, firm performance has been viewed as the most appropriate dependent variable, with commentators working within a number of frameworks to establish a link of some kind between SHRM and a range of outcome measures (Wright and Snell, 1998). Huselid's (1995) seminal paper was the first to present empirical evidence to support the notion that the presence of certain HR policies in an organisation could have a direct impact on the bottom line. This was followed by others, including a UK study showing a link between HR policies and patient mortality rates in hospital settings (West et al., 2002).

However, this strand of research has been challenged due to its methodological imperfections, and also because of the difficulty of attributing causality between HR inputs and organisational-level outputs (Marchington and Grugulis, 2000; Purcell, 1999). Case-study research conducted in the UK has revealed the complexity of the HRM-performance linkage, and shown how unpredictable events, such as industry down-turns or takeovers, can undermine any linear relationship between HR interventions and organisational outcomes (Gratton et al., 1999; Hope-Hailey et al., 2002; Truss, 2001; Truss et al., 2002). Indeed, the notion that a particular set of HR practices can be identified that necessarily leads to improved organisational performance is based on a rationalistic, unitarist view of organisational life that ignores important issues of process (Purcell, 1999; Tyson, 1997).

The point about process is highly significant. Tyson (1997: 277) argues, in relation to HRM research, that: 'insufficient attention seems to have been paid to the process itself', and highlights the significance of adopting a process approach to examining human resource strategies in organisations. In particular, he notes:

'the process by which strategies come to be realised is not only through formal HR policies or written directives: strategy realisation can also come through actions by managers and others. Since actions provoke reactions ... these reactions are also part of the strategy process.' (p.280)

Purcell (1999) further argues, on the basis of research carried out by Bowey and Thorpe (1986) into pay systems, that process may be more important than content, in this context, the consultative approach used during the design of the new pay system.

Purcell (1999) makes the point that viewing HR's contribution solely on the basis of HR strategies and policies is too limited:

'we need to be much more sensitive to processes of organisational change and avoid being trapped in the logic of rational choice. A fruitful line of research is analysis of how and when HR factors come into play in strategic change.' (p.37)

In this way, Purcell invites us to consider HR's contribution in a different way. Rather than focusing on the content of HR, such as HR policies, strategies and practices, we should view HR as contributing through the process of strategic decision-making, and through change programmes. Thus, the focus shifts away from looking at HR as a discrete entity in the organisation towards a consideration of HR as one element contributing to the wider organisational goals and objectives. This view is echoed by Procter and Currie (1999) in their research into HRM processes in the NHS.

However, despite these calls, research still tends to focus on examining the content of HR, whereas very little research has been conducted that focuses specifically on HR processes, or how HR can contribute to strategic change. It is this gap that we aim to address in this study.

One issue here is to define what we mean when we talk about 'HR' in this context. Many of the studies that have focused on the HRM-performance linkage have used

the term 'HRM' to mean human resource policies adopted by the organisation (eg Huselid, 1995). Elsewhere, commentators have talked of the 'HR function', meaning the human resource department itself. In this paper, we adopt the term 'HR system', or 'HR', as our focus of analysis. This is, first, to fit with the 'system' focus of complexity theory and, second, to illustrate the point that HR's contribution from a process perspective needs to be considered holistically, comprising both the individuals working within the HR function and the way that they work, and the structures, strategies and policies that they develop.

Complex Adaptive Systems

Although we may intuitively accept the point that a process approach is a fruitful way forward for HRM research, there is still the need for an appropriate theoretical framework within which to situate this argument.

One perspective that offers the potential for founding a process focus on HRM within a conceptual framework is the Complex Adaptive Systems approach. Within this, organisations are viewed as complex systems (CAS), co-evolving and interconnected with other such systems, in a state far from equilibrium (Mitleton-Kelly, 2002; Morrison, 2002). When organisations are viewed in this way, internal processes come to the fore and are accorded a strategic prominence that is not apparent in some of the approaches adopted hitherto in HRM research.

An interest in complex structures originally began to emerge in physics and chemistry where the phenomenon of self-organization, ie the endogenous tendency for both complexity and organisation to increase within a system, was identified in dissipative structures, ie, structures capable of importing free energy and exporting high entropy waste (Quinn, Spreitzer and Brown, 2000; Foster, 2000). In biology, the complexity sciences have transformed the way that evolution is understood (Kauffman, 1993), and the more holistic method of enquiry represented by CAS has allowed weather systems, cells in the body and DNA systems to be investigated (Peiperl and Arthur, 2000).

Mathews, White and Long (1999a: 18) explain that the 'complexity sciences' question the belief that all events are potentially predictable and controllable. They represent

'a historically recent coalescence of theories developed in the natural and physical sciences that focus on developing novel explanations of the developmental and evolutionary behaviours of systems'. According to Coveney and Highfield (1995: 7), the focus of study is: 'the behavior of macroscopic collections of such units that are endowed with the potential to evolve in time'. Under the CAS approach, predictability and control are regarded as theoretically impossible, because such systems contain inherent non-linearities, although predictability may be possible in the short-term because of the time it takes for small changes to escalate within the system (Stacey, 1996; Smith, 1995; Mathews et al., 1999a; Laszlo, 1996). In this way, they are more allied with qualitative methods of enquiry and phenomenological approaches to understanding the world and the interrelationship between phenomena (Burrell and Morgan, 1979). The purpose of enquiry with such a framework therefore becomes increased depth of understanding rather than the ability to predict what is inherently unpredictable.

To qualify as a complex adaptive system, an entity must meet four criteria; first, it must be comprised of many agents acting in parallel; second, it must shuffle these agents continuously; third, it is subject to the third law of thermodynamics, exhibiting entropy and winding down over time unless replenished with energy and, fourth, it must show the capacity for pattern recognition, and be capable of anticipation and learning (Pascale, 1999; Laszlo, 1996).

Organizations have been conceptualised as complex adaptive systems, actively searching for appropriate energy sources to create and maintain the complexity they need to produce goods and services, and also searching for knowledge both inside the organization and outside; the greater the diversity present in the environment, the more opportunities there are for such diversity to be organized into productive structures (Foster, 2000). In complex systems, innovation is essential to generate new ways of working. Mitleton-Kelly (2003a) refers to organisations as 'complex evolving systems'.

Morrison (2002:8) describes complexity theory in the following terms:

'complexity theory looks at the world in ways which break with simple cause-and-effect models, linear predictability and a dissection approach to understanding phenomena, replacing them with organic, non-linear

and holistic approaches, in which relations within interconnected networks are the order of the day.'

Thus, under complexity theory, we are faced with a world far from equilibrium, where systems evolve in unpredictable ways according to four key principles. First, they are at risk of death when in equilibrium; second, they are self-organizing and contain emergent complexity due to the intelligence they contain in their nodes, so that what are initially simple structures are capable of generating an infinite number of complex and unpredictable patterns; third, they tend to move towards chaos when provoked by a complex task, once they have reached high levels of performance, their performance worsens until they are pulled far enough away from their usual arrangements that they can generate new forms. Finally, they cannot be directed, only disturbed, since cause-and-effect linkages are weak in such systems and one small variation can cause substantial effects, whilst large changes may have relatively small effects (Pascale, 1999; Caldart and Ricart, 2004).

One of the most important features of CASs is that they cannot remain in a state of equilibrium. This is based on the law of cybernetics which states that, for a system to survive, it must cultivate internal variety or it will fail to cope well with externally imposed variety. Therefore, organizations with an inherent tendency towards homeostasis through having a strong internal culture would find it difficult to survive (Pascale, 1999).

Another important feature of complexity theory is that system intelligence is contained in the nodes, rather than at the top, as is assumed in traditional strategy models of organization (Mathews, White and Long, 1999b). This would suggest that the role of strategy and, indeed, HR strategy, is to find ways of harnessing the intelligence within the nodes and developing supporting mechanisms to underpin it, rather than seeking to drive change down from top to bottom (Pascale, 1999).

In some respects, CAS theory is similar to open systems theory, however, the difference lies in the conceptualisation of the systems. Under open systems theory, the external environment and the organization are viewed as separate entities, with exchange taking place through the open boundaries of the organisation. Under CAS theory, however, they are regarded as enmeshed together, so that the system is both strongly self-determining and, at the same time, dependent on its environment

(Morrison, 2002; Mitleton-Kelly, 2003a). As such, organisations are viewed as extremely unstable, dissipative structures, and their survival depends on interchange with the environment (Foster, 1993; Mathews et al., 1999). The law of entropy means that any system closed off from its environment will disintegrate into disorder and randomness (Georgescu-Roegan, 1970). Order and predictability can occur within the dissipative structure, but they occur without warning and are transitory. Mitleton-Kelly (2003b) refers to the four principles of emergence, connectivity, interdependence and feedback as fundamental to complex systems.

These dissipative structures are non-linear, which, again, differentiates them from traditional open systems, which are regarded as linear (Mathews, 2000; Prigorgine, 1980; Prigorgine and Stengers, 1984). Within linear systems, small forces can produce small effects that can be adjusted. However, non-linear systems are characterised by increasing disequilibrium within the system, although they can be quite stable for long periods of time (Foster, 2000; Foster and Wilde, 1999a; 1999b). These non-linearities lead to positive or negative feedback within the system which can cause the system to evolve into new structures or sink into decline (Mathews, 2000; Mitleton-Kelly and Papaefthimiou, 2000). This leads to a point of bifurcation, at which stage the organization can either rely on existing mechanisms and, ultimately, dissolve into disorder as it becomes increasingly misaligned with its environment, or engage in transformation through a process of experimentation. It is at this point of bifurcation that inertia can enter the system, causing it to die (Morrison, 2002). The alternative is for the system to embrace a qualitatively different way of working. This process is repeated, as the new equilibrium also becomes misaligned with its environment, creating new internal arrangements better able to deal with complexity (Leifer, 1989). Turbulence can be either internally or externally generated, but the argument is that the leap to a new state is nondeterministic and random, so that the resulting state is unpredictable, but will represent a total break from the past and an abandonment of old methods of working.

During this transition phase, systems will typically experiment and trial new ways of working, involving the generation of alternatives from which the system can choose. This is associated with increased internal activity and a need for more resources (Leifer, 1989).

The preferred configuration that is chosen from amongst the alternatives generated is likely to be one that maintains a high degree of energy throughput and openness to other systems in its environment. This will lead to a new stable state where entropy production increases and the system stabilises around a configuration that is loosely coupled with the new environment. In this way, change builds upon change, allowing the system to cope better with the next change (Mathews et al., 1999a).

Application of Complexity Theory to HRM

Few empirical studies, and no analyses of the application of the framework to the specific field of HRM have been carried out which might enable us to assess its potential contribution to this field. However, the CAS framework has been used to explore individuals' career experiences through individual relationship networks within and outside organizations (Peiperl and Arthur, 2000; Parker and Arthur, 2000), and a large action research project funded by the EPSRC is currently under way at the Complexity Group at the LSE (Mitleton-Kelly and Papaefthimiou, 2000; Mitleton-Kelly, 2003a; b). Ashmos et al. (2000) carried out one study within a hospital setting using the CAS framework. They found out that hospitals with more complex internal arrangements and stakeholder group participation performed better on a range of financial performance measures than those with less complex arrangements. They also argue that allowing maximum participation in strategic decision making (thus capitalising on the knowledge contained within the system nodes), and ensuring few mechanistic constraints on activity, coupled with encouraging people to work collaboratively on problem-solving, encouraging variety and allowing people to explore options, was the most successful change management approach (Ashmos et al., 2000).

What are the implications of complex adaptive systems approaches for process-based SHRM research? First, because a complex adaptive system is self-organising, an understanding of the emergent properties contained within the system becomes crucial, rather than the development and imposition of top-down policies such as HR strategies. Complex adaptive systems are characterised by their own unique identity; they are able to create the conditions for their own renewal and are self-regenerating and self-perpetuating (Morrison, 2002). In the context of social

systems, this means that organisations are self-organised rather than managed top-down, with knowledge and learning distributed throughout the network, and the acceptance of a degree of uncertainty and unpredictability (Mitleton-Kelly, 2003b). For the HR system, this means that the ability to connect with the rest of the organisational network is critical.

Second, another important factor is the interconnected state of the SHRM system with other systems both within and outside the organisation, so understanding the nature of these interconnections, and finding ways of fostering them, is crucial (Laszlo, 1996; Mitleton-Kelly, 2003b). Mitleton-Kelly and Papaefthimiou (2000:4) refer to the 'co-evolution' that takes place between entities within the human ecosystem of the organisation, with feedback playing a critical role in this (Mitleton-Kelly, 2003a).

Third, the emergence of the system is path-dependent, in other words it is dependent upon its history and sensitive to initial conditions, which generates a number of alternatives within the organisation's 'space of possibilities' as the system evolves (Mitleton-Kelly, 2002; Morrison, 2002). Some of these factors may act as enabling conditions, whilst others act as disablers. Thus, account needs to be taken of the context within which HRM is enacted; some settings will be more conducive to HR playing a prominent role than others (Paauwe and Boselie, 2002; Truss et al., 2002). However, similar initial conditions can produce dissimilar outcomes due to the feedback and interactions that occur over time (Morrison, 2002).

Fourth, according to the CAS perspective, much more significance is attached to the network 'nodes', ie the individuals and groups placed at points of intersection within the system. This, again, is much more in keeping with what we know about socio-political and cultural processes within organizations. Whereas much of the traditional HRM literature has argued that it is the development and implementation of an HR strategy that is critical, according to complexity theory, human resource management is as much driven bottom-up and from critical network nodes as it is top-down. Communication and the processes by which the HR system interacts with the rest of the organisation become critical (Morrison, 2002).

Fifth, complexity theory suggests that social systems evolve and change over time due to challenges from within and outside the system (Laszlo, 1996), they are emergent and unstable due to the independent behaviour of acting individuals (Morrison, 2002). Mitleton-Kelly (2003a) argues that organisations may need to develop a number of micro-strategies before committing major resources to one, in order to allow for the effects of co-evolution. We can therefore conjecture that, according to the complexity perspective, successful HR systems will also need to reinvent themselves over time.

Finally, complexity theory suggests that what Morrison (2002) terms 'loose-tight structures', or Brown and Eisenhart (1997) term 'semi-structures', become the most appropriate way of managing, combining a core of central values or structures with varying interpretations at a local level. Mitleton-Kelly and Papaefthimiou (2000:3) refer to an organisation's 'enabling conditions' comprising both enablers and inhibitors of change. Critical to these enabling conditions is a structure and culture that are sufficiently loose to enable new solutions, or 'self-organisation', to emerge. This suggests that creating an HR system with a stable core and loose periphery may be the most appropriate way forward.

Where the CAS framework goes beyond the boundaries of current thinking in the field is in its focus on non-linearities and complex interactions. As Mathews et al (1999b) argue, complexity theory challenges the assumptions of the Newtonian perspectives of equilibrium, negative feedback loops, levels of activity, and linear relationships that have dominated social science. The CAS approach gives us a framework for focusing on the unpredictable, chaotic, inexplicable features of the system. Within the complex adaptive systems framework, the focus of analysis cannot be to understand and predict cause-effect relationships, first because causality cannot be attributed in a linear fashion within a complex system and, second, because the nature of complex systems is such that prediction is impossible due to the multiplicity of interrelationships within the system. The problematic nature of predictability both fits within pluralistic sociological organization theory, and, at the same time, goes beyond it by suggesting that understanding, rather than prediction, should be the ultimate goal of research. In this sense, complexity theory is closely aligned with more post-modern interpretations of organisations, such as that of Bauman (Beilharz, 2001; Morrison, 2002)

In the light of the complexity approach, there are many potential ways in which we could set out to explore HR processes in organisations. In order to provide a way into this new area, we have decided to focus on four key exploratory questions arising out of a reading of complexity theory and how it might be applied to HR processes:

- how is the HR department structured?
- how innovative is the HR department?
- to what extent is the HR system interconnected with its environment?
- does the setting within which the HR department is located act as an enabler or disabler for the HR system?

Given what has been argued to date about complexity theory, we might expect that an HR system that demonstrated it could co-evolve, was interconnected, was 'semi-structured', innovated, and was located within an enabling environment would contribute more to the organisation than one that failed to meet these criteria. As yet, given this is a new research area and because complexity theory itself lacks coherence as a unified theoretical framework, we do not know how these facets will manifest themselves in an organisational setting, so our research is essentially exploratory.

Methodology

The methodology adopted for this study is exploratory, qualitative and intensive. This was felt to be more appropriate than adopting a large-scale questionnaire survey; as Tyson (1997: 285) notes: 'processes of involvement within change strategies are not revealed by these kinds of surveys'.

The overall study, which has recently begun, involves three matched-pair case studies in public sector organisations: two local councils, two NHS Trusts and two police boroughs, all located in South-West London. These were matched as closely as possible for task, size and location. The decision was taken to adopt a matched pairs methodology as it was felt that this would enable differences in process to emerge more clearly than would be possible with single cases. This project is

ongoing and, in this paper, we report on preliminary findings from one of the local councils and one of the police boroughs.

In each organisation, an intensive and longitudinal case study approach was adopted. In addition to collecting substantial amounts of documentary evidence, interviews were conducted with a cross-section of respondents. The plan, as the project progresses, is to track a change project of significance to the organisation over approximately six months. We are concerned to observe, over time, how HR is involved in major change, as well as to see how HR operates as a team within the organisation. As Tyson (1997: 288) argues:

'change strategies are good exemplars of the contribution by HR managers. This involves them in implementing emergent strategies to achieve strategic outcomes.'

A series of around 15 initial interviews has been conducted in each organisation, with HR department members, senior and line managers, and specific individuals involved in the change project that is being tracked. This initial series will be followed by further interviews with the project team over five-six months, culminating in a final series of approximately 8-10 interviews at the end of the project to elicit information on any changes that may have occurred.

The interviews were conducted face-to-face by one or two interviewers. The interview schedules were semi-structured and geared towards eliciting information relevant to the research themes, whilst allowing interviewees to elaborate on issues of particular importance to their situation. An emphasis was placed during the interviews on obtaining specific examples and stories from the interviewees to illustrate the points that they were making. Each interview lasted between one and one-and-a-quarter hours.

The interviews were all tape-recorded and transcribed verbatim. The resulting transcripts were checked for errors by the interviewers and subjected to a rigorous analysis and coding exercise, starting from themes drawn from the literature. New themes were added as the coding progressed, and some categories were combined.

Two people were involved in this process, to ensure inter-rater reliability and consistency.

Findings

At this stage, we are able to report on preliminary data collected from two of the case study organisations, one police borough and one local council.

Background

The Council was one of the London boroughs and has been under the majority control of the Liberal Democrats since around the mid 1980s. The Council was divided into five functional groups: Chief Executive's Group, Resources, Environment and Leisure, Community Services and Learning for Life. Each functional grouping contained a range of other departments and services. In 2002, the Council had a workforce of just under 5,000 of whom about half worked in schools.

Organisational strategy was determined by the Strategy committee, however there were also committees chaired by a "Lead" Councillor which reported into the Council. There were seven Lead Councillors covering 10 committees (e.g. Resources, Children's Services, Environment, e-government) with some Councillors being the "Lead" for more than one committee.

The Council was primarily a bureaucracy operating in a relatively stable environment, responding to changes in legislation and government performance criteria. One of the primary reasons for the Council's stability has been the continuity in political leadership that it has experienced for over 15 years. From the interviews we held, it appeared that the organisation was characterised by a consultative and no-blame culture at senior management level, and a number of interviewees mentioned feelings of confidence and pride in an organisation that was high performing and innovative. Senior management interviewees considered that relationships between officers (staff employed by the Council) and councillors (the elected members of the Council) were very good. Councillors from the majority party emphasised the importance and advantages of consultation and consensus. Thus, unlike many other Councils, opposition party Councillors were represented (on a proportionate basis) on the decision making committee of the Council. The Council also appeared to be

responsive to the concerns of residents, for example, the Council reversed a waste collection policy when it met with resistance from local residents.

The major driving force for the Council were national government performance assessments. For the Head of HR, high performance on these assessments aided recruitment and retention due to the reputation effects, as well as providing more freedom from government inspections. Budgetary constraints were considered to be a major problem, and officers on the Council tended to be proactive and successful in seeking funding from external sources. Two corporate videos had been produced and shown to Council employees; one highlighted the achievements of the Council and included interviews with employees in different departments, and the other aimed to communicate a longer term vision for the Council based on using e-technology for service delivery.

The Police Borough was part of the Metropolitan Police Service (MPS). The MPS was responsible for policing in London and Heathrow, for providing security arrangements for the British Monarchy and diplomats, and also contributed resources for the prevention and detection of national and international crime. The Crime and Disorder Act (1998) triggered a shift in structure for the MPS from 80 Divisions to one consisting of a central unit at Scotland Yard and 32 geographically based London Boroughs aimed at enabling stronger and closer relationships with local authorities. The rationale and main perceived advantages of this new structure were provided in an MPS document in July 2000 (MPS, 2000: 1):

- two tier structure for easier co-ordination and clearer accountability;
- less bureaucracy with greater focus of resources on front line policing;
- an appropriate structure to aid Borough Commanders in carrying out their responsibilities under the Crime and Disorder Act;
- more effective co-ordination and implementation of corporate strategies/policies;
- more effective arrangements to manage the new relationship with the London Mayor, Metropolitan Police Authority (MPA) and Greater London Assembly (GLA);
- more effective investigation of crime;
- efficient and effective use of resources in line with Best Value principles.'

The strategic direction for the MPS was set by the Management Board. This Board had seven core members (Commissioner, Deputy Commissioner, three Assistant Commissioners, Director Personnel and the Director of Resources), as well as the Director of Public Affairs and the Director of the Corporate Development Group and, when required, representatives of specialist functions. Each Borough was overseen by a Senior Management Team, comprising the Borough Commander, a number of Chief Superintendents and the HR manager. Overall, the Centre therefore played a strategic and co-ordinating role whilst responsibility for the core operational policing role was devolved to the Borough-based units.

In 2004, the MPS employed around 28,000 police officers. Challenges facing the MPS in the coming years include the potential loss of a considerable number of police officers due to a major recruitment drive in the 1970s, leading to a significant number of officers now coming up for retirement. Whilst there has been an effort to increase recruitment (the "Step Change" programme) to 35,000 police officers, there was a shortage of Sergeants - the first line managers in the organisation.

Major critical events for the organisation were changes in legislation or the introduction of new legislation, as well as the results of major public inquiries into the police. Particularly important in the views of many interviewees were the Police and Criminal Evidence Act (1984), the Stephen Lawrence Inquiry, and the Sheehy Report.

Unlike the Council, the environment of the Police Borough was dynamic and undergoing rapid and unexpected changes. Goals and priorities came from a variety of sources, the principal ones being the Home Office, the Greater London Authority, the Metropolitan Police Authority but also influenced by the Police Federation. Like other public bodies, the MPS was subject to targets, performance indicators and the results measured and published. The organisational culture was performance target driven, top down and directive (rather than consultative). The organisation had a very large number of priorities (some respondents reported having 40 priorities), which were subject to unanticipated changes as political bodies tried to respond to rising public concerns about any particular law and order issue. Public concerns about a particular type of crime could lead to the MPS being directed to make it a

priority focus (referred to as "flavour of the month"). However, this would be at the expense of a focus on other crimes, consequently, figures for lower priority crimes would start to rise until public concern shifted to this crime. The negative effects at lower levels of the organisation were demoralisation and confusion about goals and priorities. Despite this, interviewees considered the organisation to be characterised by a "can do" mentality with a focus on action and response.

Structure of the HR Function

The Council

According to the HR Business Plan for 2003-2006, Corporate HR's overall objective was to give "a better quality of life to residents by enabling the best possible services to be achieved through a committed, flexible and competent workforce". The HR strategy had three principal aims:

"maximise performance through continuous development and performance management; to create a unified, flexible workforce, equally valued and fairly treated, no matter what position they have in the organisation and to attract and retain the highest calibre of employees and motivate all staff."

HR in the Council operated on two levels: a centralised HR function ("Corporate HR") and HR devolved to the four main functional groupings ("Group HR"). The HR Director was not on the Council's strategy committee, but reported in to the Resources Director. Corporate HR was generally brought in to advise or take part in policy implementation, rather than the formulation of organisational strategy.

This structure was introduced in the mid 1990s with the aim of enabling the centralised function to focus on policy and strategic level issues, whilst Group HR could focus on operational issues and be more responsive to the concerns of the various departments.

By mid-2004, most of the HR staff were based in the various Groups, whilst Corporate HR had a staff of 15. According to the Business Plan, Corporate HR had two principal areas of activity: employee relations/services, and organisational development. The aim of the former was to develop, monitor and revise policies and

procedures “to foster positive employee relations across the Council, so staff can deliver quality and cost effective services”. The aim of the latter was to develop the performance of the Council, Councillors, managers and employees so they “contribute effectively to achieve the stated goals of the Council”.

Some interviewees reported unintended effects of the devolution of HR to the local level. First, it was more difficult to keep a consistent corporate line in developing best practice policies across the organisation. Second, there was a loss of control by the centre and, therefore, increased vulnerability to potential claims of unfair practice and personnel cases potentially being referred to employment tribunals. Third, corporate HR was spending too much time ‘fire fighting’ and time to develop strategy was limited. Fourth, Group personnel teams felt ‘dumped upon’ by the new administrative workload. Over time, Corporate HR came to be perceived by some as:

“obstructive, inflexible, having an ivory tower approach and not so much concerned about the impact on services as on maintaining professionalism.” (Group HR)

However, other interviewees also noted that Corporate HR had been considerably strengthened by the appointment of a new HR Director in 2002, and had become considerably more consultative in its approach. Perceptions of the value of HR at the Group level varied amongst the interviewees, with some appreciating the presence of dedicated help at the local level, and others feeling that their own Group HR were lacking in capability.

The Police Borough

HR in the Metropolitan Police Service (MPS) also operated at two main levels: a central unit largely concentrated at Scotland Yard in London (with multiple functional divisions) and a small HR unit at each of the 32 Police Boroughs. This structure had been introduced in the mid 1990s, when a process of devolving the HR function to a local level was initiated. Prior to this, HR had been at the centrally based organisation in London, with a Police Chief Inspector in charge of the personnel function at the local level.

Central HR was responsible for developing corporate policy, which was cascaded down to the Boroughs to implement. Recruitment, selection, induction and initial training of police officers were also the responsibility of the Centre. The Director of Central HR was a member of the MPS core management team, and also reported to an Assistant Commissioner responsible for HR. Like other aspects of the MPS, HR strategy appeared to be top down and driven by the centre. HR strategy was written by Central HR based on a number of inputs including the MPS policing plan, consultation (with a small sample of local HR managers), performance requirements and the previous year's strategy. This was then sent out to the Borough-based HR units, who were responsible for developing local level HR plans.

Borough level HR teams performed largely administrative functions, ensuring compliance with instructions from the centre and collating personnel related data (e.g. sickness levels, numbers of staff employed at different levels, staff transfers) on a weekly or monthly basis for the Centre. These data were used as an input for planning across the MPS. The budget for each Borough was set by the Centre, including the total number of officers to be employed, though there was some scope at the local level to determine the precise number of police officers at different levels.

The HR function in the Borough we examined was headed by an HR manager who had 9 FTE civilian staff (7 full time and 3 part-time) and a Training Unit (which should have consisted of a Police Sergeant and a civilian Executive Officer, but was understaffed at the time of the study). An Executive Officer was responsible for each of three main areas (Manpower Planning, Attendance Management, and Recruitment and Selection) and reported directly to the HR manager. A Police Constable had been temporarily appointed to run the Training Unit at the time of the interviews. Earlier, there had been staff shortages in the HR Department, with the HR manager only having two staff for the six months to March 2004.

The HR Manager was the only civilian member of the Senior Management Team which consisted of the Borough Commander and a number of senior police officers. However, one interviewee pointed out to us that salaries and status of the civilian staff were considerably lower than those of police officers; a police constable will generally have a higher salary than an HR manager.

Innovation in the HR Department

The Council

We found instances of innovation and change within Corporate HR in the Council in six main areas: the relationship between Corporate HR and Group HR, policy development processes, policy updating, recruitment, retention, and e-government. Most of these had taken place after the appointment of a new Head of Corporate HR.

Over time, devolution of the HR function had led to Corporate HR being perceived as remote and isolated from Group HR and formulating policies without regard to implementation practicalities or necessarily addressing managerial problems. On his appointment, the new Head of Corporate HR visited the Departmental Strategic Directors and Heads of HR in the various departments in order to identify their felt needs and perceptions of Corporate HR. These responses were used to focus and target corporate HR activities.

One key issue that emerged from these discussions was the perceived critical need for Council-wide procedures on capability and work performance. These procedures had previously been formulated, but not implemented due to resistance from the trade union. The new Head of Corporate HR therefore decided to give the union a deadline for a productive consultation over the competencies, after which the policy would be implemented in any event. This was done with the intention of indicating to the union that a more decisive approach was going to be adopted.

At the same time, to speed up policy development processes and increase the relevance/workability of policies, trade union representatives and line managers were encouraged to become involved at the early stages of policy development. Personnel procedures were also updated and broadened to include TUPE, contract variation, organisation development and culture change. One innovation in recruitment focused on social workers, an area characterised by hard to fill posts, understaffing and high turnover. New recruitment methods used included targeted open days for social workers, direct approaches to employment agencies requesting recruitment to the Council rather than on a "per day" basis, a hyperlink (complete

with webcast) to the Council on the website one of the largest internet recruitment companies. More broadly, targeted open days at the City Shopping Centre (rather than the Civic Offices) for young people were organised with advertising on a youth FM radio station, and flyers given out in Virgin Record shops and McDonalds. Innovations on retention included the development of e-induction for new employees due to the very low take-up of the traditional induction which involved a guided tour plus speakers from senior management as these were run at times inconvenient for many employees (e.g. part-time workers), and a sickness policy produced as part of an initiative to improve health awareness and stress management, (and thereby reduce sickness absence). Finally, Corporate HR were asked to second a member of staff to work within a change management programme to pilot the use of e-technology to change working practices in one part of the Council.

The Police Borough

Within the MPS, we found examples of innovation in HR mostly at the corporate, rather than at the Borough level. A major innovation was the devolution of HR from a central function to the local level in the mid-1990s. As with the Council, the aim was to allow central HR to focus on policy and strategic issues, whilst the devolved HR teams could be more responsive and supportive of local level operations. Initially, the devolution was presented as something that was to be piloted at a number of sites in London with an evaluation to be carried out after a year in order to draw lessons. However, no evaluation was carried out but devolution took place across the MPS.

Another innovation by central HR was the adoption of HR Evaluation Teams based on a model from the US. These teams would visit each borough for one or two days in order to gain a better understanding of the processes underlying local level HR performance. Perceived benefits of these visits were the identification of good practice that could be disseminated to other Boroughs by central HR, and incentives for poorly performing boroughs to improve their performance. To aid comparison between the performance of the 32 Police Borough, these were divided into "Police Families" consisting of about five Police Boroughs regarded as broadly similar.

Communication between central HR and Borough HR tended to be on a formal level. Thus, HR managers sometimes found out about changes when information arrived at their desks. In 2003, monthly meetings at central HR were initiated for all HR Managers from the Boroughs and Assistant Directors of various HR departments at the centre and the Director of Central HR. This innovation aimed to improve communication, allow interactions to be at a more personal level, explain the thinking behind initiatives and processes, and potentially allow HR managers to raise issues directly to the senior HR management thereby increasing the understanding between central HR and Borough HR managers. Not all these benefits were realised in practice. According to an interview, one reason was the size of the meeting, which involved 40-50 HR managers, which meant that communication tended to be mainly one way.

In 2003, Central HR rolled out a computer system (known as "MetHR") to integrate all the data collected by HR at local level. Previously, a range of personnel data was collected and stored on a number of different computer systems which were not interlinked. The rationale of the integrated system was to allow HR at Borough level to access all personnel data from one system, thereby saving time and improving information flows into decision making.

The high degree of centralisation and the 'command and control' culture appeared to limit the scope for innovation within the HR function at the Borough level. However, it was clear from the interviews that the HR manager was recognised as being very creative given the conditions under which the organisation operated. For example, the HR manager used the method of officer attachments to different parts of the organisation to develop police officers in order to overcome the constraints of limited resources and task overload. Several interviewees also gave examples of the creativity of the HR manager in being able to find solutions which prevented personnel problems from escalating.

Interconnections between HR and its Environment

The Council

Interviewees identified a number of interconnections between Corporate HR and the internal and external environment. Formal links were provided through the Head of Corporate HR's membership of various internal committees, links with the Lead HR Councillor, and via the Director of Resources who had responsibility for overseeing HR, and was a member of the Council Senior Management Team. The Head of Corporate HR was also an active member of SOCPO, the Society of Chief Personnel Officers in Local Government and the Civil Service, which brought him into regular contact with peers.

Membership of the Council Employee Joint Committee included the trade unions, Deputy Council Leader, Lead HR Councillor, other Administration Councillors and a Labour Party and a Conservative Party Councillor. One role of trade union representatives was to express the view and concerns of employees. The connection to the Deputy Leader and Lead HR councillor as members of the majority party was critically important, given their influence on the strategic decision making of the Council.

Unlike other Councils, the Lead Councillor rather than a Council Officer presented reports to the Strategic Committee. The role of the officer was to be present and answer detailed questions about any particular report. However, underlying the formal structures and processes were informal ones generally hidden from view but of critical importance. According to one interviewee in HR:

"I've seen people produce policy documents and present them up for committee without having kind of done any informal work and then go badly wrong for them ... actually the informal network is terribly important and often gets the business done. And ... [it] makes the formal approach much smoother, because everyone knows what's happening and just ratifies what you've been working on behind the scenes."

The Head of HR would often informally sound out ideas with the lead HR Councillor, Deputy Leader of the Council, senior Council management and HR service heads.

Unanticipated events sometimes arose from formal interactions due to network effects. For example, the Labour Councillor was sympathetic to the aims of a policy initiative on disciplinary rules presented to the Council Employee Joint Committee by the Head of HR, but which was being resisted by the trade union representatives. By acting as an informal go-between, this Councillor helped resolve the disagreement between the Head of HR and the trades unions, which led to the development of "a more constructive dialogue".

Some HR innovations appeared to strengthen interconnections within the Council, such as involving trades union representatives earlier in policy development and including line managers. According to one interviewee in HR:

"What we did want to start is getting the unions involved from the outset ... and thank goodness, they are! I think that's been hugely beneficial ... we're certainly getting their input early on, getting them working with operational managers as well as HR managers on a kind of multi-faceted task group ... [it] appears to be working much better."

HR linkages with external organisations were characterised by varying degrees of formality. The HR Business Plan identified 12 main external "partner organisations" and their contribution to HR. The single largest category were organisations providing training and assessment services, but also included those providing advice on pay and conditions, occupational health, equalities in employment and HR software. Linkages to organisations were apparent from the interviews to other partner councils on an e-government project, employment agencies (including a dot com recruitment company), with which discussions had been held on the issues/problems facing the council and exploring potential solutions, community relations forums (from which key individuals had been consulted on planned diversity programme for the Council), a nearby council which had been visited (to which the trade union representatives had been invited) to observe different working practices.

The Police Borough

In the period following initial devolution, the MPS was divided into four or five regions of London with a small number of HR Managers per geographical region. Strong horizontal links had been established between HR Managers with monthly meetings held with an MPS Business Manager. This Business Manager acted as an

intermediary between the central unit and those at the local level. Meetings were used to disseminate information and to identify problems at the local level. However, this network was lost as the number of Boroughs and HR Managers grew. Over time, the Central HR unit became the primary formal external link for Borough HR. Given the role of the Central HR in attempting to co-ordinate the activities of Boroughs and meet overarching goals, the nature of this link appeared to be primarily a downward flow of information, performance targets, instructions or policies from the centre to the Boroughs, whilst the Borough would send information (e.g. sickness levels, compliance on annual appraisals) back to the centre.

Borough HR was also connected to the MPS through the membership of the HR manager on the Borough Senior Management Team. A key relationship for the HR Manager was with the Borough Commander, who was in a strong position to influence decisions affecting HR and with whom there was a good relationship. The HR Manager also had links to a wide range of staff within the Borough due to contact with officers and staff in their personnel function role (e.g. providing advice, involvement in case conferences and so on). Connections between personnel at more junior levels and others within the organisation were more limited as these employees were involved in purely administrative roles. Informal links between the HR Manager and other HR Managers and specialists within the Met generally were often used to access ideas and advice.

Enabling/Disabling Conditions

The Council

A number of contextual factors acting as enablers for HR could be identified within the Council. We focus here on those relevant for Corporate HR. One was the perception of high competence of senior HR management by Councillors. Thus HR Senior Managers were regarded as “the experts” and left to implement policy decisions and take responsibility for operational matters. The autonomy of the HR function was also aided by the consultative culture of the organisation, whilst innovation could be seen to be encouraged by the no-blame culture within the organisation. An emphasis on inclusivity (e.g. the involvement of trade union representatives and operational managers) in the early stages of HR policy

formulation also appeared to aid the development of HR policies that were more likely to be acceptable and practical. Moreover, the change to Corporate HR adopting a more consultative and responsive approach to the Groups' managers and Group HR appeared to increase the acceptance of Corporate HR policies through other parts of the organisation. Another factor was the role of good personal relationships of the Head of HR in formal and informal networks within the Council.

Two main disabling conditions could be identified from the interviews and are mentioned briefly. One arose because a previous Lead Councillor for HR was an international HR consultant; during their period of tenure, there was much greater involvement by this member in the policies and operational aspects of HR in the Council. Due to this Councillor's 'persuasive' nature, the role of HR was tempered by what he wished (by influence through the majority party) to achieve; for instance, we were told that performance related pay was brought in for senior managers, against the judgement of the then Heads of HR; five years on after the Councillor's departure, this scheme has now been replaced by a traditional incremental pay scale.

The second, paradoxically, was the consultative and consensual culture of the organisation, a factor usually considered an enabler. Thus, according to one interviewee in HR:

"[whilst it means getting] a rounded view and the opinions of people before making a decision, which can have huge strengths, it also has huge weaknesses as well, because sometimes because of that consensual approach, it means that sometimes just [it] seems too slow moving."

In the context of a desire for consensus, trade unions appeared to have been able to slow down the adoption of a particular policy by withholding agreement. Since, according to a Councillor, the key role of the Joint Committee was:

"it's very much us listening to the unions, the unions listening to our point of view, or what we want to achieve, and what they want to achieve, and hopefully coming to an agreement somewhere along the line."

With the perceived advantage that at the level of the organisation this approach resulted in very low levels of industrial confrontation and strife.

The Police Borough

A number of enabling conditions were identified in the Police Borough. First, the length of experience of the HR Manager, and the high regard in which they were held within the Borough, meant that they were able to exercise more influence and be involved in more strategic issues than would otherwise be the case. Second, the perceived attitude of key members of the Senior Management Team towards the HR function (which was, in turn, affected by the HR Manager's 'reputational effectiveness' (Truss et al., 2002)). Third, the presence of the HR Manager on the Borough's Senior Management Team, which meant that they were party to strategic decisions made for the Borough and were therefore able to assess the HR implications at an early stage.

Disabling conditions which appeared to affect Borough HR included the heavy workload on the local HR unit, HR staff shortages, inconsistencies in policies issued from different parts of the MPS, low status/power of the HR managers vis-à-vis police officers, and pressures and goals which might conflict between central HR and Borough HR. Whilst devolved HR had advantages, a disadvantage was that this mode of operation relied on line managers taking responsibility for HR matters, and they needed to be supported and developed. This was problematic in an environment characterised by a high workload, and unpredictable and frequent change in priorities and operational requirements.

Discussion and Conclusions

A complexity perspective potentially provides new insights into the role and contribution of HR in organisations. This perspective draws attention to a number of factors. First, the importance of understanding the connections between the HR system with other systems inside and outside the organisation, the nature of these connections, and how they can be fostered. Second, the context of HRM, with a particular focus on identifying enabling and disabling conditions and how these change over time. Third, the importance of communication and interaction between network nodes within an organisation comprising key individuals and groups and their effect on HRM. Fourth, the suggestion that an effective HR system would

involve a central organisational core loosely coupled to peripheral units which could respond and adapt to local conditions.

Both the Council and MPS had adopted a devolved structure for HR comprising a central policy-making unit and decentralised local units. According to complexity theory, this arrangement could potentially deliver considerable benefits (Brown and Eisenhardt, 1997). Both, however, seemed to be problematic. In the case of the Council, coupling between the central and local HR units appeared to be too loose with each evolving along separate paths, leading to misunderstandings. Conversely, in the case of the MPS, the central and local units were very tightly coupled with generally a high degree of centralised control of the local units. This suggests that the optimal degree of coupling is intermediate between these two extremes, allowing two-way information flows and responsiveness from both the central and localised units in order to identify a common consensually-based trajectory.

An important part of the process in both the Council and the Police Borough were informal, social relationships. In both organisations, the role played by HR was facilitated through the senior HR professionals establishing links outside and across the formal organisational structure and hierarchy. In the Council, we saw how a participative approach with influential stakeholders such as unions and Councillors, was critical in achieving goals set by HR, reflecting the findings of Ashmos et al. (2000).

Conversely, in the Police Borough, it seemed that this was more difficult to achieve because of the strongly hierarchical nature of the organisation, reflected symbolically in the uniform and ranking of the officers. The HR function was regarded very much internally as a staff function, separate from the line police roles, rather than being closely integrated. Indeed, the only apparent point of integration was at the HR Manager level. Again, this was reflected in the different terms and conditions under which police officers (employees of the Crown) were employed, compared with the HR staff, who were subject to UK employment law. It would appear that this kind of environment has a disabling effect on the HR system at a local level, although the longitudinal and comparative aspects to our study will yield greater insights into this issue. This reflects prior research, which has shown clearly that the role played by

HR is heavily dependent on the context in which it is enacted (Truss et al., 2002; Paauwe and Boselie, 2002).

Another interesting finding concerned the tension between top-down and bottom-up developments and innovation. Complexity theories suggest that allowing freedom to innovate at all levels is critical to organisational success. This preliminary analysis of our findings suggests that the freedom to innovate at junior levels was curtailed in both organisations. In the Police Borough, the sheer volume of processing work for HR officers at a junior level, their dislocation from the rest of the organisation and relative inexperience meant that they did not have significant opportunities to innovate. At HR Manager level, the role was somewhat circumscribed by central edicts, and it seemed from our research so far that the opportunity for upward feedback and influence was limited, although a remarkable degree of influence had been achieved in the circumstances by the HR Manager through personal credibility. In the Council, on the other hand, there was some evidence from our interviewees that HR teams at the Group level in some parts of the organisation had developed independent practices that dislocated them from the rest of the organisation, rather than creating feedback loops that influenced central HR.

Overall, this study has provided some preliminary insights from the very early stages of our research project. There are clearly some important limitations; first, we have not collected all our data, so our findings are, at this stage, indicative. Second, the lack of a consistent specification of the dimensions of complexity theory means that operationalising the constructs involved is extremely difficult, and we are having to develop theory at the same time as testing it out. Third, the fact that our research sites are all located within the public sector imposes some constraints on the generalisability of the findings. Finally, the usual caveats concerning case study based research also apply. However, we feel that by attempting to apply complexity theory constructs to human resource management we may provide some extremely important insights into how the HR system contributes to organisational effectiveness over the longer term.

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