An investigation into whether there is a relationship between the transformational leadership behaviours of NHS Chief Executives in England and their organisation's performance?

A thesis submitted in partial fulfilment for the Degree of Doctor of Business Administration

by

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Abstract

This research study investigates the relationship of transformational leadership(Bass, 1985) with organisational performance (Sharma et al., 1990).

It is set within the context of the English NHS which is undergoing both considerable and radical change(DOH, 1997, DOH, 2000, DOH, 2005b) and framed within the paradigm of the New Public Management(Osborn and Gaebler, 1992). The role Chief Executives of NHS organisations play in delivering improvements in organisational performance during these times of great change is considered. The conceptual model derived from the literature suggested that transformational leadership behaviours were positively correlated with higher organisational performance at times of considerable change.

The study was undertaken using data collected about Chief Executives who had been in post for at least two years, and appraised by their immediate superior, the organisation's non-executive Chair. The Chair used the Multifactor Leadership Questionnaire [MLQ (5X)] to report on their Chief Executives transformational leadership behaviours (Avolio and Bass, 2004). The Chair reported also on the organisation's performance using the EXCEL performance excellence questionnaire(Sharma et al., 1999). The use of the EXCEL instrument was novel within the NHS.

The results indicated support for the theoretical conjecture that transformational leadership as measured by the MLQ (5X) is positively correlated with performance excellence as measured by the EXCEL instrument. Elements of the transformational leadership model required modification as a result of the data analysis. Following subsequent factor analysis a revised two factor leadership model comprising an 'Active' leadership and a 'Passive/corrective' leadership component was derived from the data. Contingent reward, identified within the theoretical framework as a transactional factor, was found to be both a transactional and a transformational component within this two factor model. The reasons for this are explored.

The impact of gender as a factor in leadership behaviour was explored and found to have no augmenting effect on organisational performance.

Tenure in post was considered and the data showed that Chief Executives in post for over four years had a higher positive impact on organisational performance compared to those in post for two to three years.

Areas for future research are identified arising from these findings.

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It is a truism that no thesis is written alone. Many travel the road with the doctoral student, feeling all the highs and lows, all hoping to reach the same point at the end – a successful conclusion to the years of effort. Without those fellow travellers the journey would be infinitely less rich and the reward less valued.

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Chapter 1

1.1 Introduction

"Great leadership is not a singular concept. On the contrary, it is a function of the circumstances in which businesses and their top executives operate" (Mayo and Nohria, 2005; p.49)

This thesis is about leadership. The circumstance in which leadership is played out and researched in this study is in the context of the English NHS facing continuous and radical change. Both leadership and healthcare are the subject of almost daily comment, in the press, on television, and other forms of media. It is as common a subject at work as the weather.

Yet leadership is almost the most elusive of concepts (Bennis, 2002). What purpose does leadership serve; how do we recognise it; is it focussed in a single individual or based on teams; is it only potent at the highest organisational level, or is it needed throughout the organisation; is it about personality, competence, or behaviour (Katz and Katz, 1978). All these questions still generate enquiry by researchers after tens of years of intensive research(Bohn, 2002). It's enduring ability to fascinate and "spawned an entire cottage industry: literally thousands of 'leadership experts' have made careers of testing and coaching executives, all in pursuit of creating businesspeople who can turn bold objectives – be they strategic, financial, organisational, or all three – into reality"(Goleman, 2000; p.78). It is one of the key driving forces for improving firm performance (Zhu et al., 2005).

Over the last fifteen years two main areas of interest have captured the research agenda: that of transformational leadership; and its relation to successful change. Both have sustained the interest of managers and researchers alike because of their promise of extraordinary individual and organisational outcomes (Eisenbach et al., 1999). The surge in interest in transformational leadership has provided a fulcrum for the field of leadership research (Bryman, 2004a).

It is also in these changing times that the call for leadership (and leaders) can be heard loudest as organisations seek ways of sustaining their competitive advantage in markets that appear to be changing constantly (Eisenhardt, 1989, Carnall, 2004, Smith, 2002). Transformational leadership has gained substantial support for the proposition that it has a positive effect on organisational performance (Hater and Bass, 1988, House and Shamir, 1993, Dvir et al., 2002, Bass et al., 2003, Podsakoff et al., 1996, McColl-Kennedy and Anderson, 2002, Elenkov, 2002, Zhu et al., 2005, Walumba et al., 2004), and in particular at times of considerable organisational change and uncertainty (Bass and Avolio, 1994a, Bryman et al., 1996, Sashkin, 1992, Kouzes and Posner, 1995, Tichy and Devanna, 1986, Kotter, 1990, Pawar and Eastman, 1997, Eisenbach et al., 1999, Waldman et al., 2001).

To add to these fields of study, emerging thinking on leadership highlights some frustration with, and over-focus on, top-level leaders alone, and almost a singular indicator of success – the financial bottom line (Higgs, 2002). This emerging line of thinking focuses on sense-making in organisations (Weick, 2001). Organisations now emphasise the need for leaders to take on new roles of facilitating, coordinating, and orchestrating the work of others. In addition employees have been placed in positions of self-management, and are held directly accountable for their performance. The work group or team is fast becoming the most common form of organisation within organisations so as to best accomplish complex corporate objectives (Prati et al., 2003). Leadership requires therefore, in the context of change, to focus on building the capability of people within the organisation to deal with continuous change (Conner, 1999).

Within this emerging school two common strands exist:

- The focus on studying what leaders actually do,
- The determinants of effectiveness includes the leaders impact on followers and their subsequent ability to perform (Higgs, 2002).

These factors coalesce in the key issue of the impact that leaders have on their organisation's performance through the motivation of its staff to perform beyond expectations, and therefore gain higher levels of performance(Kouzes and Posner, 1995, Bass, 1985). The direct relevance to the impact that higher performance has on patient care within the context of the NHS is explored below.

1.2 Why study these issues within the NHS?

In this section I will describe the reasons why studying Chief Executives within the English NHS is an important contribution to the field of leadership research. In doing so, issues facing the NHS in terms of service transformation will be touched upon, and the current practise of performance measurement for judging organisational improvement and productivity.

In a speech to health service staff in 2004, the Permanent Secretary at the Department of Health and Chief Executive of the NHS, Sir Nigel Crisp said:

"Leadership for improvement is hard. It will often mean helping people to do things they didn't want to do; to change ingrained patterns of work, take them out of their comfort zone. Sometimes too it can mean taking on vested interests in the interests of patients and the public. Leadership will require courage and endurance." (Crisp, 2004).

This focus on leadership was echoed in a further Governmental publication concerning care given to patients requiring emergency care:

"Developing leadership is an integral part of the Government's Modernisation Agenda and the NHS Plan. Effective leadership is crucial for improving the quality of care to patients, for developing staff and for creating the vision to take the modernisation agenda forward" (DOH, 2005c, p.1)

The requirement for change by all Governments for the NHS to improve, makes the NHS one of the most visible and politicised institutions, either locally or nationally with the ensuing challenge for NHS leaders (Dawson, 1999, Stewart, 1996, Alimo-Metcalfe, 1998c). The intent of recent Government publications underscores the degree and speed of change asked of the Service (DOH, 2005b, DOH, 1997, DOH, 2000, OfficeforPublicSectorReform, 2002). In addition the most recent governmental developments in performance measurement, improvement and star ratings for hospitals have energised the whole debate over organisational effectiveness and performance (Radnor and Lovell, 2003, Mullen, 2004, Freeman, 2002).

The transformation of the National Health Service over recent years can be underscored in Figures 1.0-1.3 which show improvements in performance.













Patient survey on quality of care



Figure 1.3 (DOH, 2005a)

In addition there are some 79, 000 extra nurses and 27, 000 extra doctors employed within the NHS in 2005 compared to 1997 (Hewitt, 2006)

All these indicators highlight the enormous changes in patient's experiences of the NHS. They are waiting less time for treatment and living longer especially of the key causes of premature death; heart conditions and cancer.

However these improvements have been bought with considerable increases in expenditure much of which has been used on pay costs. Government figures show that of the £3.6 billion extra spent on hospital and community expenditure in England in 2005/06, only some £475 million was spent on service improvements (13%), whilst 50% was spent on higher pay (Hawkes, 2006).

In determining the progress of reform it is recognised that measuring how health service organisations perform and what constitutes success is complex and fraught(Robinson and Exworthy, 1999). In five years time total spending on all healthcare services in the UK will reach approximately £144 billion or in other terms £1 in every £10 circulating in the entire economy will be devoted to healthcare (Appleby and Devlin, 2004). 'What do we get for our money?' is a familiar cry to public servants no matter whether they work in education, local / central government, or the health service. The development of performance indicators to help demonstrate value for money, or progress against key targets, is a strong element of Governmental approaches in this area (HealthcareCommission, 2004). Notwithstanding these imperatives, key questions exist as to whether performance indicators are there for judging organisations or to help them learn (Mullen, 2004). The main method for showing performance in the NHS up to 2006 has been the publication of Star Ratings for health service organisations (HealthcareCommission, 2004). These ratings are to be replaced in 2006 with a broader spectrum of measures designed to more adequately capture performance (HealthcareCommission, 2005). The Kings Fund, a leading policy think-tank, commented in a press release that:

'...we are glad to see the back of Star Ratings. They were a useful first move towards producing performance management information for the NHS, but they are of little use to patients and health professionals, and are too volatile to represent a proper assessment of NHS performance. (Dickson, 2005)'

The use of productivity as a measure of performance also has many difficulties. Using existing standard measures of NHS inputs and outputs reports indicate that the NHS has seen a decline in its productivity of about 1.59% a year since 1998/99 (Dawson et al., 2005). This is not surprising given the unprecedented increase in NHS expenditure, much of which has gone on pay costs, but also because the NHS collects very little information about what actually happens to patients as a result of their contact with the health service. For example the data does not take fully into account improvements in quality – for example, if a patient is given more time to talk to their GP, this will count as a fall in output.

The focus of the drive for continuing the transformation of services and improving value for money/productivity places NHS Chief Executives at the forefront of attention as leaders. As an NHS Chief Executive, now working in academe, I am specifically interested in the contribution that my leadership peer group can make to successful organisational adaptation for the changes required. The emphasis on leadership here is from the viewpoint of the transformational leader, given the connection between this leadership approach and successful change. As Ferlie et al. (1996) suggest in their critique of public services management, leaders who cannot inspire others to follow will continue to fail.

The focus on the Chief Executive within NHS organisations represents the reality of their executive accountability for the organisations performance and the popular mythology that they 'carry the can' when things go wrong. Chief Executives represent the pinnacle of the managerial ladder in each NHS organisation, the 'accountable officer' responsible to Parliament for the use of public monies (Exworthy and Robinson, 2001). They are commonly the officer to be dismissed should something go dramatically wrong in a single event, or where performance is not up to scratch over a period of time. The Chief Executive's role has been described as managing the internal dynamics of the organisation (Exworthy and Robinson, 2001). From personal experience it is these internal dynamics of strategy, process, focus, alignment of objectives, tactics, which engages the life of health service Chief Executives. Yet how should they be judged on their contribution to organisational success or failure – by what measures and by whom.

As once a Chief Executive myself, with all the stresses and strains of the job still resonating in my mind, and indeed throughout the time of this research, what I wanted was clarity about those aspects of our 'business' that we needed to be clear about in terms of strategy, what processes would we use to enact it successfully, and how would we know how well we were doing. I wanted to know on what basis my personal contribution to this would be evaluated, and by whom. Perhaps I was seeking a linear rational approach to management review when more abstract, swampy, approaches might be best.

1.3 Professional reasons for an interest in organisation and leadership

In this section I will explain my professional reasons for studying the field of leadership behaviour and organisational performance.

My career to date has been exclusively focussed on the management of public health services and hospitals in particular. Until recently I was Chief Executive at the Nottingham City Hospital, a major University teaching hospital NHS Trust employing 6000 staff in the East Midlands. Using the existing method of judging performance, the hospital Star Rating mechanism, this Trust received the top rating for the last three consecutive years. It could however be argued that this Star Rating approach can be manipulated and lead to perverse incentives (Mullen, 2004). This appointment followed a period as Merger Project Director for the Leicester Hospitals Merger Project. The project was concerned with the integration of three teaching hospitals in Leicester into a single NHS hospital Trust employing some 9000 staff, with an annual budget of over £300 million. At the time it was the largest hospital merger project in the U.K. The three existing hospitals had, in my opinion, very different cultures and in their Chief Executives very different leadership styles. This required me to vary my approach to each Chief Executive to maximise the chance of a change strategy towards a successful merger being achieved (I had no authority over them, I was a peer). I recognised that each had qualities of leadership but those alone seemed inadequate to explain the perceived relative success or effectiveness of each.

The Nottingham City Hospital was my third Chief Executive position. Prior to moving to Nottingham from the position as Merger Project Director I was the Chief Executive of another University hospital in Leicester and a smaller district general hospital in Derby. When I considered my experiences as a hospital Chief Executive through the time of many Secretary's of State for Health and combined these alongside my experiences as a Merger Project Director for the Leicester Hospitals Merger Project, I became truly fascinated in the nature of leadership, organisational context and the individual, as these appeared to be factors in how the Chief Executive (CEO) needed to operate and how well they succeeded. This may not be so surprising - it may be self evident that the CEO in dissimilar organisations might adopt different management behaviours depending on the situation faced by the organisation, its culture, background etc., and their particular 'personality' (Schein, 1992). In essence, this situational approach to leadership has a considerable research history (Fiedler, 1967, Hersey and Blanchard, 1969) and continuing calls for context rich research to be exploited (Osborn et al., 2002, Dargie, 2000).

When I was a practising NHS Chief Executive I recognised the significant changes faced by the NHS, both from a political and public expectation viewpoint (DOH, 2000, DOH, 1997, Milburn, 2002). Most organisations worldwide are faced with considerable pressure to adapt and change to remain in 'business', and I acknowledge that this applies both to the public services as well as the private sector(Bichard, 2000). The focus of attention therefore within this study will be within the English NHS in the context of significant change (Nadler and Tushman, 1990, Nadler and Tushman, 1989, Nadler et al., 1995, Nadler and Heilpern, 1998, Tushman and Romanelli, 1985, Tushman et al., 1986, Tushman and O'Reilly, 1996).

As remarked earlier, health services are amongst those dramatically affected by the demand for change, and in particular the extent and rapidity of change (Stewart, 1996, Langlands, 1999, Berwick, 1998). However when I was a practising Chief Executive I was acutely aware of the performance improvement needed to satisfy the expectations of patients, staff and politicians(Langlands, 1999, Berwick, 1998). There are however unique structural and cultural obstacles within the public service, and the NHS specifically, which create particular leadership difficulties (Collinson, 2002). The NHS has multiple stakeholders. In a leadership context, Chief Executives have to balance the differing perspectives of clinicians and management, and sometimes between different professional groups. Staff may be reluctant to envisage all the possible changes given the possible impact on their daily lives. Without a compelling vision of how the change will improve the future and trust in the leader, it may be difficult to expect them to put themselves or their patients on the line. These same leaders also need the space to lead the change and reform needed by the Government to show the public that the NHS is continuing to be more responsive and efficient (Lloyd, 2006).

The pace of change is becoming faster, and all organisations have needed to be flexible and responsive, which has led to less job security (Rifkin, 1996). Coupled with this is the erosion in the vocation for public service felt by many, such as a desire to add social value (Steele, 1999). It has been argued that the direct effect on public service leaders is that they are increasingly dissatisfied in an increasingly difficult job with a demoralised workforce(Worrall and Cooper, 1998).

The intellectual challenge therefore for CEO's in managing this complex set of dynamics requires considerable leadership attributes(Smith, 2002).Lessons learnt from the study may well have practical significance for the training, development and recruitment of health service CEO's, and the political response to organisational failure. Indeed a recent study by Cranfield University on behalf of the NHS found that two-thirds of NHS CEO's believed that there is a direct link between investment in senior leadership development and the performance of the NHS(NHSLeadershipCentre., 2003a).

In determining the research area, prior to beginning substantial work, the question most prevalent in my thinking was do healthcare organisations with transformational Chief Executives have higher organisational performance? This single question was elaborated through the research process, tackling the key issues of:

- Why choose transformational leadership?
- Why concentrate on the CEO alone, as opposed to the top team?
- How will we know if the CEO is a transformational leader?
- How can we evaluate performance, and by whom?
- How can we relate the two concepts of transformational leadership and organisational performance in a meaningful way?

1.4 Personal reasons for undertaking the research

Finally in this section I will explain my personal reasons for undertaking a doctorate in this area of study. I will seek to combine the earlier sections with some thoughts on personal career. In conclusion I will describe the originating research question that spurred the research into the literature.

My career to date has focussed on public services management and health services management in particular. In considering my future career options, I could see considerable merit in having a detailed grasp of organisational strategy, change management, and leadership styles and behaviour.

The opportunity to take my career further in an academic environment opened up for me when offered the opportunity to become Director of the new Centre for Health Improvement and Leadership at the University of Lincoln. The synergy of my NHS knowledge with research training through the doctoral process was critical in deciding to take the offer.

The application and translation of research findings has proved a remarkably beneficial and occasionally irritating process of intellectual engagement with the literature and the way it is conveyed to me as a practitioner. I now see the pressures upon academics through their own performance evaluation system, the Research Assessment Exercise (HFCE, 2005). The push in the RAE is to gain the maximum number of quality point-scoring activities within research active staff as this determines the level of funding the University or institution gains in the following 5 year period. To do so require publication in high quality peer reviewed journals, books, conference presentations or editorship etc. In essence it is the academic community reviewing itself. Whilst peer-review has much merit it is not consumer orientated. As a practitioner I was the consumer of the research but much of it is not translated for me to use easily in my context and environment.

The application of theory to day-today practise was especially exciting. This fits with the argument as to how best practice is, or is not, applied in healthcare management. It can be argued that the flow of systematic reviews will better inform healthcare management and policy making by highlighting information that is relevant for decisions (Lavis et al., 2005). Others concur and promote the notion that instead of training health service managers to understand the language of research and review, we might just create more translators (Burns, 2005). I see this as a role I can play.

The concept of 'translation' can however have many facets. The career move from operational management with an interest in the application of theory, to theory with an interest in its application to operational management is but one. Others have reflected astutely on the *practitioner as researcher* concept (Homa, 1998). The process of 'personal transformation' described by Homa through his doctoral research at the same time as undertaking a full-time NHS Chief Executive job illustrated by the capacity to better interpret events with plasticity of thought. The recognition of this capability through the educative and stretching process of critical research training has felt to have obvious benefits as a healthcare management practitioner, and now erstwhile academic and management developer.

The issue of what is the problem and why are we trying to solve it is the nature of this thesis (Landry, 1995). The problem is what can be found out about English

NHS Chief Executives transformational leadership behaviours, and where such behaviours are strong, does it make a significant difference to their organisations performance.

In the next chapter will be a review of the literature on leadership and of measuring organisational performance. It will conclude with a conceptual model to be tested through a research design.

2.1 Introduction

This chapter will cover the relevant literature of the concepts of leadership and organisational performance.

In reviewing the literature in these fields of research, the following process will be used:

- 1. The issue of public sector leadership will be framed in the context of global trends in public services.
- 2. There will be a general review of the history of leadership over the last 70 years or so. This element will conclude with contemporary emergent thinking on leadership.
- 3. The impact of gender will be considered as to whether this is an augmenting factor in leadership behaviours.
- 4. The concept of organisational performance will be reviewed with reference to leadership and its measurement in the context of non-profit organisations and the NHS in particular.
- 5. This chapter will conclude with a conceptual model which will focus on what relationship exists between transformational leadership and organisational performance. Contained within this conceptual model will be the research question and hypotheses to be explored in the research study placed in the context of health service organisations within the English NHS. This model will act as an introduction to the following chapter on research methodology and design.

2.2 Organisational context and environment

The choice of health service organisations within the English NHS as the unit of analysis reflects that the service is facing significant changes both in the way it is organised and in the expectations that the public have of it (DOH, 1997, DOH, 2000, DOH, 2005b).

The case has been made for more leadership in the NHS to deal with greater uncertainty, increased complexity, the constant need to be able to adapt to change, and in the context of limited resources (Alimo-Metcalfe, 1998c, Stewart, 1996, Langlands, 1999, Milburn, 2002, Goodwin, 1998, DOH, 2005c). The Government has called for a transformation of public services as shown in the following quotations:

"Citizens... want to know how the performance of their local services compare with those elsewhere, the exam results of schools, the performance of hospitals... Rightly they will not tolerate failure or endure chronic underperformance." (p.9)

"Performance targets have an important role to play in measuring how far these standards are being met" (p.12)

"Public services reform requires support for and development of excellent leaders capable of tackling poor management and inspiring ambitious performance" (p.22) (OfficeforPublicSectorReform, 2002).

These quotes illustrate the growing momentum for radical change and leadership to be seen together at Governmental level. It is in this context that this research is embedded.

The UK NHS is one of the largest organisations in the world, and the largest in the UK. It was established in 1948 by the reforming post-war Labour/socialist Government with the aim of providing free health care at eh point of need irrespective of wealth or position. It was the first of its kind in the Western world. Though financed through general taxation and a national insurance contribution, it was not long before the scale of the funding task was clear. Almost immediately, in 1949, charges were made for certain items such as prescription

charges (Klein, 2001). Since 1949 and the introduction of prescription charges ended the purity of the socialist conception of health care, the dominating issues have been financial resources and politics (Goodwin, 1998). However with the advent of the *New Public Management* (Osborn and Gaebler, 1992, Pollitt, 2002, Ferlie et al., 1996) comparisons between public and private sectors when it comes to managerial, economic, performance, and leadership issues has intensified.

Apart from its size what differentiates the NHS from other organisations? First there may be differences in the management and accountability of the public and private sectors. Second, there is the impact of the strong professional base of the NHS(Goodwin, 1998). This latter point is influential in determining the receptivity of organisations to change especially where that change is transformational(Pettigrew, 1987, Pawar and Eastman, 1997). Third, at its simplest level, the main purpose of the private sector is to provide a product or service which is sufficiently attractive to potential customers to cause them to buy it. In business there is a financial bottom line and although profit and loss are not enough by themselves to judge performance, at least they are tangible indicators(Goodwin, 1998, Kaplan and Norton, 1996b).

The ambiguity of accountability of public sector managers means that they must devote a lot of energy to managing the interface between their organisation and the political process; a process which has direct influence on public sector managerial behaviour(Goodwin, 1998, Bichard, 2000, Pollitt, 2002). It is more highly subjective and context rich making objective measurement of performance more complex and arguably less valid (Freeman, 2002, Mullen, 2004, Chang et al., 2002)

The Governmental emphasis on organisational performance has been stressed previously in this chapter (OfficeforPublicSectorReform, 2002). As a response to perceived difficulties in creating competitive pressures within public services, the 'New Public Management' (NPM), posits an essentially 'entrepreneurial' model of public services management and leadership (Osborn and Gaebler, 1992).

The general elements of the NPM are as follows:

- A shift in the focus of management systems and management effort from inputs and processes to outputs and outcomes,
- A shift towards more measurement, manifesting itself in the appearance of batteries of performance indicators and standards,
- A preference for a more specialised, lean, and flat, and autonomous organisational forms rather than large, multi-purpose, hierarchical bureaucracies,
- A widespread substitution of contract or contract-like relationships for hierarchical relationships
- A much wider than hitherto use of the market or market-like mechanisms for the delivery of public services) including privatisation, contracting out, the development of internal markets etc.,
- A broadening and blurring of the 'frontier' between the public and private sectors
- A shift in the value priorities away from universalism, equity, security and resilience, and towards efficiency and individualism.
- A shift to being close to customers

(Adapted from Pollitt, 2000; 2002)

Further more, within the NPM model 'reinvented' government will display a distinctive approach in a broader way. In addition to those mentioned above they will:

- 'steer not row', i.e. become more concerned with strategy and less with carrying-out
- Act in anticipatory ways for a host of public problems prevention is better than cure (Pollitt, 2000)

Before one can assess evidence about impacts of reform processes, it is important to know what kind of thing is going to *count* as a result. This ties back to earlier references to externally judgmental decisions based on non-summative 'objective' measures (Freeman, 2002, Mullen, 2004). In the NPM results are assessed from any combination of the following:

- What savings have been made (reduced budget appropriation)
- How have processes been improved (faster, more accessible services, quicker turn-around times, 'one-stop shops')
- Has efficiency been improved (better input/output ratios)
- Is there greater effectiveness (less crime, poverty, functional illiteracy, homelessness, drug abuse, more contented and trusting citizens)
- Is there an increase in the overall capacity/flexibility/resilience of the system as a whole (e.g. through the recruitment and training of more skilled, more committed public servants)

(Adapted from Pollitt, 2000)

The NPM raises a number of important questions of how public service leaders assess the performance of their organisations and how they themselves are appraised accordingly (Javidan and Waldman, 2003), and the relevance of transformational leadership which some argue is more prevalent in public sector organisations (Lowe et al., 1996) especially those such as the NHS facing radical change (DOH, 1997, DOH, 2000, DOH, 2005b). This emphasis on change critically introduces the behaviours associated with receptivity or resistance to change (Pawar and Eastman, 1997, Nadler and Heilpern, 1998, Tushman and O'Reilly, 1996, Kelman, 2005).

Kelman (2005) builds on Osborn and Gaebler (1992) through his major study of the way the United States Government Administration is attempting to effect change and gain long-term improvement. He highlights the difficulty of changing behaviour in government which he argues is particularly resistant to change. Top leaders had a profound effect on energising the front-line to take the opportunity

of change. Top leaders provided the authorisation to the voice for reform. They provided succour and support for the risks ahead for the change vanguard, encouraging those opposed to, or sceptical of, reform to recognise the change afoot and leave. The process of reinventing Government he describes acted at both the organisational and individual level.

It should however be noted that researchers and practitioners argue that the results of major administrative reforms, such as the NHS is undergoing (and promoted by the NPM ethos) usually cannot be seen for three years or more after their adoption. And so at each step the reform project may fail, or undergo significant adoption and modification, or collide with some other set of priorities, or just quietly stall and fade (Pollitt, 2002).

The connection of the NPM to transformational leadership, and organisational performance (especially within the NHS) is explored in the next section.

2.3 A review of the literature on leadership.

This section explores the concepts and theories of leadership from an historical perspective and, as a subset, the research on the relevance of gender to leadership.

Interest in the nature of leadership has been one of the most enduring and popular areas of research over the last ten years (Alimo-Metcalfe, 1998b, Bryman, 2004a). The literature on leadership has over 5000 studies listed with hundreds being added each year (Yukl, 1998). Indeed interest in leadership has a long history. In 1974, one of the foremost researchers on leadership commented:

"Four decades of research on leadership have produced a bewildering mass of findings.... The endless accumulation of empirical data has not produced an integrated understanding of leadership" (Stogdill, cited in Yukl, 1998; p.493).

In order to make sense of this burgeoning field of literature a brief history of its development is detailed below.

2.4 A brief history of leadership research

In order to determine why transformational leadership behaviour, rather than any other leadership approach, is chosen for emphasis in this thesis, this decision needs to be seen in the historical context of leadership research.

Period	Approach	Core Theme
Up to the late 1940s.	Trait approaches.	Leadership ability is down to personal qualities or innate in the individual.
Late 1940s to the late 1960s.	Style or behavioural approaches.	Leadership effectiveness is to do with how the leader behaves and their style of leadership.
Late 1960s to the early 1980s.	Contingency approaches.	It all depends; effective leadership is affected by the situation/context in which the leader is operating.
Since early 1980's	New Leadership approaches	Leaders need vision
Since early 1990's	Emergent theories of leadership sense making	Leaders as builders of capability within their organisation to deal with continuous change

Table 2.0: A basic historical taxonomy of leadership.

(Adapted from Bryman, 1992)

Each period of research will now be explored in more detail to illustrate the development of theory with a critique of their relative strengths and weaknesses

2.41 Trait approaches

The first major research-based approach to studying leadership took place between the early 1930s up until the late 1940s and focussed on trying to identify what were the distinguishing characteristics or traits of great leaders. Three broad types of trait were addressed. Firstly, physical elements such as height or weight, age or appearance. Secondly, ability such as intelligence, scholarship, knowledge, and fluency of speech. Thirdly, other personality features such as self-confidence, emotional control, and inter-personal sensitivity (Bass, 1990b). Questions asked included: -

'What traits distinguish leaders from other people?' 'What is the extent of those differences?' (Adapted from Stogdill, cited in Bass, 1990; p.38)

Pure trait theory fell into disfavour, as, despite the generation or so of such investigations, the results were inconsistent. Some studies found that individuals perceived as having leadership qualities were more extroverted; others suggested that they were more introverted, whilst some studies found no significant differences. Relatively few trait studies included measures of leader behaviour (Yukl, 1998). Personal observation may bear out that being either an extrovert or an introvert does not in itself determine leadership; rather it is the behaviour one adopts in different situations that contributes to effectiveness in a leadership role (Yukl, 1998). It was also concluded that both person and situation had to be included to explain the emergence of leadership (Stogdill, cited in Bass, 1990). It is recognised that trait theory is intuitively appealing. It fits clearly with our notion that leaders are the individuals who are out-front and leading the way in our society. They are special kinds of people, with gifts who can do extraordinary things. It is also argued that the trait approach has a century of research to back it up. One other observation of trait theory is that it is not a useful approach to training and development for leadership. Even if definitive traits can be identified, teaching new traits is not an easy process because traits are not easily, though never, learned (Doh, 2003b).

Within the field of trait theory few characteristics are seen as more valued, or valuable, in modern Western Society than intelligence (Judge et al., 2004). Behavioural scientists have long considered intelligence to be a strong predictor of leadership and success in the job (Rubin et al., 2002, Atwater et al., 1999). From a theoretical viewpoint there are many reasons to believe that intelligence is related to leadership. Studies have shown that intelligence is one of the best predictors of general job performance and stronger for complex jobs (Schmidt and Hunter, 1998). Furthermore, leaders are responsible for such tasks as developing strategies, solving problems, motivating employees, and monitoring the environment (Fiedler and Garcia, 1987). Creativity is another mechanism linking intelligence to leadership (Jung, 2001). Leaders are therefore both better problem solvers and likely to be more creative and foster creativity in their followers (Judge et al., 2004).

It is important to consider objective and perceptive measures of leadership. This arises from the viewpoint that intelligence may cause a leader to appear as leader-like (Hogan et al., 1994). If individuals believe that leaders are endowed with certain characteristics, then when individuals observe those characteristics in others, they infer leadership or leadership potential to exist (Judge et al., 2004). Appearing smart may be more important than being smart (Rubin et al., 2002). Perceptual measures of intelligence and leadership may produce higher correlations than would objective measures of these constructs.

Some caution should however be applied to these areas of study. There are disagreements over the definition of intelligence (Matthews and Zeidner, 2002) and to some extent its operationalisation (Bommer et al., 1995, Rubin et al., 2002). Opposing studies show that IQ at best contributes 20% of the factors that determine success in life (Goleman, 1996, Hernstein and Murray, 1994), or that whilst leaders tended to be more intelligent than the average group members, they were not the most intelligent, thereby arguing that a minimum baseline or threshold of IQ is necessary for effective performance and that other augmenting characteristics are needed for outstanding performance (Bahn, 1979). Nor does considering intelligence in a narrow way assist conceptually given the emergent school of leadership thinking referred to later that taps into other forms of

intelligence, such as social intelligence (Thorndike and Stein, 1937), emotional intelligence (Salovey et al., 2001, Goleman, 1995, Bar-On and Parker, 2000, Higgs and Dulewicz, 1999), and the whole field of multiple intelligences which can include linguistics, spatial, inter-personal and intra-personal intelligence as examples (Gardner, 1993, Gardner, 1999). Emotional intelligence in particular will be considered later in this chapter both from the viewpoint of its potential links to transformational leadership and also to gender (Mandell and Pherwani, 2003).

However out of this abundance of research has emerged a body of data that points to the important role of various personality traits in the leadership process (Northouse, 2001). The focus exclusively on the leader, rather than the followers, the situation etc. gives us a deeper and more intricate understanding of how the leader and his or her personality are related to the leadership process. Indeed trait theory has remerged in the writings of Goffee and Jones (Goffee and Jones, 2000) and Hogan and Hogan (Hogan and Hogan, 2001) as part of the emergent theories of leadership sense making. Bennis (Bennis, 2002) has restated a number of traits he believes all leaders have – under all conditions:

- Leaders must provide direction and meaning to their staff
- Leaders have to convey some sense of optimism and hope
- Leaders have to generate and sustain trust
- Leaders have to engage followers in shared meaning
- Leaders have to show results

2.42 Style or behavioural approaches

From the late 1940s to the late 1960s, researchers moved on from the limitations and inconsistency of trait theory to new work on the aspect of style and the behaviour of the leader. Much of the early work in this area was done in the pioneering programmes of the Universities of Ohio and Michigan State.

Research at Ohio State University indicated that effective leaders had two main behaviour characteristics: -

- 1. Consideration.
- 2. Initiating structure.

Consideration was described as the degree to which the leaders act in a supportive and friendly manner, showing concern for their subordinates and looking after their welfare. Initiating structure is the degree to which the leader defines and structures his or her role, and the role of their subordinates to the attainment of the group's goals. However these studies showed that these two behaviours were relatively independent of each other (Yukl, 1998). This means that effective leaders could have high consideration and low initiating structures and vice versa. However it is probable that most leaders would be somewhere on the continuum between the extreme high and low scores.

Much of the research was sourced from questionnaires designed by the researchers to assess the leader's behaviour by asking subordinates for their views on their leaders. Such questionnaires can be susceptible to several types of bias and error e.g. the use of ambiguous terms can be interpreted by respondents in different ways (Luthans and Lockwood, 1984). Other concerns include distortion by stereotypes, and implicit theories about what behaviours occur together (Rush et al., 1977, Eden and Leviatan, 1975), or where the subordinates did not actually see the behaviours on display (Green and Mitchell, 1979). When all of these sources of error are taken together it is apparent why retrospective behaviour questionnaires completed by subordinates may have their limitations as a means of measuring leader behaviour. It should be noted however that recent work on 360-degree feedback might correct some of these limitations (Alimo-Metcalfe, 1998a).

The Michigan University studies were undertaken at the same time as the Ohio research. The focus in Michigan was the link between leader behaviour, group processes and group performance. The methodology used was a collection of field studies as opposed to solely subordinate questionnaire responses about their leaders. Likert (Likertt, 1961) summarised the results by characterising effective and non-effective leaders by three behaviours, not two, as in the Ohio studies: -

- Task orientated behaviour, where effective leaders were shown not to be doing the same work as their subordinates. Instead they concentrated on aspects similar to initiating structure behaviour.
- Relations orientated behaviour, where the manager set goals but left discretion with the subordinates, and supported them to see the experience as building and maintaining the subordinates' sense of personal value and importance.
- 3. Participative leadership, where managers make extensive use of group supervision, guiding discussion and keeping it supportive, constructive and problem solving orientated.

Yukl (Yukl, 1971) extended this work to a three-factor taxonomy: -

- 1. Task orientation.
- 2. Relations orientation.
- 3. Change orientation, where the leader does things that are primarily concerned with improving strategic decisions, adaptation to change, and gaining commitment to change.

This latter characteristic is especially relevant to later references in this paper to transformational leadership.

The style approach makes several positive contributions to our understanding of the leadership process. Firstly, it marked a shift from a focus on the personality characteristics of leaders, to what they did, and how they did it (Likertt, 1967, Yukl, 1971). Secondly a wide range of studies have validated and given credibility to the approach(Yukl, 1997, Blake and McCanse, 1991, Boyatzis et al., 2000, Goleman).

Criticisms of the approach focus on its tendency to look for simple answers to complex questions (Yukl, 1997), and that leadership behaviour is woven together into a complex tapestry such that the whole is greater than the sum of its parts (Kaplan, 1986).

2.43 Contingency approaches

Much of the early leadership research therefore focused on the behaviour of the leader with subordinates, outside of the context in which the parties worked. Under which circumstances it is most appropriate to adopt any particular combination of behaviours framed research that is known as Situational or Contingency Leadership theory.

Fiedler (Fiedler, 1967) argued that the most important variables affecting the effectiveness of a leader are: -

- The degree to which the task is structured (with respect to goals, methods, standards expected).
- The quality of leader-subordinate relations.
- The position-power of the leader (the power the organisation confers on the individual to get the job done).

In determining this approach Fiedler studied many different leaders who worked in different contexts, primarily military organisations. He assessed leader's styles, the situations in which they worked, and whether or not they were effective. After analysis Fiedler was able to make empirically grounded generalisations about which styles of leadership were best and which styles were worst for a given organisational context (Fiedler, 1967).

This contingency approach was also reflected in the work of Lawrence and Lorsch (Lawrence and Lorsch, 1967). The basic assumption underlying their work is that internal organisational variables are in a complex interrelationship with one another and with conditions in the environment.

Contingency theory has several major strengths. First it is a theory that is supported by a great deal of empirical research (Peters et al., 1985). Second, contingency theory has broadened our understanding of leadership by forcing us to consider the impact of situations on leaders. Third, contingency theory is predictive and therefore provides useful information regarding the type of leadership that will most likely be effective in certain contexts. Fourth, this theory

is advantageous because it does not require that people be effective in all situations (Northouse, 2001).

There are however a number of criticisms can be applied to contingency theory. First, because it fails to explain fully why individuals with certain leadership styles are more effective in some situations than others. Fiedler calls this a "black box" problem because a level of mystery remains why this should be so (Fiedler, 1993). A second criticism relates to the instrument that Fiedler uses the LPC. It does not correlate well with other standard leadership measures, does not seem valid on the surface, and is not easy to complete correctly (Northouse, 2001). A final criticism is that contingency theory fails to explain adequately what organisations should do when there is a mismatch between the leader and the situation in the workplace. Because it is a personality theory, contingency theory does not advocate teaching leaders how to adapt their styles to various situations as means to improve leadership in organisations (Northouse, 2001). Whilst Fiedler argues that leadership style is a relatively enduring characteristic of the leader, and thus the job should be modified to take this into account. Hersey and Blanchard suggest that leadership style and flexibility can be developed (Hersey and Blanchard, 1969).

Another situational variable identified by researchers Hersey and Blanchard (Hersey and Blanchard, 1969) is the 'maturity' of the follower. The 'maturity' of the follower relates to two aspects: their competence and experience in a particular role/activity and their degree of self -confidence. Depending on where the follower is currently in relation to a particular task/activity, a particular combination of task and relations behaviour is required. This is an important distinction between the premises underlying the two models. Hersey and Blanchard's Situational Leadership Theory, whilst popular, has continuing problems that challenge its theoretical validity and limited pragmatic utility (House and Aditya, 1997). Others argue that it suffers from a continued lack of a sound theoretical foundation of the hypothesized relationships among variables in the model (Graeff, 1997).

Context/situational elements of leadership theory are still acknowledged however as an important component of leadership research(Goffee and Jones, 2000, Bass, 1999, Osborn et al., 2002).

As most of the earlier leadership approaches had problems such as inconsistent findings, measurement problems and the problem of causality, from the mid 1970s a major paradigm shift occurred in leadership research.

2.44 New Leadership approaches

The New Leadership paradigm could be argued as a reflection of the societal and economic context of its time. The traditional approaches to leadership could not explain how to respond to the new challenges of a turbulent and rapidly changing environment (Alimo-Metcalfe, 1998). The impact of globalisation, the creation of 'virtual' teams, the focus on the needs of consumers, downsizing, and the development of organisational networks, forced a different focus on the leadership required to ensure organisational survival. This 'New Leadership' approach consists of a number of theories all of a common genre (Bryman, 1992, Shamir et al., 1993). They have several common characteristics: -

- They all attempt to explain how leaders are able to lead organisations to attain outstanding accomplishments such as moving their companies to a position of continuous success despite environmental and other characteristics that may prevent them from doing so. Corporate turnarounds of failing companies against the odds or major figures in political history fall into these categories.
- These theories try and explain how certain leaders are able to obtain extraordinary levels of staff motivation, admiration, trust, respect, loyalty and commitment.
- They stress symbolic and emotionally appealing leader behaviours such as vision, empowerment, image building, risk taking, support and intellectual stimulation.
- They emphasise emotions and values.

 Lastly, they gain from their staff identification with their vision, values and improved staff satisfaction and performance (Bryman, 2004a, Burns, 1978, Bass, 1985, Conger and Kanungo, 1987, Bennis and Nanus, 1985, Kouzes and Posner, 1987, Westley and Mintzberg, 1989, Bryman, 1992, Podsakoff et al., 1996, Berson and Avolio, 2004).

Within the New Leadership paradigm there are a number of concepts such as charismatic leadership (Conger, 1989, House, 1971), visionary leadership (Sashkin, 1988) and transformational leadership (Bass, 1985). Whilst there are a few differences among these different concepts, all share the view that outstanding leaders have the ability to make a substantial emotional impact on subordinates (Javidan and Waldman, 2003).

2.45 Charismatic Leadership

Because the core of all these concepts is charisma, several authors have used the general rubric of charismatic leadership for all of them. Further, as opposed to the term 'transformational leadership', the concept of charisma does not necessarily entail behaviours and values that correspond to one particular value system, such as human relations (Beyer, 1999).

The origins of charismatic leadership theory can be traced to the work of Max Weber, who differentiated charismatic authority from more traditional or legal/bureaucratic forma of authority (Weber, 1946). For Weber, charisma was viewed in terms of supernatural gifts of the body and spirit comprising special attributes and qualities. It was not until House formulated a theory of charisma that was sufficiently domesticated, which made it possible to test empirically propositions derived from the theory (House, 1977). This is taken further in the following definition proposed by Trice and Beyer (Trice and Beyer, 1986):

'An extraordinary gifted person, a social crisis, radical solutions, followers linked to the leader to transcendent powers, validation by repeated successes' (Adapted from pgs. 313-314)
While continuing to include personal attributes, more recent conceptualisations of charisma stress behavioural components, thus making it possible to be shown by people in a variety of leadership positions (Conger, 1999).

Within the literature the Table below identifies the specific behaviours of charismatic leaders.

The vision that is articulated by a charismatic leader generally differs from the status quo (Conger and Kanungo, 1998). Charismatic leaders may be viewed as agents of change who promise better opportunities and better outcomes for their followers. The greater the discrepancy between the promoted vision and the status quo, the greater the likelihood the leader will be perceived as visionary. The followers' attachment and commitment to the picture of the desired future, and the extent of their identification with the leader, depends strongly on their perception of the credibility of the leader and the vision. Charismatic leaders build that credibility through vision articulation and how it can be accomplished (Conger and Kanungo, 1987, Tichy and Devanna, 1986).

Table 2.1: Differences between non-charismatic and charismatic leadership

	Non charismatic leader	Charismatic leader
Relation to status quo	Essentially agrees with the	Essentially opposed to the
	status quo and strives to	status quo and strives to
	maintain it	change it
Future Goal	Goal not too discrepant	ldealised vision which is
	from status quo	highly discrepant from
		status quo
Likableness	Shared perspective makes	Shared perspective and
	him/her likable	idealised vision makes
		him/her a likable and
		honourable hero worthy of
		identification and imitation
Trustworthiness	Disinterested advocacy in	Disinterested advocacy by
	persuasion attempts	incurring great personal risk
		and cost
Expertise	Expert in using available	Expert in using
	means to achieve goals	unconventional means to
	within the framework of the	transcend the existing order
	existing order	
Behaviour	Conventional, conforming to	Unconventional or counter
	existing norms	normative
Environmental sensitivity	Low need for environmental	High need for environmental
	sensitivity to maintain	sensitivity for changing the
.	status quo	status quo
Articulation	Weak articulation of goals	Strong articulation of future
	and motivation to lead	vision and motivation to
Dower hoos	Desition newer and	lead
Power base	Position power and personal power(based on	Personal power(based on
	• • •	• • • •
	for a friend who is similar	admiration for a unique hero
	other	
Leader-follower relationship	Egalitarian, consensus	Elitist, entrepreneur, and
	seeking or directive. Nudges	· • •
	or orders people to share	
	his/her views	changes advocated
		shanges aurocated

(Adapted from Conger and Kanungo, 1987)

They may also convince or influence followers through impression management or image building (Gardner and Avolio, 1998). They are able to convince their subordinates of their strong motivations and may take on high personal risk (Conger and Kanungo, 1998).

There are however deficits in charisma research (Steyrer, 1998). It can be argued that charisma is a phenomenon in which followers respond to exceptional, exemplary characteristics of behaviour on the part of the leader by allocating charisma to them. This can be summarised as 'exceptional, exemplary individual, plus a vision, working at a time where radical change is needed, followers are seeking relief and direction, who is then allocated charisma' (Conger and Kanungo, 1987, House et al., 1991). This influencing process provokes a number of questions. First, how do personal identification, social identification, internalisation, and instrumental compliance interact in determining the behaviour of followers? Is one influence process more central than the others? How are these influence processes related to leader influence on follower self-identity, self efficacy, and motive arousal?(Shamir, 1999).

Second, charismatic leadership is usually conceptualised at the dyadic level, and group processes have been less well studied. Charismatic leaders tend to polarise people into loyal followers and dedicated opponents (Bass, 1985). Whilst a number of studies at group level have been published (Conger and Kanungo, 1998, Shamir et al., 1993, Meindl, 1990), the theories are still weak on explaining how charisma is institutionalised or a major change is actually implemented by the leader (Bryman, 1993).

Finally, whilst relating it's positive characteristics, within the concept of charismatic leadership it is recognised that the character of the charismatic leader may have a dark side (Hogan and Hogan, 2001). Charismatic leaders can be prone to extreme narcissism that leads to highly self-serving and grandiose aims. Their behaviours can become exaggerated, lose touch with reality, or become vehicles for personal gain alone (Sankar, 2003). House et al (1991) speculate that there is a unique set of personality characteristics and behaviours that distinguish these negative forms, which they describe as personalised

charisma, from the earlier more positive view of charisma, which they describe as socialised. This connects to work on leader integrity (De Vries, 1994) and the field of authentic leadership (Cuilla, 2004, Cooper et al., 2005, Avolio et al., 2004).

2.46 Visionary Leadership

Visionary and charismatic leadership are sometimes seen as the same construct (Sashkin and Fulmer, 1988, Shamir et al., 1993). This is because the formation and articulation of a vision is commonly emphasised behaviour in the current conception of charismatic leadership in organisations (Sandbakken, 2003). An alternative view is that charisma and vision are two distinct constructs and as such a leader may be charismatic but not visionary, or visionary but not charismatic, or both charismatic and visionary, or neither (Khatri et al., 2001). According to Kouzes and Posner (1995), visionary leadership concerns the development of long-range vision, described as an ideal and unique image of what organisations could be in the future. Sashkin (1986) found four factors required to create a vision:

- 1. performing the actions necessary to realise the vision
- 2. explaining the vision to others
- 3. extending the vision to allow for different situations
- 4. expanding it to apply to a variety of circumstances

Sashkin sees a vision as being embedded in the organisations philosophy, with all policy infrastructures developed in support, communicated effectively, with respect for the follower's sensitivities.

It can be concluded that charismatic leadership theories define charisma in a way that includes attributes of vision, and visionary leadership theorists define vision in a way that contains attributes of charisma (Conger and Kanungo, 1987, Westley and Mintzberg, 1989).

2.47 Transformational Leadership

Transformational leadership has gained particular attention in recent years (Bass, 1985, Bass et al., 1996). The focus on transformational leadership reflects a school of thought that such an approach is most strongly correlated to successful management of change (Kotter, 1990, Kouzes and Posner, 1987, Nadler and Heilpern, 1998, Nadler et al., 1995, Tichy and Devanna, 1986, Kouzes and Posner, 1995, Kotter, 1995, Brown and Eisenhardt, 1997, Berson and Avolio, 2004, DeHoogh et al., 2004, Dvir et al., 2002). The need for Chief Executives to be competent at leading during times of significant change is perhaps one of the most challenging areas of thought (Yukl, 1998). This recognises and builds on the work done by researchers on strategic change (Mintzberg and Quinn, 1992, Pettigrew et al., 1992, Carnall, 1997, Pettigrew and Whipp, 1991). This subject has become especially relevant in recent years, as many organisations have been faced with the need to change in order to survive (Yukl, 1998, Nadler and Tushman, 1990, Kotter, 1995, Brown and Eisenhardt, 1997, Eisenbach et al., 1999, Pollitt, 2002). When there is a realisation that the old ways no longer work, such transformational leaders may undertake the task of developing an appealing vision of the future. A good vision provides both a strategic and a motivational focus. It provides a clear statement of the purpose of the organisation and is, at the same time, a source of inspiration and commitment (Eisenbach et al., 1999).

Transformational leadership has many definitions. For the purposes of this study the following will be used:

"Transformational leadership influences followers by broadening and elevating follower's goals and providing them with confidence to perform beyond the expectations specified in the implicit or explicit exchange agreement"

(Dvir et al., 2002).

There can be no doubt that transformational leadership research has rejuvenated the study of leadership (Hunt, 1999). This has made it the most

studied area of leadership over the last decade (Bryman, 2004a, Lowe and Gardner, 2000).

Burn's (1978) originating model showed transformational and transactional leadership styles as polarised and at opposite ends of a spectrum. The transactional leader is one who influences others by appealing to their self-interest primarily through the exchange of valued rewards for services or other desired behaviours. Transactional leaders use rewards as their primary source of power (Bass, 1990a). Followers comply with the leader when the exchange meets the followers' needs. The relationship continues as long as the reward is desirable to the follower, and both the leader and the follower perceive the transaction as a means of progressing towards their personal goals (Bass, 1990a). It should be noted that Burn's original model was framed in his work as a political scientist/narrator in America where a not uncommon feature of political debate may be described as promising rewards for votes.

In seeking to further define the concept of transformational leadership Bass (1985) analysed data from managers' descriptions of their leaders and produced underlying themes that formed four specific transformational leadership components: -

- Idealised influence or charisma. Transformational leaders behave in ways that result in them being role models for their followers. The leaders are admired, respected and trusted. Followers identify with the leaders and want to emulate them. Among the things the leader does to earn this credit is considering the needs of others over his or her personal needs. The leader shares risks with followers and is consistent rather than arbitrary. He or she can be counted on to do the right thing, demonstrating high standards of ethical and moral conduct. He or she avoids using power for personal gain and only when needed.
- 2. *Inspirational motivation.* May or may not overlap with idealised influence or charismatic leadership, depending on how much followers seek to identify with the leader. The leader provides symbols and simplified emotional appeals to increase awareness and understanding of mutually desired goals. They elevate follower's expectations.

3. Intellectual stimulation. Followers are encouraged to question their old ways of doing things or to break with the past. They are supported for questioning their own values, beliefs and expectations, as well as those of the leader and organisation. Followers are also supported for thinking on their own, addressing challenges, and considering creative ways to develop themselves.

4. Individualised consideration. Followers are treated differently but equitably on a one to one basis. Not only are their needs recognised and perspectives raised, but their means of more effectively addressing goals and challenges are dealt with. With individualised consideration, assignments are delegated to followers to provide learning opportunities (Bass and Avolio, 1994a).

Bass makes a distinction between what he describes as transactional leadership and transformational leadership. The key differences between the two styles are shown in the Table overleaf:

The Transactional Leader	The Transformational Leader	
Major Attributes	Major Attributes	
 Operates out of own needs and agendas "Manipulates" others and situations Seeks concrete evidence of success 	 Concerned about values, ethics standards and long-term goals. Self-contained and self-defining 	
Leadership Philosophy	Leadership Philosophy	
 Play by my rules and I will get what you what you want 	 Articulates clear long-term standards and goals. Bases decisions on broad view of the situation, not just immediate factors. 	
Follower Philosophy	Follower Philosophy	
 Let me know what you want and I will get it for you (if you take care of my needs) 	 Give me autonomy to pursue broad organisational goals. Do not ask me to compromise my own values or standards of self-respect unless it is for the good of the group o organisation. 	
Major Blind Spots in Delegation	Major Blind Spots in Delegation	
 Cannot suspend agenda or co- ordinate agenda with others. Cannot think of others as thinking about him; lack of Trust. Does not understand that some people will forego immediate payoffs to maintain a relationship of mutual trust or respect. 	 Can be too self-contained and reluctan to delegate. May become isolated in leadership role. 	

Table 2.2: Comparison of transactional and transformational behaviours

(Adapted from Bass and Avolio, 1994)

Transformational leaders continuously strive to develop followers to higher levels of ability and motivation and to raise the moral standards of followers from the level of self-interest to consideration of the larger interests of group, organisation, and society. This shift is essential to the promotion of total quality, which requires a systematic effort coordinated and implemented by teams of individuals. Bass posited that organisational understanding of customers needs and values are critical to success. Taking suppliers needs into account, involving them in the process of change, and developing their capabilities and skills are relevant to a continuous improvement process. Thus the boundaries of leadership extend much farther than the impact of the immediate followers and include customers, suppliers, relationships with outside agencies, and even competitors (Bass and Avolio, 1994).

Transactional leadership occurs when the leader rewards or disciplines the follower depending on the adequacy of the followers' performance. Transactional leadership depends on contingent reinforcement, either positive contingent reward (CR) or the more negative active or passive forms of management-by-exception (MBE-A or MBE-P). CR has been found to be reasonably effective, although not as much as the Four I's, in motivating others to achieve higher levels of development and performance (Bass and Avolio, 1994).

Management-by-exception tends to be more ineffective but required in certain situations. In MBE-A, the leader arranges to actively monitor deviances from standards, mistakes, and errors in the followers work and to take corrective action as required. MBE-P implies waiting passively for deviances, mistakes, and errors to occur and then taking corrective action. The LF style is the avoidance or absence of leadership and is, by definition, the most inactive-as well as the most ineffective according to almost all the research on the style. As opposed to transactional leadership, laissez-fairre leadership represents a non-transaction (Bass and Avolio, 1994).

Fundamental to Bass's theory of transformational leadership is that every leader displays each style to some degree. Bass and Avolio (1994) argue that the optimal profile for a transformational leader is as shown overleaf:





(Adapted from Bass and Avolio, 1994)

The third dimension of Bass's model (depth) represents how frequently an individual displays a particular style of leadership. The active dimension helps clarify the style, and the effectiveness dimension broadly represents the impact of the leader on performance. In the above figure, the size of the boxes denotes that the transformational leader infrequently displays LF leadership and increasing frequencies of the transactional leadership styles of MBE-P, MBE-A, and CR. The transformational I's are the most frequently displayed. In contrast performing the poorly leader's profile tends towards inactivity and ineffectiveness, being opposite of optimal leaders with the size of the boxes being reversed with LF being the biggest, and then other boxes getter smaller towards the I's. It must be remarked upon that transformational leadership must be augmented by transactional leadership approaches, since both are required in complex organisations (Bass et al., 1996).

Growing evidence from studies that have investigated its efficacy has supported the general validity of the transformational leadership model (Bass and Avolio, 1994a, Bass and Avolio, 1994b, Kouzes and Posner, 1987, Kouzes and Posner, 1995, Sashkin, 1992, Bryman, 1992, Tejeda et al., 2001, DenHartog et al., 1997).

These studies have revealed that these leadership behaviours may have a much greater impact on subjective and objective measures of performance than transactional or exchange orientation(Lowe et al., 1996). Hater and Bass (1988) conducted one of the early comprehensive studies involving transformational leadership and objective performance criteria. demonstrating that transformational leadership assessments obtained via subordinate ratings significantly differentiated top-performing managers (who were identified via other means) from ordinary managers. Additional support for the positive effect of transformational leadership on performance is provided by Howell and Frost (1986) who compared the effects on followers of charismatic versus directive and considerate leadership behaviours under experimentally-induced high and low productivity norm conditions. Charismatic behaviours were found to have a stronger and more positive influence on the performance, satisfaction, and adjustment of followers than did directive and considerate behaviours (Howell and R, 1986).

In reviewing transformational leadership, several strengths are discernable. First, as above, it has been the subject of wide research from many different perspectives.

Second, transformational leadership has intuitive appeal (Northouse, 2001). The leader advocating change from the front is consistent with society's popular notion of leadership.

Third, transformational leadership treat leadership as a process that occurs between followers and leaders. Because this process incorporates both, leadership is not the sole responsibility of a leader but emerges from the interplay between the two. As a result, followers gain a more prominent position in the leadership process because the attributions of followers are instrumental in the evolving transformational process (Bryman, 1992).

Fourth, The transformational approach provides a broader view of leadership that augments other leadership models (Northouse, 2001). Many leadership models focus primarily on how leaders exchange rewards for achieved goals – the transactional approach (Bass, 1985). The transformational approach provides an expanded picture of leadership that adds the leaders attention to the needs and growth of followers (Bass, 1985, Avolio, 1999).

Finally, transformational leadership places a strong emphasis on followers' needs, values, morals, and their cooperation (Bennis, 1999). Burns (Burns, 1978) suggests that transformational leadership involves attempts by leaders to move individuals to higher standards of moral responsibility. Transformational leadership is fundamentally morally uplifting (Avolio, 1999). This moral dimension sets transformational leadership apart from other leadership theories (Northouse, 2001).

2.48 Criticisms of the transformational leadership concept.

Notwithstanding the strengths above, transformational leadership also has several weaknesses. One criticism is that it lacks conceptual clarity. Because it covers such a wide range, including creating a vision, motivating, being a change agent, building trust, giving nurture, and acting as a social architect, it is difficult to define clearly the parameters of transformational leadership (Northouse, 2001). Research has shown substantial overlap between the Four I's, (idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration), suggesting that the dimensions are not distinct (DenHartog et al., 1997, Avolio and Bass, 2004, Avolio et al., 1999, Dvir et al., 2002). Bryman (1992) points out that charismatic leadership and transformational leadership are

often treated as the same thing even though in some models of leadership charisma is only one component of transformational leadership. Others have argued if the two factor model of transformational and transactional leadership is an appropriate conceptualisation or whether the issue is really about the relationship between them (Yukl, 1999b). This goes back to Burns original concept of the two factors being at ends of a spectrum. The correlation between the two factors has been studied and have shown that they are highly correlated, suggesting that transformational leadership is an extension of transactional leadership (Waldman et al., 1990). Bass has suggested that they remain however two distinct dimensions (Bass, 1998).

A second criticism is that transformational leadership treats leadership as a personality trait or personal disposition rather than a behaviour in which people can be instructed (Bryman, 1992, Bennis, 2002). If it is a trait, training people in this approach has a problem, as it is difficult (though not impossible) to teach people to change their habits (Doh, 2003b). Then the word 'transformational' creates images of one person being the active component of the leadership process. There is a tendency to see transformational leaders as visionaries, individuals with special qualities that transform others-the 'heroic' leader (Pettigrew, 1987). These images accentuate a trait characterisation of transformational leadership (Northouse, 2001).

Third, that transformational leadership is based primarily on qualitative data gained from leaders who were very visible serving in positions that were at the top of their organisations (Bryman, 1992, Alimo-Metcalfe, 1998b, Higgs, 2002), and also negated the influence and role of top teams on organisational performance (Finklestein and Hambrick, 1990).

Fourth, transformational leadership may have the potential to be abused. Transformational leadership is concerned with changing people's values and moving them to a new vision (Burns, 1978). Who decides that the new vision is a better vision? History is full of charismatic individuals who used coercive power to lead people to evil ends (Bullock, 1991).

Fifth, Burns (1978) original concept was at the level of societies and movements. The goals that societies seek to attain are likely to come in diverse alternative sets and the means that societies can adopt to reach them are likely to be unclear, vague, or even unknown. The applicability of ideological leadership that can emerge at a societal level many be constrained at the organisational level (Pawar, 2003).

Sixth, that the distinction between charismatic leadership and transformational leadership is either redundant in that charismatic leadership is one of the central dimensions of transformational leadership (Bass, 1985, Waldman et al., 1990) or that they are distinct from each other (Sashkin, 1992, Yukl, 1999a).

Seventh, the organisational context in which leadership is played out is underresearched (Pettigrew, 1987, Pillai and Meindl, 1998, Pawar and Eastman, 1997, Conger and Kanungo, 1998, Bryman, 1992). The issue is whether different organisational contexts, receptivity to change, cultural norms, may all affect the predictability of transformational leadership to effect successful organisational change and performance improvement (Pawar, 2003).

2.49 Emerging theories

Emerging theories on leadership reflect the difficulties inherent in all research into leadership namely that they concentrate on the top level leaders, mostly male, quite often based on instruments framed in the context of North American businesses, and focussed on organisational performance based on the 'bottom line' (Alimo-Metcalfe, 1998b, Higgs, 2002). The main focus for this emerging literature is on the leader's ability to build the capability of people within the organisation to deal with continuing change (Conner, 1999). Higgs and Rowland (2000) cite Peter Senge in their paper on building leadership capability:

"Might not the continual search for the hero-leader be a critical factor in itself, diverting our attention away from building institutions that by their very nature, continually adapt and reinvent themselves, with leadership coming from many people and many places and not just from the top" (p.6).

Further more recent work on this emergent school of thought highlights the need for leaders to shape behaviour, to frame change, and create capacity (Higgs and Rowland, 2005). This emerging school may be summed up by the following quote from Goffee and Jones (2000) that effective leadership is to:

"Be yourselves - more - with skill" (p.70)

This reference to personality highlights a dimension within the emergent school of thought that links back to Trait Theory and the contribution that general intelligence plays in leadership effectiveness (Judge et al., 2004, Atwater et al., 1999).

This emerging 'school' sees leadership as being a combination of personal characteristics and areas of competence' (Higgs, 2002). This is a return to the point in leadership history where personality traits were the source of considerable research (Yukl, 1971). In building the case for personality as an important determinant of leadership effectiveness, recent work by Collins (Collins, 2001) is significant. Using successful CEO's as the unit of analysis he identified two distinguishing characteristics:

- Humility being self-effaced with an absence of arrogance,
- Will persistence in the pursuit of business goals and implementation of required actions.

Within this emergent field based on personality, emotional intelligence has gained some prominence of interest. Research into emotional intelligence attempts to answer the question 'which personal capabilities drive outstanding performance' (Goleman, 1998). The resonance with which the concept of emotional intelligence fits with daily lives may account for the level of interest in its nature and measurement. It is not surprising that individuals who are able to assess their own and others emotions and appropriately adapt their behaviour for a given situation based on this assessment are expected to be leaders (Bass, cited in Kobe, Rieter-Palmon and Rickers, 2001).

The core proposition of the emotional intelligence school is that life success requires a combination of an average level of traditional, intelligence with above average levels of 'emotional' intelligence (Higgs and Dulewicz, 1999). There are many disputes as to who coined the phrase originally and in what language it appeared first. (Matthews and Zeidner, 2002) In addition the terms emotional and intelligence juxtaposed may lead many people to dismiss them as incompatible constructs (Schutte and Malouff, 1999). Whatever the debate over its origin the literature is predicated on the concept of social intelligence first proposed by Thorndike (Thorndike, 1920) who defined it as the 'ability to understand and manage men and women, boys and girls - to act wisely in human relations'. (p.228). A social intelligence model presumes several core assumptions about human behaviour. First, behaviour is purposive and strategic, and is orientated to achievement of some goal. Focussing on what people are 'trying to do' has proven a powerful framework for understanding their actions. Second, people are active rather than passive participants in their own lives. They actively interpret the meaning of their social surroundings and the opportunities and risks presented to them. Third, behaviour is inherently social and contextualised in that all the actions take place within a given cultural context in which actions take on socially defined meanings. (Bar-On and Parker, 2000) Following Thorndike, Gardner (Gardner, 1993) included social intelligence as one of the several domains in his theory of multiple intelligences.

It could be argued that the most striking aspect of the emotional intelligence literature is the breadth, variety, and differences among authors regarding which abilities emotional intelligence is thought to entail, (Bar-On and Parker, 2000) and work on the topic is proliferating. (Mayer et al., 2000) This argument is further enhanced when the issue of construct measurement is added and for which there still is much work to be done in clarifying and refining measurement methodology (Cherniss and Goleman, 2001). This latter point will be considered when reviewing each construct of emotional intelligence.

As a broad categorisation of the differences within this field of research and the methods used for discovery there is a need to distinguish between two terms – emotional intelligence and emotional competence (Gowring, 2001). Emotional

intelligence refers to a person's basic underlying capability to recognise and use emotion. Mayer, Salovey and Caruso have stated that this is the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others (Mayer et al., 2000) Goleman, (Goleman, 1995) Bar-On,(Bar-On and Parker, 2000). Cooper and Sawaf (Cooper and Sawaf, 1997)and others have preferred to examine emotional intelligence through the exploration of emotional competence. Emotional competence describes the personal and social skills that lead to superior performance in the world of work (Gowring, 2001).

Salovey and Mayer formally coined the phrase emotional intelligence (EI) in 1990 (Mayer et al., 1990). Arguing that other conceptions of emotional intelligence (EI) are misleading, these researchers suggest that their specific use of the term stressed the concept of an intelligence that processes and benefits from emotions. From this perspective, EI is composed of mental abilities, skills, or capacities. Under their conceptual framework EI represents an intelligent system for the processing of emotional intelligence, and as such, it should resemble central parts of traditional, well-established intelligence systems. The model is subdivided into four branches:

- 1. Emotional perception/identification involves perceiving and encoding information from the emotional system.
- 2. Emotional facilitation of thought involves further processing of emotion to improve cognitive processes with a view to complex problem solving.
- 3. Emotional understanding is in some ways the obverse of the second: it concerns cognitive processing of emotion.
- 4. Emotion management concerns the control and regulation of emotions in the self and others.

(Mayer et al., 2000)

Their definition of EI, refined in 1997, described EI as a set of interrelated skills concerning the:

" The ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to provide emotional and intellectual growth" (p.10) (Mayer and Salovey, 1997)

These researchers, and colleagues, are amongst the most prolific protagonists in EI in the scientific literature (Mayer et al., 1999, Mayer et al., 2000, Mayer and Cobb, 2000); (Mayer and Geher, 1996) (Salovey et al., 2001, Salovey et al., 1995).

They suggest that their specific use of the term (EI) stresses the concept of an intelligence that processes and benefits from emotions. From this perspective, EI is composed of mental abilities, skills, or capacities. (Mayer et al., 2000) Mayer, Salovey and Caruso's model suggests that EI represents an intelligent system for the processing of emotional information, and as such, it should resemble central parts of traditional, well-established intelligence systems. This consists of a capacity for inputting information and a capacity for processing information, by reference to symbols and expert knowledge (Matthews, Zeidner and Roberts, 2002).

- The most populist writer in the field of emotional intelligence is Daniel Goleman. His paper 'Beyond IQ: developing leadership competencies of emotional intelligence' presented at the 2nd International Competency Conference (Goleman, 1997) provides a useful definition of the construct of emotional intelligence, which is about:
 - Knowing what you are feeling and being able to handle those feelings without having them swamp you
 - Being able to motivate yourself to get jobs done, be creative and perform at your peak; and
 - Sensing what others are feeling, and handling relationships effectively.

The relevance to IQ referred to in the papers title links back to some of the origin for the development of EQ as an indicator for predicting executive or management competency (Dulewicz and Higgs, 2000b). The question whether IQ alone would predict managerial success was resurrected by researchers such as Gardner (Gardner, 1999) who developed and explored the concept of multiple intelligences including social intelligence and intrapersonal intelligence and found no significant relationships with IQ measures. This led to a conclusion that these 'other' intelligences were a distinctly different construct from IQ. In essence IQ alone could not adequately predict managerial success. Further work by Dulewicz and Higgs (2000) supports Goleman's core proposition that it is a combination of IQ and emotional intelligence which determines "life success". Goleman says that:

"High IQ makes you a good English Professor; adding high EQ makes you chairman of the English Department...... High IQ make you a brilliant fiscal analyst, adding high EQ makes you Chief Executive Officer" (1997,pg.. 36)

Goleman (Goleman, 1998) presented a model of EI with twenty-five competencies arrayed in five clusters:

	Definition	Hallmarks
Self-	The ability to recognise and	Self confidence,
Awareness	understand your moods, emotions,	Realistic-self assessment,
	and drives, as well as their effects on	Self-deprecating sense of
	others.	humour.
Self-regulation	The ability to control or redirect	Trustworthiness and integrity,
	disruptive impulses and moods,	Comfort with ambiguity,
	The propensity to suspend judgement,	Openness to change.
	to think before acting.	
Motivation	A passion to work for reasons that go	Strong drive to achieve,
	beyond money and status,	Optimism, even in the face J
	A propensity to pursue goals with	failure,
	energy and persistence.	Organisational commitment.
Empathy	The ability to understand the	Expertise in building and
	emotional makeup of other people,	retaining talent,
	Skill in treating people according to	Cross-cultural sensitivity,
	their emotional reactions.	Service to clients and
		customers.
Social skill	Proficiency in managing relationships	Effectiveness in leading
	and building networks.	change,
		Persuasiveness,
		Expertise in building a
		leading teams.

Table 2.3: The Five Components of Emotional Intelligence at Work

(Adapted from Goleman, 1998)

- 1. Self-awareness cluster included emotional awareness, accurate selfassessment, and self-control.
- 2. The self regulation cluster included self control, trustworthiness, conscientious, adaptability, and innovation
- 3. The motivation cluster included achievement drive, commitment, initiative, and optimism

- 4. The empathy cluster included understanding others, developing others, service orientation, leveraging diversity, and political awareness
- 5. The social skills cluster included influence, communication, conflict management, leadership, change catalyst, building bonds, collaboration and co-operation, and team capabilities.

Boyatzis and Goleman define clusters as behavioural groups of the desired competencies (Boyatzis et al., 2000).

All of the above mentioned work has been by North American researchers. Considerable work has been done in the United Kingdom (Dulewicz and Higgs, 2000b, Dulewicz and Higgs, 1999, Dulewicz and Higgs, 2000a, Higgs and Dulewicz, 1999, Higgs and Rowland, 2001)to study emotional intelligence and measures of competency and broader-based measures of personality. Studies have considered the linkages between emotional intelligence, competencies, and personality factors. Recent work has confirmed the link to transformational leadership (Downey et al., 2006, Mandell and Pherwani, 2003, Barling et al., 2000). The elements of emotional intelligence derived from this work are described as: -

- 1. Self-awareness. The awareness of your own feelings and the ability to recognise and manage these.
- 2. Emotional Resilience. The ability to perform well and consistently in a range of situations and when under pressure.
- 3. Motivation. The drive and energy which you have to achieve results, balance short and long term goals and pursue your goals in the face of challenge and rejection.
- 4. Interpersonal sensitivity. The ability to be aware of the needs and feelings of others and to use this awareness effectively in interacting with them and arriving at decisions impacting on them
- 5. Influence. The ability to persuade others to change their viewpoint on a problem, issue or decision.
- 6. Intuitiveness. The ability to use insight and interaction to arrive at and implement decisions when faced with ambiguous or incomplete information.

 Conscientiousness and Integrity. The ability to display commitment to a course of action in the face of challenge, to act consistently and in line with understood ethical requirements.

(Adapted from Higgs, 2002)

Criticisms of the measurement of emotional intelligence

Despite the undoubted popularity of emotional intelligence as a business concept the validity of the research is called into question by the lack of truly robust measure (Steiner 1997, Hein, 1997). In considering this point, Schutte and Malouff (1999) have identified twelve key issues regarding the development of measures for emotional intelligence.

First, emotional intelligence can be conceptualised broadly or narrowly. Salovey and Mayer (Salovey and Mayer, 1990) have focussed on appraising, controlling, and using emotions productively. Goleman (Goleman, 1995) has included social skills not directly related to emotions. Emotional intelligence can also be conceptualised as an ability (Mayer and Salovey, 1997), which is how cognitive intelligence is usually conceptualised, or as typical performance, which is how personality traits are usually conceptualised (Schutte and Malouff, 1999).

Second, new methods of assessing emotional intelligence will proliferate, including methods resistant to faking. All of the tests above are self-reports. Self-reporting is typical of constructs conceptualised as personality traits (Ackerman and Haggestad, 1997)

Third, researchers will develop methods of assessing emotional intelligence in children.

Fourth, special-purpose measures of emotional intelligence will be developed. As interest emotional intelligence grows, scale developers will create emotional intelligence scales to serve specific purposed, such as vocational guidance and selecting individuals for specific training programmes.

Fifth, commercialisation of new measure of emotional intelligence will increase. This has a both a benefit and a disadvantage. The benefit is that it encourages scale developers to develop new scales. However it may have the effect of making researchers less likely to modify a scale in ways that might improve it.

Sixth, confirmatory factor analysis (CFA) will become the standard for scale validation. Almost all today are based on this method. Widespread use of CFA will help lead to the development of scales and sub-scales on the basis of more generalisable factor patterns. The factor-derived scales and sub-scales will, in theory, more accurately and clearly assess various types of individuals.

Seventh, researchers will begin to use multi-trait, multi-method analyses as a standard method of evaluation of the validity of measures of emotional intelligence suggested by Campbell and Fiske in the 1950's (Campbell and Fiske, 1959). This method combines self-reports and observer ratings, and should correlate more highly than should measures of different traits measured by the same or different methods.

Eighth, researchers will use item response theory analysis to evaluate items in scales developed to measure emotional intelligence.

Ninth, scale developers will separately validate every subscale of measures that assess emotional intelligence. It is essential for all subscales offered for use to demonstrate convergent and discriminant validity.

Tenth, measures of emotional intelligence will be evaluated for their fit with the Big 5 dimensions of personality. The Big 5 dimensions include extroversion, agreeableness, conscientiousness, emotional adjustment, and inquiring intellect.

Eleventh, evaluation of emotional intelligence measures by independent research groups will expand. The challenge of academic rigour will aid the formation of better-developed scales.

Twelfth and finally, the most widely used measures of emotional intelligence will be those that best predict important life successes. If we conceptualise emotional intelligence as a set of skills involving appraising, regulating, and harnessing emotions, we can identify many types of life successes that we would expect high levels of emotional intelligence to predict.

Having framed the variety and history within the broad concept of leadership there is one further issue to be considered issues –that of its relationship to gender.

2.5 The relevance of gender.

Gender differences are a growing area of research, though the conclusions of research vary as to whether gender is a significant variable in transformational leadership approaches (Bass and Avolio, 1994b, Bass et al., 1996, Kakabadse and Kakabadse, 1998, Eagly and Carli, 2003a, Eagly and Carli, 2003b, Vecchio, 2002, Vecchio, 2003, VanEngen et al., 2001, VanEngen and Willemsen, 2004).

The definition of gender is taken as 'the way in which meaning and evaluations are associated with sex by members of a culture. In other words, masculinity and femininity have various sets of characteristics associated with them, depending on the culture. The degree to which males and females are expected to behave differently, are treated differently, or are valued differently has little to do with sex and everything to do with gender. (Northouse, 2001)

There is evidence that women leaders tend to be more people orientated, democratic, consultative, showing concern for other people's satisfaction, as compared to men (Eagly and Johnson, 1990, Osland et al., 1998, Tucker et al., 1999). Leadership style research often assumes that women and men have different characteristics that make them suitable for different types of jobs. Research emphasises the idea that the number of women leaders should be increased because women hold such 'new' qualities as networking skills, ability to motivate others, social skills, and so on, that are needed in contemporary organisations (Lamsa and Sintonen, 2001).

The relevance to contemporary organisations is formed in the light of trends towards flatter organisations, team based management, and increased globalisation (Adler, 1993, Helgesen, 1990, Rosener, 1990)

In respect of transformational leadership there are a limited number of studies that examine gender and transformational leadership specifically (Alimo-Metcalfe and Alban-Metcalfe (2005). Since the early 1990's a number of studies have found gender differences with respect to leadership style. These include that:

- Women are more likely to construe leadership in transformational terms, men in transactional,
- Women are more likely than men to describe the style of leadership they adopt as transformational, with men more likely to describe their leadership as transactional,
- Women are significantly more likely to be described by their direct reports as adopting a transformational style (irrespective of the sex of the direct report), with men more likely to be described as adopting a laissez-faire, or management-by-exception style.

(Adapted from Alimo-Metcalfe and Alban-Metcalfe, 2005)

Druskat (Druskat and Wolff, 2001) found that female subordinates rated female leaders as displaying significantly more transformational behaviours and significantly fewer transactional behaviours than male leaders who were rated by male subordinates. In a sample of nurses (97% women) Bycio, Hackett, and Allen (Bycio et al., 1995)discovered similar patterns and magnitudes of relationships for transformational leadership and its outcomes and transactional leadership and its outcomes. Bass, Avolio, and Atwater (Bass et al., 1996, Bycio et al., 1995)found that female leaders were rated by both female and male subordinates as displaying transformational leadership behaviour more frequently than male leaders. However it should be noted that effect sizes were very small, suggesting no practical differences between female and male leaders. Other studies found no differences between female and male leaders in subordinate ratings of transformational leadership (Carless, 1998a).

That researchers should come to such diverse findings may result from the variety of research methodologies used. These range from experiments, assessments or organisational studies, the different measurement instruments and procedures applied (observation, self- or other-ratings), and, most importantly, the variety in organisational contexts studied such as the type of industry, organisation, management level (VanEngen et al., 2001).

Organisational context is of relevance in this study within the National Health Service, which is dominated by female employees but at the most senior levels is predominantly male in orientation e.g. executives, senior Consultant Medical staff. Eagly and Johnson (Eagly and Johnson, 1990) reported that sex differences relate to the proportion of men among the people whose style is being assessed. Differences between male and female managers in democratic and people orientated styles are significantly smaller in male-dominated management layers than in female –dominated layers. This suggests that these female managers use styles congruent with the gender typing of the context in which they are working. It is argued that stereotypical labelling of women's behaviours can have negative effects as well as positive (Goffee and Jones, 2000).

The impact of the sex composition of the organisational context in leader behaviour was the explicit subject of the recent study by Gardiner and Tiggermann(Gardiner and Tiggermann, 1999). Female managers were more task-orientated in male-dominated contexts and more people- orientated in feminine contexts than male managers. In this study male- dominated contexts included the car, timber, consulting and accountancy industries, whereas femaledominated contexts included nursing and children's education. Work by van Engen et al studying department stores suggested that gender-typing may not be as crucial as other organisational factors such as organisational structure, culture, the corporate mission which all shape leadership behaviour in organisations(VanEngen et al., 2001).

We must first ask a very basic question -do females and males differ in displayed behaviour? The answer may be in the aggregate the sexes may differ

with respect to social actions. Men have been found to be somewhat more selfassertive aggressive and coarse in their manner and language than women. Females in contract have been found to be more expressive of emotion and compassion (Eagly, 1995).

A highly practical question however is whether these aggregate differences are likely to be job relevant. By an large it is difficult to conceive of positions where job descriptions would include these specific attributes (Vecchio, 2002)

In the long standing tradition of studying leadership style (Bass, 1990b) most research conducted prior to 1990 distinguished between task oriented or initiation of structure or consideration (Eagly and Carli, 2003a). A less popular distinction was between leaders who behaviour democratically and allow subordinated to participate in decision-making, or behave autocratically and discourage subordinates from such participation. Eagly and Johnson (1990) reviewed 162 studies comparing women and men on relevant measures. This study found that leadership styles where somewhat gender-stereotypic on laboratory studies and assessment studies using participants not selected for new leadership roles. Women more than men manifested relatively interpersonally oriented and democratic styles, and men more than women manifested relatively task oriented and autocratic styles.

The new emphasis on leadership that is transformational as well as transactional (Bass, 1985)is more future oriented than present oriented and strengthens organisations by inspiring follower commitment and creativity. Researchers in the area have reasoned the transformational leadership might be particularly advantageous to women because of its androgynous qualities (Yoda, 2001). Pursuing these ideas, Eagly et al. (2003) carried out a meta-analysis of 45 studies comparing male and female managers on measures ion transformational transactional and laissez-faire leadership styles. In general this meta analysis revealed that compared with male leaders female leaders were more transformational and engaged in more of the contingent reward behaviours (ie exchanging reward for follower satisfactory performance) that are one component of transactional leadership). Also male leaders were more likely than female leaders to manifest two other aspects of transactional leadership: active

management by exception and passive management by exception. Men were also higher on laissez-faire leadership whist Eagly and Carli acknowledge that these sex difference were small they prevailed in the meta-analysis as a whole as well as in other studies that used the MLQ.

Given these constraints transformational leadership may be especially advantageous for women (Eagly and Carli, 2003b, Yoda, 2001) because it encompassed some behaviour that are consistent with the female gender role's demand for supportive, considerate behaviour and therefore allow women to excel as leaders. This is supported by other researchers in this field (Bass and Avolio, 1994b, Lowe et al., 1996). It is recognised however that some of the finding in most of the studies indicate that the magnitude of difference is small (Eagly et al., 2003)). Whilst some researchers (Vecchio, 2002) suggest that such effects are therefore unimportant, others conclude that they can have practical importance in natural settings (Bushman and Anderson, 2001).

Studies within the NHS by Alimo-Metcalfe (1995) have revealed that women are more likely to identify transformational leadership qualities and skills as appropriate for senior managers. Subsequent work by Alimo-Metcalfe (1998) and Alimo-Metcalfe and Alban-Metcalfe (2001) identified differences between men and women within a major study in local government and the NHS. This was theoretical research designed to test a transformational leadership construct within the UK public services. The resulting model of transformational leadership is argued to be more sensitive to the UK and more gender sensitive (Alimo-Metcalfe and Alban-Metcalfe, 2001; Alban-Metcalfe and Alimo-Metcalfe, 2000).

In summary, meta-analyses and individual studies suggest several conclusions about differences between male and female leaders. Although relatively similar to men in behaviour and effectiveness, women leaders tend to be more participative and less autocratic, a pattern that may be better suited to 21st century organisations (Northouse, 2001). What is clear however is that better controlled studies into this relationship and gender are needed (Vecchio, 2002, Bass and Avolio, 1994b, VanEngen et al., 2001).

2.6 Measuring Organisational Performance

The last aspect of this research for consideration is how to assess and measure organisational performance. Whilst numerous studies identify the importance of organisational performance effectiveness or for judging value-for-money, measuring this is complex and difficult and is one of the thorniest issues confronting the academic researcher and practitioner today (Venkatraman and Ramanujam, 1986). They cite Kanter and Brinkerhoff, who add that some leading scholars have expressed impatience with the very concept of 'organisational effectiveness', urging researchers to turn their attention to more fruitful fields (Kanter and Brinkerhoff, 1981).

The topic of accountability and performance measurement has become urgent for all organisations, no less so for those working in the non-profit(or public) sector(Kaplan, 2001). However the distinction between profit and non-profit sectors in terms of measuring performance is sharply illustrated by the economic bottom line in profit sectors with this being rarely the primary objective in public services.

In public services the literature of performance measurement is extensive but generally inconclusive(Forbes, 1998). Forbes noted that non-profit organisations lack the simple elegance of a financial measure – such as profitability or shareholder returns- used by profit organisations to assess their performance. He went on to deduce that non-profit organisations have difficulty "developing surrogate quantitative measures of organisational performance... because they frequently have goals that are amorphous and offer services that are intangible" (p.184). In addition performance management is by definition the process of quantifying past performance(Neely, 1998). Drucker goes further in highlighting that most measures are lacking indicators and that they are the results of management performance, not the cause of it (Drucker, 1993).

It is acknowledged that performance measures, if useful, should be derived from strategy. They should be used to reinforce the importance of certain strategic objectives (Kaplan and Norton, 2001, Skinner, 1989).

Reflecting this journey from for-profit organisation-based measures to ones that were better fitted to multi-stakeholder involvement, with new emphasis on effectiveness not just efficiency, researchers in the 1980's advocated multidimensional approaches be used for measuring public sector effectiveness(Cameron, 1982, Cameron and Whetton, 1983, Connolly et al., 1980). In this way users could access both the organisations ability to acquire its resources, and its ability to mobilise these resources to achieve desirable outcomes. In effect this is about moving the agenda from a study of efficiency to one of effectiveness as defined by a range of stakeholders(Ferlie et al., 2000). This involvement of multiple stakeholders in the definition of organisational effectiveness is further explored in the later references to multiple dimensions of performance measurement. Nevertheless it is acknowledged that the development of multi-dimensional measures for organisational performance in the non-profit (or public services) does offer a way forward(Chow et al., 1998).

The following section will consider a number of performance measurement systems in use globally and within the public services. Each will be reviewed for its relevance to this study within the English NHS.

2.61 The Balanced Scorecard

Kaplan and Norton's (1992) work on the Balanced Scorecard (BSC) provides a framework for selecting multiple performance measures focussed on critical aspects of the organisations business. It also provides a tool for organising strategic objectives into customer, internal process, and learning and growth perspectives, to augment the traditional financial perspective. By integrating these four perspectives it is argued that the BSC will help managers understand cross-functioning relationships that can ultimately lead to improved problem solving for decision making(Kaplan and Norton, 1992).

An essential part of the BSC is the articulation of linkages between performance measures and strategic objectives (Banker and Janakiraman, 2001). Once linkages are understood, strategic objectives can be further translated into

actionable measures to help organisations improve performance(Kaplan and Norton, 2001). The BSC has four perspectives.

First, customer measures, such as customer satisfaction, are intended to measure the company's performance from the customers' perspective. Second, internal process measures, such as the time to process customer returns in retail stores are employed to identify core competencies, recognise strengths and shortcomings, and make improvements. Third, since the path to success for any organisation changes with time, an organisations ability to innovate new products and new processes is critical in achieving excellence. Fourth, learning and growth measures, such as employees' new skills and computerisation, focus on factors that facilitate continuous improvement(Banker et al., 2004). The BSC model is shown overleaf.





(Adapted from Kaplan and Norton, 1996)

Proponents of the BSC consider it imperative that measures used to evaluate performance be linked to the business strategy, regardless whether they are measures common to all business units or unique to a particular or single unit (Kaplan and Norton, 2000). This is an important point given the number of healthcare organisations of varying types and sizes in the English NHS with each having different strategies for development. The concept of strategically linked measures also underlies the growing emphasis on non-financial, forward-looking performance measures and value drivers in the performance measurement literature (Ittner and Larcker, 1998, Ittner et al., 2003). Several contend that

performance measurement systems, regardless of whether they use the BSC framework, should be designed to make cause-and-effect relations between managers' actions and results more explicit (Eccles, 1991; Copeland, 1996; Young and O'Byrne, 2001).

The BSC does require clarity over who sets the weighting within each Scorecard. In the commercial world this will be done uniquely by each company. The relevance of subjective and objective measures also requires clarity e.g. organisational psychology research has shown that where financial and nonfinancial measures are reviewed in business decision making, studies have shown that participants place greater weight on current non-financial information when forecasting future financial performance than on current financial information. It is argued that this is the result of non-financial measures being more cognitively valuable, that is more meaningful, transparent, understandable, though more subjective (Ittner et al., 2003).

2.62 The concept of Performance Excellence

An alternative method of measuring performance is by considering the concept of performance excellence using the EXCEL instrument. This method is predicated on the work by Peters and Waterman (Peters and Waterman, 1982)and developed by Sharma et al (1990). In their book, *In Search of Excellence* (1982) Peters and Waterman summarised the results of studies of 62 American companies on three criteria: large size (based on annual sales); sustained financial performance (profit, growth, market value); and innovative capability which included not only the ability to come up with a flow of new products and services, but also how rapidly and skilfully they responded to what was happening in the environment.

From this work Peters and Waterman (1982) identified eight organisational characteristics that distinguish excellent companies:

- 1. A bias for action
- 2. Close to the customer

- 3. Autonomy and entrepreneurship
- 4. Productivity through people
- 5. Hands on, value driven
- 6. Sticking to the knitting
- 7. Simple form, lean staff
- 8. Simultaneous loose-tight properties

Some criticism has been levelled at the *Excellence* study of Peters and Waterman. In a critical review Carroll (Carroll, 1983)disagreed with the narrow definition of excellence used, and suggest that excellence depends not only on the eight attributes, or what he calls 'management effectiveness', but also on several 'non-management' variables, which includes technology, finance, raw materials, and Government policy. Other empirical work has also examined the *Excellence* study, questioned the results and prescriptions, and the construct of business excellence (Caruana et al., 1995).

In their review of the literature Sharma et al (1990) drew four conclusions:

- All authors have tended to indicate what they believe is a better measure of performance and have then proceeded to see how Peters and Waterman's' excellent companies compare to this 'better' measure(s) of performance (Aupperle et al., 1996)
- Excellence should be seen as an extreme (and perhaps even infinitely unattainable) point on a continuum. Yet there is a tendency among authors for a rigid dichotomous classification of excellent firms i.e. excellent/not excellent (Clayman, 1987, Langbert, 1990)
- 3. Studies tend to focus on single item measures. Doyle (Doyle, 1992)points out that seeking excellence on one dimension only results in meeting the needs of one group over that of others, with resulting disequilibrium. Managers should therefore not seek to excel only on a single objective, but rather look for a balanced performance over time on a set of goals (Barsoux, 1989).

4. Measures that have been used to date have not been rigorously developed to operationalised the eight attributes of excellence by Peters and Waterman (Caruana et al., 1995).

Caruana et al (1995) investigated the relationship between excellence and business performance using the EXCEL instrument and a limited repertoire of financial and growth performance. They concluded that the performance results reported in their study provide support for the hypothesis that companies' excellence is related positively to business performance. The statistical reliability claimed for EXCEL by Sharma et al was confirmed, as was the content and convergent validity. Some indication of external validity was also provided by virtue of the fact that 'more excellent' firms perform better. Nomological validity may be in some doubt however, as rather than forming eight distinct characteristics as in the Sharma et al study, the factor analysis suggested there may simply be two facets of excellence – the 'close to the customer' factor, and the 'general excellence' factor.

They acknowledge that their study, based on self-reported postal questionnaires, based on a population of larger British service companies may mean that any generalisation of findings to other populations must be made with some caution.

Performance excellence (Peters and Waterman, 1982, Sharma et al., 1990, Caruana et al., 1995) is a multi-dimensional concept which assumes that high intensity and balanced performance by leaders over time on a set of goals/criteria will yield results. The EXCEL scale is an instrument specifically designed to measure organisational excellence based on the eight variables of Peters and Waterman(Peters and Waterman, 1982). The construct of performance excellence, as expressed by EXCEL, is viewed as those management practices that lead to sustained performance.

The EXCEL instrument developed by Sharma et al (1990) is a 16 item, 7-point instrument (see table below).

Table 2.4: The EXCEL instrument

Item	
1.	In this organisation we encourage employees to develop new ideas
2.	This organisation has a small staff that delegates authority efficiently
3.	It is the belief of top management in this organisation that its people are of utmost importance to the company
4.	In this organisation we instil a value system in our employees
5.	We provide personalised attention to all our customers
6.	In this organisation top management creates an atmosphere that encourages creativity and innovativeness
7.	The company's values are the driving force behind our operation
8.	The firm is flexible and quick to respond to problems
9.	The company concentrates in product areas where it has a high level of skill and expertise
10.	We have a small but efficient management team
11.	The company develops products that are natural extensions of its product line
12.	The organisation truly believes in its people
13.	The company considers after-the-sale service just as important as making the sale itself
14.	The company believes in experimenting with new products and ideas
15.	The company believes that listening to what customers have to say is a good skill to have
16.	This organisation is flexible with employees but administers discipline when necessary

(Adapted from Sharma et al, 1990)

There are however some potential pitfalls in adopting business strategy and management models directly into public management without further considerations of possible dysfunctional consequences (Mullen, 2004). Public management is also concerned with other stakeholders, clients and citizens in particular (OfficeforPublicSectorReform, 2002). This additional complexity will be explored when considering the use of the BSC approach within the English NHS.
2.63 Measuring organisational performance in the NHS using the Performance Assessment Framework

In the United Kingdom (UK), the Government introduced a performance measurement system for the NHS in 1999 (DOH, 1999) called the Performance Assessment Framework (PAF). It is claimed by the Government that the PAF is based on the concept of the BSC (DOH, 2002) although its six dimensions are fundamentally different from those within the BSC. The perceived need for s new NHS Performance measurement framework has been highlighted as an important issue on the political and social policy agenda since the Labour Government came to power in 1997 (Chang et al., 2002). Given the shift to the New Public Management paradigm (Pollitt, 2002) the focus of the PAF seeks to assist the NHS to work towards improving the health of the public and providing better care and health outcomes for the people who use its services (DOH, 2002). More specifically the PAF would be used to assess how well the NHS was delivering its services and to enhance its accountability to the public and to parliament (DOH, 1999, DOH, 2002). The PAF therefore emerged as a significant development in the management and control of NHS performance both nationally and locally.

There are six dimensions within the PAF that consider the needs of different stakeholders, outcome and process measures, and long-term and short-term targets. The six dimensions are:

- 1. health improvement
- 2. fair access (to services)
- 3. effective delivery of appropriate healthcare
- 4. efficiency
- 5. patient / carer experience
- 6. health outcomes of NHS care

(Adapted from DOH, 2002)

The stated purpose of this framework was to improve NHS performance by encouraging managers to focus on more comprehensive views of performance, rather than concentrating on the 'bottom-line' figures (DOH, 1999). The intention of Government is that the PAF serves as both a measurement system and a strategic management system (as suggested by Kaplan and Norton, 2001), linking national health strategies and local operational activity top improve performance at both national and local levels.

The PAF reflects both outcome and process measures, aiming to achieve longterm health improvement via the efforts put into raising results for process measures. The Government uses the PAF as a strategic tool for benchmarking (DOH, 2002).

However the PAF is not identical to the BSC, rather the BSC approach has been transformed to suit the unique context of the NHS (Chang, 2002). The BSC dimension on shareholder wealth gain, for example, was substituted with health improvement measured by reducing death rates. In addition the BSC assumes that learning and growth are both seen in a uniformly positive vein. However within the context of public services such as the NHS where growth of individual organisations may be detrimental to the health of the whole system, then learning how to reduce costs to become smaller (and thereby transfer tax funds to other parts of the system) may be more appropriate than growth (Johnson, 2000).

Kaplan and Norton (1996) note that a cause and effect relationship between process and outcome measures is a necessary element of any BSC framework. In the case of the PAF, this cause and effect relationship is assumed to exist between aspects of health service delivery (i.e. process measures) and health improvements (i.e. outcome measures). In addition the PAF may lead to perverse consequences where improvement is achieved for public presentation but is not there in reality. Gaming may take place to 'show' the best result (Freeman, 2002). It is a product of the process and the method by which it is used (Mullen, 2004). Recent work by researchers at the London School of Economics has confirmed the potential for 'gaming' on targets based around the PAF and its associated methodology (Bevan and Hood, 2006).

The PAF is an external, non-summative set of indicators (which is then summated for Star Ratings through a method which is opaque) and used for external verification of quality improvements and central control. Such indicators can be very seductive as they promise an objective view of healthcare quality, yet it can be argued that it is a promise they are unable to keep. The PAF is not a formative mechanism for internal quality improvement (Freeman, 2002).

As with other BSC approaches, if the PAF is correct in its assumptions of the relationship between cause and effect, and between process and outcome measures, then such causal relationships should enable managers to use the performance measurement system as a feed forward control tool, where the improvement of process measures should then contribute to improved outcome measures. It is argued that this assumption should not be taken for granted within the PAF (Chang et al., 2002). Finally the politicisation of the NHS will always have the potential to distort the 'balance' in the Balanced Scorecard as politicians change targets and priorities (Radnor and Lovell, 2003).

As a result of this latter point the Government has transferred responsibility for the assessment of performance by NHS organisations over to the independent Healthcare Commission. It is in the process of changing the methodology for publication of organisational performance in 2006 (HealthcareCommission, 2005). It is proposed to provide a summative report based on 7 domains:

- safety
- clinical and cost effectiveness
- governance
- patient focus
- accessible and responsive care
- care environment and amenities
- public health

(Adapted from the Healthcare Commission, 2005)

2.64 Organisational Performance concluding note

In a world where patient choice and quasi-markets operate in healthcare, the relationship of internal formative performance measures and indicators of attention to customer satisfaction will be a key for continued performance excellence.

Choice and contestability of services, with money following the patient, will strongly require healthcare organisations to consider the concept of performance excellence and their leadership approaches if they are to remain viable organisations within an overall healthcare system (Eisenbach et al., 1999). The prospect of patient choice may be seen by Governmental economic advisors as a means to encourage competition among providers, the 'grit in the oyster' to drive up quality standards (Coulter, 2004). This can be illustrated in the following diagram:

Figure 2.2: 'Creating a Patient-led NHS'



(Adapted from DOH, 2005a)

Equally within a politicised NHS researchers and practitioners may argue that the results of major administrative reforms usually cannot be seen for three years or more after their adoption. At each step the reform project may fail, or undergo significant adoption and modification, or collide with some other set of priorities, or just quietly stall and fade (Pollitt, 2002).

2.7 The conceptual model that arises from this review of the literature

In reviewing the literature three key issues arise:

 The New Public Management is radically changing the way that public services are delivered. This is not simply a process response but a more fundamental way of viewing public services from the viewpoint of the consumer at the micro level: from Government at the macro level; and the way public organisations are externally and internally measured on improvement (Osborn and Gaebler, 1992, Pollitt, 2000, Pollitt, 2002, Freeman, 2002, Mullen, 2004, Ferlie et al., 1996). It requires a form of leadership consistent with the principles of the NPM and able to rise to the challenges posed by its drive for excellence (Javidan and Waldman, 2003, Goodwin, 1998, Kelman, 2005).

The concept of organisational transformation or modernisation is argued to be one of the key political drivers in public services within the UK in the late 20th and early 21st centuries and certainly within the English NHS (DOH, 1997, DOH, 2000, DOH, 2005b, DOH, 2005a, OfficeforPublicSectorReform, 2002, Pollitt, 2000, Pollitt, 2002).

 Transformational leadership has a very substantial body of evidence supporting its conclusion that it promotes higher levels of organisational performance especially at times of considerable organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Within the context of public sector reform within the UK transformational leadership is seen as a central dimension of success (Smith, 2002, ProductivityandInnovationUnit, 2000, Crisp, 2004, Alimo-Metcalfe and Alban-Metcalfe, 2000). Transformational leadership will form therefore the core leadership theory used in this research grounded within the concept of the New Public Management.

3. There is a energetic debate about whether women are more transformational than men with a consensus that the effect is small but no consensus that small means irrelevant (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

With female Chief Executives of NHS Trusts now forming one-third of the Trust CEO population, and as a higher proportion than any other public service sector (Batty, 2003), it is important to test whether female CEO's in the NHS have stronger transformational leadership behaviours, and if so does it positively affect organisational performance. The literature suggests that female Chief Executives may have higher ratings of transformational and transactional leadership behaviours than their male counterparts and corresponding higher performance (Bass and Avolio, 1994a; Bass et al 1996; Eagly and Johnson, 1990; Eagly and Carli, 2003b; Eagly, 1995; Eagly and Carli, 2003b; Kakabadse and Kakabadse, 1998; VanEngen et al, 2001; Vecchio, 2002; Vecchio, 2003; Carless, 1998b; Druskat and Wolff, 2001; VanEngen and Willemsen, 2004)

4. Measuring organisational performance in NHS organisations is complex. The PAF may not provide the internal formative measure for quality improvement and strategy development required (Radnor and Lovell, 2003; Chang et al 2002). The alternative concept of business excellence which leads to sustained performance which encompasses strategy, process, and customer satisfaction may be an alternative model (Sharma et al., 1999, Sharma et al., 1990, Caruana et al., 1995).

This conceptual model can be illustrated in the following diagram:

Figure 2.3: the relationship of the NPM, transformational leadership, and performance excellence



2.8 Research Question development

The resulting research question can now be framed. This is:

"Within English NHS organisations is there a relationship between the transformational leadership behaviour of the Chief Executive and performance excellence?"

This question can be illustrated in the following diagrammatic form below:

Figure 2.4: The basic research model with independent and dependent variable



Gender

Gender will be considered as to whether it mediates transformational leadership and organisational performance within the English NHS. The literature suggests that female Chief Executives may have higher ratings of transformational and transactional leadership behaviours than their male counterparts and corresponding higher performance excellence. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

The process to be used to test this within the research model will be as described by Robson (1999, p.344). The basic approach will be to:

- establish a relationship between the independent and dependent variable (as shown in Diagram 5)
- 2. subdivide the data on the basis of the values of gender as the third variable
- 3. review the original two-variable relationship of each of the sub-groups (male and female)
- 4. compare the relationship found in each sub-group with the original relationship.

Tenure in post

A similar exercise will be undertaken to explore the relationship of tenure in post to organisational performance. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

2.9 Hypotheses

The resulting hypotheses are shown below:

Hypothesis 1.0: There will be no correlation between CEO's transformational leadership behaviour and organisational performance.

Hypothesis 1.1: There will be a positive correlation between CEO's transformational leadership behaviour and organisational performance. (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Hypothesis 2.0: There will be no correlation between transactional leadership behaviour and organisational performance.

Hypothesis 2.1: There will be a positive correlation between transactional leadership and organisational performance but less so than in hypothesis 1b.(Lowe et al., 1996, Bass, 1985, Antonakis et al., 2003)

Hypothesis 3.0: Within the concept of transformational leadership as proposed by Bass (1998) CEO's within the English NHS will demonstrate a nine factor model transformational of and transactional leadership (six transformational, 3 transactional, and 1 nontransactional leadership behaviour) Hypothesis 3.1: Within the concept of transformational leadership there will be levels of multicollinearity amongst the transformational, transactional, and non transactional leadership behaviours demonstrated by CEO's in the English NHS resulting in fewer factors.(Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001)

Hypothesis 4.0: There will be no differences between male and female CEO's transformational leadership behaviours when correlated to organisational performance.

Hypothesis 4.1: Female CEO's will be shown to have a more significant effect on organisational performance than their male counterparts. (Bass and

Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Hypothesis 5.0: CEO tenure between those in post for 2-3 years and those over 4 years will have no difference in effect on organisational performance.
Hypothesis 5.1: CEO's in post for longer periods of tenure (over 4 years) will have greater impact on organisational performance than those in post for between 2-3 years. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

In the following chapter the research question and hypotheses will be framed within an appropriate research methodology and methods. The aim will be to ensure that the subsequent findings are valid and generalisable.

Chapter three: Methodology and research design

3.1 Theoretical conjecture and research philosophy

Broadly speaking research is carried out in order to discover something about the world, a world conceived, albeit loosely and tentatively, in terms of concepts that characterise a discipline, whatever it might be (Hughes, 1990).

"Although many of the discoveries of our age and others have been unintended, even accidental, they have been established and accredited as discoveries through the application of a method, a corpus of procedures vested with the power to produce knowledge we would call 'scientific' which are in effect, collective agreements as to how specific versions of the world can be arrived at" (p.10).

The relevance of the philosophical / research paradigms mentioned arises from the fact that every research tool or procedure is inextricably embedded in commitments to particular versions of the world and to knowing that world. Our ongoing attempts to grapple with making meaning of the worlds we occupy and seek to interpret and understand forms the subject of Epistemology or the theory of knowledge (Cardinal et al., 2004). The word is derived from the ancient Greek words *episteme* meaning 'knowledge' and *logos* meaning 'account' or 'rationale'. Epistemology discusses the nature of belief and knowledge itself. It asks what our grounds for knowledge are (Remenyi et al., 1998). Every academic discipline throws up questions of belief, method, validity and truth (Cardinal et al., 2004).

Positivism is an epistemological position that advocates the application of methods of the natural sciences to the study of social reality and beyond. It entails the following:

- Only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge.
- The purpose of theory is to generate hypotheses that can be tested and that will thereby allow explanations of laws to be assessed.

- Knowledge is arrived at through the gathering of facts that provides the basis for laws.
- Science must (and presumably can) be conducted in a way that is value free.
- There is a clear distinction between scientific statements and normative statements and a belief that the former are the true domain of the scientist,

This last element is implied by the first because the truth or otherwise of normative statements cannot be confirmed by the senses.

(Adapted from Bryman, 2004b)

One of the main intellectual traditions that offer an alternative to positivism is phenomenology, a philosophy that is concerned with the question of how individuals make sense of the world around them – how it is interpreted. Here it is argued that the application of the scientific world of the natural sciences is fundamentally different to the subject matter of the social sciences – people and their institutions. The study of the social world requires a different logic of research procedure, one that reflects the distinctiveness of humans as against the natural order (Bryman, 2004b).

The basic research paradigms of positivism and phenomenology and their key differences are shown in table below:

	Positivist Paradigm	Phenomenological Paradigm			
Basic beliefs:	The world is external and	The world is socially			
	objective.	constructed and subjective.			
	Observer is independent.	Observer is part of what is			
		observed.			
	Science is value-free.	Human interests drive			
		Science.			
Researcher	Focus on facts.	Focus on meanings.			
should:	Look for causality and	Try to understand what is			
	fundamental laws.	happening.			
	Reduce phenomena to	Look at the totality of each			
	simplest elements.	situation.			
	Formulate hypotheses and	Develop ideas through			
	then test them.	induction from data.			
Preferred	Operationalising concepts	Using multiple methods to			
methods	so that they can be	establish different views of			
include:	measured.	phenomena.			
	Taking large samples.	Small samples investigated			
		in depth or over time.			
(Adamtad for E	In depth or over time.				

Table 3.0: Key Features of Positivist and Phenomenological Paradigms

(Adapted from Easterby-Smith, Thorpe and Lowe, 1991)

The natures of methods associated with these positivist and phenomenological paradigms (Nomothetic and ideographic) are shown in table below:

Table 3.1: A Comparison of Nomothetic and Ideographic Methods

Nomothetic

5. High

Ideographic

- 1. Deduction. Induction. Vs
- 2. Explanation via analysis Explanation of subjective meaning of casual relationships and Vs systems and explanation by explanation by covering-laws understanding (emic). (etic).
- 3. Generation of Vs and Generation and use of qualitative use quantitative data. data.
- 4. Use of various controls. physical or statistical, so as to Vs allow the testing of hypotheses.

Commitment to research in everyday settings to allow access to, and minimise reactivity among the subjects of research.

structured Vs Minimum structure to ensure 2,3 research methodology to ensure and 4 (and as a result of 1). replicability of 1, 2, 3, and 4.

(Adapted from Gill and Johnson, 1997)

Within a positivist framework a range of design options are available. Higgs (1998) using Wright and Fowler (1986) as a base identifies three broad research strategies, being:

- 1. Descriptive: seeking to describe phenomena rather than explain relationships;
- 2. Explanatory: seeking to explain a phenomenon through data collection and analysis. This strategy entails an experimental design; and
- 3. Exploratory: seeking to combine (1) and (2) above, although not setting out to test precise predictions.

This study is descriptive – is there a relationship within English NHS organisations as to between Chief Executive behaviour and performance excellence?

In advance of considering the methods used to answer these questions grounding in which research methodology to be used is considered. There is considerable discussion over the direction that leadership research should take: a continued emphasis on quantitative, hypothesis-testing approach; or more emphasis on descriptive, qualitative research (Yukl, 1998, House and Aditya, 1997, Bryman, 2004a, Bass, 1999).

Methodology decisions are, of necessity, influenced by the 'tradition' in the field of study (Wright and Fowler, 1986). Where there exists a strong theoretical conjecture derived from the literature review a positivist approach is preferred (Remenyi et al., 1998). It is recognised that such an approach has a number of criticisms. In the context of this research these are focussed on the failure to see leaders in their natural settings; a singular concentration of the leader at the expense of top teams and organisational culture; or the absence of being able to study effects and changes over time (House and Aditya, 1997, Bryman et al., 1996, Pettigrew, 1987, McCall and Lombardo, 1978, Finklestein and Hambrick, 1996).

House and Aditya (House and Aditya, 1997)reflect in the early years of leadership research, was of necessity, almost completely atheoretical and purely

inductive. However the advent of the 'neocharismatic' research paradigm came a broadening of the domain of scientific leadership research with an emphasis on deduction. Positivistic and quantitative approaches are therefore the predominant approach in the field of transformational leadership research.

The *Research Methodology Programme* for doctoral research associates at Henley Management College emphasises the assessment of risk by the use of the following diagram:

Table 3.2: Choosing research strategies

New theory	2.Next best	4.Dangerous
Traditional theory	1.Best strategy	3.Risky
	Traditional method	New method

Based on the traditional method for assessing transformational leadership it was decided to use an established survey method which presented the least risk for the 'novice' researcher, where the doctoral research associate is engaged in apprenticeship training.

In addition four key issues affecting research strategies must also be taken into account:

Figure 3.3: Research considerations for the doctoral student



(Adapted from Remenyi et al, 1998)

Taking these two complementary pieces of advice a positivistic / quantitative approach using established theory and methods is chosen as the strategy for this research. Within the positivist approach a number of prescribed steps must be taken (Remenyi et al., 1998, Robson, 1999, Creswell, 1994, Easterby-Smith et al., 1991):

- Undertake a literature review.
- Assessment of established theoretical frameworks.
- If they are strong, form theoretical conjecture (if not strong, consider Grounded Theory approaches).
- Deduce a hypothesis from the theory.
- Express this hypothesis in operational terms (i.e. ones indicating exactly how the variables are to be measured), which propose a relationship between two specific variables.
- Test this operational hypothesis using a measuring instrument. This will involve an experiment, sample, or some other form of empirical enquiry.

- Examine the specific outcome of the enquiry through testing analysis. It will either tend to confirm the theory or indicate the need for its modification or refinement.
- If necessary, modify the theory in the light of the findings. An attempt is then made to verify the revised theory by going back to the first step and repeating the whole cycle.

(Remenyi et al., 1998, Robson, 1999)

This approach can be illustrated by the following:

Figure 3.4: The research cycle



(Adapted from Remenyi et al, 1998)

3.2 Research design

3.2.1 The research question

Research questions are not like ordinary questions. They expect more than a simple reply – they must be answerable (Andrews, 2003). This means that it

would be unhelpful in research to have a question that is so all-embracing that it would be impossible, using the frameworks above, to answer within the confines of the researcher's ability, time, or costs involved in answering it. The starting point for this design therefore is the originating aim of the research:

"Within English NHS organisations is there a relationship between the leadership behaviour of the Chief Executive and performance excellence?"

From the review of the literature contained in Chapter 2 the following basic research model was constructed:

Figure 3.5: Basic research model



3.3 Theoretical foundation for the research model

Building on the theoretical foundations in Chapter 2 it is argued that:

 The New Public Management construct is radically changing the way that public services are delivered. This is not simply a process response but a more fundamental way of viewing public services from the viewpoint of the consumer at the micro level: from Government at the macro level; and the way public organisations are externally and internally measured on improvement (Osborn and Gaebler, 1992, Pollitt, 2000, Pollitt, 2002, Freeman, 2002, Mullen, 2004, Ferlie et al., 1996). It requires a form of leadership consistent with the principles of the NPM and able to rise to the challenges posed by its drive for excellence (Javidan and Waldman, 2003, Goodwin, 1998, Kelman, 2005). The concept of organisational transformation or modernisation is argued to be one of the key political drivers in public services within the UK in the late 20th and early 21st centuries and certainly within the English NHS (DOH, 1997, DOH, 2000, DOH, 2005b, DOH, 2005a, OfficeforPublicSectorReform, 2002, Pollitt, 2000, Pollitt, 2002).

Transformational leadership has a very substantial body of evidence supporting its conclusion that it promotes higher levels of organisational performance especially at times of considerable organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Within the context of public sector reform within the UK transformational leadership is seen as a central dimension of success (Smith, 2002, ProductivityandInnovationUnit, 2000, Crisp, 2004, Alimo-Metcalfe and Alban-Metcalfe, 2000). Transformational leadership will form therefore the core leadership theory used in this research grounded within the concept of the New Public Management.

There is a energetic debate about whether women are more transformational than men with a consensus that the effect is small but no consensus that small means irrelevant (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

With female Chief Executives of NHS Trusts now forming one-third of the Trust CEO population, and as a higher proportion than any other public service sector (Batty, 2003), it is important to test whether female CEO's in the NHS have stronger transformational leadership behaviours, and if so does it positively affect organisational performance.

 Measuring organisational performance in NHS organisations is complex. The PAF may not provide the internal formative measure for quality improvement and strategy development required (Radnor and Lovell, 2003, Chang et al., 2002). The alternative concept of business excellence which leads to sustained performance which encompasses strategy, process, and customer satisfaction may be an alternative model (Sharma et al., 1999, Sharma et al., 1990, Caruana et al., 1995).

This expanded conceptual model can now be illustrated in the following diagram:

Figure 3.6: the relationship of the NPM, transformational leadership, and performance excellence



Gender

Gender will be considered as to whether it mediates transformational leadership and organisational performance within the English NHS. The literature suggests that female Chief Executives may have higher ratings of transformational and transactional leadership behaviours than their male counterparts and corresponding higher performance excellence. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Tenure in post

A similar exercise will be undertaken to explore the relationship of tenure in post to organisational performance. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

The resulting hypotheses are shown below:

Hypotheses

Hypothesis 1.0: There will be no correlation between CEO's transformational leadership behaviour and organisational performance.

Hypothesis 1.1: There will be a positive correlation between CEO's transformational leadership behaviour and organisational performance. (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Hypothesis 2.0: There will be no correlation between transactional leadership behaviour and organisational performance.

Hypothesis 2.1: There will be a positive correlation between transactional leadership and organisational performance but less so than in hypothesis 1b.(Lowe et al., 1996, Bass, 1985, Antonakis et al., 2003)

Hypothesis 3.0: Within the concept of transformational leadership as proposed by Bass (1998) CEO's within the English NHS will demonstrate a nine factor model of transformational and transactional leadership (five transformational, 3 transactional, and 1 nontransactional leadership behaviour)

Hypothesis 3.1: Within the concept of transformational leadership there will be levels of multicollinearity amongst the transformational, transactional, and non transactional leadership behaviours demonstrated by CEO's in the English NHS resulting in fewer factors. (Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001)

Hypothesis 4.0: There will be no differences between male and female CEO's transformational leadership behaviours when correlated to organisational performance.

Hypothesis 4.1: Female CEO's will be shown to have a more significant effect on organisational performance than their male counterparts. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Hypothesis 5.0: CEO tenure between those in post for 2-3 years and those over 4 years will have no difference in effect on organisational performance.
Hypothesis 5.1: CEO's in post for longer periods of tenure (over 4 years) will have greater impact on organisational performance than those in post for between 2-3 years. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

3.4 Research method validity

The research was designed to make use of survey instruments. Validity and generalisability are significant factors in research (Robson, 1999)The researcher must be able to demonstrate that the findings are 'really' about what they appear to be about. Are the relationships established in the findings 'true', or are they due to other effects? Validity is synonymous with accuracy or correctness (Churchill, 1999). Validity has a number of considerations; predictive validity, content validity, internal and external validity, construct validity, and reliability.

Predictive reliability focuses on the usefulness of the measuring instrument as a predictor of some other characteristic or behaviour of the individual: it is

sometimes called criterion-related validity (Churchill, 1999). Predictive validity is ascertained by how well the measure predicts the criterion. Another type of predictive validity is concurrent validity. This is where there is concern about the relationship between the predictor variable and the criterion variable when both are assessed at the same point in time. Predictive validity is determined strictly by the correlation between the two measures. If the correlation is high, the measure is said to have predictive validity.

Content validity focuses on the adequacy with which the domain of the characteristic is captured by the measure. Content is sometimes known as *face validity* because it is assessed by examining the measure with an eye toward ascertaining the domain being sampled. The key to content validity lies in the procedures that are used to develop the instrument. The researcher has to specify what the variable is and what it is not (Churchill, 1999). The task of definition will be expedited by the literature review that illustrates how the variable has been defined and used.

Internal validity is of concern in all causal and explanatory studies of the relationship between different events (Remenyi et al., 1998). It questions whether the research design is capable of eliminating bias and the effects of extraneous variables (Castile, 2006). External validity involves the domains to which the results may be generalised to other populations (Remenyi et al., 1998).

Construct validity is the most directly concerned with the question of what the instrument is, in fact, measuring. Construct validity lies at the heart of scientific progress. Researchers need constructs with which to communicate (Churchill, 1999). We operationally define the constructs in terms of a set of observables. We need to have adequately sampled the domain of the construct and that there is internal consistency among the items of the domain. The higher the correlations, the better the items are measuring the same underlying construct.

Reliability is of central concern to social scientists because the measuring instruments employed are rarely completely valid (Frankfort-Nachmias and

Nachmias, 1996). Reliability refers to the extent to which a measuring instrument contains variable errors, that is, errors that appear inconsistently from observation to observation during one measurement event or that vary each time a given unit is measured by the same instrument. It is distinguished from validity in that validity is represented in the agreement between two attempts to measure the same trait through maximally different methods, whereas reliability is the agreement between two efforts to measure the same trait through maximally similar methods (Churchill, 1999).

Generalisability (also termed external validity) concerns the extent to which the findings of the research are more generally transferable to other contexts, settings, or groups (Robson, 1999).

Researchers must also be aware of the threats that exist to validity. Robson (1999) has adapted earlier work by Cook and Campbell (Cook and Campbell, 1979) in identifying twelve threats:

- 1. History things change in the participants environment
- 2. Testing -where changes occur as a result of practice and experience gained by participants on any pre-tests
- 3. Instrumentation -where some aspects of the way participants were measured changed between pre- and post-test
- 4. Regression if participants are chosen because they are unusual or atypical, later testing will tend to give less unusual scores (regression to the mean)
- 5. Mortality participants drop out of the study
- 6. Maturation growth change or development in participants unrelated to the treatment in the enquiry
- 7. Selection initial differences between groups prior to involvement in the study
- 8. Selection by maturation interaction predisposition of groups to grow apart (or together if initially apart)
- 9. Ambiguity about causal direction does A cause B, or B cause A

- 10. Diffusion of treatments when one group learns information or otherwise inadvertently receives aspects of a treatment intended only for a second group
- 11. Compensatory equalisation of treatments if one group receives 'special' treatment there will be organisational and other pressures for a control group to receive it
- 12. Compensatory rivalry as above but with an effect on the participants themselves e.g. when a group in an organisation sees itself under threat from a planned change in another part of the organisation and improves performance.

In translating concepts such as leadership, and organisational performance, research design requires their transition from the conceptual level to the observational level This is done through operationalising the variables that flow from the concepts (Frankfort-Nachmias and Nachmias, 1996).

3.5 Operationalising the leadership variable

3.51 Measuring Transformational Leadership

Four instruments from the literature were considered and reviewed for this study. They are the Multifactor Leadership Questionnaire (MLQ) formulated by Bass and Avolio (Avolio and Bass, 2004), the Transformational Leadership Questionnaire (TLQ) formulated by Alimo-Metcalfe (Alimo-Metcalfe and Alban-Metcalfe, 2001), the Leadership Qualities Framework (NHSLeadershipCentre., 2003b), and the Leadership Practices Inventory. (Kouzes and Posner, 2003)

Each will be considered in turn:

3.52 The Multifactor Leadership Questionnaire

The MLQ is one of the most widely used instruments to measure transformational (and transactional) leader behaviours in the organisational sciences. (Tejeda et al., 2001) The conceptual basis for the original factor

structure for the MLQ began with Burns' description of transforming leadership (Burns, 1978) further developed by Bass (Bass, 1985).

Bass's (1985) multifactor model consisted of four dimensions for transformational leadership (charisma, inspirational motivation, intellectual stimulation, and individualised consideration), and three dimensions for transactional leadership (contingent reward, management by exception, and laissez faire). Each dimension is defined. In subsequent writings (Hater and Bass, 1988)he noted that although charismatic and inspirational leadership were unique constructs, they were often not empirically distinguishable, thus reducing his original multifactor model to six.

The six factors and their operational definitions are:

- 1. Charisma/inspirational provides followers with a clear sense of purpose that is energising, is a role model for ethical conduct, and builds indemnification with the leader and his or her articulated vision,
- 2. Intellectual stimulation gets followers to question the tried and true ways of solving problems, and encourages them to question the methods they use to improve upon them
- Individualised consideration focuses on understanding the needs of each follower and works continuously to get them to develop to their full potential,
- 4. Contingent reward clarifies what is expected from followers and what they will receive if they meet expected levels of performance
- 5. Active Management-by-Exception focuses monitoring task execution for any problems that might arise and correcting those problems to maintain current performance levels; and
- 6. Passive-Avoidant leadership tends to react only after problems have become serious enough to take corrective action, and often avoids making any decision at all.

Bass and his colleagues then went further in expanding the theory based on results from studies completed between 1985 and 1990(Bass and Avolio, 1994a, Hater and Bass, 1988, Avolio and Bass, 1991). In its current form the full-range

leadership theory (FRLT) represents nine single-order factors comprised of five transformational leadership factors, three transactional factors, and one nontransactional laissez-fairre leadership factor. (Avolio and Bass, 1991) These nine factors are defined as follows:

Transformational factors

- Idealised influence (attributed) which refers to the socialised charisma of the leader, whether the leader is perceived as being confident and powerful, and whether the leader is viewed as focussing on higher-order ideals and ethics
- 2. Idealised influence (behaviour) refers to charismatic actions of the leader that are centred on values, beliefs, and a sense of mission
- 3. Inspirational motivation refers to the ways leaders energise their followers by viewing the future with optimism, stressing ambitious goals, projecting and idealised vision, and communicating to followers that the vision is achievable
- 4. Intellectual stimulation refers to leader actions that appeal to followers' sense of logic and analysis by challenging followers to think creatively and find solutions to difficult problems
- Individualised consideration refers to leader behaviour that contributes to followers satisfaction by advising, supporting, and paying attention to the individual needs of followers, and thus allowing them to develop and selfactualise

Transactional factors

- Contingent reward leadership refers to leaders behaviours focussed on clarifying role and task requirements and providing followers with material or psychological rewards contingent on the fulfilment of contractual obligations
- 2. Management-by-exception (active) refers to the active vigilance of a leader whose goal is to ensure that standards are met
- 3. Management-by-exception (passive) is where leaders only intervene after non-compliance has occurred or when mistakes have already happened

Nontransactional laissez-fairre leadership

 Laissez-faire leadership represents the absence of transaction of sorts with respect to leadership in which the leader avoids making decisions, abdicates responsibility, and does not use their authority. It is considered active to the extent that the leader 'chooses' to avoid taking action. This component is generally considered the most passive and ineffective form of leadership.

(Adapted from Antonakis et al., 2003)

A meta-analysis confirmed that results of the studies are consistent with the conclusion that effective leaders emphasise transformational behaviours but also use relevant transactional behaviours (Lowe et al., 1996). Avolio et al (Avolio et al., 1999)studies of the MLQ (Form 5X) that a six factor model held up with relatively little shrinkage in terms of its fit, when tested in replication studies. A recent study by Antonakis, Avolio, and Sivasubramaniam (Antonakis et al., 2003) using the current version of the MLQ (Form 5X) supported the stability of the nine-factor model and concluded that the current version of the MLQ (Form 5X) is a valid and reliable instrument that can adequately measure the nine components comprising the full-range theory of leadership.

There are however observations that the factor structure of the MLQ may not be stable (Bycio et al., 1995). As such the MLQ has been the subject of study and modification by other researchers (Howell and Avolio, 1991, Bass and Avolio, 1993, Bycio et al., 1995, Tejeda et al., 2001) These modifications, whilst representing improvements in the measurement of Bass's constructs, add to the difficulty of comparing the research with previous studies (Tejeda et al., 2001).

The high correlations among the transformational scales have been used as evidence by some authors (Carless, 1998a, Bycio et al., 1995)to suggest that the scales may not measure different or unique underlying constructs. Carless (1998) posited that transformational leadership can be defined by:

• distinct and separate behaviours, or

- that transformational leader behaviours are so highly related that it is more appropriate to conceptualise them as a single factor, or
- that leadership is a hierarchical concept explained by a number of independent behaviours(charisma, intellectual stimulation, individualised consideration) that share in common a strong relationship with a higherorder construct, transformational leadership.

Her study suggests that the sub-scales of the MLQ were highly correlated indicating that subordinates were not able to discriminate between the behaviours and therefore the MLQ does not measure separate transformational leadership behaviours, instead it seemed to assess a single, hierarchical construct of transformational leadership.

Bycio et al (1985) concluded in their study of hospital head nurses using an earlier version of the MLQ (version 10) that there was grounds for a two-factor model, Active-Passive, because the transformational components and Contingent Reward were all highly correlated and for the original five-factor model.

Further factor analysis by Lievens et al in a study in the Netherlands (1997) indicated that the four transformational leadership behaviours of charisma, inspiration, individualised consideration, and intellectual stimulation, were all highly correlated and clustered into one factor. The transactional factors, active management-by-exception and contingent rewards seemed to measure distinct leadership behaviours. Passive-management-by-exception was found to correlate to laissez-faire leadership to form a single factor which they labelled 'passive leadership'. This replicated work by Yammarino and Bass. (1990)

Work by Den Hartog et al (1994) indicated support for both a three-factor (transformational, transactional, and passive leadership) and four-factor model (transformational, contingent reward, active-management-by-exception, and passive leadership).

Work by Wofford et al (1998) and Goodwin et al (2000) has obtained additional support for the two-factor model. Wofford et al (1998) however loaded contingent rewards onto the factor containing individualised consideration, ascribed charisma, inspirational leadership, and intellectual stimulation, whereas management-by-exception subscales loaded onto a second factor. These results were replicated by Goodwin et al (2000).

Avolio et al in a study in 1999 found evidence for a three correlated higher-order model; transformational leadership, developmental transactional leadership, and passive corrective leadership.

Whether the MLQ is transferable across national cultures have been the subject of much research (Triandis, 1993, Gaughan, 2001, DenHartog et al., 1997). Its application to the United Kingdom, and to NHS leaders is particular requires some debate. Alimo-Metcalfe's study in Local Government and the NHS suggests that Bass's model, while of relevance, is inadequate in describing how transformational leadership is viewed in the NHS (Alimo-Metcalfe, 1998c).

Antonakis et al (Antonakis et al., 2003) argue that some of the conflicting results that have emerged in prior research using the MLQ may be attributed in part to the use of non-homogenous samples to test the construct validity of the instrument. Consequently, using non-homogenous samples (e.g. mixing organisational types and environmental conditions, leader/rater gender samples, hierarchical levels, etc.) to test the multi-dimensionality of the MLQ may result in inconsistent findings, especially when testing the nine-factor model.

3.53 The Transformational Leadership Questionnaire

Others confirm the limitations to the US models of transformational leadership to the UK (Gaughan, 2001). This need for a UK leadership instrument flows from:

- Possible private sector bias of previous models of leadership.
- Powerful professional groups (e.g. doctors) in the UK NHS.
- Importance of the political dimension in the NHS.

• Potential gender bias of previous research. (Alimo-Metcalfe, 1999)

Recent research across the both the UK Local Government and the UK NHS, using a draft Leadership Questionnaire-Local Government Version (TLQ-LGV) found a wider range of transformational dimensions than in Bass and Avolio's (1994) MLQ model (Alimo-Metcalfe and Alban-Metcalfe, 2001). Fourteen leadership criteria variables held in 3 clusters in were obtained:

- Leading and developing others
- Showing genuine concern
- Enabling
- Being accessible
- Encouraging change
- Personal qualities
- Being honest and consistent
- Acting with integrity
- Being decisive
- Inspiring others
- Resolving complex problems
- Leading the organisation
- Networking and achieving
- Focussing effort
- Building shared vision
- Supporting a developmental culture
- Facilitating change sensitively

(Alimo-Metcalfe and Alban-Metcalfe, 2003)

A number of the leadership dimensions in the MLQ also emerge in the TLQ-LGV model (Gaughan, 2001). The greatest area between the MLQ leadership dimension and the individualised consideration and the TLQ-LGV factor labelled genuine concern for others. The TLQ-LGV leadership factor genuine concern for others is much richer in its description of the behaviours required.

Gaughan (2001) points out that whilst some similarities exist there are important differences. These are:

- In the TLQ-LGV model genuine concern for others emerged as the most important factor, whereas in the MLQ model individualised consideration was the fourth factor
- The factor that is most important in the MLQ model is *charismatic leadership/idealised influence*
- In the TLQ-LGV model, there was little notion of what is described as 'followership', which is pervasive in the US models of leadership
- Political sensitivity and skills factor is identified in the TLQ-LGV model but not in the MLQ model
- Decisiveness, determination and self-confidence is identified separately in the TLQ-LGV which may overlap with the MLQ factor inspirational motivation
- Inspirational networker and promoter is also unique to the TLQ-LGV
- Clarifies boundaries, involves others in decisions, is a leadership dimension unique to the TLQ-LGV model
- The MLQ has transactional factors such as *contingent reward* that the TLQ does not.

The greatest drawback to the use of the TLQ is the lack of further validation by other researchers. This is recognised by Alban-Metcalfe and Alimo-Metcalfe (Alban-Metcalfe and Alimo-Metcalfe, 2000) by calling for further quantitative studies and qualitative contextual work in differing organisations, sectors and countries though a small study within the NHS of managerial effectiveness was supportive of the construct though the TLQ was not the instrument used. Instead critical incident technique elicited the behaviours of managerial effectiveness (Hamlin, 2002). As a secondary issue the instrument covers 12 dimensions and has over 100 questions which are a large number to manage.

3.54 The NHS Leadership Qualities Framework

The NHS Leadership Qualities Framework , otherwise known as the LQF (NHSLeadershipCentre., 2003b), describes a set of key characteristics, attitudes

and behaviours that leaders in the NHS should aspire to when delivering the Governments plans. There are 15 characteristics, clustered around Personal Qualities, Setting Direction, and Delivering the Service. It is a competency based framework. The clusters are broken down as follows:

- Personal qualities
 - o Self belief
 - o Self awareness
 - o Self management
 - o Drive for improvement
 - Personal integrity
- Setting direction
 - Seizing the future
 - Intellectual flexibility
 - Broad scanning
 - o Political astuteness
 - Drive for results
- Delivering the service
 - Leading change through people
 - Holding to account
 - Empowering others
 - Effective and strategic influencing
 - Collaborative working

It has not been the subject of independent evaluation (Bolden et al., 2005) having originally been framed from a management consulting viewpoint led by the HayGroup. The methodology used to develop the LQF was to use behavioural interviews to elicit evidence of the leadership qualities most strongly associated with success. These findings were correlated with organisational performance data and benchmarked against the consulting firms' global leadership database. This instrument has not been designed to specifically

measure transformational leadership and accordingly it was decided not to use the LQF in this study as the basis for assessing transformational leadership.

3.55: The Leadership Practices Inventory (LPI)

Kouzes and Posner's work (2003, 1995, 1987) produced the LPI which resulted from several hundred thousand responses from managers and studies involving over 150 doctoral theses (Sandbakken, 2003). Based on 5 scales and 30 items. The 5 scales and associated items are shown overleaf.

 6. Makes certain that people adhere to agreed-on standards 11. Follows through on promises and commitments 16. Asks for feedback on how his/her actions affect people's performance 21. Builds consensus around organization's values 26. Is clear about his/her philosophy of leadership 2 Talks about future trends influencing our work 7 Describes a compelling image of the future 12 Appeals to others to share a dream of the future 17 Shows others how their interests can be realized 22 Paints 'big picture' of group aspirations 27. Speaks with conviction about meaning of work Challenge the Process 8 Challenges people to try new approaches 13 Searches outside organization for innovative ways to improve 18 Asks 'what can we learn?' 23 Makes certain that goals, plans, and milestones are set 28. Experiments and takes risks Enable others 4 Develops co-operative relationships 9 Actively listens to diverse points of view 14 Treats others with dignity and respect 19 Supports decisions other people make 24 Gives people choice about how to do their work 29. Ensures that people grow in their jobs Encourage the Heart 10 Expresses confidence in people's abilities 15 Creatively rewards people for their contributions 20 Recognizes people for commitment to shared values 25 Finds ways to celebrate accomplishments 	Madal (1 10)			
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Table 3.2: The LPI

(Adapted from Castile, 2006)

The LPI has been subject to independent study of its factor structure. Carless (2001) concluded that the LPI assessed a single overarching higher order of transformational leadership as well as a five factor model. The findings indicated that while it was possible for the raters to distinguish conceptually among separate transformational leader behaviours, either these distinctions were not captured by the LPI or raters did not notice the differences. Carless concluded that given the evidence that the LPI has weak discriminant validity, there is little justification for either giving specific feedback on transformational leader's behaviours, nor to promote the development of specific transformational leadership behaviours. In addition the LPI only assess transformational leadership behaviours, it does not measure transactional behaviours. Finally the questions in the Inventory are all positively posed, thus opening for a positive halo-effect that often presents itself in scaling with a carryover from one question to another (Sandbakken, 2003, Churchill, 1999).

In comparing the MLQ, TLQ and the LPI the following table highlights the key attributes of each instrument:

	,		
Attributes	MLQ (Form 5X)	TLQ (PRIV)	LPI
Scales/factors	6	12 scales in 3 clusters	5
Items/questions	45	100	30
Origin	Bass (1985)	Alban-Metcalfe and	Kouzes and
		Alimo-Metcalfe (2000, 2001)	Posner(1987)
Alpha's	.7182	.8894	.8191
Scale	0-4 Likert	1-6 Likert+Don't know,N/A	1-10 Likert
Conclusion	Independently validated	No independent validation	Ind. validated
	Low risk	High risk	Low risk

Table 3.3: Attributes of the MLQ, TLQ and the LPI

(Sandbakken, 2003))

3.56: Choice of transformational leadership instrument

The table above and commentary on each instrument was reviewed. An approach recommended by Doctoral Supervisors and Henley Management College more generally is to consider theory and methodology which is both well established and validated.
The TLQ is the most risky strategy as it has not been independently validated. The LQF was not designed to capture transformational leadership per se. The LPI, whilst having strong characteristics, does not measure transactional leadership.

The MLQ (Form 5X) is the most widely used instrument for measuring transformational and transactional leadership(Antonakis et al., 2003, Lowe et al., 1996). Access to the instrument was uncomplicated. The MLQ has been used in studies within the NHS such as the Royal College of Nursing Leadership Programme (Castile, 2006) for the purposes of management development, it has not been used to explore its factor structure within the UK NHS. Whilst there are these acknowledged issues to do with the factor structure of the MLQ it is decided that the following operationalisation is used:

- Transformational leadership to be assessed using the MLQ (Form5X) as the most widely used instrument in the research(Antonakis et al., 2003, Lowe et al., 1996, Avolio and Bass, 2004)
- Gender and tenure will be collected through demographic data.

3.6 Operationalising the organisational performance variable

Promoting public sector efficiency remains an important concern for many governments (Pollitt, 2000;2002) Perceived as lacking competitive pressures, traditionally it has been held that the public sector has little inherent incentive to pursue efficient behaviour (Street and Jacobs, 2002). However it has long been recognised that measuring organisational performance must address two basic issues:

- Selection of a conceptual framework from which to define organisational performance, and
- Identification of accurate, available measures that operationalised organisational performance

(Dess and Robinson, 1984)

Operationalising such a complex concept is inherently difficult (Dess and Robinson, 1984). Three approaches were considered arising from the literature; the Balanced Scorecard Method (Kaplan and Norton, 1992), the NHS PAF (DOH, 1999, DOH, 2002) and the EXCEL method (Sharma et al., 1990).

3.61 The Balanced Scorecard Method / the NHS PAF

Because of the limitations of traditional financial performance measures and dramatic changes in the business environment(Otley, 2000), organisations are now encouraged to measure their performance from a broader, more balanced and comprehensive perspective(Otley and Fakiolas, 2000). Among many multidimensional performance measurement systems introduced in the last decade the 'balanced scorecard' has emerged as the one most widely discussed in the academic literature and adopted in practice(Chang et al., 2002).

The Balanced Scorecard Method (BSC) was originally conceived by Kaplan and Norton(Kaplan and Norton, 1992). It has four main perspectives:

- Financial
- Customer
- Internal business processes
- Learning and growth

These four perspectives provide a balanced picture of current operating performance as well as drivers of future performance(Kaplan and Norton, 1996b).

Proponents of the BSC consider it imperative that measures used to evaluate performance be linked to the business strategy, regardless whether they are measures common to all business units or unique to a particular or single unit (Kaplan and Norton, 2000). However the applicability of the BSC to the NHS is not empirically tested (Freeman, 2002, Chang et al., 2002, Mullen, 2004)

The BSC has now been applied to the NHS, called the Performance Assessment Framework (PAF)(Chang et al., 2002). It is claimed by the Government that the PAF is based on the concept of the BSC, although its six dimensions are fundamentally different from those within the BSC, namely:

- Health improvement
- Fair access
- Effective delivery of appropriate healthcare
- Efficiency
- Patient/care experience
- Health outcomes of NHS care

It can be argued that the PAF is not identical to the BSC, rather the BSC approach has been transformed to suit the unique context of the NHS (Chang, 2002). The BSC dimension on shareholder wealth gain, for example, was substituted with health improvement measured by reducing death rates.

To support these six dimensions, a set of performance indicators was also introduced (DOH, 2002). These indicators were chosen based on the aim of each dimension(Chang et al., 2002). As an example the first indicator, *Health improvement*, had the following indicators:

- Deaths from all causes
- Deaths from cancer
- Suicide rates
- Deaths from accidents
- Serious injuries from accidents
- Deaths from all circulatory diseases

The stated purpose of this framework was to improve NHS performance by encouraging managers to focus on more comprehensive views of performance, rather than concentrating on the 'bottom-line' figures (DOH, 1999). The intention of Government is that the PAF serves as both a measurement system and a strategic management system (as suggested by Kaplan and Norton, 2001), linking national health strategies and local operational activity top improve performance at both national and local levels. The PAF reflects both outcome and process measures, aiming to achieve longterm health improvement via the efforts put into raising results for process measures. The Government also intended to use the PAF as a strategic tool for benchmarking (DOH, 2002).

In considering that the concept of performance excellence is positively related to business performance do the BSC/ NHS PAF assist in answering the research question?

The BSC assumes that learning and growth are both seen in a uniformly positive vein. However within the context of public services such as the NHS where growth of individual organisations may be detrimental to the health of the whole system, then learning how to reduce costs to become smaller (and thereby transfer tax funds to other parts of the system) may be more appropriate than growth (Johnson, 2000).

Kaplan and Norton (1996) note that a cause and effect relationship between process and outcome measures is a necessary element of any BSC framework. In the case of the PAF, this cause and effect relationship is assumed to exist between aspects of health service delivery (i.e. process measures) and health improvements (i.e. outcome measures). In addition the PAF may lead to perverse consequences where improvement is achieved for public presentation but is not there in reality. Gaming may take place to 'show' the best result (Freeman, 2002). It is a product of the process and the method by which it is used (Mullen, 2004).

The PAF is an external, non-summative indicator for external verification of quality improvements and central control. Such indicators can be very seductive as they promise an objective view of healthcare quality, yet it can be argued that it is a promise they are unable to keep. The PAF is not a formative mechanism for internal quality improvement (Freeman, 2002).

As with other BSC approaches, if the PAF is correct in its assumptions of the relationship between cause and effect, and between process and outcome

measures, then such causal relationships should enable managers to use the performance measurement system as a feed forward control tool, where the improvement of process measures should then contribute to improved outcome measures. It is argued that this assumption should not be taken for granted within the PAF (Chang et al., 2002). Finally the politicisation of the NHS will always have the potential to distort the 'balance' in the Balanced Scorecard as politicians change targets and priorities (Radnor and Lovell, 2003).

As with other BSC approaches the PAF assumes a causal relationship between process and outcome measures, though this is subject to question(Otley and Fakiolas, 2000). The use of the BSC/PAF as a means of assessing organisational performance directly linked to Chief Executive leadership behaviours has not been empirically tested(Chang et al., 2002). It is not intended to do so as part of this descriptive research.

3.62 The EXCEL method

This method is predicated on the work by Peters and Waterman (Peters and Waterman, 1982) and developed by Sharma et al (1990). In their book, *In Search of Excellence* (1982) Peters and Waterman summarised the results of studies of 62 American companies on three criteria: large size (based on annual sales); sustained financial performance (profit, growth, market value); and innovative capability which included not only the ability to come up with a flow of new products and services, but also how rapidly and skilfully they responded to what was happening in the environment. The EXCEL scale builds on the assumption that there is a positive relationship between excellence and organisational performance (Peters and Waterman, 1982, Sharma et al., 1990, Caruana et al., 1995).

From this work Peters and Waterman (1982) identified eight organisational characteristics that distinguish excellent companies:

- 1. A bias for action
- 2. Close to the customer

- 3. Autonomy and entrepreneurship
- 4. Productivity through people
- 5. Hands on, value driven
- 6. Sticking to the knitting
- 7. Simple form, lean staff
- 8. Simultaneous loose-tight properties

As referred to in Chapter 2 some criticism has been levelled at the *Excellence* study of Peters and Waterman in other studies. In a critical review Carroll (Carroll, 1983)disagreed with the narrow definition of excellence used, and suggested that excellence depends not only on the eight attributes, or what he calls 'management effectiveness', but also on several 'non-management' variables, which includes technology, finance, raw materials, and Government policy. Other empirical work has also examined the *Excellence* study, reviewed the results and prescriptions, and the construct (Caruana et al., 1995).

Responding to these criticisms in their review of the literature Sharma et al (Sharma et al., 1990)drew four conclusions:

- All authors have tended to indicate what they believe is a better measure of performance and have then proceeded to see how Peters and Waterman's' excellent companies compare to this 'better' measure(s) of performance (Aupperle et al., 1996)
- Excellence should be seen as an extreme (and perhaps even infinitely unattainable) point on a continuum. Yet there is a tendency among authors for a rigid dichotomous classification of excellent firms i.e. excellent/not excellent (Clayman, 1987, Langbert, 1990)
- Studies tend to focus on single item measures. Doyle (Doyle, 1992)points out that seeking excellence on one dimension only results in meeting the needs of one group over that of others, with resulting disequilibrium. Managers should therefore not seek to excel only on a single objective, but rather look for a balanced performance over time on a set of goals (Barsoux, 1989).

 Measures that have been used to date have not been rigorously developed to operationalised the eight attributes of excellence by Peters and Waterman (Caruana et al., 1995).

Caruana et al (1995) investigated the relationship between excellence and business performance using the EXCEL instrument and a limited repertoire of financial and growth performance. They concluded that the performance results reported in their study provide support for the hypothesis that companies' excellence is related positively to business performance. The statistical reliability claimed for EXCEL by Sharma et al was confirmed, as was the content and convergent validity. Some indication of external validity was also provided by virtue of the fact that 'more excellent' firms perform better. Nomological validity may be in some doubt however, as, rather than forming eight distinct characteristics as in the Sharma et al study, the factor analysis suggested there may simply be two facets of excellence – the 'close to the customer' factor, and the 'general excellence' factor.

They acknowledged that their study, based on self-reported postal questionnaires, based on a population of larger British service companies may mean that any generalisation of findings to other populations must be made with some caution.

The EXCEL instrument developed by Sharma et al (1990) is a 16 item, 7-point instrument (see table below). The alpha's for the EXCEL scale have been reported as .89 and .90 by Sharma et al(Sharma et al., 1990) and .92 (Caruana et al., 1995).

Performance excellence (Peters and Waterman, 1982, Sharma et al., 1990, Caruana et al., 1995) is a multi-dimensional concept which assumes that high intensity and balanced performance by leaders over time on a set of goals/criteria will yield results. The EXCEL scale is an instrument specifically designed to measure performance excellence based on the eight variables of Peters and Waterman (1982). The construct of corporate excellence, as expressed by EXCEL is viewed as those management practices that lead to

sustained performance. Given this study involves organisations in the public sector where financial performance measures have less meaning, and where the complexity of healthcare processes and outcomes, mixed with a need for service excellence is paramount, the EXCEL instrument was used in this study to measure the healthcare organisations performance.

Table 3.4: The EXCEL instrument

tem	
1.	In this organisation we encourage employees to develop new ideas
2.	This organisation has a small staff that delegates authority efficiently
3.	It is the belief of top management in this organisation that its people are of utmost importance to the company
4.	In this organisation we instil a value system in our employees
5.	We provide personalised attention to all our customers
6.	In this organisation top management creates an atmosphere that encourages creativity and innovativeness
7.	The company's values are the driving force behind our operation
8.	The firm is flexible and quick to respond to problems
9.	The company concentrates in product areas where it has a high level of skill and expertise
10.	We have a small but efficient management team
11.	The company develops products that are natural extensions of its product line
12.	The organisation truly believes in its people
13.	The company considers after-the-sale service just as important as making the sale itself
14.	The company believes in experimenting with new products and ideas
15.	The company believes that listening to what customers have to say is a good skill to have
16.	This organisation is flexible with employees but administers discipline when necessary

(adapted from Sharma et al, 1999)

3.7 The use of subjective measures

The use of subjective measures of relative performance have been empirically tested for were correlation with objective measures(Dess and Robinson, 1984, Ittner et al., 2003). The result of these studies indicates that it is possible to accept that whilst objective measures would be preferable that "a researcher might consider using a subjective perceptual measure.... under two specific conditions: (1) accurate objective performance measures are unavailable, and (2) the alternative is to remove the consideration of performance from the research design" (Dess and Robinson, 1984; p.271). Given the lack of empirical

validation of the NHS Performance Assessment Framework as an alternative measure of organisational performance (Chang et al., 2002), and the central research question, the use of subjective perceptual data is acceptable.

3.71: Choice of organisational performance instrument

The Balanced Scorecard(Kaplan and Norton, 1992, Kaplan and Norton, 1996a) outside of its use as part of the NHS Performance Assessment Framework, is not standardised within NHS organisations. Each would have designed different ways of measuring performance which precludes its use as a standard measure for this study. Equally designing and validating a common BSC as an exploratory piece of research was a high risk approach for a doctoral candidate.

The NHS PAF would answer many of these issues but has not been independently validated or empirically tested as a means of assessing the relationship between CEO leadership behaviour and organisational performance (Chang et al., 2002, Freeman, 2002).

The EXCEL instrument (Sharma et al., 1990, Sharma et al., 1999)has been the subject of independent validation (Caruana et al., 1995) and through its use in doctoral theses (Castile, 2006, Sandbakken, 2003, Wilburg, 2003). It has been published in the Handbook of Marketing Scales (Bearden and Netemeyer, 1999). In the context of transformational leadership, organisational performance is linked to leadership style and effectiveness especially at times of considerable organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1996). It was concluded that the EXCEL instrument would be used for this study.

3.8 Data Collection

Access is a major problem for researchers (Remenyi et al., 1998, Janesick, 1994, Saunders et al., 2000). The approach to access and its inherent problems are well recognised (Robson, 1999). The study surveyed all NHS Chief Executives of NHS Trusts in England who had been in post in their organisations for two years. The NHS Leadership Centre agreed to identify those Chief Executives who have been in the same post for two years at the time that the questionnaires were circulated. The time requirement to complete the survey instruments reflected the need to know that the Chief Executive has been in post long enough to be able to effect the organisations performance through their leadership behaviour(Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000).

The use of focus groups is "another useful method for gathering ideas and insights." (Churchill 1999:106) Focus groups are defined as a research technique that collects data through group interaction on a topic defined by the researcher. (Morgan, 1996:130) This definition has three essential elements. Firstly, it clearly states that focus groups are a research method devoted to data collection. Second, it locates the interaction in a group discussion as the source of the data. Third, it acknowledges the researchers active role in creating the group discussion for data collection purposes. Morgan (Morgan, 1993)presented a conceptual framework to clarify the relationship between focus groups as a qualitative method and surveys as a quantitative method, since the two methods produce such different kinds of data.

Where the survey is the primary method (as in this study) and the focus group services in a preliminary capacity it is common to use focus groups to provide data on how the respondents themselves talk about the topics of the survey(Morgan, 1996). Focus group research reveals it historical association with marketing research by using the term 'segmentation' to capture sampling strategies that consciously considers the composition of groups. For this study the initial focus group used were all NHS Chairs. Churchill (1999) suggests that focus groups have proved productive in the following two ways:

- To generate hypotheses that can be further tested quantitatively
- To generate information helpful in structuring consumer questionnaires.

Churchill recommends 8-12 members (this study had 10) selected so they are relatively homogenous. The focus group collected together for this study were asked to consider:

- 1. The introduction letter. Was it clear and compelling in seeking the assistance of the observer/rater?
- 2. The use of the EXCEL questionnaire in terms of NHS context sensitive words were simple alternatives available?
- 3. Whether there were any other key questions that might be added to the study?
- 4. Whether the questionnaires would take too long to complete?

In essence the focus group acted as a pre-test group. Pre-testing questionnaires is vital in understanding how the questionnaire performs under actual conditions of data collection (Churchill, 1999:p.364). The language of the EXCEL instrument was deemed not always 'NHS' orientated. The focus group suggested the following changes to the EXCEL instrument:

Table 3.5: Amendments to the EXCEL instrument (post focus group)

Item

1.In this *Trust* we encourage employees to develop new ideas

2. This *Trust* has a small staff that delegates authority efficiently

3.It is the belief of top management in this *Trust* that its people are of utmost importance to the *organisation*

4.In this *Trust* we instil a value system in our employees

5.We provide personalised attention to all our customers

6.In this *Trust* top management creates an atmosphere that encourages creativity and innovativeness

7. The *Trust's* values are the driving force behind our operation

8. The Trust is flexible and quick to respond to problems

9. The Trust concentrates in services where it has a high level of skill and expertise

10.We have a small but efficient management team

11. The Trust develops services that are natural extensions of its product line

12. The Trust truly believes in its people

13. The *Trust* considers *after-care* service just as important as the *initial treatment*

14. The Trust believes in experimenting with new products and ideas

15. The Trust believes that listening to what customers have to say is a good skill to have

16. This Trust is flexible with employees but administers discipline when necessary

The subsequent letters to Chairs and the combined MLQ/EXCEL questionnaire is shown in the Appendices.

3.9 Post initial focus group

After the focus group the MLQ and EXCEL questionnaire instruments were issued as follows:

Figure 3.4: Data collection method



Each MLQ and EXCEL was coded with identifiers so that the data collected from each can be matched together.

The focus group recommended that the Chair of the Trust be approached to complete the instruments. They argued that the Chair was in a unique position to judge both the leader effectiveness and the organisational performance.

The use of the Chairs feedback through the MLQ and EXCEL reflects that they are in a unique position to evaluate leader effectiveness. They carry out the annual appraisal of the Chief Executive, and are accountable to the Secretary of State for Health for the organisations overall performance:

"As leader of the Board, the Chair has the overarching responsibility for ensuring that.... the organisation meets its planned objectives for service delivery. It falls to the Chair to conduct the annual performance review of the Chief Executive. An effective performance review enables individuals to understand their performance, identify training and development needs, and thereby increase their contribution to the organisation. Chairs are in a special position because of their greater involvement with the Chief Executive and knowledge of the organisation." (DoH, 2003: p.16-18)

The Chairs when undertaking the review of CE's performance are asked to consider the following generic objectives amongst others:

- Setting direction and delivering results
- Getting the basics right and engaging others in the drive for service improvement and innovation
- Objectives linked to 'objectively' verifiable measures and subjective assessments on style, approach and 'soft' issues
 (NHSLeadershipCentre., 2003c)

It was recognised that there was the risk of the Chair and the Chief Executive being too close for effective performance review and scrutiny. The Department of Health reminds Chairs that they "should be careful to ensure that his or her supportive relationship to the Chief Executive does not obstruct effective scrutiny". (DoH, 2003:20) As an added layer of consistency the Chairs appraisal of a Chief Executive needs to be formally signed-off by the Chief Executive of the Strategic Health Authority acting in a grandparent role.

Whilst Chief Executives were asked to rate themselves for the purposes of a further study outside of this thesis, self-ratings by CEO's would have significant methodological considerations as studies have shown that leaders self-ratings are subject to bias and inflation (Harris and Schaubroeck, 1988, Mabe and West, 1982).

3.10 Demographics

Demographic data relating to size and type of organisation was collected for inclusion in the statistical analysis as control variables.

3.11 Pre-testing of the questionnaires

The EXCEL instrument was tested through focus group work and subsequently amended.

The MLQ was argued by its originators to be cross-cultural following extensive multi-national research (Bass and Avolio, 1993, Avolio and Bass, 2004). It has also been the subject of independent research (Bycio et al., 1995, DenHartog et al., 1999, DenHartog et al., 1997, Antonakis et al., 2003) and reported in numerous doctoral theses (Avolio and Bass, 2004). It was decided therefore not to undertake a pilot of the MLQ.

3.12 Statistical analysis of the resulting data

The data was analysed in accordance with standard multivariate techniques for quantitative studies (Field, 2005, Pallant, 2001, Hair et al., 1998, Kinnear and Gray, 2000).

3.13 Conclusion

In summary the research methodology was based on a positivist approach, the most prevalent form of study in the field of theory. The literature review indicated that the MLQ was the most appropriate instrument for assessing transformational leadership behaviour (Avolio and Bass, 2004).

Performance excellence would be evaluated using the EXCEL instrument (Sharma et al., 1999).

Within the population of NHS organisations only those organisations who's Chief Executives had been in post for at least two years would be studied (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000) and a comparison would be made of those CEO's in post for two/three years and those on post for over four years.

Gender and tenure would also be considered through demographic data collection and studied using appropriate statistical techniques.

The appraisal of the CEO leadership behaviour and the organisations performance excellence would be undertaken by the organisations non-executive Chair (DOH, 2003a, NHSLeadershipCentre., 2003c).

The resulting revised research model therefore is shown overleaf:

Figure 3.5: the relationship of the NPM, transformational leadership, and performance excellence



The next chapter will describe the research process in more detail concluding with data analysis and interpretation relating to the research model and hypotheses.

Chapter Four: Analysis and findings

4.1 Introduction

This chapter will follow 4 stages:

- 1. Firstly, to briefly describe the research model, key research question and hypotheses generated from the previous chapter on methodology;
- 2. Secondly, to describe the methods used to collect the data;
- Thirdly to describe the statistical methods used to interpret the data and test the hypotheses;
- 4. Fourthly, to report on the findings from the analysis.

Building on the theoretical foundations in Chapters Two and Three it is argued that:

 The New Public Management construct is radically changing the way that public services are delivered. This is not simply a process response but a more fundamental way of viewing public services from the viewpoint of the consumer at the micro level: from Government at the macro level; and the way public organisations are externally and internally measured on improvement (Osborn and Gaebler, 1992, Pollitt, 2000, Pollitt, 2002, Freeman, 2002, Mullen, 2004, Ferlie et al., 1996). It requires a form of leadership consistent with the principles of the NPM and able to rise to the challenges posed by its drive for excellence (Javidan and Waldman, 2003, Goodwin, 1998, Kelman, 2005).

The concept of organisational transformation or modernisation is argued to be one of the key political drivers in public services within the UK in the late 20th and early 21st centuries and certainly within the English NHS (DOH, 1997, DOH, 2000, DOH, 2005b, DOH, 2005a, OfficeforPublicSectorReform, 2002, Pollitt, 2000, Pollitt, 2002). Transformational leadership has a very substantial body of evidence supporting its conclusion that it promotes higher levels of organisational performance especially at times of considerable organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Within the context of public sector reform within the UK transformational leadership is seen as a central dimension of success (Smith, 2002, ProductivityandInnovationUnit, 2000, Crisp, 2004, Alimo-Metcalfe and Alban-Metcalfe, 2000). Transformational leadership will form therefore the core leadership theory used in this research grounded within the concept of the New Public Management.

There is a energetic debate about whether women are more transformational than men with a consensus that the effect is small but no consensus that small means irrelevant (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

With female Chief Executives of NHS Trusts now forming one-third of the Trust CEO population, and as a higher proportion than any other public service sector (Batty, 2003), it is important to test whether female CEO's in the NHS have stronger transformational leadership behaviours than men, and if so does it more positively affect organisational performance. The literature suggests that female Chief Executives may have higher ratings of transformational and transactional leadership behaviours than their male counterparts and corresponding higher performance excellence. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

 Measuring organisational performance in NHS organisations is complex. The Performance Assessment Framework (PAF) may not provide the internal formative measure for quality improvement and strategy development required (Radnor and Lovell, 2003, Chang et al., 2002). The alternative concept of business excellence which leads to sustained performance which encompasses strategy, process, and customer satisfaction may be an alternative model (Sharma et al., 1999, Sharma et al., 1990, Caruana et al., 1995).

Gender

Gender will be considered as to whether it mediates transformational leadership and organisational performance within the English NHS.

Tenure in post

A similar exercise will be undertaken to explore the relationship of tenure in post to organisational performance. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

4.2 Hypotheses

The resulting hypotheses are shown below:

Hypothesis 1.0: There will be no correlation between CEO's transformational leadership behaviour and organisational performance.

Hypothesis 1.1: There will be a positive correlation between CEO's transformational leadership behaviour and organisational performance. (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Hypothesis 2.0: There will be no correlation between transactional leadership behaviour and organisational performance.

Hypothesis 2.1: There will be a positive correlation between transactional leadership and organisational performance but less so than in hypothesis 1b.(Lowe et al., 1996, Bass, 1985, Antonakis et al., 2003)

Hypothesis 3.0: Within the concept of transformational leadership as proposed by Bass (1998) CEO's within the English NHS will demonstrate a nine factor model of transformational and transactional leadership (five transformational, 3 transactional, and 1 nontransactional leadership behaviour) Within the concept of transformational leadership as Hypothesis 3.1: proposed by Bass (1998) there will be levels of multicollinearity amongst the transformational, transactional, and non transactional leadership behaviours demonstrated by CEO's in the English NHS resulting in fewer factors. (Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001)

Hypothesis 4.0: There will be no differences between male and female CEO's transformational leadership behaviours when correlated to organisational performance.

Hypothesis 4.1: Female CEO's will be shown to have a more significant effect on organisational performance through higher transformational leadership than their male counterparts. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli,

2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Hypothesis 5.0: CEO tenure between those in post for 2-3 years and those over 4 years will have no difference in effect on organisational performance.
Hypothesis 5.1: CEO's in post for longer periods of tenure (over 4 years) will have greater impact on organisational performance than those in post for between 2-3 years. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

In seeking to quantify effects such as transformational leadership and organisational performance, and decide whether they are meaningful, Field (2005) suggests a four stage process:

- 1. Generate a hypothesis (or hypotheses) this will usually be a prediction that some kind of effect exists in the population (as above)
- 2. Collect some useful data.
- 3. Fit a statistical model to the data this model will test your initial predictions.
- 4. Assess this model to see if it supports your initial predictions.

4.3 Completion of the MLQ (5X) by the Chairs and CEO's of the NHS organisations

The population of Chairs and Chief Executives was available from national databases held in yearbooks and through NHS websites. Initially it was thought to send these to named individuals to increase the likelihood of return but in a small pilot exercise of ten chosen at random this proved unworkable. Some individuals had changed jobs and their replacements simply sent the forms back uncompleted or did not return them until telephoned when they explained that they thought the questionnaire to be 'personal' and the absence of the individual in post led them to dispensing with it. It was therefore decided to move to 'Dear Chair' and 'Dear Chief Executive' letters to avoid this problem. As a fundamental plank of the sampling strategy only Chief Executives in post for two years were

to be approached. This period of tenure was framed from the literature review. (Hambrick and Fukutomi, 1991)However the yearbooks and websites did not differentiate tenure of the Chief Executive in post, merely stating who the Chief Executive was. It was therefore necessary to send questionnaires to all Chairs and Chief Executives in England and identify those in post for two years from demographic information contained in the Chief Executives questionnaire. This added considerably to the burden of administration, time and cost.

Questionnaires were sent out over a four week period in the spring of 2005 with an initial return period of two weeks. Chase up letters were sent out after 3 weeks. The total number of sets of questionnaires based on organisational numbers of PCT's and NHS Trusts totalled 478. Through a combination of telephoning NHS organisations and from the questionnaires returned from the Chief Executives or Chairs alone but with no complementary response despite the chasing, it was discerned that the total number of Chief Executives in post for two years at the time the questionnaires were sent out was 144. Eighty eight completed sets were returned giving a response rate of 61%. With the advent of alternative methods of questionnaire completion, in particular web based completion, this direct mail response rate compares well with other mail shot methods (Cobanoglu et al., 2001). It also compares well against previous doctoral theses by, amongst others, Brett (2000), Sandbakken (2004), and Wilberg (2003).

Following the focus group work on the Organisational Performance (EXCEL) questionnaire (Table 3.5), a composite questionnaire was formed from the MLQ (5X) and the EXCEL instrument (Appendix 2). This was sent to the Chief Executive's Chairman as the most appropriate person to appraise the Chief Executives leadership behaviours. This was in accordance with the NHS Chief Executives national appraisal scheme (NHSLeadershipCentre., 2003c). A letter was sent to every Chair with each composite questionnaire to explain the nature of the research and its importance to the Chief Executive community (Appendix 1). They were also told that their Chief Executive would be aware that their Chair would be completing the MLQ (5X) questionnaire. Each Chief Executive was sent also a letter requesting they complete the self-rating version of the MLQ

(5X). They were advised that their Chair was being asked to complete a similar questionnaire on their leadership behaviours and express a view on their organisations performance (Letter in Appendix 3). This self-other rating data allowed for a comparison of perceptions of leadership between appraiser and appraisee. This is covered later in this chapter.

4.4 Initial data description

Of the eighty eight responses the following demographic information was collected:

- Gender
- Age breakdown
- Tenure in post (only those over 24 months in post were included in the study)
- Organisational income
- Numbers of staff employed
- Whether the Chief Executive was Primary Care or NHS Trust based
- DoH Star ratings in 2002/03 and 2003/04

The demographic data of gender and tenure would be used later to consider, in the light of the data analysis, whether any of these might be influential as mediating variables.

The relative split of male and female respondents and the knowledge of the total population by gender (from the part completed sets of questionnaires and the telephone calls) a reasonable sample had been collected through the survey.

Table 4.0

Gender

N	Valid	88
	Missing	0

Table 4.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	48	54.5	54.5	54.5
	Female	40	45.5	45.5	100.0
	Total	88	100.0	100.0	

From the demographic data additional information on tenure in post, age bands, numbers of staff the organisation employed, its total income in financial year 2005/2006 was gained. These are shown below:

Table 4.2

Length in current post in months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-36	10	11.4	11.4	11.4
	37-48	36	40.9	40.9	52.3
	Over 48 months	42	47.7	47.7	100.0
	Total	88	100.0	100.0	

Table 4.3

Age in years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36-40	4	4.5	4.5	4.5
	41-45	18	20.5	20.5	25.0
	46-50	41	46.6	46.6	71.6
	51-55	20	22.7	22.7	94.3
	56-60	4	4.5	4.5	98.9
	Over 60	1	1.1	1.1	100.0
	Total	88	100.0	100.0	

Table 4.4 Staffing numbers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 500	18	20.5	20.5	20.5
	501-999	34	38.6	38.6	59.1
	1000-2000	16	18.2	18.2	77.3
	2001-3000	9	10.2	10.2	87.5
	3001-4000	5	5.7	5.7	93.2
	4001-5000	2	2.3	2.3	95.5
	over 5000	4	4.5	4.5	100.0
	Total	88	100.0	100.0	

Table 4.5

Total income	in in	2005/06	in millions
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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 100	5	5.7	5.7	5.7
	`101 - 200	50	56.8	56.8	62.5
	201-300	20	22.7	22.7	85.2
	301-400	10	11.4	11.4	96.6
	401-500	1	1.1	1.1	97.7
	Over 500	2	2.3	2.3	100.0
	Total	88	100.0	100.0	

Table 4.6 PCT or NHS Trust

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PCT	66	75.0	75.0	75.0
	NHS Trust	22	25.0	25.0	100.0
	Total	88	100.0	100.0	

The sample had just over half of the numbers as male CEO's compared to female CEO's, nearly 90% had been in post for over 3 years and almost two-thirds were aged over 46 years. Three-quarters worked in PCT's compared to NHS Trusts, this being roughly the same proportion as the NHS as a whole.

The demographic data and the data from the composite questionnaire completed by the Chair was entered into SPSS. Some missing data were resolved at this stage through web searches or further telephone calls i.e. the organisation's star ratings if not completed, and in one case the gender of the Chief Executive.

All the data gathered from the respondents were examined through a process described in the literature as exploring data, (Field, 2005)Exploratory Data Analysis, (Kinnear and Gray, 2000)or Exploratory Analysis (Hair et al., 1998)

Field (2005, p.63) quotes Wright from 2003 in saying that this stage is about researchers 'making friends with their data'. This stage is essentially about understanding the mean, standard deviation, kurtosis and skewness of the data gained.

The process of exploring data has several stages at the exploratory stage(Pallant, 2001). The first stage is to check for errors. Outlier checks were undertaken to identify errors of input was completed and any errors corrected. Missing values that were not the result of input error are covered later.

4.5 EXCEL instrument

The EXCEL instrument has 16 items designed to measure the eight attributes of excellence espoused by Peters and Waterman. (Peters and Waterman, 1982) The EXCEL instrument was developed using recommended scaling procedures. Although originally hypothesised to be an eight-factor measure based on the eight attributes, factor analysis revealed a single higher-order factor structure composed of eight secondary factors that reflect the eight attributes of excellence. Thus, the items in the instrument are summed to form an overall score of excellence, where scores can range from a minimum of 16 to a maximum of 112. (Sharma et al., 1990)

The data file was initially examined for missing data. Missing data is a fact of life for researchers. Hair et al, (1998) suggest that researchers must ask the following questions:

- Are the missing data scattered randomly throughout the observations or are distinct patterns identifiable?
- How prevalent are the missing data? If patterns are found and the extent of the missing data is sufficient to warrant action, then it is assumed that some missing data process is in operation.

The EXCEL database of responses shows a spread of missing data as tabled below:

EXCEL number	Number missing	% of total
No. 4	1	1.1
No. 5	3	3.4
No. 7	1	1.1
No. 9	5	5.7
No. 11	2	2.3
No. 13	6	6.8
No. 14	3	3.4
(n=88)		

Of the total number of questions in the EXCEL instrument ($88 \times 16 = 1400$) only 21 were not completed by the Chair respondents (1.5%)

Hair et al (1998) recognises the dilemma researchers find with missing data. There may be a number of reasons for non-completion. These include the respondent overlooking the item, not fully understanding what it meant, or that they did not feel it was relevant. In respect of the EXCEL instrument the missing data could be explained as "data missing completely at random" (Hair et al, 1998:50). This is where there is no underlying process to bias the observed data. There are several ways of dealing with missing data. Hair et al suggest the simplest and most direct approach to dealing with missing data is to exclude them completely as cases. This is true when the resulting sample size is large. This approach is also known as the 'complete case approach' (Hair et al, 1998).

An alternative is not to exclude the cases and/or variables but use the 'mean substitution method'. The 'mean substitution' method employed above is "one of the more widely used methods" (p.54). Hair et al conclude that the rationale for this approach is that the mean is the best single replacement value. It is recognised that there are three disadvantages of the method. First, it makes the variance estimates derived from the standard variance formulas invalid by understating the true variance in the data. Second, the actual distribution of values is distorted by substituting the mean for the missing values. Third, this method depresses the observed correlation because all missing data will have a single constant value. It does have the advantage, however, of being easily

implemented and providing all cases with complete information. Where respondents failed to complete an item or items in the instrument the missing value was replaced by the mean value for that item from all the respondents.

Descriptive statistics for the EXCEL scale are shown in Table 10 below.

Table 4.7

Descriptives (EXCEL)

	Gender			Statistic	Std. Error
Organisational	Male	Mean		95.25333	1.594448
performance sum total		95% Confidence	Lower Bound	92.04572	
lotai		Interval for Mean	Upper Bound	98.46095	
		5% Trimmed Mean		96.36944	
		Median		98.02500	
		Variance		122.029	
		Std. Deviation		11.046658	
		Minimum		49.000	
		Maximum		111.000	
		Range		62.000	
		Interquartile Range		12.537	
		Skewness		-2.005	.34:
		Kurtosis		6.161	.674
	Female	Mean		94.80375	1.691530
		95% Confidence	Lower Bound	91.38231	
		Interval for Mean	Upper Bound	98.22519	
		5% Trimmed Mean		95.58750	1
		Median		97.00000	
		Variance		114.451	
		Std. Deviation		10.698175	
		Minimum		64.000	
		Maximum		110.000	
		Range		46.000	
		Interquartile Range		12.000	
		Skewness		-1.147	.37
		Kurtosis		1.148	.73

Table 4.8 Tests of Normality

	Gender	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Organisational performance sum total	Male	.134	48	.030	.840	48	.000
	Female	.157	40	.014	.908	40	.003

a Lilliefors Significance Correction

Normal distributions of data are essential for parametric statistical techniques to operate effectively (Field 2005). The Kolmogorov-Smimnov test shows that the EXCEL data was not normally distributed (p>.05). A deviation from normality means that parametric tests should not be used. However methods can be used to remedy this non-normal distribution (Hair et al, 1998, p.73). The data was therefore examined further to investigate whether there were any errors in the data set, particularly causing outliers that might be contributing to non-normal distribution. The results of this exploration are shown below:

Table 4.9

Extreme Values

	Gender			Case Number	Value
Organisational performance	Male	Highest	1	82	111.000
sum total			2	24	110.000
			3	5	106.000
			4	31	106.000
			5	15	105.700
		Lowest	1	32	49.000
			2	73	65.000
			3	68	79.000
			4	78	80.000
			5	79	86.000(a)
	Female	Highest	1	88	110.000
			2	86	109.000
			3	37	108.000
			4	62	106.000
			5	43	104.000(b)
		Lowest	1	60	64.000
			2	83	68.000
			3	39	74.000
			4	64	78.000
			5	63	83.000

a Only a partial list of cases with the value 86.000 are shown in the table of lower extremes.

b Only a partial list of cases with the value 104.000 are shown in the table of upper extremes.



Figure 4.1

The box plot, in addition to generating data on outliers, also identified extreme points. These are outliers which extend more than 3 box lengths from the edge of the box (Pallant, 2001). This cut-off is consistent with advice from Hair (1998, p.65).

In respect of the male CEO's case no. 32 was an extreme male outlier. There was no female extreme outliers. Both the male and female outliers were all checked for coding error. No coding errors were found.

The data was further analysed to check the frequency of outliers for each question especially since the scale questions had the subject of focus group revision. This is shown overleaf:

Table 4.10

EXCEL	Male and	Female and
Question	frequency	frequency
1	4	-
2	3	3
3	2(both extreme points)	1
4	2	1
5	4	3
6	3	-
7		2
8	-	4
9		
10	3(2 extreme points)	2
11	1	2
12	3(2 extreme points)	*
13		-
14	-	2
15	1 extreme point	2
16	4	2

Questions 3, 10, and 12 had extreme points from more than 1 respondent (Question 3: It is the belief of top management in the Trust that its people are of utmost importance to the organisation; Question 10: We have a small but efficient management team; Question 12: The Trust truly believes in its people). The focus group work on the EXCEL instrument had only altered certain words as shown in the Table overleaf.

Table 4.11 Amendments to the EXCEL instrument (post focus group)

Item

1. In this Trust we encourage employees to develop new ideas

2. This Trust has a small staff that delegates authority efficiently

3.It is the belief of top management in this *Trust* that its people are of utmost importance to the *organisation*

4.In this *Trust* we instil a value system in our employees

5.We provide personalised attention to all our customers

6.In this *Trust* top management creates an atmosphere that encourages creativity and innovativeness

7. The Trust's values are the driving force behind our operation

8. The *Trust* is flexible and quick to respond to problems

9. The Trust concentrates in services where it has a high level of skill and expertise

10.We have a small but efficient management team

11. The Trust develops services that are natural extensions of its product line

12. The *Trust* truly believes in its people

13. The Trust considers after-care service just as important as the initial treatment

14. The Trust believes in experimenting with new products and ideas

15. The Trust believes that listening to what customers have to say is a good skill to have

16. This Trust is flexible with employees but administers discipline when necessary

As can be seen the changes to Questions 3, 10, and 12 were minor changes to the description of the health service body: the 'Trust' instead of organisation; the 'organisation' instead of the company. Indeed Question 10 was not altered by the focus group from the original wording of the EXCEL scale. In addition, as the data proved to be non-normally distributed it would be the subject of statistical transforming techniques. The conclusion was that the was concluded that the revisions to the EXCEL instrument were unlikely to have been a factor in the scores shown in the table above and any outliers would be considered again after data transformation.

Having decided to retain these cases, the issue remained that the data was not normally distributed. Field (2005, p.78) recommends that having decided to retain data the next step is to consider transforming the data. This procedure should reduce the impact of the outliers. Transforming data is not universally recommended by all writers (Tabachnick and Fidell, 2001). Transforming data is legitimate if the purpose is to put the data in a form which would allow a parametric test or a linear test to be conducted. Consulting the distribution of the original EXCEL scores below indicated that using the 'Reflect and square root' method would be most appropriate (Tabachnick and Fidell, 2001, p.82). This is recommended as the first step when the distribution differs moderately from normal.



Figure 4.2 Original distribution of scores on the EXCEL scale.

The result of the transformation using this method is shown below. The data are now normally distributed for both male and female CEO's (where the Kolmogorov-Smimvov sig. is more than 0.05).

Table 4.12 Tests of Normality(b)

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Gender	Statistic	df	Sig.	Statistic	Df	Sig.
Transformation of Operational performance	Male	.099	48	.200(*)	.955	48	.066

* This is a lower bound of the true significance. a Lilliefors Significance Correction

b Gender = Male

Table 4.13 Tests of Normality(b)

	Gender	Kolmog	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	Df	Sig.	
Transformation of Operational performance	Female	.124	40	.125	.973	40	.447	

a Lilliefors Significance Correction

b Gender = Female



Male Gender

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Case no. 32 remained an outlier even with the transformation. However it was no longer an extreme outlier. The process of potential model building would suggest that retaining unusual cases would better reflect as wide a group of CEO's as possible and it was therefore retained as part of the population of CEO's (Tabachnick and Fidell, 2001). Hair(1998, p.66) also reports that should outliers be deleted the researcher runs the risk of improving the multivariate analysis whilst limiting its generalisation.
The next stage of analysis of the EXCEL instrument was to test its *reliability*. This is the ability of the measure to produce consistent results when the same entities are measured under the same conditions (Field, 2005; pg.743). Reliability is calculated using the most common measure of scale reliability, Cronbach's alpha. The generally agreed lower limit for Cronbach's alpha is .70 (Hair et al, 1998, Nunnally, 1978, Pallant, 2001) .The alphas for the EXCEL instrument derived from this research and comparison with other studies is shown below:

Table 4.14 Reliability Statistics (EXCEL)

Cronbach's Alpha	N of Items
.913	16

The alpha from this study (.913) compares well with the original research undertaken by Sharma, Netemeyer, and Mahajan (1990) which gave an alpha of .89/.90, Caruana et al., (1995) study with an alpha of .92, and doctoral research by Sandbakken (2004) also with an alpha of .92 and Castile (2006) with an alpha of .965. Inter-item correlations are above .3 which is considered good (Field, 2005).

Whilst the original authors (Sharma et al, 1990) provide for an opportunity to break the instrument into eight separate dimensions, in this study the overall EXCEL construct is used(the full item-total statistics[EXCEL] are contained in the Appendix)

4.6 MLQ (5X) instrument

This instrument has 45 items that identify and measure key leadership and effectiveness behaviours shown in previous research to be strongly linked with both individual and organisational success (Avolio and Bass, 2004).

A MLQ (5X) was completed by the Chair operating as the higher organisational level respondent. The responsibility of the Chair is to formally appraise the Chief Executive (NHS, 2003). The Chair is also accountable to the Secretary of Health for the organisations performance. The MLQ (5X) determines to capture the transformational, transactional, laissez faire leadership behaviours through 36 items, along with an additional 9 items for the ability of the leader being assessed. These are in areas of performance improvement, such as gaining extra effort from followers, their effectiveness as a leader, and the satisfactory way they relate to others. These extra factors were not used directly in this study. This is because the hypotheses focus on transformational, transactional, and laissez faire leadership. Performance outcome was measured by the EXCEL instrument. However it was hoped to be able to make a comparison between the EXCEL data and MLQ extra effort, effectiveness, and satisfaction data with the transformational, transactional and laissez-faire values of the MLQ and shown as an additional piece of work in the Appendices. Therefore, with the simplicity of reproducing the MLQ from the commercial company (Mindgarden) that has the copyright, all 45 items were included not just the 36 relating to leadership. The latter 9 items (items 37 to 45) however had a large number of missing data as shown in the Table below:

		Cases					
		Valid Missing		То	tal		
	Gender	N	Percent	N	Percent	N	Percent
CHLQ37	Male	40	83.3%	8	16.7%	48	100.0%
	Female	36	90.0%	4	10.0%	40	100.0%
CHLQ38	Male	47	97.9%	1	2.1%	48	100.0%
	Female	40	100.0%	0	.0%	40	100.0%
CHLQ39	Male	36	75.0%	12	25.0%	48	100.0%
	Female	32	80.0%	8	20.0%	40	100.0%
CHLQ40	Male	37	77.1%	11	22.9%	48	100.0%
	Female	29	72.5%	11	27.5%	40	100.0%
CHLQ41	Male	48	100.0%	0	.0%	48	100.0%
	Female	39	97.5%	1	2.5%	40	100.0%
CHLQ42	Male	45	93.8%	3	6.3%	48	100.0%
	Female	36	90.0%	4	10.0%	40	100.0%
CHLQ43	Male	48	100.0%	0	.0%	48	100.0%
	Female	39	97.5%	1	2.5%	40	100.0%
CHLQ44	Male	40	83.3%	8	16.7%	48	100.0%
	Female	32	80.0%	8	20.0%	40	100.0%
CHLQ45	Male	48	100.0%	0	.0%	48	100.0%
	Female	40	100.0%	0	.0%	40	100.0%

Table 4.15Case Processing Summary

The reason for the absence of such large amounts of data needs to be explained. The MLQ (5X) was not pre tested in the same way the EXCEL instrument was. This reflected the fact that the MLQ has been used in several hundred studies in many countries without difficulty (Avolio and Bass, 2004). A post-test focus group of Chairs recommended that they believed the reason for this was that the questions might have implied to the higher organisational level respondents such as Chairs that they were subordinate to the Chief Executive e.g. question 39, "the Chief Executive gets me to do more than I expected to do"; question 40, "Is effective in representing me to a higher authority"; question 44, "Increases my willingness to work harder"

Dealing with such a large amount of missing values requires the researcher to decide whether this was as a result of randomness. Given the views expressed by the post-test group of Chairs it was clear that the data absence was not random but as a direct result of concerns over the validity of the questions. It was concluded therefore that this data set was not useable for the comparison intended between it and the EXCEL data and the EXCEL data alone would, as originally intended, be used for the correlation with the MLQ data.

This issue should be considered further in any subsequent use of the instrument under these circumstances and reference is made to this in the final chapter.

The use of the transformational, transactional, and laissez faire items alone and without these additional scales is consistent with other studies of transformational leadership (Brown and Keeping, 2005, Antonakis et al., 2003).

The scores from the Chief Executives self-rating and the Chairs rating were calculated in accordance with the Multifactor Leadership Questionnaire Manual, 3rd Edition (Avolio and Bass, 2004). Each construct is identified by item numbers which are summed in sets and then divided by the number of items to acquire an item set mean.

4.61 Normality of the MLQ (5X)

Following the same process for the EXCEL, the data from the MLQ items (1-36) was firstly checked for errors. A small number of items in the reduced item set were missing. Where this occurred the office of the Chair of the organisation was sent an e-mail advising that an item was not scored and inviting them to provide a response. Some 15 missing items were handled in this way and allowed for a complete set of items to be completed for the analysis.

The next stage was to assess outliers. Box plots were constructed using SPSS. The method of evaluating what to do with outliers was:

- Check again for input error.
- Check whether the outlier was more than 3 standard deviations from the mean (Hair et al, 1998).

Each of the 36 items was grouped for transformational, transactional, and laissez-faire factors and analysed using descriptive statistics to identify outliers. There were no outliers that appeared in multiple items or were classed as extreme.

4.62 Reliability of the MLQ

A Cronbach's alpha was undertaken to check the construct reliability of the key factors of transformational, transactional, and laissez fairre leadership. The alphas for these are shown below.

Table 4.16 Reliability Statistics (overall 36 item scale)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.810	.818	36

The MLQ (5X) Cronbach's alpha of .810 for the 36 item scale is at an acceptable level (Nunnally, 1978, Hair et al, 1998, Pallant, 2001). The full item-total correlation is shown in Appendix 7.

In addition to checking the Cronbach's alpha on the whole scale, Field suggests that if several factors exist then the formula should be applied separately to items related to the different factors (Field, 2005; p.658).

4.63 Factor: Idealised Influence (Attributed)

Idealised influence (Attributed) is where leaders instil pride in others for being associated with him/her as leader. They will go beyond self-interest for the good of the group. As leaders they will build others respect for them whilst displaying a sense of power and confidence. (Avolio and Bass, 2004)

Table 4.17 Reliability Statistics (Idealised influence [Attributed])

Table 4.18 Item-Total Statistics (Idealised influence ([Attributed])

		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CI	HLQ10	10.71591	1.792	.561	.362	.603
CI	HLQ18	10.67045	2.315	.422	.241	.685
CI	HLQ21	10.54545	2.090	.613	.412	.578
CI	HLQ25	10.71591	2.344	.402	.181	.696

The overall alpha for this factor is above .7, with inter-total correlations above .3 which is deemed good (Field, 2005).

4.64 Factor: Idealised Influence (Behaviour)

Leaders talk about their most important values and beliefs, specifying the importance of having a strong sense of purpose. They consider the ethical and moral consequences of decisions. The importance of having a collective sense of mission is emphasised. (Avolio and Bass, 2004)

Table 4.19 Reliability Statistics (Idealised influence [Behaviour])

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.665	.692	4

Table 4.20 Item-Total Statistics (Idealised influence [Behaviour])

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ6	10.45455	2.780	.392	.162	.684
CHLQ14	9.80682	3.583	.486	.332	.580
CHLQ23	9.89773	3.932	.416	.178	.625
CHLQ34	9.82955	3.200	.578	.394	.513

In this case whilst the inter-total correlations are good, the overall alpha is below the level generally regarded as acceptable (Hair, 1998, Nunnally, 1978, Pallant, 2001). Removing CHLQ 6 from the scale improves the alpha though it is still below the generally accepted level.

Avolio and Bass (2004) have recognised that the two factors of *Idealised Influence (Attributed)* and *Idealised Influence (Behaviour)* can be seen as characteristics of a single factor, *charismatic leadership*. It was decided to combine the scales of *Idealised Influence (Attributed and Behaviour)* into a single higher order construct – *Charismatic leadership*. This approach is consistent with other previous studies which have reproduced a six-factor structure which included such a single construct (Dvir et al., 2002, Avolio et al., 1999). A further analysis therefore of *Idealised Influence (Attributed and Behaviour)* was run to test this proposition in this study. The results are shown below.

Table 4.21 Reliability Statistics (charismatic leadership)

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
L	.792	.809	8

Table 4.22 Item-Total Statistics (Charismatic leadership)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ6	24.67045	10.086	.409	.224	.804
CHLQ14	24.02273	10.965	.561	.406	.760
CHLQ23	24.11364	11.688	.461	.264	.776
CHLQ34	24.04545	10.366	.633	.474	.747
CHLQ10	24.04545	10.734	.581	.455	.756
CHLQ18	24.00000	11.908	.441	.275	.779
CHLQ21	23.87500	11.168	.670	.494	.750
CHLQ25	24.04545	12.090	.392	.250	.785

This resulted in a higher alpha (0.792 compared to 0.707 and 0.665) and all inter-total correlations above 0.3 indicating that this scale is internally consistent (Pallant, 2001). For the purposes of this study a single combined construct of *Charismatic leadership* rather than *Idealised Influence (Attributed) and Idealised Influence (Behaviour)*.

4.65 Factor: Inspirational motivation

Here the leader behaves in ways that motivate those around them by providing meaning and challenge to their follower's work. Individual and team spirit is aroused, enthusiasm and optimism are displayed. The leader talks enthusiastically about the future and what can be accomplished (Avolio and Bass, 2004).

Table 4.23Reliability Statistics (Inspirational motivation)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.793	.793	4

Table 4.24 Item-Total Statistics (Inspirational motivation)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ9	10.44318	2.755	.564	.338	.763
CHLQ13	10.29545	2.693	.681	.478	.704
CHLQ26	10.40909	2.497	.679	.483	.702
CHLQ36	10.51136	3.080	.500	.268	.789

The alpha being above 0.7 and all the inter-total correlations above 0.3 indicates that this scale is internally consistent (Pallant, 2001).

4.66 Factor: Intellectual stimulation

These leaders stimulate their followers' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. There is no ridicule of individual member's mistakes. Creative solutions are solicited from followers, who are included in the process of addressing problems and finding solutions (Avolio and Bass, 2004).

 Table 4.25

 Reliability Statistics (Intellectual stimulation)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.746	.741	4

Table 4.26	
Item-Total Statistics	(Intellectual stimulation)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ2	8.93182	4.846	.386	.151	.761
CHLQ8	9.06818	3.972	.565	.326	.674
CHLQ30	9.37500	3.341	.620	.392	.640
CHLQ32	9.54545	3.515	.610	.391	.646

As the alpha is above 0.7, and all the inter-total correlations above 0.3 this scale is internally consistent (Pallant, 2001).

4.67 Factor: Individualised consideration

These leaders pay attention to each individual's needs for achievement and growth by acting as coach or mentor. Followers are developed to successively higher levels of potential with new learning opportunities created for them in a supportive climate (Avolio and Bass, 2004).

Table4.27 Reliability Statistics (Individualised consideration)

Cronbach's	Cronbach's Alpha Based on Standardized	
Alpha	Items	N of Items
.487	.542	4

Table 4.28 Item-Total Statistics (Individualised consideration)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ15	9.21591	3.688	.352	.168	.352
CHLQ19	8.17045	4.603	.364	.168	.407
CHLQ29	9.34091	3.630	.151	.023	.582
CHLQ31	9.20455	3.222	.380	.210	.312

Here the alpha is considerably below the generally accepted level (Hair, 1998, Nunnally, 1978, Pallant, 2001). Even with the deletion of item 29 the scale value would remain below the generally accepted level. This result posed a number of questions. The MLQ (5X) had not been piloted with the Chairs, unlike the EXCEL, because the authors have published considerably on its reliability across contexts (Avolio and Bass, 2004).

A focus group of Chairs was convened to explore the questions in this subscale. The four questions are shown below:

Item 15: 'Spends time teaching and coaching'

- Item 19: 'Treats me as an individual rather than just as a member of a group'
- Item29: 'Considers me as having different needs, abilities, and aspirations from others'

Item 31: 'Helps me to develop my strengths'

It was the view of the focus group that the Chairs interpretation of these questions indicated that they did not feel that they related well to the view they held of their Chief Executive. In particular the Chairs felt that they were not to be seen as having their Chief Executive relate to them in the way framed by the questions. For example they did not feel that Chairs would necessarily see it as the job of the Chief executive to 'develop' their abilities, nor how the Chief Executive would see them as part 'of a group'. If a number of the Chairs were scoring on the basis of interpreting these questions as relating to the Chief Executives relationship with the *Chair*, as opposed to observing the Chief Executives relationship with *followers* it would lead to very varied scoring.

In the light of the unreliability of the scale to be correctly interpreted by Chairs the sub-scale for Individualised consideration was excluded from the study at this stage. However the validity of this scale would be considered later in the analyses when the factor structure of the MLQ was explored.

4.68 Factor: Contingent reward

Transactional contingent reward leadership clarifies expectations and offers recognition when goals are achieved. The clarification of goals and objectives and providing of recognition should result in individuals and groups achieving expected levels of performance (Avolio and Bass, 2004).

Table 4.29 Reliability Statistics (Contingent reward)

4	bach's oha	Cronbach's Alpha Based on Standardized Items	N of Items
	.726	.732	4

Table 4.30 Item-Total Statistics (Contingent reward)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ1	9.45455	3.745	.579	.336	.635
CHLQ11	9.56818	3.467	.500	.257	.677
CHLQ16	9.85227	3.966	.482	.240	.686
CHLQ35	9.92045	3.315	.524	.281	.664

As the alpha is above 0.7, and all the inter-total correlations above 0.3 this scale is internally consistent (Pallant, 2001).

4.69 Factor: Management-by-Exception (Active)

The leader specifies the standards for compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with those standards. This style of leadership implies close monitoring for deviances, mistakes, and errors and then taking corrective action as quickly as possible when they occur (Avolio and Bass, 2004).

Table 4.31

Reliability Statistics (Management-by-Exception [Active])

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.700	.699	4

	inanage	апенс-ру-схсер			
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ4	7.82955	6.833	.374	.146	.702
CHLQ22	7.80682	5.905	.526		.610
CHLQ24	7.86364	5.843	.546	.321	.597

6.207

Table 4.32 Item-Total Statistics (Management-by-Exception [Active])

7.76136

As the alpha is at 0.7, and all the inter-total correlations above 0.3 this scale is internally consistent. (Pallant, 2001)

499

.274

.628

4.610 Factor: Management-by-Exception (Passive)

Here the leader fails to interfere until problems become serious. They wait for things to go wrong before taking action. They show a firm belief in "if it ain't broke, don't fix it" (Avolio and Bass, 2004).

Table 4.33

CHLQ27

Reliability Statistics (Management-by-Exception [Passive])

Cronbach's	Cronbach's Alpha Based on Standardized	
Alpha	Items	N of Items
.670	.704	4

Table 4.34 Item-Total Statistics (Management-by-Exception [Passive])

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ3	2.84091	3.308	.598	.456	.490
CHLQ12	3.25000	3.730	.724	.683	.441
CHLQ17	1.90909	5.026	.095	.066	.844
CHLQ20	3.25000	4.144	.555	.615	.547

Here the overall alpha is below the generally accepted lower level (Hair et al, 1998, Nunnally, 1978, Pallant, 2001). However removing Item 17(CHLQ17) would take the alpha above the generally accepted level of 0.7.

Table 4.35 Reliability Statistics (Management-by-Exception [Passive])

Cronbach ⁱ s Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.819	.839	3

Table 4.36

Item-Total Statistics (Management-by-Exception [Passive])

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ3	6.97727	2.114	.603	.371	.870
CHLQ12	6.53409	2.574	.760	.638	.680
CHLQ20	6.53409	2.665	.711	.602	.725

As the alpha is now above 0.7 and all the inter-total correlations above 0.3 this scale is internally consistent (Pallant, 2001).

4.611 Factor: Laissez-fairre leadership

Here the leader avoids getting involved when important issues arise. They are absent when needed, avoid making decisions, and delay responding to urgent questions (Avolio and Bass, 2004).

Table 4.37 Reliability Statistics (Laissez-fairre leadership)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.626	.647	4

Table 4.38 Item-Total Statistics (Laissez-fairre leadership)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ5	1.26136	3.184	.372	.204	.613
CHLQ7	1.05682	2.468	.362	.201	.587
CHLQ28	.95455	2.159	.355	.207	.614
CHLQ33	.95455	1.768	.646	.437	.340

Here the alpha is below the generally accepted lower level (Hair at al, 1998, Nunnally, 1978, Pallant, 2001). Removing scale items would not significantly assist. Other studies have shown the key relationship between Management-by-Exception (Passive) and Laissez-fairre leadership. In these studies Management-by-Exception (Passive) and Laissez-fairre leadership are combined to form a single construct, Passive/Avoidant leadership(Lievens et al., 1997, Avolio et al., 1999, Dvir et al., 2002, Avolio and Bass, 2004). This scale unreliability may also reflect the inability of Chairs, whilst appraising their Chief Executives, to discriminate between Management-by-Exception (Passive) behaviours, and Laissez-fairre leadership behaviours. Passive/Avoidant leadership would be included in the subsequent regression modelling.

This proposition was explored with the following result:

Table 4.39 Reliability Statistics (Passive/avoidant leadership)

Cronbach's	Cronbach's Alpha Based on Standardized	
Alpha	Items	N of Items
.745	.777	8

Table 4.40 Item-Total Statistics (Passive/avoidant leadership)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ5	22.53409	13.815	.512	.372	.720
CHLQ7	22.68182	13.185	.394	.384	.727
CHLQ28	22.79545	12.463	.410	.262	.725
CHLQ33	22.80682	11.813	.607	.482	.687
CHLQ3	23.27273	11.120	.512	.384	.705
CHLQ12	22.82955	11.614	.682	.697	.674
CHLQ17	24.47727	14.988	027	.137	.819
CHLQ20	22.82955	11.338	.743	.663	.662

Whilst the alpha is now above generally accepted levels, the inter-total item CHLQ17 is below generally acceptable limits (Pallant, 2001). The item was checked for coding error. None being found the analysis was run again with CHLQ17 deleted. This analysis is shown overleaf.

 Table 4.41

 Reliability Statistics (Passive/avoidant leadership with CHLQ 17 deleted)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.819	.828	7

 Table 4.42

 Item-Total Statistics (Passive/avoidant leadership with CHLQ 17 deleted)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CHLQ5	20.69318	13.135	.484	.354	.811
CHLQ7	20.84091	12.089	.466	.369	.809
CHLQ28	20.95455	11.768	.402	.261	.824
CHLQ33	20.96591	11.091	.609	.482	.786
CHLQ3	21.43182	10.110	.566	.380	.800
CHLQ12	20.98864	10.609	.751	.683	.762
CHLQ20	20.98864	10.609	.751	.646	.762

As the alpha is above 0.7 and all the inter-total correlations above 0.3 this scale is now internally consistent (Pallant, 2001).

As a result of the deletion of CHLQ17 a further analysis was run to test the reliability of the revised 35 item scale. This is shown below.

Table 4.43

Reliability Statistics (35 item scale after CHLQ17 removed)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.826	.835	35

This indicates that the revised scale is still reliable (Cronbach's alpha > 0.7).

4.612 Comparisons of CEO self scores and Chair scores

Reference was made earlier to the comparisons between the Chairs ratings and those done by the CEO's. A series of paired sample T- tests was carried out. The data from this comparison are shown in Appendix 6. This indicated the following:

- In respect of charismatic leadership behaviour, the mean score of the Chair rating mean was 3.44 and the CEO self-rating mean was 3.23. To test whether the difference in mean scores was significant the sig value being less than .05, Pallant (2001) advises that this equates to a significant difference in perception.
- In respect of inspirational motivation behaviour, the mean score of the Chair rating mean was 3.47 and the CEO self-rating mean was 3.51. The sig.value was .501. Using the same sig.value interpretation(less than .05) this is not seen as a significant difference (Pallant, 2001).
- In respect of intellectual stimulation behaviour, the mean score of the Chair rating was 3.08 and the CEO self-rating mean was 3.25. The sig.value being .043 this is seen as a significant difference (Pallant, 2001)
- In respect of contingent reward behaviour, the mean score of the Chair rating was 3.23 and the CEO self-rating mean was 3.33. The sig.value was .242 and the difference in mean scores is not seen as significant (Pallant, 2001).
- In respect of Management-by-Exception (Active) leadership behaviour, the Chair rating mean was 2.61, the CEO self-rating mean was 2.22. The sig.value was .001 and is seen therefore as a significant difference in mean scores (Pallant, 2001).
- Finally in respect of Passive/avoidant leadership behaviour, the Chair rating mean was .47 and the CEO self-rating mean was .88. The sig.value being .00 this is seen as a significant difference in mean scores (Pallant, 2001).

In summary, Chairs saw their CEO's as displaying more charismatic,

Management-by-Exception (Active), and Passive/avoidant leadership behaviours than the CEO's see themselves. In these three areas the difference in the mean scores is statistically significant (Pallant, 2001).

CEO's saw themselves as displaying more inspirationally motivating, intellectually stimulating, and contingent reward leadership behaviours than their Chairs did though this was statistically significant only in respect of intellectually stimulating leadership behaviour (Pallant, 2001).

These results illustrate the nature of the literature on self-other rating mechanisms. Within the literature the ability of the other-rater to observe and adequately assess the behaviour has been highlighted (Warr and Bourne, 2000, Riggio and Cole, 1992, Funderburg and Levy, 1997). There are other rating error issues that should be recognised. These include:

- Contrast effect where the rater tends to evaluate in comparison with other individuals rather than against the standard for the job,
- First impression error
- Halo or horns effect where inappropriate generalisations from one aspect of performance to all areas
- Similar-to-me effect
- Central tendency where the inclination is to rate in the middle of the scale
- Negative or positive skew, the opposite of central tendency where the rating is higher or lower than the performance merits
- Attribution bias where the rater tends to attribute failings to factors under the control of the individual and success to external causes (or vice versa)
- Recency effect
- Stereotyping which ignore individual differences.

(Grote, 1996)

Reference to these issues on the study of CEO appraisal by Chairs will be made in the final chapter.

4.7 Hypotheses testing.

Having ascertained that the data set and factors are now reliable, and the data are now normally distributed on the dependent variable, parametric tests were applied (Pallant, 2001; Field, 2005). The hypotheses were tested using SPSS for Windows (version 12), which offers a number of statistical methods and possibilities.

First, the independent variables were correlated with the dependent variable. As the data was normally distributed, a parametric correlation method was used (Pearson product moment).

Second, multiple regression analysis was applied for testing the model for predictive ability.

Third, a factor analysis of the MLQ was undertaken to test the underlying factor structure given the earlier reference to scale reliability problems in this study.

Fourth, the regression was run again with the new factors loaded.

Fifth, gender and tenure was explored to see if there were any performance differences between male and female sample participants, and between those with over four years service compared to those of just two years service.

4.8 Examining the relationship between the EXCEL and the MLQ scores prior to regression

To check for evidence of a linear relationship between the dependent variable (organisational performance) and the independent variables (Transformational, Transactional, and Passive/avoidant leadership), the relationship was examined initially using scatter plots These are shown below along with each of the behaviours contained within the overall transformational leadership construct as postulated by Avolio and Bass (2004).

The first scatter plot examined was the overall relationship of transformational leadership to organisational performance:



Figures 4.7: Transformational leadership and organisational performance.

This scatter plot demonstrates that there is a linear positive relationship between transformational leadership and organisational leadership.

4.81 Transformational leadership and organisational performance

Each of the transformational leadership behaviours was then examined and are shown in Figures 4.8, 4.9, 4.10 and 4.11.

Transformation of Operational performance



Transformation of Operational performance



Transformation of Operational performance



Transformation of Operational performance



The scatter plot for 'Individualized consideration' is shown for completeness. However as previously indicated, the scale reliability of this item set was shown not to be reliable in this study. This issue will be referred to later in this Chapter when a Factor analysis of the MLQ was undertaken.

Overall the positive linear relationship between the transformational factors and organizational performance is demonstrated. This result is consistent with the literature which has a very substantial body of evidence supporting its conclusion that it promotes higher levels of organisational performance especially at times of considerable organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

4.82 Transactional and non-leadership and organisational performance

The next stage was to show the linear relationships of Transactional leadership and organisational performance and Non-leadership behaviours and organisational performance. These are shown in scatter plots below (Figures 4.12, 4.13, and 4.14).

Transformation of Operational performance



Transformation of Operational performance



Transformation of Operational performance



Again the positive linear relationship of the transactional behaviours and organisational performance is borne out in the scatter plots.

Finally, and to complete the model, Non- transactional leadership behaviours were plotted with organisational performance Figure 4.15





As expected in the theoretical model, Non-transactional leadership tends to have a negative linear relationship with organisational performance (Bass and Avolio, 1994).

4.83 Correlations of transformational, transactional and nontransactional leadership with organisational performance

A correlation matrix was then explored prior to regression to examine the significance of these relationships. This is shown in the Table below:

Table 4.44 Correlations(a)

		Organisational performance sum total	Transformat ional leadership construct	Transactional leadership construct	Non- transaction al leadership
Organisational	Pearson Correlation	1	.756(**)	.241	642(**)
performance sum total	Sig. (2-tailed)		.000	.099	.000
	Ν	48	48	48 .	48
Transformational	Pearson Correlation	.756(**)	1	.490(**)	594(**)
leadership construct	Sig. (2-tailed)	.000		.000	.000
	Ν	48	48	48	48
Transactional	Pearson Correlation	.241	.490(**)	1	191
leadership construct	Sig. (2-tailed)	.099	.000		.194
	N	48	48	48	48
Non-transactional	Pearson Correlation	642(**)	594(**)	191	1
leadership	Sig. (2-tailed)	.000	.000	.194	
	N	48	48	48	48

** Correlation is significant at the 0.01 level (2-tailed).

a Gender = Male

This matrix confirmed that the correlations were positive for transformational and transactional leadership behaviours, and negative for Non-transactional leadership.

The relationship between transformational leadership, as measured by the MLQ (5X) and performance excellence (measured by EXCEL) was investigated using Pearson product moment correlation coefficient. There was a large positive correlation between the two variables [r= .756**]. Throughout

p is significant at the 0.01 level (2 tailed). The strength of the correlation is framed from Pallant (2001, p.120) where:

r= .10 to .29 (positive or negative) is small

- r= .30 to .49 (positive or negative) is medium
- r= .50 to 1.0 (positive or negative) is large

For transactional leadership the positive relationship was small [r=.241], and for non-transactional leadership there was a large negative correlation with organisational performance [r=.642].

In considering gender within the model, separate analyses of the transformational and transactional behaviours by gender was explored.

Table 4.45

Correlations (Male CEO's)

		Organisational performance sum total	Transformat ional leadership construct	Transactional leadership construct	Non- transaction al leadership
Organisational	Pearson Correlation	1	.756(**)	.241	642(**)
performance sum total	Sig. (2-tailed)		.000	.099	.000
	N	48	48	48	48
Transformational	Pearson Correlation	.756(**)	1	.490(**)	594(**)
leadership construct	Sig. (2-tailed)	.000	.	.000	.000
	Ν	48	48	48	48
Transactional	Pearson Correlation	.241	.490(**)	1	191
leadership construct	Sig. (2-tailed)	.099	.000	•	.194
	N	48	48	48	48
Non-transactional	Pearson Correlation	642(**)	594(**)	191	1
leadership	Sig. (2-tailed)	.000	.000	.194	-
۰	N	48	48	48	48

** Correlation is significant at the 0.01 level (2-tailed).

a Gender = Male

Table 4.46 Correlations (Female CEO's)

		Organisational performance sum total	Transformat ional leadership construct	Transactional leadership construct	Non- transaction al leadership
Organisational	Pearson Correlation	1	.634(**)	.581(**)	327(*)
performance sum total	Sig. (2-tailed)		.000	.000	.039
	N	40	40	40	40
Transformational	Pearson Correlation	.634(**)	1	.454(**)	271
leadership construct	Sig. (2-tailed)	.000		.003	.091
	Ν	40	40	40	40
Transactional	Pearson Correlation	.581(**)	.454(**)	1	366(*)
leadership construct	Sig. (2-tailed)	.000	.003		.020
	Ν	40	40	40	40
Non-transactional	Pearson Correlation	327(*)	271	366(*)	1
leadership	Sig. (2-tailed)	.039	.091	.020	
	N	40	40	40	40

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

a Gender = Female

In this analysis, male CEO's exhibited stronger positive correlations between transformational leadership and organisational performance compared to female CEO's (.756** to.634**) though both were scores were significant. Female CEO's had significant positive correlations between transactional leadership and organisational performance compared to male CEO's (.581** to .241). Finally, male CEO's had a stronger negative correlation between non-leadership behaviours and organisational performance compared to female CEO's (.642** to .327**).

4.94 The relationship between charismatic leadership, as measured by the MLQ (5X) and performance excellence (measured by EXCEL) was investigated using Pearson product moment correlation coefficient. There was a large positive correlation between the two variables [r= .645**]. Throughout p is significant at the 0.01 level (2 tailed). The strength of the correlation is framed from Pallant (2001, pg.120) where:

- *r*= .10 to .29 (positive or negative) is small*r*= .30 to .49 (positive or negative) is medium
- r= .50 to 1.0 (positive or negative) is large

		Organisational performance sum total	Chair view of CE charisma	Chair view of CE IM	Chair view of CE IS
Organisational	Pearson Correlation	1	.645(**)	.583(**)	.610(**)
performance sum total	Sig. (2-tailed)		.000	.000	.000
	N	88	88	88	88
Chair view of CE	Pearson Correlation	.645(**)	1	.711(**)	.730(**)
charisma	Sig. (2-tailed)	.000		.000	.000
	Ν	88	88	88	88
Chair view of CE IM	Pearson Correlation	.583(**)	.711(**)	1	.559(**)
	Sig. (2-tailed)	.000	.000		.000
	Ν	88	88	88	88
Chair view of CE IS	Pearson Correlation	.610(**)	.730(**)	.559(**)	1
	Sig. (2-tailed)	.000	.000	.000	
	N	88	88	88	88

 Table 4.47

 Correlations for Charisma and organizational performance

** Correlation is significant at the 0.01 level (2-tailed).

This result is consistent with other studies of the relationship between charisma and organisational performance. Koene et al (2002) in a study in the retail sector within the Netherlands concluded that charisma had a substantial effect on store performance. This was echoed in other studies which found that whilst charisma had only a small direct relationship with performance, it was more profound under conditions of uncertainty (Waldman et al., 2004, Waldman et al., 2001, Pillai and Williams, 2004). This is especially relevant to this study within the NHS at such a time of great change (DOH, 1997, DOH, 2000, DOH, 2005b).

When split by gender, charismatic male CEO's have a more positive effect than female CEO's [r= .696 compared to .595].

Table 4.48 Correlations (Male CEO's)

		Organisational performance sum total	Chair view of CE charisma	Chair view of CE IM	Chair view of CE IS
Organisational	Pearson Correlation	1	.696(**)	.531(**)	.701(**)
performance sum total	Sig. (2-tailed)		.000	.000	.000
	Ν	48	48	48	48
Chair view of CE	Pearson Correlation	.696(**)	1	.572(**)	.763(**)
charisma	Sig. (2-tailed)	.000		.000	.000
	Ν	48	48	48	48
Chair view of CE IM	Pearson Correlation	.531(**)	.572(**)	1	.567(**)
	Sig. (2-tailed)	.000	.000		.000
	Ν	48	48	48	48
Chair view of CE IS	Pearson Correlation	.701(**)	.763(**)	.567(**)	1
	Sig. (2-tailed)	.000	.000	.000	
	N	48	48	48	48

** Correlation is significant at the 0.01 level (2-tailed).

Table 4.49

Correlations (Female CEO's)

		Organisational performance sum total	Chair view of CE charisma	Chair view of CE IM	Chair view of CE IS
Organisational	Pearson Correlation	1	.595(**)	.644(**)	.519(**)
performance sum total	Sig. (2-tailed)		.000	.000	.001
	Ν	40	40	40	40
Chair view of CE	Pearson Correlation	.595(**)	1	.862(**)	.687(**)
charisma	Sig. (2-tailed)	.000		.000	.000
	Ν	40	40	40	40
Chair view of CE IM	Pearson Correlation	.644(**)	.862(**)	1	.587(**)
	Sig. (2-tailed)	.000	.000		.000
	Ν	40	40	40	40
Chair view of CE IS	Pearson Correlation	.519(**)	.687(**)	.587(**)	1
	Sig. (2-tailed)	.001	.000	.000	
	Ν	40	40	40	40

** Correlation is significant at the 0.01 level (2-tailed).

4.95 The relationship between inspirational motivation, as measured by the MLQ, (5X) and performance excellence (measured by EXCEL) was investigated. There was a large positive correlation between the two variables [r= .583**]. The strength of the correlation is framed from Pallant (2001, pg.120) where:

r= .10 to .29 (positive or negative) is small

r= .30 to .49 (positive or negative) is medium

r= .50 to 1.0 (positive or negative) is large

This finding is consistent with other studies that show that work motivation, or willingness to exert extra effort, is the outcome best predicted by transformational leadership (Ardichvili and Kuchinke, 2002, DenHartog et al., 1999, Judge and Bono, 2004). When split by gender, inspirationally motivating females have a more positive effect than men [r= .644** compared to .531**].

4.96 The relationship between Intellectual stimulation, as measured by the MLQ, (5X) and performance excellence (measured by EXCEL) was investigated. There was a large positive correlation between the two variables [r= .610**]. The strength of the correlation is framed from Pallant (2001, pg.120) where:

r= .10 to .29 (positive or negative) is small
r= .30 to .49 (positive or negative) is medium
r= .50 to 1.0 (positive or negative) is large

This result is supported by other studies which found similar correlations(Elenkov, 2002). The value of intellectual stimulation within the NHS can be deduced from the high order of technological advances required in patient care, and the high status of professional who value such stimulation and in other sectors where this may also apply such as education (Gokcekus, 2000, Smith, 2002, Marks and Printy, 2003)

When split by gender, intellectually stimulating male CEO's had a more positive effect on performance excellence than female CEO's [r= .701** compared to .519**].

4.84 The transactional behaviours were then examined to assess the significance of their correlations with organisational performance.

		Organisational performance sum total	Chair view of CE CR	Chair view of CEMBE(A)
Organisational	Pearson Correlation	1	.716(**)	.381(**)
performance sum total	Sig. (2-tailed)		.000	.000
	Ν	88	88	88
Chair view of CE CR	Pearson Correlation	.716(**)	1	.506(**)
	Sig. (2-tailed)	.000		.000
	N	88	88	88
Chair view of CEMBE(A)	Pearson Correlation	.381(**)	.506(**)	1
	Sig. (2-tailed)	.000	.000	
	N	88	88	88

Table 4.50 Correlations

** Correlation is significant at the 0.01 level (2-tailed).

There was a large positive correlation between Contingent Reward and organisational performance [$r=.716^{**}$]. The strength of the correlation is framed from Pallant (2001, pg.120) where:

r= .10 to .29 (positive or negative) is small

r= .30 to .49 (positive or negative) is medium

r= .50 to 1.0 (positive or negative) is large

This finding indicates that contingent reward is a powerful characteristic within the Chief Executives armamentarium, as perceived by the Chairs. Reasons for the strength of the effect can be found in studies of public services leadership, and in research into the physical distance between Leader and follower (Howell et al., 2005). It is also consistent with Goodwin el (2001) in a study of American public service managers which correlated contingent reward as being more strongly related to transformational leadership under conditions where there implicit psychological contracts existing with followers (p.771) and replicated in a study within the American army by Bass et al. (2003). In a target driven NHS, based on professional clans and bureaucratic machinery, with an orientation to efficiency, contingent reward behaviour will be a strong force for driving delivery of improvements in performance (Pawar and Eastman, 1997).

4.98 Management-by-Exception (Active) was also positively correlated to organisational performance though to a lesser extent than Contingent Reward [r=.381]. When broken down by gender the following results were found:

Table 4.51Correlations (Male CEO's)

		Organisational performance sum total	Chair view of CE CR	Chair view of CEMBE(A)
Organisational	Pearson Correlation	1	.650(**)	.244
performance sum total	Sig. (2-tailed)		.000	.095
	Ν	48	48	48
Chair view of CE CR	Pearson Correlation	.650(**)	1	.442(**)
	Sig. (2-tailed)	.000		.002
	Ν	48	48	48
Chair view of CEMBE(A)	Pearson Correlation	.244	.442(**)	1
	Sig. (2-tailed)	.095	.002	-
	N	48	48	48

** Correlation is significant at the 0.01 level (2-tailed).

Table 4.52

Correlations (Female CEO's)

		Organisational performance sum total	Chair view of CE CR	Chair view of CEMBE(A)
Organisational	Pearson Correlation	1	.796(**)	.558(**)
performance sum total	Sig. (2-tailed)		.000	.000
	Ν	40	40	40
Chair view of CE CR	Pearson Correlation	.796(**)	1	.580(**)
	Sig. (2-tailed)	.000		.000
	Ν	40	40	40
Chair view of CEMBE(A)	Pearson Correlation	.558(**)	.580(**)	1
	Sig. (2-tailed)	.000	.000	
	N	40	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Contingent reward orientated females had a more positive effect on performance excellence than men [r= .796** compared to .650**].

In respect of the relationship between Management-by-Exception (Active), there was a medium positive correlation with organisational performance (where p is significant at the 0.01 level [two-tailed] between the two variables [r= .381**]. The strength of the correlation is framed from Pallant (2001, pg.120) where:

r= .10 to .29 (positive or negative) is small
r= .30 to .49 (positive or negative) is medium
r= .50 to 1.0 (positive or negative) is large

That Management-By-Exception (Active) has a positive effect on performance excellence has been borne out in other studies (Elenkov, 2002, Podsakoff et al., 1984). It is suggested that leaders who used contingent negative, or aversive, reinforcement, which represented the more active form of management-by-exception, could enhance follower performance if the criticism was perceived as fair, if it clarified performance standards, or modified poor performance in an acceptable way to avoid aversive consequences. It may also reflect the desire for autonomy felt by many professional staff such as doctors and nurses within the NHS, used to freedoms and left to 'get on with the job'. This autonomous motivation (as opposed to controlled motivation) has been found in other studies (Bono and Judge, 2003). When split by gender, Management-by-Exception (Active) females had a more positive effect on organisational performance than men [r= .558** compared to .244].

4.85 To complete the model Non-transactional leadership (Passive/avoidant) behaviours were studied.

Table 4.53 Correlations

		Organisational performance sum total	Chair view of CE Passive/avo idant leadership
Organisational	Pearson Correlation	1	564(**)
performance sum total	Sig. (2-tailed)		.000
	N	88	88
Chair view of CE Non-	Pearson Correlation	564(**)	1
transactional leadership	Sig. (2-tailed)	.000	
	N	88	88

** Correlation is significant at the 0.01 level (2-tailed).

Table 4.54

Correlations (Male CEO's)

		Organisational performance sum total	Chair view of CE Passive/avo idant leadership
Organisational	Pearson Correlation	1	612(**)
performance sum total	Sig. (2-tailed)		.000
	N	48	48
Chair view of CE Non-	Pearson Correlation	612(**)	1
transactional leadership	rai leadership Sig. (2-tailed)	.000	
	Ν	48	48

** Correlation is significant at the 0.01 level (2-tailed).

a Gender = Male

Table 4.55

Correlations (Female CEO's)

		Organisational performance sum total	Chair view of CE Passive/avo idant leadership
Organisational	Pearson Correlation	1	514(**)
performance sum total	Sig. (2-tailed)		.001
	Ν	40	40
Chair view of CE Non-	Pearson Correlation	514(**)	1
transactional leadership	Sig. (2-tailed)	.001	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

a Gender = Female

The relationship between Non-transactional (Passive/avoidant) leadership was shown to have a negative correlation with organisational performance [r= -.564**].

Other studies have identified similar correlations between Non-transactional leadership and organisational performance (Hetland and Sandal, 2003, Masi and Cooke, 2000). This is may also be a characteristic of leadership behaviour where feedback is sparse and passively offered until a crisis develops and the feedback is perceived as harshly and unfairly critical by the employee (Gaddis et al., 2004). When split by gender, Non-transactional Male CEO's had a higher negative impact on organisational performance compared to their female equivalents [r=.612** and r=.514**]

4.9 Regression analysis of the model of transformational leadership and organisational performance

The next step was to assess the impact of which leadership variables had the most effect on organisational performance. This was undertaken using multiple regressions. Multiple regression is not just one technique, but a family of techniques that can be used to explore the relationship between one continuous dependent variable and a number of independent variables or predictors (usually continuous). Multiple regressions are based on correlation but allow a more sophisticated exploration of the interrelationship among a set of variables (Pallant, 2001). Multiple regressions can be used to address:

- How well a set of variables is able to predict a particular outcome;
- Which variable in a set of variables is the best predictor of an outcome;
- Whether a particular predictor variable is still able to predict an
- outcome when the effects of another variable is controlled for.

The method used was 'backward' stepwise regression. In this method the computer begins by placing all predictors in the model and then calculates the contribution of each one by looking for the significance value of the t-test for each predictor. If the predictor meets the removal criteria (i.e. fails to make a statistically significant contribution to how well the model predicts the outcome

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variable) it is removed and the model is re-estimated for the remaining predictors. Backward method is preferable to forward method as it is less likely to make a Type II error [missing a predictor that does in fact predict the outcome variable] (Field, 2004, p.161).

The regression was run through SPSS with descriptives (to check correlations), collinearity diagnostics (to check for evidence of multicollinearity) and outliers outside three standard deviations (to check for extreme cases). A histogram of residuals was requested to check for normality of residuals together with a scatter plot of residuals to check for heteroscedacity of residuals. The statistics are shown in the diagrammes, tables, and scatter plot below.

All of the independent variables had correlations above 0.3 indicating that they all have some relationship with the dependent variable (Pallant, 2001, p.143). Indeed with scores of .645, .583, .610, .716, and -.564 they correlate substantially. The only correlation near the 0.3 level was Management- by-Exception (Active) at 0.318. Contingent Reward had the highest correlation followed by Charisma, Intellectual stimulation, Inspirational motivation, and finally Management-by-Exception (Active). Passive/avoidant leadership (Non-transactional leadership) had a strong negative correlation with organisational performance.

One area of concern is where independent variables have high correlations between them. This is suggested where the correlation is above values of 0.7 (Tabachnick and Fidell, 1996). The scores in the matrix show that some of the correlations were over 0.7. Where high collinearity exists it would suggest that some of the transformational factors are measuring the same concept and this would cause the regression model to become unstable.

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		Organisational performance sum total	Chair view of CE charisma	Chair view of CE IM	Chair view of CE IS	Chair view of CE CR	Chair view of CEMBE(A)	Chair view of CE Passive/avo idant leadership
Organisational	Pearson Correlation	-	.645(**)	.583(**)	.610(**)	.716(**)	.381(**)	564(**)
performance sum total	Sig. (2-tailed)	•	000	000	000	000	000	000
	Z	88	88	88	88	88	88	88
Chair view of CE	Pearson Correlation	.645(**)		.711(**)	.730(**)	.724(**)	.449(**)	590(**)
charisma	Sig. (2-tailed)	000	•	000	000.	000	000.	000
-	Z	88	88	88	88	88	88	88
Chair view of CE IM	Pearson Correlation	.583(**)	.711(**)	~	.559(**)	.661(**)	.368(**)	367(**)
	Sig. (2-tailed)	000.	000.	•	000	000	000.	000
	Z	88	88	88	88	88	88	88
Chair view of CE IS	Pearson Correlation	.610(**)	.730(**)	.559(**)	-	.683(**)	.452(**)	529(**)
	Sig. (2-tailed)	000.	000	000	•	000	000.	000
	Z	88	88	88	88	88	88	88
Chair view of CE CR	Pearson Correlation	.716(**)	.724(**)	.661(**)	.683(**)	7	.506(**)	(**)669
	Sig. (2-tailed)	000.	000.	000.	000	•	000	000
	Z	88	88	88	88	88	88	88
Chair view of	Pearson Correlation	.381(**)	.449(**)	.368(**)	.452(**)	.506(**)	~	393(**)
CEMBE(A)	Sig. (2-tailed)	000.	000.	000.	000	000	•	000
	Z	88	88	88	88	88	88	88
Chair view of CE	Pearson Correlation	564(**)	590(**)	367(**)	529(**)	699(**)	393(**)	~
Passive/avoidant	Sig. (2-tailed)	000	000.	000	000	000.	000	•
	Z	88	88	88	88	88	88	88
** Corrolotion in circuition	** Corrolation is cianificant at the 0.04 lovel (2 toiled)							

** Correlation is significant at the 0.01 level (2-tailed).

Table 4.57 Coefficients(a)

		Unstand Coeffi		Standardized Coefficients			Collinearity	/ Statistics
Model		В	Std. Error	Beta	t	Sig.	Toleranc e	VIF
1	(Constant)	49.284	8.304		5.935	.000		
	Chair view of CE charisma	2.477	3.138	.107	.789	.432	.289	3.461
	Chair view of CE IM	2.923	2.304	.144	1.269	.208	.412	2.424
	Chair view of CE IS	2.452	1.949	.143	1.258	.212	.411	2.431
	Chair view of CE CR	6.617	2.492	.371	2.655	.010	.274	3.653
	Chair view of CEMBE(A)	272	1.181	020	230	.819	.718	1.393
	Chair view of CE Passive/avoid ant leadership	-2.399	2.173	- 120	-1.104	.273	.455	2.199

a Dependent Variable: Organisational performance sum total

The test for collinearity is to check the 'Tolerance' figures in the above table. Values near 0.0 indicate the possibility of multicollinearity between independent variables. There is some suggestion of multicollinearity (tolerances of .289, .274) within the transformational, transactional, and passive/avoidant (non- leadership) behaviours.

In evaluating each of the independent variables contribution to the prediction of the dependent variable, this is found in the Beta column in the table above. Contingent Reward makes significantly the largest contribution at .371 with in order, Inspirational motivation, Intellectual stimulation, Charisma, Management-by-Exception(negative contribution), and finally Passive/ avoidant making the largest negative contributions to the dependent variable (Beta of -0.12). The degree to which the variance in the dependent variable is explained by each of the independent variables is shown in the model summary below.

Table 4.58 Model Summary(e)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753(a)	.567	.535	7.387512
2	.751(b)	.563	.537	7.370517
3	.750(c)	.563	.542	7.327546
4	.744(d)	.554	.538	7.362427

a Predictors: (Constant), Chair view of CE Passive/avoidant leadership, Chair view of CE IM, Chair view of CEMBE(A), Chair view of CE IS, Chair view of CE charisma, Chair view of CE CR b Predictors: (Constant), Chair view of CE Passive/avoidant leadership, Chair view of CE IM, Chair view of CEMBE(A), Chair view of CE IS, Chair view of CE CR

c Predictors: (Constant), Chair view of CE Passive/avoidant leadership, Chair view of CE IM, Chair view of CE IS, Chair view of CE CR

d Predictors: (Constant), Chair view of CE IM, Chair view of CE IS, Chair view of CE charisma e Dependent Variable: Organisational performance sum total

This indicates, using the 'backward' stepwise method of regression, loading each of the factors in turn, that the transformational factors alone (model 4)account for 55.4% of the variance in organisational performance. When loaded into the stepwise regression the transactional and non-leadership factors only marginally improves prediction of the variance in the dependent variable (by 1.3%).

Table 4.59 ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressio n	5782.741	6	963.790	17.660	.000(a)
	Residual	4420.602	81	54.575		
	Total	10203.343	87			

a Predictors: (Constant), Chair view of CE Passive/avoidant leadership, Chair view of CE IM, Chair view of CEMBE(A), Chair view of CE IS, Chair view of CE charisma, Chair view of CE CR
 b Dependent Variable: Organisational performance sum total

The ANOVA table tests whether there is a significant relationship between the dependent and independent variables. In this ANOVA all the factors are included in the regression. The significance figure was 0.00, well below the 0.05 significance level, therefore the model was significant overall.

Testing further aspects of collinearity is shown in the final table within the regression model. The Collinearity Diagnostics table below shows a number of Eigenvalues close to zero. Eigenvalues close to zero indicate multicollinearity. Further the condition index is the measure of the relative amount of variance associated with an eigenvalue so that a large condition index also indicates a high degree of collinearity. The last value, along with a low eigenvalue and a high condition index indicates some degree of multicollinearity amongst the independent variables.

						Vari	Variance Proportions	su		
			1							Chair view of CE Passive/avo
Model	Dimensio n	Eigenvalue	Condition Index	(Constant)	Chair view of CE charisma	Chair view of CE IM	Chair view of CE IS	Chair view of CE CR	Chair view of CEMBE(A)	idant leadership
1	-	6.295	1.000	00.	00 [.]	00.	00.	00.	00	00.
	2	.619	3.189	00	00	00.	00.	00.	00	.38
	e	.050	11.173	.01	00	.01	.01	00.	86.	.02
	4	.015	20.388	90.	00	90.	.83	.03	00	.07
	5	600 [.]	25.742	.49	.01	.46	00.	<u>.01</u>	00.	.12
	9	.007	29.335	.02	.10	.15	00.	06.	.02	.20
	7	.004	41.082	.43	88.	.33	.16	.05	00.	.22
7	~~	5.309	1.000	00.		00.	00 [.]	00.	00.	00
	2	.611	2.947	00.		00.	00.	00.	00.	.40
	ю	.048	10.490	.01		.02	.02	.01	96.	.02
	4	.015	18.758	60.		.08	96.	.03	00.	.07
	5	600.	23.713	69		.57	00 ⁻	00.	00.	£.
	9	200.	28.310	.22		.33	.02	96.	.01	.39
<i>с</i>		4.382	1.000	00.		00.	00	00		<u>.</u>
	2	.587	2.733	00.		00.	00.	00.		.41
	ю	.015	17.037	60.		80.	.97	.03		.07
	4	600 [.]	21.534	.68		.58	00.	00.		.11
	5	200.	25.586	.23		.33	.02	96.		.40
4	~~	3.957	1.000	00.		00.	00.	00.		
	2	.022	13.450	.51		05	.35	.05		
	ი [.]	.012	11.892	07.		/ .	00.	ς t		
	4	.008	21.700			.82	- cn:	/ .		
a Depender	nt Variable: O	Dependent Variable: Organisational performance		sum total						

Table 4.60 Collinearity Diagnostics(a)

Multicollinearity is a problem in regression models because it causes the model to become unstable. For this reason it was necessary to look at ways of avoiding multicollinearity by building models that do not include pairs of highly correlated variables, or by running a factor analysis prior to running the regression again.

Analysis of residuals can be demonstrated by the casewise diagnostics table and scatter plot below. This indicates that 1 case had standardised residuals greater than 2 standard deviations from the regression line. If the residuals are normally distributed it is reasonable to expect 5% of cases to be more than 2 standard deviations (1 case being 1.1%). The corresponding scatter plot of standardised residuals shows the extent to which the assumption of homogeneity of variance was met. The scatter plot identifies any outliers that affect the regression model. Outliers are defined as being + or - 3.3 (Pallant, 2001, p.144). No cases violate the model and therefore the assumption of homogeneity of variance was met. Therefore no extreme cases needed to be considered for removal from the model.

As one of the assumptions of linear regression is that the residuals should be normally distributed with a mean of 0, therefore in the normal probability plot below the transformational and transactional leadership behaviours deviated slightly from normality (they did not fit perfectly under the curve).

Histogram

Dependent Variable: Organisational performance sum total



Scatterplot



Dependent Variable: Organisational performance sum total

Table 4.61 Casewise Diagnostics(a)

Case Number	Std. Residual	Organisational performance sum total	Predicted Value	Residual
32	-3.173	49.000	72.36022	- 23.360222

a Dependent Variable: Organisational performance sum total

4.91 Summary of the regression model with the transformational and transactional and passive avoidant leadership behaviours.

The regression model showed that the transformational, transactional and passive avoidant leadership behaviours accounted for 57% of the variance in the

dependent variable. Each of the leadership behaviours showed positive linear relationships with the dependent variable (and Non-Transactional leadership with a negative linear relationship).

Backward stepwise regression method highlighted that the transformational factor alone accounted for 55.4% of the variance in the dependent variable, organisational performance. Of the individual factors, contingent reward had the highest correlation with organisation performance followed by inspirational motivation, intellectual stimulation and in fourth by charisma.

A number of behaviours did have correlations above 0.7 suggesting multicollinearity and there was other evidence (through Eigenvalues near zero) to suggest that a Factor Analysis should be undertaken. In addition the issue of the scale validity of the Individualised Consideration behaviour (which was excluded from this regression) further suggested factor analysis of the MLQ.

4.10 Factor analysis

Factor analysis takes a large set of variables and looks for a way that the data can be 'reduced' or summarised using a smaller set of factors or components. It does this by looking for 'clumps' or groups among the inter-correlations of a set of variables (Pallant, 2001, p.151). There are two main approaches to factor analysis, exploratory and confirmatory. Exploratory factor analysis is often used in the early stages of research to gather information about the inter-relationships among a set of variables. Confirmatory factor analysis is a more complex and sophisticated set of techniques used later in the research process to test or confirm specific hypotheses concerning the underlying set of variables. The term factor analysis encompasses a variety of different, although related techniques. Principal Components Analysis (used in this study) uses the original variables and transforms them into a smaller set of linear combinations, with all the variance in the variables being use (Pallant, 2001, p.151).

The Factor Analysis was run under SPSS using Data Reduction, Factor Analysis. The 36 items in the MLQ were loaded. Principal Components Analysis was

chosen along with the KMO and Bartlett's test of sphericity. Hair (1998, p.112) recommends that for sample sizes between 85 and 100 the suppress values box was checked at 0.55. The analyses are shown below.

Table 4.62 KMO and Bartlett's Test

easure of Sampling	.817
Approx. Chi-Square df Sia	1679.275 630 .000
	Approx. Chi-Square

To test whether Factor analysis is appropriate the KMO value should be above 0.6 and the Bartlett's test of sphericity should be significant (.05 or lower). This latter test refers to the null hypotheses that the correlation matrix is the identity matrix. Both tests have acceptable results and therefore factor analysis is appropriate.

Table 4.63 Communalities

	Initial	Extraction
CHLQ1	1.000	.641
CHLQ2	1.000	.727
CHLQ3	1.000	.675
CHLQ4	1.000	.677
CHLQ5	1.000	.808
CHLQ6	1.000	.692
CHLQ7	1.000	.712
CHLQ8	1.000	.590
CHLQ9	1.000	.556
CHLQ10	1.000	.730
CHLQ11	1.000	.618
CHLQ12	1.000	.821
CHLQ13	1.000	.688
CHLQ14	1.000	.672
CHLQ15	1.000	.690
CHLQ16	1.000	.569
CHLQ17	1.000	.777
CHLQ18	1.000	.744
CHLQ19	1.000	.730
CHLQ20	1.000	.790
CHLQ21	1.000	.761
CHLQ22	1.000	.677
CHLQ23	1.000	.732
CHLQ24	1.000	.791
CHLQ25	1.000	.792
CHLQ26	1.000	.711
CHLQ27	1.000	.665
CHLQ28	1.000	.666
CHLQ29	1.000	.722
CHLQ30	1.000	.714
CHLQ31	1.000	.729
CHLQ32	1.000	.642
CHLQ33	1.000	.716
CHLQ34	1.000	.565
CHLQ35	1.000	.683
CHLQ36	1.000	.625

Extraction Method: Principal Component Analysis.

The communalities matrix indicates the proportion of the variance in a variable accounted by the factors. Variables with small communities (say .2 or below would have very little in common with the other variables and should be removed from the analysis. In the table above all the items were well above that threshold and justified their retention in the analysis.

Having judged that factor analysis is appropriate the need is to check those components with Eigenvalues above 1.

		Initial Eigenvalu	es	Extractio	on Sums of Squar	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.697	32.491	32.491	11.697	32.491	32.491
2	2.522	7.006	39.497	2.522	7.006	39.497
3	1.850	5.138	44.635	1.850	5.138	44.635
4	1.593	4.424	49.059	1.593	4.424	49.059
5	1.405	3.904	52.963	1.405	3.904	52.963
6	1.387	3.852	56.815	1.387	3.852	56.815
7	1.274	3.539	60.354	1.274	3.539	60.354
8	1.206	3.351	63.704	1.206	3.351	63.704
9	1.118	3.106	66.810	1.118	3.106	66.810
10	1.047	2.908	69.718	1.047	2.908	69.718
11	.967	2.686	72.404			
12	.857	2.380	74.785			
13	.811	2.253	77.038			
14	.755	2.097	79.135			
15	.728	2.021	81.156			
16	.672	1.867	83.023			
17	.595	1.653	84.675			
18	.562	1.562	86.238			
19	.529	1.468	87.706			
20	.489	1.357	89.063			
21	.470	1.305	90.368			
22	.397	1.103	91.471			
23	.381	1.058	92.529			
24	.364	1.011	93.540		- 	
25	.337	.937	94.477			
26	.307	.852	95.329			
27	.277	.768	96.098			
28	.253	.703	96.801			
29	.230	.639	97.439			
30	.188	.523	97.962			
31	.175	.486	98.449			
32	.148	.411	98.860			
33	.121	.337	99.197			
34	.110	.306	99.502			
35	.093	.257	99.760			
36	.086	.240	100.000			

Table 4.64 Total Variance Explained

Extraction Method: Principal Component Analysis.

Ten components recorded Eigenvalues above one. As this may prove to be too many components the visual examination of the scree plot (Figure 4.18) will show where the 'elbow' in the shape of the plot occurs.

Scree Plot



From the scree plot it is argued that components 1 and 2 were retained. Factor analysis provides a final piece of analysis through the Component Matrix. Where the matrix shows components loading above 0.4 with any large numbers that would also suggest the number of components to be retained. In the table below components 1, and 2 have greatly more components than the other factors therefore they are retained. This two factor model has been shown in other studies (Carless, 1998, Bycio et al, 1985, Wofford et al, 1998, Goodwin et al, 2000).

Table 4.65 Component Matrix(a)

	1	2	3	4	5	6	7
CHLQ21	.822						
CHLQ20	723	.348					
CHLQ32	.713						
CHLQ12	706	.420	-				
CHLQ1	.696					,	
CHLQ35	.691						
CHLQ31	.691						
CHLQ10	.690						
CHLQ26	.677	.400			×		
CHLQ8	.667						
CHLQ30	.666			367			
CHLQ11	.659						
CHLQ34	.650						
CHLQ13	.643	.402					
CHLQ7	635			.385			
CHLQ16	.611						
CHLQ14	.602	.439					
CHLQ27	.601						
CHLQ18	.587				306		
CHLQ15	.581						
CHLQ36	.576		311				
CHLQ3	558	.418					344
CHLQ23	.536						
CHLQ9	.469	.446					
CHLQ6	.460						.345
CHLQ33	511	.545					
CHLQ28	312	.508		388			
CHLQ24	.443		.617				
CHLQ22	.338		.598		-	.333	
CHLQ4	.302		.403	.445		.401	
CHLQ17					.742		
CHLQ29				485	.488		.351
CHLQ2	.457	.362	.311			458	
CHLQ25	.391			.356		457	.445
CHLQ5	378	.435					
CHLQ19	.310	322					

Extraction Method: Principal Component Analysis.

a 10 components extracted (7 shown in this table)

Having identified two factors the next step was to try and interpret them though a process of factor rotation. This process aims to present the pattern of loadings in a manner that is easier to interpret. Varimax rotation was chosen as the suggestion is that the factors extracted are independent of each other. This method rotates the factors in such a way that when the final factors are produced they are not correlated with each other. It is recognized that this method may not always offer the best factor definition but is one of the simplest to interpret (Hinton et al., 2004). Oblique methods are less well developed and are less widely used (Hair et al, 1998). Although the quartimax method is analytically simpler than the Varimax method, Varimax gives a clearer separation of the factors and has proved very successful as an analytical approach to obtaining an orthogonal rotation of factors (Hair et al, 1998). The table below shows the loadings after a rotation had been applied and the factor analysis set up so as to suppress loadings below 0.55(based on sample size) in order to highlight only the strong relationships between factors and variables hence the blank values (Hair et al, 1998, p.112).

Table 4.66 Rotated Component Matrix(a)

	Comp	onent
	1	2
CHLQ26	.779	
CHLQ13	.754	
CHLQ14	.745	
CHLQ34	.670	
CHLQ9	.644	
CHLQ32	.630	
CHLQ35	.587	
CHLQ31	.584	
CHLQ2	.583	
CHLQ15	.548	
CHLQ18	.537	
CHLQ16	.534	
CHLQ27	.533	
CHLQ30	.525	
CHLQ36	.515	
CHLQ23	.511	
CHLQ10	.508	
CHLQ8	.500	
CHLQ6		
CHLQ25		
CHLQ24		
CHLQ22		
CHLQ4		
CHLQ17		
CHLQ29		
CHLQ12		767
CHLQ33		744
CHLQ20		722
CHLQ3		675
CHLQ21	.545	.635
CHLQ11		.596
CHLQ28		592
CHLQ5		575
CHLQ1		.569
CHLQ7		509
CHLQ19		

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 3 iterations.

The total variance explained by these two factors amounted to 39.5% (Factor 1=32.5%, Factor 2=7%). Factor 1 therefore had a much larger explanation of the variance that Factor 2. The factor loadings now allow the factors to be interpreted. Factors should be retained if they make sense of the data and meaning attached to each factor. In order to do this the two factors were

scrutinized to observe the distribution of the original MLQ 36 items into these two factors. This is shown in table 4.67:

Table 4.67

Factor 1

ltem	Factor 1	II(A)	II(B)	IM	IS	IC	CR	MBE	MBE	L-
No.								(A)	(P)	F
26	Articulates a compelling vision of the future			*						
13	Talks enthusiastically about what			*						
	need to be accomplished									
14	Specifies the importance of a strong Sense of purpose		*							
34	Emphasizes the importance of a		*							
	collective sense of mission									
9	Talks optimistically about the future			*						
32	Suggests new ways of looking at how to complete assignments				*					
35	Expresses satisfaction when I meet expectations						*			
31	Helps me develop my strengths			<u> </u>		*				<u> </u>
2	Re-examines critical assumptions to question whether they are appropriate				*					
15	Spends time teaching and coaching					*				
18	Goes beyond self-interest for the good of the group	*								
16	Makes clear what one can expect to receive when performance goals are achieved						*			
27	Directs my attention towards failures to meet standards							*		
30	Gets me to look at problems from many different angles					*				
36	Expresses confidence that goals will be achieved	-		*						
23	Considers the moral and ethical consequences of decisions		*						-	
10	Instills pride in me for being associated with him/her	*								
8	Seeks differing perspectives when solving problems				*					-
21	Acts in a way that build respect	*				-			1	+

Key:	
II(A):	Idealised influence (attributed)
II(B):	Idealised influence (behaviour)
IM:	Inspirational motivation
IS:	Intellectual stimulation
CR:	Contingent reward
MBE(A):	Management-by-Exception (Active)
MBE(P):	Management-by-Exception (Passive)
L-F:	Laissez-faire

When comparing this factor structure against the original structure within the MLQ the following appears:

Idealised influence (attributed): 3 of the 4 items(75%)

Idealised Influence (behaviour):3	of the 4 items (75%)
Inspirational motivation:	4 of the 4 items (100%)
Intellectual stimulation:	3 of the 4 items (75%)
Individualized consideration:	3 of the 4 items (75%)
Contingent reward:	2 of the 4 items (50%)
Management-by-Exception (activ	e): 1 of the 4 items (25%)

Table 4.68

Factor 2

ltem	Factor 2	II(A)	II(B)	IM	IS	IC	CR	MBE	MBE	L-
No.								(A)	(P)	F
12	Waits for things to go wrong before								*	
	taking action									
1	Provides me with assistance in						*			
	exchange for my efforts									
5	Avoids getting involved when									*
	important issues arise									
28	Avoids making decisions									*
11	Discusses in specific terms who is						*			
	responsible for achieving									
	performance targets									
21	Acts in ways that builds my respect	*								
3	Fails to interfere until problems								*	†
	become serious									
20	Demonstrates that problems must								*	
	become chronic before taking action									
33	Delays responding to urgent					1				*
	questions									
7	Is absent when needed			\square						*
19	Treats me as an individual rather than				1	*				+
	just a member of the group									
Key				<u> </u>		<u> </u>	I	1	1	

- II(A): Idealised influence (attributed)
- II(B): Idealised influence (behaviour)
- IM: Inspirational motivation
- IS: Intellectual stimulation
- CR: Contingent reward
- MBE(A): Management-by-Exception (Active)
- MBE(P): Management-by-Exception (Passive)
- L-F: Laissez-faire

When comparing this factor structure against the original structure within the MLQ the following appears:

Idealised Influence (attributed);	1 of the 4 items in the new factor (25%)
Individualized consideration:	1 of the 4 items (25%)
Contingent reward:	2 of the 4 items (50%)

Management-by-Exception (P): 3 of the 4 items (75%) Laissez-faire: 4 of the 4 items (100%)

This second factor has predominantly transactional and non-leadership behaviours.

4.10.1 Analysis of the resulting two-factor model.

When clustered together Factor 1 had seven components and Factor 2 had five components. Of the seven components in Factor 1, five are from the transformational variables within the transformational leadership construct (Bass, 1994). The only exceptions are Contingent Reward which had two items and MBE(A) with one item. This suggests that Factor 1 represents a broad transformational leadership factor. Work by Lievens et al (1997) and Den Hartog et al (1997) has indicated that the four transformational leadership behaviours of charisma, inspirational motivation, individualised consideration, and intellectual stimulation were all highly correlated and clustered into one factor as in this study.

Charisma is shown to be an important component in many studies of organisational transformation especially at times of considerable change (Kotter, 1990, Kouzes and Posner, 1987, DeHoogh et al., 2004, Dvir et al., 2002, Berson and Avolio, 2004).

The emphasis on inspirational motivation in this study is consistent with other studies that demonstrates its potency for extra effort and performance output (Judge and Bono, 2004, Ardichvili and Kuchinke, 2002, Hetland and Sandal, 2003).

Similarly with intellectual stimulation the results may reflect the high value of intellectual stimulation within the NHS arising from the high order of technological advances required in patient care, and the high status of professional who value such stimulation. This has been identified within

healthcare and in other sectors such as education (Gokcekus, 2000, Smith, 2002, Marks and Printy, 2003).

Within Factor 2 the five components had two transformational behaviour (Idealised influence [attributed] and individualized consideration) with three items between them, two transactional items (Contingent Reward and Management-by-Exception [Passive]) with two and three items respectively, and the single component of Laissez-faire leadership which had all four items included. This factor splits Contingent Reward equally with the 'transformational' factor. It can be argued therefore than Contingent Reward is both a transformational and transactional behaviour and therefore the transformational factor has a contingent reward component (Goodwin et al, 2001). Thus transformational leaders reward appropriate behaviour in exchange for rewards as do transactional leaders, however transactional leaders are seen as doing so as a means of carrying out the exchange relationship explicitly established.

4.11 Two factor regression

This two factor model requires description. In essence Factor 1 can be described as 'active' leadership; Factor 2 as 'passive/corrective' leadership (Avolio et al., 1999). Den Hartog et al (1997) describe this as the "distinction between the presence and absence of leadership" (p.32). Following an example set by Castile (2006) a small group of CEO's was asked to comment on the description of the factors taking into account the Bass descriptors (1998), their conclusion being that these were understandable interpretations of the clusters. These descriptors will therefore be used in further analyses.

Further hypotheses was added at this stage:

Hypothesis 6a: There will be no difference between 'Active' leadership CEO's and 'Passive/corrective' CEO's on organisational performance
Hypothesis 6b: The 'Active' leadership CEO's will have a more positive impact on organisational performance than the 'Passive/corrective' CEO's.

Hypothesis 7a: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership there will be no difference in organisational performance based on gender

Hypothesis 7b: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership female CEO's will have will have a more positive effect of organisational performance than their male counterparts.

4.11.1 Second regression analysis using these new descriptors.

A second regression was carried out using this new two-factor structure of 'active' and 'passive/corrective' leadership. The method used was 'backward' stepwise regression. In this method the computer begins by placing all predictors in the model and then calculates the contribution of each one by looking for the significance value of the t-test for each predictor. If the predictor meets the removal criteria (i.e. fails to mke a statistically significant contribution to how well the model predicts the outcome variable) it is removed and the model is re-estimated for the remaining predictors. Backward method is preferable to forward method as it is less likely to make a Type II error [missing a predictor that does in fact predict the outcome variable] (Field, 2004, p.161).

Table 4.69 Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
2	Passive/Cor rective Leadership factor, Active leadership(a)		Enter
		Passive/Cor rective Leadership factor	Backward (criterion: Probability of F-to- remove >= .100).

a All requested variables entered.

b Dependent Variable: Organisational performance sum total

The model summary shows that 'Active' leadership and 'Passive/corrective' leadership accounts for 50.4% of the variance in organisational performance score, of which 'Active' leadership accounts for 50.2%.

Table 4.70 Model Summary(c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710(a)	.504	.493	7.714293
2	.708(b)	.502	.496	7.688671

a Predictors: (Constant), Passive/Corrective Leadership factor, Active leadership

b Predictors: (Constant), Active leadership

c Dependent Variable: Organisational performance sum total

The ANOVA table showed that the model overall was significant (sig. less

than 0.05).

Table 4.71 ANOVA(c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressio n	5144.967	2	2572.483	43.228	.000(a)
	Residual	5058.376	85	59.510		
	Total	10203.343	87			
2	Regressio n	5119.396	1	5119.396	86.600	.000(b)
	Residual	5083.947	86	59.116		
	Total	10203.343	87			

a Predictors: (Constant), Passive/Corrective Leadership factor, Active leadership

b Predictors: (Constant), Active leadership

c Dependent Variable: Organisational performance sum total

The Coefficients table indicates that 'Active' leadership alone is significant (sig. below 0.05). The Beta standardised coefficients show the order of importance of the independent variables in the model, the larger the magnitude of B the more influential the independent variable is in predicting the dependent variable. 'Active' leadership significantly influences organisational performance whilst 'Passive/corrective' leadership has a very small effect.

Table 4.72 Coefficients(a)

		Unstand Coeffi		Standardized Coefficients			Collinearity	/ Statistics
Model		В	Std. Error	Beta	t	Sig.	Toleranc e	VIF
1	(Constant)	51.232	9.249		5.539	.000		
	Active leadership	.773	.090	.692	8.598	.000	.901	1.110
	Passive/Co rrective Leadership factor	216	.329	053	656	.514	.901	1.110
2	(Constant)	46.274	5.305		8.723	.000		
	Active leadership	.791	.085	.708	9.306	.000	1.000	1.000

a Dependent Variable: Organisational performance sum total

4.12 Gender

Using the two factor model, the impact of gender on organisational performance was evaluated using independent samples t-test with the data split for male and female CEO's. As the sig. value is over 0.05 in Levenes test for Equality of variances 'equal variances assumed' was checked. In this model gender had a 2-tailed sig. of .553. This shows that there is no significant difference between male and female CEO's. The same is true for 'Passive/corrective' leadership at .409. It can be concluded that gender does not mediate the relationship of 'Active' or 'Passive/corrective' leadership and organisational performance.

4.13 Tenure in post

Using the two factor model CEO's in post for two to three years was compared to those in post for over four years by independent samples t-test. The results indicate that CEO's in post for over four years do have a greater positive influence on organisational performance albeit a very small difference (2-tailed sig. .002). This result should be viewed with some caution given the small numbers in the sample of CEO's in post for between two to three years (n=10).

Table 4.73 Group Statistics

	Gender	Ŗ	Mean	Std. Deviation	Std. Error Mean
Active	Male	48	61.0833	9.38045	1.35395
leadership	Female	40	62.3250	10.13850	1.60304
Passive/Corre	Male	48	17.8958	2.78476	.40195
ctive Leadership factor	Female	40	17.4250	2.47953	.39205

Table 4.74 Independent Samples Test

		Levene's Test for Equality of Variance	Test for Variances			t-test fo	t-test for Equality of Means	eans		
									95% Confidence Interval of the Difference	ince Interval fference
		Ľ.	Sig.	ţ	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Active leadership	Equal variances assumed	.605	.439	596	86	.553	-1.24167	2.08340	-5.38332	2.89999
	Equal variances not assumed			592	80.498	.556	-1.24167	2.09831	-5.41704	2.93371
Passive/Corrective Leadership factor	Equal variances assumed	.605	.439	.830	86	.409	.47083	.56748	65728	1.59895
	Equal variances not assumed			.839	85.600	.404	.47083	.56148	64543	1.58710

Table 4.75 Group Statistics

	Length in current post in months	Z	Mean	Std. Deviation	Std. Error Mean
Organisational	25-36	10	83.73600	13.794816	4.362304
performance sum total	Over 48 months	42	97.16643	11.416656	1.761628

Table 4.76 Independent Samples Test

		Levene's Test for Equality of Variances	Test for Variances			t-test fo	t-test for Equality of Means	eans		
							-		95% Confidence Interval of the Difference	ince Interval fference
		Ľ.	Sig.	ţ	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Organisational performance sum	Equal variances assumed	1.512	.225	-3.213	20	.002	.002 -13.430429	4.180134	- 21.826475	-5.034382
total	Equal variances not assumed			-2.855	12.104	.014	.014 -13.430429	4.704575	- 23.671049	-3.189808

Table 4.77 Group Statistics

	Length in current post in months	z	Mean	Std. Deviation	Std. Error Mean
Organisational	25-36	10	83.73600	13.794816	4.362304
performance sum total	Over 48 months	42	97.16643	11.416656	1.761628

Table 4.78

Independent Samples Test

		Levene's Test for Equality of Variances	Levene's Test for juality of Variances			t-test fo	t-test for Equality of Means	ans		
									95% Confidence Interval of the Difference	nce Interval ference
		ĮL.	Sia.	ب	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Organisational performance sum	Equal variances assumed	1.512	.225	-3.213	50	.002	-13.430429	4.180134	- 21.826475	-5.034382
total	Equal variances not assumed			-2.855	12.104	.014	014 -13,430429	4.704575	- 23.671049	-3.189808

4.14 Validation

The most appropriate validation approach for result generalisability is to test the model on a new sample. Where this is not possible, as in this case, the next best strategy is to split the data into a 'build group' and a 'test group' (Hair et al, 1998). The rationale behind validation of the results is to ensure that the results are generalisable to the population and not specific to the population at hand (Sandbakken, 2004). The sample was split at random 50% to each group.

Table 4.79 Variables Entered/Removed(b,c)

Model	Variables Entered	Variables Removed	Method
1	Two factor model of leadership(a)		Enter

a All requested variables entered.

b Dependent Variable: Organisational performance sum total

c Models are based only on cases for which Approximately 50 % of cases (SAMPLE) = 1

Table 4.80 Model Summary(b,c)

	F	۲			
Model	Approximately 50 % of cases (SAMPLE) = 1 (Selected)	Approximately 50 % of cases (SAMPLE) ~= 1 (Unselected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677(a)	.659	.458	.447	8.111835

a Predictors: (Constant), Two factor model of leadership

b Unless noted otherwise, statistics are based only on cases for which Approximately 50 % of cases (SAMPLE) = 1.

c Dependent Variable: Organisational performance sum total

Both the R values are very close (difference of .018) as are the R2 values (difference of .011). This indicates that the model is stable and robust and can be generalised to a wider population. The variance in the dependent variable (organisational performance) arising from the two factor model is 46%. This compares to 57% in the six factor model (charismatic, inspirationally motivating, intellectually stimulating, contingent rewarding, active management-by-exception, and passive avoiding).

4.15 Sample size

The sample size was 88. Hair et al (1998, p.166) suggest 15 to 20 observations per independent variable. Field (2004, p.172) concurs that 15 cases per predictor is sufficient. The two factor model of 'Active' leadership and 'Passive/corrective' leadership complied with these conditions though the six factor model (charisma, inspirational motivation, intellectual stimulation, contingent reward, Management-by-Exception[Active] and Passive/avoidant leadership) was borderline. The two factor model was therefore more likely to be reliable as a predictor. Furthermore this model performed well under validation.

4.2 Hypotheses and discussion

Chapter Four reviewed the data collected through the use of the MLQ (5X) and the EXCEL instrument through a sample of Chief Executives in the English NHS who had been in post for at least two years. The procedures for data analysis were in accordance with accepted practice (Pallant, 2001; Hair et al, 1998; Field, 2005, Kinnear and Gray, 2000; Tabachnick and Fidell,1996, 1996). Reliability tests, correlation, and factor analysis were performed and the original research model revised as a result.

The result of this analysis against each hypothesis is summarised and discussed below:

Hypothesis 1.0: There will be no correlation between CEO's transformational leadership behaviour and organisational performance.

Hypothesis 1.1:There will be a positive correlation between CEO's transformational leadership behaviour and organisational performance. (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai

and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

The analysis indicates that there is a positive correlation between transformational leadership and organisational performance as posited in Bass's original Full Range Leadership Model (Bass, 1999). This correlation was large .756**(table 4.44). Within the transformational leadership factors Charisma had the strongest correlation .645** (table 4.47). This result is consistent with other studies of the relationship between charisma and organisational performance. Koene et al (2002) in a study in the retail sector within the Netherlands concluded that charisma had a substantial effect on store performance. This was echoed in other studies which found that whilst charisma had only a small direct relationship with performance, it was more profound under conditions of uncertainty (Waldman et al., 2004, Waldman et al., 2001, Pillai and Williams, 2004). This is especially relevant to this study within the NHS at such a time of great change (DOH, 1997, DOH, 2000, DOH, 2005b).

Inspirational motivation also had a large positive correlation with organisational performance .583** (table 4.47). This finding is consistent with other studies that show that work motivation, or willingness to exert extra effort, is the outcome best predicted by transformational leadership (Ardichvili and Kuchinke, 2002, DenHartog et al., 1999, Judge and Bono, 2004).

Intellectual stimulation also recorded large positive correlation with organisational performance .610** (table 4.47). This result is supported by other studies which found similar correlations(Elenkov, 2002). The value of intellectual stimulation within the NHS can be deduced from the high order of technological advances required in patient care, and the high status of professionals who value such stimulation, and in other sectors where this may also apply such as education (Gokcekus, 2000, Smith, 2002, Marks and Printy, 2003) Hypothesis 2.0: There will be no correlation between transactional leadership behaviour and organisational performance.

Hypothesis 2.1: There will be a positive correlation between transactional leadership and organisational performance but less so than in hypothesis 1b.(Lowe et al., 1996, Bass, 1985, Antonakis et al., 2003)

Transactional factors within the Bass(1999) model were replicated in this study which had lower positive correlations with organisational performance compared to the transformational factors .241 (table 4.44). When separated out there was a large positive correlation between Contingent Reward and organisational performance .716** (table 4.50).

This finding indicates that contingent reward is a powerful characteristic within the Chief Executives armamentarium, as perceived by the Chairs. Reasons for the strength of the effect can be found in studies of public services leadership, and in research into the physical distance between Leader and follower (Howell et al., 2005). It is also consistent with Goodwin el (2001) in a study of American public service managers which correlated contingent reward as being more strongly related to transformational leadership under conditions where there implicit psychological contracts existing with followers (p.771) and replicated in a study within the American army by Bass et al. (2003). In a target driven NHS, based on professional clans and bureaucratic machinery, with an orientation to efficiency, contingent reward behaviour will be a strong force for driving delivery of improvements in performance (Pawar and Eastman, 1997). Further comments on this are made below when considering the results of the factor analysis of the MLQ.

Management-by-Exception (Active) was also positively correlated to organisational performance though to a lesser extent than Contingent Reward .381 (table 4.50). That Management-By-Exception (Active) has a positive effect on performance excellence has been borne out in other studies (Elenkov, 2002, Podsakoff et al., 1984). It is suggested that leaders who used contingent negative, or aversive, reinforcement, which represented the more active form of management-by-exception, could enhance follower

performance if the criticism was perceived as fair, if it clarified performance standards, or modified poor performance in an acceptable way to avoid aversive consequences. It may also reflect the desire for autonomy felt by many professional staff such as doctors and nurses within the NHS, used to freedoms and left to 'get on with the job'. This autonomous motivation (as opposed to controlled motivation) has been found in other studies (Bono and Judge, 2003).

Management-by-Exception (Passive) had scale unreliability in the initial data analysis. Reliability was gained by the clustering of its item scales with Laissez-faire items to form a single factor 'Passive/avoidant leadership. The relationship between Non-transactional (Passive/avoidant) leadership was shown to have a large negative correlation with organisational performance - .564** (table 4.53).

Other studies have identified similar correlations between Non-transactional leadership and organisational performance (Hetland and Sandal, 2003, Masi and Cooke, 2000). This may be a characteristic of leadership behaviour where feedback is sparse and passively offered until a crisis develops and the feedback is perceived as harshly and unfairly critical by the employee (Gaddis et al., 2004).

Hypothesis 3.0: Within the concept of transformational leadership as proposed by Bass (1998) CEO's within the English NHS will demonstrate a nine factor model of transformational and transactional leadership (five transformational, 3 transactional, and 1 Nontransactional leadership behaviour)

Hypothesis 3.1: Within the concept of transformational leadership as proposed by Bass (1998) there will be levels of multicollinearity amongst the transformational, transactional, and non transactional leadership behaviours demonstrated by CEO's in the English NHS resulting in fewer factors.(Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001)

Factor analysis of the Bass nine-factor model of full range leadership demonstrated multicollinearity when applied to the sample of CEO's in the English NHS (table 4.57). Subsequent factor analysis indicated a two factor model of 'Active' leadership and 'Passive/corrective' leadership fitted the data well (table 4.66). This factor reduction has been identified in previous studies (Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001) Others have found two factor models to fit the data well (Den Hartog et al, 1997; Avolio et al, 1999). The context in which leadership is played out within the NHS with emphases on target achievement and large powerful professional groupings may account for the emergence of such a two factor model of 'Active' and 'Passive/corrective' leadership (Pawar and Eastman, 1997). The role that Contingent reward plays in the two factor model illustrated a continuance of the discussion about whether contingent reward is a transformational or transactional factor. In this study Contingent reward split equally between the 'Active' and 'Passive/corrective' factors(tables 4.67 and 4.68). It can be argued therefore than Contingent Reward is both a transformational and transactional behaviour and that the transformational factor has a contingent reward component (Goodwin et al, 2001). Thus transformational leaders reward appropriate behaviour in exchange for rewards as do transactional leaders, however transactional leaders are seen as doing so as a means of carrying out the exchange relationship explicitly established.

Hypothesis 4.0: There will be no differences between male and female CEO's transformational leadership behaviours when correlated to organisational performance.

Hypothesis 4.1: Female CEO's will be shown to have a more significant effect on organisational performance through higher transformational leadership than their male counterparts. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

In this study of CEO's in the English NHS (using the original construct of transformational leadership) independent samples t-test showed that any differences in transformational leadership behaviours between male and female CEO's had no statistically significant effect on organisational performance. This is supportive of other studies (Carless, 1998). There were however differences in leadership correlations depending on whether the CEO was male or female. Male CEO's were more charismatic and intellectually stimulating than their female counterparts (tables 4.48 and 4.49). Female CEO's however were more inspirationally motivating. Female CEO's used Contingent reward to stronger effect on organisational performance and were less likely to be passive/avoidant than their male counterparts.

It is important to note that sex differences in leadership can be context sensitive (Van Engen et al, 2004). The NHS, whilst predominantly female, has a disproportionate number of males at the most senior levels. Whilst not a direct part of this study the organisational context may explain any differences (Gardiner and Tiggerman, 1999).

Hypothesis 5.0: CEO tenure between those in post for 2-3 years and those over 4 years will have no difference in effect on organisational performance. Hypothesis 5.1: CEO's in post for longer periods of tenure (over 4 years) will have greater impact on organisational performance than those in post for between 2-3 years. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

Based on the two factor model, independent samples t-testing demonstrated that CEO's in post for over four years showed a slightly higher effect on organisational performance compared to those in post for a shorter period of time. However given the nature of the sample size within each sub-sample this result should be treated with caution (tables 4.75 and 4.76).

As a result of the factor analysis, two further hypotheses were tested:

Hypothesis 6.0: There will be no difference between 'Active' leadership CEO's and 'Passive/corrective' CEO's on organisational performance

Hypothesis 6.1:The 'Active' leadership CEO's will have a more positive impact on organisational performance than the 'Passive/corrective' CEO's.

'Active' leadership was shown to have a more positive impact on organisational performance than 'Passive/corrective' leadership (table 4.70). The variance in the dependent variable (organisational performance) arising from the two factor model is 50%. This compares to 57% in the seven factor model (charismatic, inspirationally motivating, intellectually stimulating, contingent rewarding, active management-by-exception, and passive/avoiding leadership). Between the two factor leadership behaviours, 'Active' leadership contributed 50.2% of the variance in the dependent variable with a total model variance with 'Passive/corrective' leadership of 50.4%.

Hypothesis 7.0: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership there will be no difference in organisational performance based on gender

Hypothesis 7.1: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership female CEO's will have will have a more positive effect of organisational performance than their male counterparts.

Independent samples t-tests were applied to the two factor model and tested for gender as with the original construct (tables 4.73 and 4.74). Again the result was not significant.

4.3 Comparing the nine factor and two factor models

The nine factor model of transformational, transactional and non-leadership behaviour is predicated on the theoretical grounds that it is possible for raters to discern separate leadership behaviours (Bass and Avolio, 2004). Within this study the reliability analysis indicated that raters found difficulty with this in a number of areas. Idealised influence (attributed and behaviour) were found to be seen as a single construct, charisma (tables 4.17, 4.18 and 4.21). In addition the individualised consideration scale was found to be unreliable. Management-by-Exception (Passive) and Laissez-faire were also combined to form a single construct, Passive/avoidant leadership (tables 4.33, 4.37 and 4.41). Such results were found in other studies (Lievens et al, 1997, Den Hartog et al, 1997, Dvir et al, 2002, Avolio et al, 2004, Avolio et al, 1999). In effect the nine factor model became a six factor model before regression and further factor analysis (Hater and Bass, 1998).

In terms of predictive value, within the transformational factors charisma had the highest correlations with organisational performance (table 4.47). Of the transactional factor contingent reward was the most potent correlate (table 4.50) as found in other studies (Goodwin et al, 2001, Bass et al, 2003, Howell, 2005).

Within the overall nine-factor model, stepwise regression showed that contingent reward made the highest Beta score (table 4.57). Inspirational motivation, intellectual stimulation were also stronger predictors of the dependent variable than charisma. Transformational factors predicted 55.4% of the variance in the dependent variable (table 4.58).

Following the factor analysis the two factor model derived from the data showed that predominantly transformational factors had by far the largest predictive value on the dependent variable at 50.2% of the total variance, along with 'Passive/ corrective leadership adding only a further 0.2%. These results are borne out in other studies that posit a possible two factor model (Goodwin et al, 2001, Carless, 1998, Bycio et al, 1985, Wofford et al, 1998). The two factor model may also be more stable due to prediction based on the numbers of independent variables as predictors and the sample size.

4.4 Conclusion

The original research model was framed within the context of the Full Range Leadership Theory postulated by Avolio and Bass (2004) and Bass(1999) which proposed a model where transformational factors (Charismatic leadership; inspirational motivation; intellectual stimulation; and individualised consideration) are augmented by three transactional factors, Contingent
reward and Management-by-Exception (Active and Passive) to increase expected effort through heightened motivation to designated outcomes, which leads to performance beyond expectation. Transformational leadership influences a perceptual change in others. It is this potency of change leadership that generates a "shift to a higher order exchange process: not a simple transaction, but rather a fundamental shift in orientation, with both long and short term implications for development and performance" (Avolio and Bass, 2004; pg. 20). Bass (1985) argues that transformational leadership accounts for unique variance in ratings of performance above and beyond that accounted for by active transactional leadership. In the context of the English NHS, experiencing continuous dramatic change as it faces demographic demands, higher public expectations and the introduction of a quasi-market, organisational survival may depend on its ability to engage in rapid change (Brown and Eisenhardt, 1997).

Studies have confirmed that transformational leadership has a positive effect on organisational performance (Hater and Bass, 1988, House and Shamir, 1993, Dvir et al., 2002, Bass et al., 2003, Podsakoff et al., 1996, McColl-Kennedy and Anderson, 2002, Elenkov, 2002, Zhu et al., 2005), and in particular at times of considerable organisational change and uncertainty (Bass and Avolio, 1994a, Bryman et al., 1996, Sashkin, 1992, Kouzes and Posner, 1995, Tichy and Devanna, 1986, Kotter, 1990, Pawar and Eastman, 1997, Eisenbach et al., 1999, Waldman et al., 2001).

The emergence of transformational leadership depends in part in the context in which the leader and followers interact (Bass, 1985; Pawar and Eastman, 1997). In this study of Chief Executives in England who have been in post for at least two years, the theoretical conjecture that the augmented model of the Full Range Leadership theory would lead to higher performance was tested through the Multi-factor Leadership Questionnaire (MLQ[Short form 5X]) (Avolio and Bass, 2004) and the EXCEL organisational excellence questionnaire (Sharma et al., 1991). The time limit for acceptance into the study was set at over 2 years to reflect the need for the Chief Executive to have an impact on organisational performance (Hambrick and Fukutomi, 1991; Allgood and Farrell, 2000).

The subsequent hypotheses arose out of the literature. The resulting analysis provides support for the underlying proposition that transformational leadership does have a significantly positive effect on organisational performance.

The leadership factors arising from the analysis indicated that the original model was not reliable using the MLQ (5X) within the NHS as a means of Chairs measuring their Chief Executives performance and in its underlying factor structure. A revised two factor model of 'Active' and 'Passive/corrective' leadership was tested and fitted well with the data and meaning. The context within this two factor model was tested was the NHS in England undergoing considerable change. The notion that 'Active' leadership, containing many of the transformational characteristics of the Bass (1999) model, is consistent with previous studies of charisma, inspiration, and motivation for change. The contingent reward component, split between 'Active' and 'Passive/corrective' leadership behaviours affords a recognition that elements of this behaviour can be transformational as well as transactional. Continued stories of lack of CEO intervention in problems demonstrate the possible deletérious consequences of if the CEO is too passive and corrective (HealthcareCommission, 2006).

The final chapter will summarise previous chapters, identify contributions in the field of leadership and organisational performance from this study, and highlight limitations of the research. It will also make reference to personal learning through the research process.

Chapter Five

Conclusions, contributions, and personal reflections

5.1 Introduction

This final chapter summarises and concludes the previous chapters. It covers the theoretical and methodological foundations of the research. Contributions in the field of transformational leadership behaviour and organisational performance will be highlighted. Limitations of the research will also be discussed. Finally, personal reflections on the research process and possible future areas for research will be considered

5.2 The research problem

This research focussed on the relationship of English NHS Chief Executives transformational leadership behaviour and their organisation's performance excellence.

The English NHS is undergoing considerable and radical change to embrace multiple concepts such as; giving patients wide choice of which their healthcare providers are; the speed of access to treatments; the impact of technological advances such as the internet and information; the opening up of a quasi-market in provision; the rapid advances in health technologies; the publication of increasingly detailed performance tables (DOH, 1997, DOH, 2000, DOH, 2005b, DOH, 1999, HealthcareCommission, 2004, HealthcareCommission, 2005, DoH, 2005). This radical change within health services in echoed through the public services more generally as a consequence of the paradigm known as the New Public Management (Osborn and Gaebler, 1992, Pollitt, 2000, Pollitt, 2002, Kelman, 2005).

The study focussed on the concept of transformational leadership as one of the most researched agents for leadership of successful organisational change (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Chief Executives of NHS organisations are the statutory Accounting Officers for their organisations performance. They carry executive responsibility for how well the organisation is viewed by its local populations and to the Secretary of State and Parliament for its performance (Exworthy and Robinson, 2001).

This focus on organisational performance is critical for public services to demonstrate that they use public funds effectively and efficiently. What measures and methods are used is not something of esoteric value. In the context of healthcare organisations they may determine the quality of care offered to patients, the strategy and tactics deployed for the organisation's well-being, the approach to efficiency and effectiveness, and the way the organisation is viewed by its customers or the public(HealthcareCommission, 2004, Freeman, 2002, Mullen, 2004). However the method and measurement of organisational performance excellence within the NHS is acknowledged to be complex, multi-dimensional and difficult to measure (Robinson and Exworthy, 1999).

The problem under consideration therefore was framed by the research question:

"Within English NHS organisations is there a relationship between the leadership behaviour of the Chief Executive and performance excellence?"

5.3 The theoretical foundation

The literature review within Chapter Two highlighted the potency of transformational leadership as one of the most influential leadership theories of modern times (Bryman, 2004a). It has been evaluated within organisations undergoing significant change through studies of transformational leaders' ability to motivate their followers to levels of performance beyond expectations(Bass and Avolio, 1994a, Bass, 1985, Avolio, 1999, Conger and Kanungo, 1987, Kouzes and Posner, 1987, Kouzes and Posner, 1987, Kouzes and Posner, 1995, Eisenbach et al., 1999, Nadler and Heilpern, 1998, Walumba et al., 2004).

Transformational leadership as proposed by Bass and Avolio (1994) has 9 elements clustered into two distinct concepts; that of transformational leadership and transactional leadership and a non-leadership behaviour that may be seen as the absence of leadership. The elements of transformational leadership are needed to augment transactional leadership for the greatest effect on performance(Avolio and Bass, 2004). The most widely used instrument for measuring the full range of transformational leadership behaviours is the Multifactor Leadership Questionnaire(Avolio and Bass, 2004).

For this study transformational leadership as proposed by Bass and Avolio (1994) was the basis for assessing the leadership behaviours of the Chief Executives involved. After evaluation of a number of alternative leadership instruments it was concluded that the instrument to undertake this assessment would be the Multifactor Leadership Questionnaire [MLQ, Short Form 5X] (Avolio and Bass, 2004). In using this instrument the authors claim it is applicable cross-culturally from numerous previous studies (Avolio and Bass, 2004).

The measurement of organisational performance is complex and culturally sensitive (Robinson and Exworthy, 1999). Reliance on 'bottom line' measures for public services, and the health service in particular, may not convey the key issues facing organisations(Kaplan and Norton, 1992, Kaplan and Norton,

1996b, Otley, 2000, Otley and Fakiolas, 2000, Freeman, 2002, Mullen, 2004). The concept of performance excellence was considered from the literature to offer an alternative way of assessing organisational performance(Sharma et al., 1990). Based on Peters and Waterman's (1982) "Excellence" construct, it has now been operationalised by the EXCEL instrument(Sharma et al., 1999). Studies using the EXCEL instrument have replicated its value in determining performance excellence(Caruana et al., 1995, Sandbakken, 2003, Brett, 2000, Castile, 2006).

Whilst there are other studies which have used different instruments to measure transformational leadership such as the Leadership Practices Inventory along with the EXCEL(Sandbakken, 2003, Castile, 2006) there have been none that have utilised the MLQ (5X) to measure transformational leadership along with the EXCEL to measure organisational performance. This study therefore offered new insights and a fresh contribution to the field.

Within the research study gender was considered as to whether it had any augmenting effect on transformational leadership, and thereby performance excellence. Studies in this area are contradictory and controversial(Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Gender was therefore collected as part of a small number of demographic items, and hypothesised that it would have an augmenting effect on transformational leadership correlation with organisational performance.

Tenure of the CEO was also considered as a possible affect on the performance of the organisation (Allgood and Farrell, 2000, Hambrick and Fukutomi, 1991).

5.4 The research model

Arising from the literature review an initial research model, with hypotheses, was constructed as shown below:



The MLQ transformational, transactional and non-leadership elements were the independent variables with organisational performance the dependent variable. The hypotheses arose directly from the literature(Bass and Avolio, 1994a, Bass, 1985, Avolio et al., 1999, Avolio and Bass, 2004) and are shown in more detail below:

Hypothesis 1.0: There will be no correlation between CEO's transformational leadership behaviour and organisational performance.

Hypothesis 1.1: There will be a positive correlation between CEO's transformational leadership behaviour and organisational performance. (Bass, 1999, Bennis, 1999, Berson et al., 2001, Bichard, 2000, Bryman et al., 1996, Carnall, 1997, Alimo-Metcalfe, 1998b, Conger, 1989, Dvir et al., 2002, Eisenbach et al., 1999, Ferlie et al., 1996, Higgs, 2002, House and Aditya, 1997, Hunt, 1999, Koh et al., 1991, Kotter, 1990, Kotter, 1995, Kouzes and Posner, 1995, Nadler and Heilpern, 1998, Nadler and Tushman, 1990, Pillai and Meindl, 1998, Podsakoff et al., 1990, Podsakoff et al., 1996, Price, 2003, Smith, 2002, Tichy and Devanna, 1986).

Hypothesis 2.0: There will be no correlation between transactional leadership behaviour and organisational performance.

Hypothesis 2.1: There will be a positive correlation between transactional leadership and organisational performance but less so than in hypothesis 1b.(Lowe et al., 1996, Bass, 1985, Antonakis et al., 2003)

Hypothesis 3.0: Within the concept of transformational leadership as proposed by Bass (1998) CEO's within the English NHS will demonstrate a nine factor model of transformational and transactional leadership (five transformational, 3 transactional, and 1 nontransactional leadership behaviour)

Hypothesis 3.1: Within the concept of transformational leadership there will be levels of multicollinearity amongst the transformational, transactional, and non transactional leadership behaviours demonstrated by CEO's in the English NHS resulting in fewer factors.(Lowe et al., 1996, Carless, 1998a, Bycio et al., 1995, Antonakis et al., 2003, Bass and Avolio, 1993, Tejeda et al., 2001)

Hypothesis 4.0: There will be no differences between male and female CEO's transformational leadership behaviours when correlated to organisational performance.

Hypothesis 4.1: Female CEO's will be shown to have a more significant effect on organisational performance than their male counterparts. (Bass and Avolio, 1994b, Bass et al., 1996, Eagly and Johnson, 1990, Eagly and Carli, 2003a, Eagly, 1995, Eagly and Carli, 2003b, Kakabadse and Kakabadse, 1998, VanEngen et al., 2001, Vecchio, 2002, Vecchio, 2003, Carless, 1998b, Druskat and Wolff, 2001, VanEngen and Willemsen, 2004).

Hypothesis 5.0: CEO tenure between those in post for 2-3 years and those over 4 years will have no difference in effect on organisational performance. Hypothesis 5.1: CEO's in post for longer periods of tenure (over 4 years) will have greater impact on organisational performance than those in post for between 2-3 years. (Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000)

Following factor analysis of the MLQ two further hypotheses were generated as below:

Hypothesis 6.0: There will be no difference between 'Active' leadership CEO's and 'Passive/corrective' CEO's on organisational performance

Hypothesis 6.1: The 'Active' leadership CEO's will have a more positive impact on organisational performance than the 'Passive/corrective' CEO's.

Hypothesis 7.0: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership there will be no difference in organisational performance based on gender

Hypothesis 7.1: Within the two factor model of 'Active' leadership and 'Passive/corrective' leadership female CEO's will have will have a more positive effect of organisational performance than their male counterparts.

5.5 Research design, methodology, and results

The predominant research strategy for studies of this nature was positivist(Remenyi et al., 1998, Bryman, 2004b).

The study involved collection of data about English NHS Chief Executives leadership behaviours using the MLQ (5X) and organisational performance using the EXCEL instrument. To do so required the identification of an observer who could comment on both. Within the procedures of the NHS this was determined to be the organisations non-executive Chair (DOH, 2003a). The Chair is accountable for the overall performance of the organisation by leading its Board of Directors. They also have the key role of appraising the Chief Executive's performance on at least an annual basis formally and in effect on a continuous basis through day-to-day contact between them (Exworthy and Robinson, 2001, NHSLeadershipCentre., 2003c).

As the MLQ (5X) has been claimed by the authors as cross-cultural and used in multiple studies worldwide no pre-test of the instrument was made. However as the EXCEL has not been used in the NHS a focus group of Chairs was convened to test their observation of the instrument as individuals who might be asked to complete it for their organisations(Churchill, 1999). Observations were made on terminology to make the instrument more applicable to the NHS.

Despite some difficulty in identification, data was collected from a sample of Chief Executives who had been in post for at least two years. The time period was designed to ensure the Chief Executive had an opportunity to influence organisational performance excellence(Hambrick and Fukutomi, 1991, Allgood and Farrell, 2000).

A total of 88 completed combined MLQ (5X) and EXCEL instruments were returned. The MLQ (5X) contained 9 items relating to 'Outcomes of Leadership' which were not needed for the study as this data was contained within the construct of the EXCEL instrument. However to retain the integrity of the MLQ (5X) from the commercial suppliers these were retained and the respondents asked to complete all 45 items. On entering data into SPSS it was noted that the Chairs had not answered a large number of these nine items. A focus group was arranged to explore the difficulties Chairs may have had in their completion. The focus group highlighted a number of concerns about the wording of these items which they did not see related to them in their role as superior appraisers as opposed to subordinate followers. This will be referred to later as a contribution to the field from this study.

In addition, paired sample T-tests were undertaken to compare the means scores gained from Chair reports of their CEO's, and CEO's scoring themselves using the MLQ(5X). When compared, these demonstrated important differences in perceptions of leadership behaviour. Chairs see CEO's having statistically higher mean scores for *charismatic leadership*, *Management-by-Exception (Active)*, and *Passive/avoidant leadership*. CEO's scored themselves higher in being *inspirationally motivating*, *contingent reward*, and *intellectually stimulating* behaviours, though only in the case of the latter was this difference to the Chair score statistically significant.

5.6 Strengths and limitations of this study

All research is a trade off(Remenyi et al., 1998). The resources of the student, the time available, the theoretical foundations, the predominant paradigm for study, access to the population to be studied, all have to be taken into consideration. As such the doctoral student needs to use both *delimititations* to address how the study will be narrowed in scope, and provide *limitations* to identify potential weaknesses of the study(Creswell, 1994). The focus of the

question looking at Chief Executives within the English NHS who have been in post for at least two years demonstrates the potential strengths but also the potential weaknesses of the study. The sample size was relatively small but then the population as a whole is not large. This may be more relevant when the total number is disaggregated for gender and tenure where the sample sizes become quite small.

The longitudinal effect of transformational leadership on organisational performance was not explored through this study. There would be value in understanding this and is reflective of such calls from other researchers (Bryman, 2004a, Hunt, 1999, Pettigrew, 1987).

The strength of the study comes from using previously validated instruments not used in conjunction together or within the NHS. The geographical delimitations to within England reflected the variety of healthcare cultural and organisational differences within the four countries of the UK. This might limit the generalisability beyond England. This point also is reflected from the earlier reference to Chairs concerns over some of the unused item wording within the MLQ (5X) which raises concerns over the 'universality' of the questionnaire claimed by the authors(Avolio and Bass, 2004).

The completion of the combined MLQ (5X) and EXCEL by the Chair alone might have resulted in losing the richness that would have come multiple completions by peers and subordinates. The seeking of objectivity from raters is never without concerns. The relationship of Chair to Chief Executive is highly important for organisational wellbeing (Robinson and Exworthy, 1999) but may lead to 'halo' and other effects (Lefkowitz, 2000, Forray, 1995, Fried et al., 1999).

The use of subjective measures of to assess organisational performance excellence, whilst methodologically sound (Dess and Robinson, 1984) is not favoured within public services where hard comparable data is preferred to accord with public expectations and the demands of the New Public

management Paradigm(HealthcareCommission, 2005, Osborn and Gaebler, 1992, Pollitt, 2000, Pollitt, 2002, Ferlie et al., 1996).

5.7 Contributions of the research

5.7.1: Contribution no 1: The correlation of transformational leadership and organisational performance excellence in the NHS.

The strong correlation of transformational leadership and organisational performance in this study supports other studies(Hetland and Sandal, 2003, Dvir et al., 2002, Elenkov, 2002). Its application to the NHS confirms the call for NHS Leaders to adopt transformational leadership behaviours to help the service transform itself(DOH, 2005c, Goodwin, 1998, Smith, 2002, Crisp, 2004). The conceptual model of transformational leadership (as measured by the MLQ (5X) and organisational performance (as measured by the EXCEL instrument) was largely validated with the additional issues listed below. At a time of radical and significant change within the Service this correlation affords a clear direction of travel for leadership development within the NHS.

The subsequent factor analysis produced a two factor model of 'Active' and 'Passive/corrective' leadership which also supported the potent effects of transformational leadership behaviours on the variance in organisational performance.

5.7.2: Contribution no.2: The operationalisation of transformational leadership (MLQ [5X]) and organisational performance (EXCEL).

2a: The use of the MLQ (5X) and the EXCEL instrument together within the NHS has not previously been undertaken. The operationalisation of the instruments and their subsequent use highlighted a number of important results.

2b: *Contingent Reward* proved a significant predictor of organisational performance, higher than that postulated in the Full Range Leadership Theory

but shown in other studies (Hetland and Sandal, 2003, Bass et al., 2003, Masi and Cooke, 2000). This may well be a context effect of a target driven NHS with (as described by Pawar and Eastman, 1997) large numbers of independently orientated professional staff, working within bureaucratic organisations, orientated to efficiency with a dominant technical core. This may also reflect work on receptivity to change where the dominant organisational culture does not lend itself to simple vision but on a more potent exchange approach (Pawar and Eastman, 1997, Pettigrew, 1987, Pillai and Meindl, 1998). This study provides some support for previous work that female leaders engage in more of the *contingent reward* behaviours than men (Eagly et al., 2003).

2c: *Contingent reward* was also found to have both transformational and transactional components when explored within the two factor model. It can be argued therefore than Contingent Reward is both a transformational and transactional behaviour and therefore the transformational factor has a contingent reward component (Goodwin et al, 2001). Thus transformational leaders reward appropriate behaviour in exchange for rewards as do transactional leaders, however transactional leaders are seen as doing so as a means of carrying out the exchange relationship explicitly established.

2d: The difficulties concerning the scale associated with *Individualised Consideration* is of methodological and theoretical concern. Though universally completed by raters, the results when loaded into SPSS for reliability analysis, indicated that the scale not be demonstrated as reliable. The unreliability of the scale suggests it may not reflect the construct it is measuring (Field, 2005; p.666). Alternatively the scale items may have been confusing to superior raters given the terminology within the questions. A final possibility is that the physical distance of the leader from the rater or from subordinates within a stressed organisation, dominated by targets, means that the opportunities for such personalised consideration are increasingly limited(Howell et al., 2005). Subsequent factor analysis showed that individualised consideration was a component within the 'Active' leadership factor. This issue warrant further investigation.

2e: The merging of Management-by-Exception and Laissez-faire leadership into a single construct, Passive/Avoidant leadership, in this study supports findings from other research. This is likely to have arisen by the inability of the Chairs to distinguish these two separate leadership behaviours. This combination has some support in other studies (Avolio and Bass, 2004; Dvir et al, 2002; Avolio, Bass, and Jung, 1999).

2f: The extent of multicollinearity within the MLQ suggested that factor analysis would be appropriate. The data derived an alternative two factor model of 'Active' and 'Passive/corrective' leadership that was well interpreted by a focus group of CEO's. The predictive value of the two factor model was robust as compared to the six factor model.

5.7.3 Contribution no. 3: the predictive value of the models of Transformational leadership, and 'Active' and 'Passive/corrective' leadership

3a: The first regression analysis based on the six factor model showed that of the transformational factors, charisma had the largest correlation with organisational performance. Contingent reward had the highest correlation within the transactional factors. When the Beta of all the factors was considered, contingent reward had the highest Beta score. Charisma was fourth in descending order after inspirational motivation and intellectual stimulation. The context of the NHS undergoing considerable change but with a strong intellectual, vocationally orientated workforce needs to be considered alongside these results.

3b: The second regression analysis based on the two factor model demonstrated that within the 'Active' leadership component, transformational factor dominated its composition and counted considerably towards the variance in the dependent variable.

5.7.4 Contribution no. 4: The effect of gender

In this study of CEO's in the English NHS (using the original construct of transformational leadership) independent samples t-test showed that any differences in transformational leadership behaviours between male and female CEO's had no statistically significant effect on organisational performance. This is supportive of other studies (Carless, 1998). There were however differences in leadership correlations depending on whether the CEO was male or female. Male CEO's were seen by their Chairs as more charismatic and intellectually stimulating than their female counterparts (tables 4.48 and 4.49). Female CEO's however were seen by their Chairs as more inspirationally motivating. Female CEO's used Contingent reward to stronger effect on organisational performance and were less likely to be passive/avoidant than their male counterparts.

However on all factors the difference was not statistically significant. This supports the results of some studies(VanEngen and Willemsen, 2004), but not others(VanEngen et al., 2001, Vecchio, 2002)

5.7.5 Contribution no.5: The effect of CEO tenure on organisational performance

The data confirmed that CEO's in post for over four years had a small but statistically significant effect on organisational performance when compared to CEO's in post for shorter periods. This has important consequences for organisational stability and successful receptivity and adaptation to change (Pettigrew, 1987, Huy, 1999). It also raises important issues over CEO development and transition as the NHS moves to multiple autonomous bodies with no central planned succession/retention programme (DOH, 2005b).

5.7.6 Contribution no. 6: the ratings by Chairs of their Chief Executives and of their organisation's performance.

The skewed nature of the raw data from the EXCEL(prior to transformation) may suggest Chairs inability or unwillingness to choose from a range of

scores and to choose at the extreme, in this case mostly a positive skewness The Chairs may have felt it more appropriate to paint their Chief Executive or organisation in the best possible light (Brown and Keeping, 2005, Exworthy and Robinson, 2001) or it is a result of 'halo' or other effects(Fried et al., 1999, Forray, 1995, Lefkowitz, 2000). It may also reflect the leader's political skill to influence Chairs as appraisers. Their political, networking, and social capital abilities have been shown to impact on perceived performance (Douglas and Ammeter, 2004). This suggests that the mechanism by which Chairs appraise their Chief Executive would benefit from a wider repertoire of data than their personal observations and anecdotal feedback from others allows. The renewed training of raters in such appraisal mechanisms may also be valuable(Conger and Toegel, 2002).

The T-tests undertaken to compare the perceptions of transformational leadership behaviour of the Chief Executive by themselves and by their Chair indicated significant differences. Such differences cannot be helpful for either party when determining an individual's performance. Whilst in practice these two data sets would be brought together for mutual discussion and hopefully reconciliation (NHSLeadershipCentre., 2003c) such a significant difference in perception as a starting point may make such an objective difficult.

5.7.7 Contribution no. 7: The measurement of performance

This study used the EXCEL operationalisation of the Performance excellence construct(Sharma et al., 1999, Peters and Waterman, 1982, Sharma et al., 1990). The instrument was found to be reliable and valid as a means of measuring organisational performance though in this study the whole construct was used in this study as a single variable. The construct can however be broken down into its eight elements: a bias for action; close to the customer; autonomy and entrepreneurship; productivity through people; hands on, value driven; sticking to the knitting; simple form, lean staff; simultaneous loose-tight properties. It is suggested that by doing so each organisation would gain a richer picture of performance than a single aggregated number. The EXCEL might be augmented with additional

questions to those within the original instrument. This issue will be explored in the section of further research.

5.7.8 Contribution no.8: The effect on leadership development and training.

Calls for transformational leadership in not uncommon in the NHS(Smith, 2002, Goodwin, 1998, DOH, 2005c, Crisp, 2004). What this study shows is that Chief Executives have responded to this call. Nevertheless one area which, in the push for the overtly transformational elements, may have been overshadowed is contingent reward behaviour. Bass (1985) has indicated that transformational leadership augments transactional leadership. This study, grounded within the NHS, shows the potency of contingent reward behaviours as major factor in gaining performance beyond expectation. It is suggested that this potent factor be re-emphasised through experiential learning and development for example negotiating skills, giving feedback, and appraising performance. The guestion of leadership development of CEO's has to be framed within an extensive literature on the subject. It is argued that successful performance in most forms of work can be attributed to experience and coaching, rather than simple in-born talent early-life experiences. Specifically jobs, bosses, hardships and special projects can be the most useful experiences for leadership development (Conger, 2004). Within the context of the NHS a number of important points can be made:

- With the combined pressures of organisational change and downsizing, performance pressure continuing to increase as patient and governmental expectations continue to grow and with the potential for senior leader 'burnout' a reality, leadership development requires continued appropriate investment (Alimo-Metcalfe, 1999).
- As the proportion of women leaders continues to grow, questions are posed as to whether women-only leadership development may be appropriate to augment the traditional programmes (Vinnecombe and

Singh, 2003). Whilst there are arguments both for and against such an approach (Calas and Smircich, 1995) might support continued attempts for women potential leaders to break through the 'glass ceiling (Bass and Avolio, 1994b, Kakabadse and Kakabadse, 1998).

5.8: Potential future research areas

Whilst providing some tentative answers and reasons for the issues below, this study has identified the following areas for further research:

- The longitudinal effect of transformational leadership on organisational performance requires further consideration (Pettigrew, 1987, Bryman, 2004a, Hunt, 1999). If within the NHS so much stock is put on the role and accountability of the organisations Chief Executive to lead transformation how transient is the effect of their transformational leadership ability? How much is down to the Chief Executive alone, their Top Team (Finklestein and Hambrick, 1996, Flood et al., 2000, West et al., 2003), the receptivity of the organisation to accept radical change (Pawar and Eastman, 1997, Huy, 1999), or the nature of the organisational structure (Pillai and Meindl, 1998). Further studies to elicit the effect of each of these variables would enrich the knowledge of leadership effects within the NHS.
- 2. This study describes *what* behaviours leaders adopt for organisational performance. It does not describe *how* they apply these behaviours, at what time, in what way, with what people, in what combination. A case study exploration of these aspects with high transformational leaders would elaborate these issues (House and Aditya, 1997, Hunt, 1999).
- 3. The MLQ (5X) as an instrument for assessing transformational and transactional leadership as promulgated by the Full Range Leadership Theory of Bass and Avolio (1994b) requires further refinement if used within the NHS. The additional scale items used to assess *Outcomes of Leadership* (gaining extra effort, effectiveness, and satisfaction) whilst

not used in this study, were found to be culturally ill-fitting within the context of the NHS and where the rater is the superior Chair of the organisation rating their Chief Executive. The focus group of Chairs used to explore the reasons for large number of uncompleted items indicated that the Chairs did not see the questions as appropriate given their position within the organisation, and as a refection of the relationship with their Chief Executive both as a colleague and subordinate. This impact of appraisal under such circumstances calls for further research on the relationship of the Chair to their CEO when undertaking appraisals and the instrumentation used to gain a full view of the individual being assessed (Exworthy and Robinson, 2001, Hater and Bass, 1988, Lefkowitz, 2000).

- 4. In the light of the above point an assessment of appraisal training for Chairs of NHS organisations to improve the quality and timeliness of feedback to Chief Executives should be carried out and evaluated. This should also cover issues of instrumentation and data from multiple sources (Alimo-Metcalfe, 1998a, Fletcher, 2001).
- 5. The two factor model of 'Active' and 'Passive/corrective' leadership that was derived form the data could be further explored by a larger study. The sample in this study (n=88) whilst forming a large proportion of the total population, would benefit from a more widespread examination, particularly with so many CEO's coming into new posts arising from the Governments latest reorganisation and transformation programme (DOH, 2005b).
- 6. Organisational type (PCT or NHS Trust) was not assessed as part of this study. The arrival of new organisations, both within the traditional NHS public service framework, but also quasi-commercial organisations within the NHS such as Foundation Trusts and Social Entrepreneurial organisations and private companies, may provide a fertile ground for studying this variable. This is especially so as NHS organisations can be conjectured within the work of Pawar and

Eastman (1997) as having negative polarity to change with would make transformational leadership less effective. In particular does the Chief Executive influence the organisation setting or does the organisation setting influence the Chief Executive (Hinings and Greenwood, 1988, Pillai, 1998).

- Further studies using the disaggregated EXCEL questionnaire should be considered to determine whether this richer picture provides greater assurance of performance excellence, and whether longitudinal studies, (rather than this snap-shot) would add further to the relationship of transformational leadership to performance excellence over time (Pettigrew, 1987).
- 8. The potency of contingent reward behaviour as spanning the boundary between transformational and transactional factors suggests that further studies of this behaviour alone may be valuable. In addition training and development in this key area should be evaluated to assess its impact on public service organisations performance excellence (Sosik et al., 2002) and in particular in a service based on professional excellence and emotional involvement with the patient or client (Strodeur et al., 2001)
- 9. The possible augmenting effect of emotional intelligence and transformational leadership on organisational performance would be valuable to study particularly given the growing body of evidence that emotional intelligence may make such a contribution (Kerr et al., 2006, Downey et al., 2006, Kupers and Weibler, 2006, Brown et al., 2006)

5.9: Learning from the research process

When beginning doctoral research I was encouraged to read widely, 'read, read, and read' was the mantra. I recall one reference that stood out which cautioned that I should be aware that in doctoral education I was under my own management and have responsibility for determining what is required as

well as carrying it out. I had periods of self-doubt which I needed to come through with the clear aim of becoming a competent professional researcher(Phillips and Pugh, 1994). This was on reflection sound advice but not taken too seriously at the beginning.

Part-time doctoral training is hard work, and more so when compounded with full time employment. It requires the personal support of many people to help carry one through the periods of self-doubt. There were also acute periods of isolation, either because one is intensely occupied with a beautiful research problem, or because things are going very badly and depression sinks in. The support of one's supervisors was critical for the success of the research endeavour at such times. It is a lesson which can be hard learnt. Nevertheless there were also be times of unalloyed joy –cracking a problem; the 'eureka' moment; learning a new technique and see it play out in your research analysis.

I was also privileged to read Peter Homa's paper on 'Academic as Management Researcher: the Obligations of Evidenced-Based Management (1998). This described the importance for managers to consider how the critical appraisal skills and challenge that research training provides may be carried into one's practitioner world. It is certainly the case that my ability (and desire) to robustly delve deeper into issues has been enhanced over these years.

The challenge of methodology and methods is the 'grit' of research. What is the problem to be solved and how might we solve it. Having solved it how might we know that our answers can be understood by others and ideally replicated elsewhere? This goes beyond the simple mechanics of the process but the realm of epistemology and ontology, and the techniques which can be used to assure the subsequent results(Robson, 1999, Bryman, 2004b, Schwab, 1999, Cardinal et al., 2004).

My knowledge of leadership is now infinitely wider and deeper than it could ever have been through normal work routines. The research process of

beginning wide and then narrowing down may appear wasteful at the time as one dispenses with areas of study to concentrate on a more manageable field of study. This initial breadth is hugely valuable to later thinking when one seeks to integrate and interpret your research in the broader world of work. For having 'read, read, read' one also needs to 'write, write, write', to translate this material into a form of potential common/mutual understanding for the research community of one's peers. This act of translation has taken on greater meaning as academic study occupies larger elements of work time. Practitioner colleagues do not sit and wait at the end of your research process for the results- they are getting on with their world's problems. Bringing results to them in a language of utility is a major consideration for those of us in academic management research and brought sharper into focus as a consequence of this research journey(Lavis et al., 2005, Burns, 2005).

5.10: Concluding remarks

This research has confirmed that NHS organisations in England will see higher levels of organisational performance if their Chief Executives display transformational leadership behaviours. In essence this confirms the theoretical and anecdotal view that the leadership behaviours of Chief Executives do make a difference. The importance of developing Chief Executive transformational leadership (or 'Active' leadership) behaviours within the NHS is highlighted. Feedback becomes more critical to this group and raises the question of who appraises Chief Executive's performance, and how this is done, along with practical issues about method and instrumentation.

Gender was shown not to be an augmenting factor in transformational leadership behaviours effects on organisational performance.

Tenure in post however did demonstrate some positive effects on organisational performance. The effect of leadership consistency at the top through the CEO suggests that retention of transformational CEO's in their posts would enhance successful change and thereby long term improvements

in performance. The role of the 'Top Team' and their contribution and development must also be assessed (Alimo-Metcalfe and Alban-Metcalfe, 2005, Higgs and Rowland, 2000, Finklestein and Hambrick, 1996).

The use of the MLQ (5X) to assess leadership behaviour was shown not to have universal utility across cultures and contexts.

Findings from this research have indicated several further areas for study.

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Letter to Chairs about their Chief Executive's leadership behaviour (as measured by the MLQ (5X) and their organisations performance excellence (as measured by the EXCEL instrument)

Dear Chair

Is there a relationship between how Chief Executives are as leaders and our organisations performance?

Please help with this research study – as a practicing Chief Executive, I know how much is on all our desks at this very moment but I do hope to show that this is an important issue.

Chair's and Chief Executive's know that at the end of the day they are held accountable for their organisation's performance.

Chief Executives face many pressures, work in many different contexts, and with a wide variety of staff and external stakeholders. In doing so they employ a variety of leadership styles and behaviours. Most recently, there has been a focus on transformational leadership as an important approach to understanding how organisations respond successfully to change and improve organisational performance.

What we do not know conclusively is whether there is a relationship between the Chief Executive's leadership style and their organisation's performance. There may be many other factors at play outside of the control of the Chief Executive. The emphasis on the leadership behaviour of the Chief Executive, politically and managerially, focuses our interest solely in this as a determinant of organisational performance. If this is so it may impact on our leadership development programmes, and if not, we must fundamentally consider how we judge the contribution that Chief Executive's make within health and social care communities.

This research study, undertaken as part of a doctoral programme, will help add to our knowledge of the relationship between the leadership behaviour of Chief Executives and their organisation's performance. It comprises two questionnaires: -

- A1 A leadership questionnaire
- B An Organisational performance questionnaire

You alone should complete both and return in the enclosed envelope. These questionnaires are widely used and valid instruments for measuring leadership and organisational performance.

Your Chief Executive has been sent a copy of the leadership questionnaire alone coded A2.

The study will form any part of my Doctoral degree, and an executive summary will be published in late 2005. I hope you will be able to help!

Yours,

Gerry McSorley Chief Executive Nottingham City Hospital Doctoral Research Associate Henley Management College/Brunel University

The questionnaire sent to Chairs combining the MLQ (5X) and the EXCEL instrument



This questionnaire is to describe your CEO's leadership style as you perceive it. Please answer all questions on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.

Circle the number to indicate your answer.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word "others" may means your peers, clients, direct reports, supervisors and/or all of these individuals.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

THE PERSON I AM RATING

1. Provides me with assistance in exchange for my efforts0 1 2 3 4
2. Re-examines critical assumptions to question whether they are appropriate0 1 2 3 4
3. Fails to interfere until problems become serious0 1 2 3 4
4. Focuses attention on irregularities, mistakes, exceptions and deviations from standards0 1 2 3 4
5. Avoids getting involved when important issues arise0 1 2 3 4
6. Talks about their most important values and beliefs0 1 2 3 4
7. Is absent when needed0 1 2 3 4
8. Seeks differing perspectives when solving problems0 1 2 3 4
9. Talks optimistically about the future0 1 2 3 4
10. Instils pride in me for being associated with him/her0 1 2 3 4
11. Discusses in specific terms who is responsible for achieving targets
12. Waits for things to go wrong before taking action0 1 2 3 4
13. Talks enthusiastically about what needs to be accomplished0 1 2 3 4
14. Specifies the importance of having a sense of purpose0 1 2 3 4
15. Spends time teaching and coaching0 1 2 3 4
16. Makes clear what one can expect to receive when performance goals are achieved0 1 2 3 4
17. Shows that he/she is a firm believer in "If it ain't broke, don't fix it" 0 1 2 3 4
18. Goes beyond self-interest for the good of the group0 1 2 3 4

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4
19. Treats me as	an individual rather that	in just a member of	a group	0
20. Demonstrate	s that problems must bec	come chronic before	e I take action	0
	that builds my respect			
22. Concentrates	s his/her full attention or	dealing with mista	kes, complaints a	nd failures0
	e moral and ethical conse	^		
4. Keeps track	of all mistakes	•••••	•••••	0
25. Displays a se	ense of power and confid	ence		0
26. Articulates a	compelling vision of the	e future		0
27. Directs my a	ttention toward failures t	o meet standards		0
28. Avoids maki	ng decisions		•••••	(
29. Considers m	e to have different needs	, abilities and aspira	ations from others	0
30. Gets me to lo	ook at problems from ma	ny different angles	•••••	
31. Helps me to	develop my strengths			0
32. Suggests nev	w ways of looking at how	to complete assign	nments	
33. Delays respo	onding to urgent question	s		
34. Emphasises	the importance of having	a collective sense	of mission	
35. Expresses sa	tisfaction when I meet ex	xpectations	••••••••••••••••	(
36. Expresses cc	onfidence that goals will	be achieved	•••••••••••••••••	(
37. Is effective i	n meeting my job-related	l needs		
38. Uses method	ls of leadership that are s	atisfying		0
	ls of leadership that are s o more than I expect to c			
39. Gets me to d		lo		(
39. Gets me to d40. Is effective i	o more than I expect to a	lo		
39. Gets me to d40. Is effective i41. Works with a	o more than I expect to o n representing me to high	lo		
39. Gets me to d40. Is effective i41. Works with i42. Heightens m	to more than I expect to on nepresenting me to high me in a satisfactory way.	lo	· · · · · · · · · · · · · · · · · · ·	
 39. Gets me to d 40. Is effective i 41. Works with i 42. Heightens m 43. Is effective i 	to more than I expect to on n representing me to high me in a satisfactory way by desire to succeed	lo her authority requirements	· · · · · · · · · · · · · · · · · · ·	



Organisational Performance Questionnaire

This part of the questionnaire concerns the organisation's performance. Please evaluate the organisation being led by the leader you referred to in part A1, using the following 7-point scale where 1 is Strongly Disagree and 7 is Strongly Agree. After each statement, <u>circle</u> the number that indicates your answer.

To what extent do you agree that the statements below describe the organisation, which has the person you evaluated in questionnaire A1 as its leader?

	ongly agree	Disagree	Partly Disagree	Neither Disagree Nor Agree	Partly Agree	Agree		Stro Agı	ongly :ee
	1	2	3	4	5	6			7
1.	In this Tr	ust we encoura	age employees	to develop nev	w ideas		1 2	3 4	567
2.	This Trus	st has a small n	nanagement te	am that delegat	tes authority ef	ficiently	12	34	567
3.		elief of top ma ce to the organ		his Trust that it	s people are of	futmost	12	34	567
4.	In this Tr	rust we instil a	value system i	n all our emplo	oyees.		12	3 4	567
5.	We provi	ide personalise	d attention to a	all our custome	rs		1 2	34	567
		ust top manag and innovativ		an atmosphere	that encourage	ŚŚ	12	34	567
7.	The Trus	t's values are t	he driving for	ce behind our o	peration		1 2	34	567
8.	The Trus	t is flexible an	d quick to resp	ond to problem	15.		1 2	34	567
	The Trus expertise		in services wh	ere it has a hig	h level of skill	and	12	34	567
10.	We have	a small but eff	ficient manage	ment team			12	34	567
11.	The Trus	t develops serv	vices that are n	atural extensio	ns of its servic	e strategy	12	34	567
12.	The Trus	t truly believes	s in its people				12	34	567
	The Trus treatment		er discharge se	ervice just as in	portant as the	initial	12	34	567
14.	The Trus	st believes in ex	xperimenting v	with new produ	cts and ideas.		1 2	34	567
15.	The Trus skill to h		listening to wl	hat customers h	have to say is a	good	12	34	56
	This Tru necessary		ith employees	but administer	s discipline wh	nen	1 2	234	56

About You!

<u>Gender</u>		
Male	Female	
· · ·	L.	
Age		
Under 30 30-35	36-40	41-45
46-50 51-55	56-60	61-65
66-70 Over 70		
Length of service		
in current post		
[]		[]
Under a year 12-2	24 months	25-36 months
37-48 months Ove	er 4 years	
Star Rating		
Star rating in 2002/03 (ins	sert number)	
Star rating in 2003/04 (in:	sert number)	
Size of organisation		
Number of employees directly em	ployed (whole time equ	uvalent)
Under 500 501	-999	1000 – 2000
2001 -3000 300	1-4000	4001-5000
Over 5000		
Total income from all sources (<u>E)</u>	
Under 100m 101	-200m	201-300m
301-400m 401	-500	Over 500m

Letter to Chief Executive's about their leadership behaviour as measured by the MLQ (5X)

Dear Chief Executive

Is there a relationship between what we as Chief Executives do as leaders and our organisations performance?

Please help with this research study – as a practicing Chief Executive I know how much is on your desk at this very moment but I do hope to show that this is an important issue.

Many of us know that at the end of the day we are held accountable for our organisations performance.

As Chief Executives we face many pressures, work in many different contexts, and with a wide variety of staff and external stakeholders. In doing so we employ a variety of leadership styles and behaviours. Most recently, there has been a focus on transformational leadership as an important approach to understanding how organisations respond successfully to change and improve organisational performance.

What we do not know conclusively is whether there is actually a relationship between the Chief Executive's leadership style and their organisations performance. There may be many other factors at play outside of the control of the Chief Executive. The emphasis on the leadership behaviour of the Chief Executive, politically and managerially, focuses our interest solely in this as a determinant of organisational performance. If this is so it may impact on our leadership development programmes, and if not, we must fundamentally consider how we judge the contribution that Chief Executive's make within health and social care communities.

This research study, undertaken as part of a doctoral programme, will help add to our knowledge of the relationship between the leadership behaviour of the Chief Executives and their organisations performance. It comprises of one questionnaire coded A2 which you alone should complete and return in the enclosed envelope.

This questionnaire is a widely used and valid instrument of measuring leadership. Your Chair has also been asked to rate your leadership behaviour. In addition they are competing a short questionnaire on your organisations performance.

No individual feedback will be given; all data will be aggregated so it is not possible to identify individual organisations, Chief Executives. The study will form any part of my Doctoral degree, and an executive summary will be published in late 2005. I hope you will be able to help!

Return date.....a chasing letter will be sent 4 weeks after the first letter.

Yours,

Gerry McSorley Chief Executive Nottingham City Hospital

The questionnaire sent to Chief Executives about their leadership behaviour (as measured by the MLQ [5X])



This questionnaire is to describe your leadership styles, as you perceive it. Please answer all questions on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.

Circle the number to indicate your answer.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word "others" may means your peers, clients, direct reports, supervisors and/or all of these individuals.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

1. I provide others with assistance in exchange for their efforts0 1 2 3 4
2. I re-examine critical assumptions to question whether they are appropriate0 1 2 3 4
3. I fail to interfere until problems become serious0 1 2 3 4
4. I focus attention on irregularities, mistakes, exceptions and deviations from standards0 1 2 3 4
5. I avoid getting involved when important issues arise0 1 2 3 4
6. I talk about my most important values and beliefs0 1 2 3 4
7. I am absent when needed0 1 2 3 4
8. I seek differing perspectives when solving problems0 1 2 3 4
9. I talk optimistically about the future
10. I instil pride in others for being associated with me0 1 2 3 4
11. I discuss in specific terms who is responsible for achieving targets
12. I wait for things to go wrong before taking action0 1 2 3 4
13. I talk enthusiastically about what needs to be accomplished0 1 2 3 4
14. I specify the importance of having a strong sense of purpose
15. I spend time teaching and coaching0 1 2 3 4
16. I make clear what one can expect to receive when performance goals are achieved0 1 2 3 4
17. I show that I am a firm believer in "If it ain't broke, don't fix it"
18. I go beyond self-interest for the good of the group0 1 2 3 4

Not at all	Once in a while	Sometimes	Fairly often	Frequently,
0	1	2	3	if not always 4

19. I treat others as individuals rather than just a member of a group
20. I demonstrate that problems must become chronic before I take action0 1 2 3 4
21. I act in ways that build others' respect for me0 1 2 3 4
22. I concentrate my full attention on dealing with mistakes, complaints and failures0 1 2 3 4
23. I consider the moral and ethical consequences of decisions0 1 2 3 4
24. I keep track of all mistakes0 1 2 3 4
25. I display a sense of power and confidence0 1 2 3 4
26. I articulate a compelling vision of the future0 1 2 3 4
27. I direct my attention toward failures to meet standards
28. I avoid making decisions0 1 2 3 4
29. I consider an individual as having different needs, abilities and aspirations from others0 1 2 3 4
30. I get others to look at problems from many different angles0 1 2 3 4
31. I help others develop their strengths0 1 2 3 4
32. I suggest new ways of looks at how to complete assignments0 1 2 3 4
33. I delay responding to urgent questions0 1 2 3 4
34. I emphasise the importance of having a collective sense of mission0 1 2 3 4
35. I express satisfaction when others meet expectations0 1 2 3 4
36. I express confidence that goals will be achieved0 1 2 3 4
37. I am effective in meeting others' job related needs0 1 2 3 4
38. I use methods of leadership that are satisfying0 1 2 3 4
39. I get others to do more than they are expected to do0 1 2 3 4
40. I am effective in representing others to higher authority0 1 2 3 4
41. I work with others in a satisfactory way0 1 2 3 4
42. I heighten others' desire to succeed0 1 2 3 4
43. I am effective in meeting organisational requirements0 1 2 3 4
44. I increase others' willingness to try harder0 1 2 3 4
45. I lead a group that is effective0 1 2 3 4

About You!

<u>Gender</u>		
Male	Femal	e
Age		
Under 30 30-35	36-40	41-45
46-50 51-55	56-60	61-65
66-70 Over 7	0	
	· ·	
<u>Length of service</u> <u>in current post</u>		
Under a year	12-24 months	25-36 months
37-48 months	Over 4 years	
Star Rating		
Star rating in 2002/03	(insert number)	
Star rating in 2003/04	(insert number)	
<u>Size of organisation</u>		
Number of employees directl	v employed (whole ti	me equivalent)
Under 500	501-999	1000 – 2000
2001 -3000	3001-4000	4001-5000
Over 5000	5001-4000	4001-5000
Total income from all source	ces (£)	
Under 100m	101-200m	201-300m
301-400m	401-500	Over 500m
501 100111	101 500	

Item-total statistics for the EXCEL instrument

Item-Total Statistics (EXCEL)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
In this Trust we encourage employees to develop new ideas	88.76489	103.703	.749	.905
This Trust has a small management team that delegates authority efficiently	89.44670	101.286	.668	.906
It is the belief of top management in this Trust that its people are of utmost importance to the organisation	88.43534	104.412	.739	.905
In this Trust we instil a value system in all our employees	88.93375	106.556	.532	.910
We provide personalised attention to all our customers	89.76398	104.015	.537	.910
In this Trust top management creates an atmosphere that encourages creativity and innovativeness	88.86716	101.974	.770	.903
The Trusts' values are the driving force behind our operation	88.94500	102.351	.684	.905
The Trust is flexible and quick to respond to problems	89.33307	103.212	.608	.908
The Trust concentrates in services where it has a high level of skill and expertise	90.01205	107.030	.312	.920
We have a small but efficient management team	89.01489	100.828	.649	.906
The Trust develops services that are natural extensions of its service strategy	89.30352	102.598	.687	.905
The Trust truly believes in its people	88.65761	102.988	.704	.905
The Trust considers after discharge service just as important as the initial treatment	89.09784	104.303	.528	.910
The Trust believes in experimenting with new products and ideas	89.41318	102.589	.544	.910
The Trust believes that listening to what customers have to say is a good skill to have	88.77625	104.684	.581	.909
This Trust is flexible with employees but administers discipline when necessary	88.96943	106.253	.570	.909

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T-test analyses of Chair and Chief Executive perceptions of transformational leadership behaviour as measured by the MLQ (5X)

Results of the paired samples T-tests

Paired Samples Statistics: Chair and CEO ratings for charismatic leadership

Mean 3.4432

			Paire	Paired Differences	6				
					95% Confidence Interval of the Difference	nce Interval ference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t .	df	Sig. (2-tailed)
Pair 1	Chair view								
	of CE		-						
	charisma -								
	Chief	.21165	.55104	.05874	.09489	.32840	3.603	87	.001
	Executive								
,	view of their								
	charisma								

Paired Samples Statistics: Chair and CEO ratings for inspirational motivation

		Mean	z	Std. Deviation	Std. Error Mean
Pair 1	Chief Executive inspirational	3.5142	88	.40535	.04321
	mouvauon Chair view of CE IM	3.4716	88	.53529	.05706

		Sig. (2-tailed)	.501
		đf	87
		t	.676
	95% Confidence Interval of the Difference	Upper	.16787
	95% Confide of the Di	Lower	08264
Paired Differences		Std. Error Mean	.06302
		Std. Deviation	.59115
		Mean	.04261
			Chief Executive inspirational motivation - Chair view of CE IM
			Pair 1

Paired Samples Statistics; Chair and CEO ratings for intellectual stimulation

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Chief Executive				
	interllectual	3.2500	88	.41349	.04408
	stimulation				
	Chair view of	2 0767	0	62261	06764
	CEIS	2.0101	00	+0000.	+0.00.

			Paire	Paired Differences	(0				
					95% Confidence Interval of the Difference	ence Interval fference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	مىيە	đf	Sig. (2-tailed)
Pair 1	Chief Executive interlectual stimulation - Chair view of CF IS	.17330	.79089	.08431	.00572	.34087	2.055	87	.043

					Std. Error
		Mean	z	Std. Deviation	Mean
Pair 1	Chief		*		
	Executive	3 3205	88	45756	04824
	contingent	0.0530.0	00	DONOT.	
	reward				
	Chair view of	00000	00	G0742	06475
	CE CR	0007.0	00	24/00.	

Paired Samples Statistics: Chair and CEO ratings for contingent reward

			Paire	Paired Differences	S				
					95% Confidence Interval of the Difference	ence Interval fference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Chief Executive contingent reward - Chair view of CE CR	.09659	.76979	.08206	06651	.25969	1.177	87	.242

Std. Error Mean	.07542	.08434	is Test
Std. Deviation	.70755	.79122	Paired Samples Test
z	88	88	
Mean	2.2216	2.6051	
	Chief Executive management by exception(active) Chair view of CEMBE(A)	
	Pair 1		

Paired Samples Statistics: Chair and CEO ratings for Management-by-Exception (Active)

		Sig. (2-tailed)		.001		
		df		87		
		t		-3.511		
	95% Confidence Interval of the Difference	Upper		16639		
	95% Confide of the Dif	Lower		60066		
Paired Differences		Std. Error Mean		.10924		
Paire		Std. Deviation		1.02480		
		Mean		38352		
			Chief Executive	management by exception(active) - Chair view of	CEMBE(A)
			Pair 1			

		Mean	Z	Std. Deviation	Std. Error Mean
Pair 1	Chair view of CE	0747	c	C 1 U 1 U	1000
	Passive/avoid	.4/40	00	C404C.	10/00.
	ant leadership				
	Chief				
	Executive				
	view of	3.0795	88	.41401	.04413
	Passive/avoid				
	ant leadership				

Paired Samples Statistics: Chair and CEO ratings for Passive/avoidant leadership

			Paire	Paired Differences					
					95% Confidence Interval of the Difference	 Confidence Interval of the Difference 			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	ţ	df	Sig. (2-tailed)
Pair 1	Chair view of								
	С С			-					
	Passive/avoi			_					
	dant			_					
	leadership -			_					
	Chief	-2.60552	.67559	.07202	-2.74866	-2.46238	-36.179	87	000.
	Executive			_					
	view of								
	Passive/avoi								
	dant								
	leadership								

Item-total statistics for the MLQ (5X)

Item-Total Statistics for the MLQ (5X)

		Scale Variance	Corrected	Cronbach's
	Scale Mean if	if Item	Item-Total	Alpha if Item
	Item Deleted	Deleted	Correlation	Deleted
CHLQ1	90.79545	109.613	.557	.798
CHLQ2	90.89773	111.104	.503	.800
CHLQ3	93.36364	125.567	354	.831
CHLQ4	91.68182	111.806	.254	.808
CHLQ5	94.12500	120.318	234	.815
CHLQ6	91.39773	108.725	.382	.802
CHLQ7	93.92045	125.936	490	.828
CHLQ8	91.03409	109.045	.533	.798
CHLQ9	90.82955	110.626	.502	.800
CHLQ10	90.77273	109.994	.518	.799
CHLQ11	90.90909	109.302	.460	.800
CHLQ12	93.77273	126.499	488	.829
CHLQ13	90.68182	109.093	.665	.796
CHLQ14	90.75000	108.787	.629	.796
CHLQ15	91.51136	109.034	.461	.800
CHLQ16	91.19318	109.974	.529	.799
CHLQ17	92.43182	120.409	127	.823
CHLQ18	90.72727	112.247	.468	.802
CHLQ19	90.42045	117.074	.183	.809
CHLQ20	93.77273	127.005	516	.830
CHLQ21	90.60227	110.794	.611	.799
CHLQ22	91.65909	109.699	.327	.805
CHLQ23	90.84091	111.308	.511	.800
CHLQ24	91.71591	107.562	.425	.800
CHLQ25	90.77273	113.580	.361	.805
CHLQ26	90.79545	108.234	.652	.795
CHLQ27	91.61364	105.228	.557	.794
CHLQ28	93.81818	120.633	146	.821
CHLQ29	91.63636	112.993	.165	.813
CHLQ30	91.34091	106.296	.578	.794
CHLQ31	91.50000	104.552	.605	.792
CHLQ32	91.51136	105.977	.631	.793
CHLQ33	93.81818	122.679	265	.824
CHLQ34	90.77273	108.293	.604	.796
CHLQ35	91.26136	106.448	.599	.794
CHLQ36	90.89773	111.633	.494	.801