

**Leadership and Diversity in
Investment Banking:
Explaining male and female potential**

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Abstract

Although women are now entering the professions in equal numbers to men, they are still less likely to occupy senior positions, particularly in higher paid private sector organisations. This is of particular concern to many financial services organisations who have already sought to enhance opportunities for women. Despite these efforts there is a growing recognition of a need for more detailed understanding of the processes contributing to differential career progression.

A socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) applied to appraisal contexts suggests two potential barriers to women reaching senior organisational positions. First, that managers use different attribution patterns to explain the behaviour of male and female staff and, secondly, that differences in the way male and female employees explain their own performance impacts on their career progress. The two barriers in this model have yet to be tested within a single organisation. This PhD aimed to do this by investigating how managers in an investment bank identify leadership potential in male and female employees.

The research consisted of 5 main studies: 1) an investigation of attributions used by UK managers to explain employees' leadership potential; 2) an investigation of attributions used by UK employees to explain their own leadership potential; 3) an exploration of behaviours used by UK managers and employees to define leadership potential; 4) a validation study examining behaviours associated with leadership potential; and 5) a cross-cultural comparison of UK and US managers' explanations for employees' leadership potential. Overall, findings indicated significant differences in the way both UK and US managers identify and evaluate male and female leadership potential. Conversely, little evidence was found to suggest male and female employees were explaining their own leadership potential in different ways. Implications of these findings and practical steps to address these issues are discussed.

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Chapter 1: Introduction

“For every 10 men in the executive suite there is one woman, a ratio that has changed little since the term ‘the glass ceiling’ was coined two decades ago” (The Economist, p 11, July 23rd 2005).

The term ‘glass ceiling’ was first used in the Wall Street Journal’s ‘Corporate Women’ column in 1986 to try and explain why so many women appear to enter and then remain in jobs that do not lead to executive roles (Castro & Furchgott-Roth, 1997). Since then, the term has been widely used in attempts to explain the differential career progress of male and female workers. The ‘glass ceiling’ has now been formally defined by the US Department of Labor (1991) as *‘those artificial barriers based on attitudinal or organisational bias that prevent qualified individuals from advancing upward in their organisation’*. This chapter provides an overview of the current position of women in the workplace and a rationale for why it is important to carry out research in this area.

Although women are now entering professions in equal numbers to men, they are still much less likely to occupy leadership roles (Jackson & Joshi, 2001). The UK Equal Opportunities Commission [EOC] (2002; 2005) reports that, while women in Britain account for 45% of all employees, they currently make up only 30% of managers and 10% of company directors. It has been argued that prejudices against females’ suitability for senior management or leadership roles are most likely in areas which are male-dominated or perceived as requiring masculine qualities (Eagly & Karau, 2002). It might therefore be expected that working cultures such as investment banking, and the financial services industry more generally, which are typically perceived as more masculine, may be environments where women are particularly disadvantaged. Indeed, the disparity in numbers of men and women at senior levels is even greater in higher-paid, private sector industries: analysis of FTSE 100 companies indicates that only 6.5% of overall directorships are held by female workers (Singh & Vinnicombe, 2001).

Such findings paint a somewhat disappointing picture for women who desire a high-flying career and have aspirations to become a leader in their field. Indeed, the Hansard Society Commission Report, which surveyed 144 of the top 200 Confederation of British Industry companies in relation to women's progression at work, concluded that *'if boardrooms are where power and influence reside then women are clearly excluded'* (Coffey 1999 p 11).

Moreover, such statistics are not restricted to the United Kingdom. Internationally, women hold only a small proportion of management positions and even fewer of the highest posts. Catalyst reports (2003; 2002) have indicated that, for Fortune 500 companies, women hold 13.6% of all board seats and only 1.2% Chief Executive Officer positions. Figures across Europe are little better. The International Labor Organization (2004) reported that in France only 5.3% of the most senior positions in the top 200 companies in the year 2000 were held by women. Similarly, Wirth (2001), reporting on internationally comparable data for 1998, found that in Austria, Germany and Greece women typically held only between 20 and 30% of all legislative, senior official and managerial positions. Wirth also reports that between 1996 and 2002 women's share of managerial jobs actually declined by 5.6% in Ireland and 1% in the UK.

A report for the International Labor Organization (1998) concluded that, according to national surveys world wide, women's share of management jobs rarely exceeds 20% and that the more senior the position, the larger this gap becomes. In a review of international perspectives on diversity, Haq (2004) concluded there is probably no country that does not have workplace diversity concerns, including issues of gender inequality.

In addition to differences in levels of seniority, pay discrepancies for men and women are still prevalent, particularly in organisations with more men at the top (National Equal Opportunities Network, 2006; Catalyst 2000). In 2002, UK women's average

hourly earnings were 19% less than men's, and that this gap was widest for managerial and administrative roles in financial industries such as banking, insurance and pension provision (EOC, 2002). The EOC also noted that there has been virtually no change in the full-time gender pay gap since the mid-90s. Similarly in the US, where equal opportunity laws are particularly stringent, Bowler (1999), concluded that, whilst women's average earnings had increased by 14% since 1979 (and men's earnings decreased by 7%) women's earnings are still on average 24% less than those of their male counterparts. In a study of over 1,000 managers in Fortune 500 corporations, Stroth, Brett and Reilly (1992) concluded that, even where women have done '*all the right stuff*' (p 241) to ensure they are equally matched to their male colleagues in terms of education, family responsibilities and geographical flexibility, their salaries were still 11% lower.

With such discrepancies in pay and levels of seniority reached by men and women, it is perhaps not surprising that claims for gender discrimination are receiving frequent media attention. Organisations found to have allowed such practices can be ordered to pay settlements which can run into millions. For example, Morgan Stanley were ordered to pay a \$54 million settlement in 2004 for sex discrimination and Merrill Lynch has agreed to pay \$100 million to settle sex discrimination cases in New York (cf, Schein, 2005). In the UK, the international bank Dresdner Kleinwort Wassertein is currently being sued for £500,000 by a woman who claims she was sacked because managers knew she wanted a large family. A Merrill Lynch employee is also suing for £13.5 million in damages resulting from alleged sex discrimination (Capell, 2004). The US Equal Employment Opportunity Commission reported that they resolved 26,598 sexual discrimination charges without litigation during 2004, recovering over \$100 million for aggrieved individuals. The increasing prominence of such cases suggest that women may be less likely to tolerate being treated differently based solely on their gender.

These statistics appear even more notable in light of findings by Alimo-Metcalf and Alban-Metcalf (2003). Even at senior executive levels, male and female leaders

receive equal ratings from their subordinates. Their findings support previous work by Bass and Avolio (1995) which concluded that followers rated female leaders higher than male leaders in terms of leadership factors associated with individual and organisational effectiveness. At least in the eyes of their staff, female managers are perceived as having the skills necessary to make them effective leaders.

In most economically developed countries there is legislation to prevent unfair discrimination. For example, in the UK under the Sex Discrimination Act (1975) it is unlawful to discriminate, directly or indirectly, on the grounds of sex whilst under the Equal Pay Act (1970) an individual has a right to the same contractual pay and benefits as a person of the opposite sex in the same employment, where a man and woman are doing like work, work that has been rated as equivalent and work which is of equal value. Similarly, the Equal Treatment Directive (75/207) and Title VII of the Civil Rights Act (1964) protect individuals against employment discrimination on the basis of sex in the European Community [EC] and US respectively. The EC's Article 141 (ex 119) Treaty of Rome and the US' Equal Pay Act (1963) enshrine equal pay for equal work. The fact that, after several decades of legislation designed to protect women at work, differential treatment is still prevalent suggests that legislation alone is not enough to bring about the necessary changes.

Indeed in an overview of women in management worldwide, Antal and Izraeli (1993) state that *'probably the single most important hurdle for women in management in industrialized countries is the persistent stereotype that associates management with being male'* (p 63). One factor which may contribute to the persistence of the glass ceiling relates to enduring stereotypes of leadership.

Evidence suggests that the behaviours and personality traits stereotypically associated with leadership, such as self-confidence or aggression, are perceived as more male than female and that such stereotypes appear to hold globally (e.g. Schein, 2001, Schein & Davidson, 1993). As Schein (2005) states, when all else is equal, a male appears more qualified by virtue of his gender alone than does a female both to enter and to advance

within management. Furthermore, Baumgardner, Lord and Maher (1991) have argued that, whilst perceptions may not be reality, they are used to evaluate and subsequently distinguish leaders from non-leaders. As the perceptions of managers are often central to appraisal systems, it is important to investigate how they interpret the behaviour of male and female employees, particularly in relation to their future leadership potential.

Organisations are often keen to identify leadership potential in junior employees, in order to determine their competency for attaining management positions. Prahalad and Hamel (1990) suggest that 'leadership' is one of the essential competency skills which form the competitive advantage of a business. Many other researchers have linked leadership development with organizational success (e.g. Whetton & Cameron, 2005; Fulmer & Goldsmith, 2001; McCall & Hollenbeck, 2002). It is therefore considered critical for organisations to identify future leadership potential. As Campbell, Dunnette, Lawler and Weick (1970) have argued the development of talent is needed not only to fulfil succession planning requirements, but to ensure continuity in organisational leadership and performance.

While the statistics presented earlier in this chapter appear to indicate a clear disparity between how men and women fare in the workplace, some researchers have concluded that gender bias is responsible for less than 1% of the variability in performance appraisals (see Landy & Fahr, 1980). At first glance these may be considered inconsequential effects, but, over time, even seemingly minor effects can lead to major inequalities. For example, Martell, Lane and Emrich's (1996) computer simulation of bias effectively illustrates how the probabilities of bias can amass within a pyramidal organisation. Take the example of a hypothetical eight-tier organisation where women constitute 53% of the first level and gender bias affects only 1% of women's performance ratings. It can be mathematically demonstrated that by the highest organisational level, bias would accumulate. All other factors still being equal, only 35% of those promoted to the most senior jobs would be female.

There is therefore a growing recognition of the need for more detailed understanding of the processes that contribute to the differential progress for men and women into leadership roles (e.g. Koczwara & Silvester, 2004). The aim of this thesis is to increase understanding of these processes by focusing on judgements of leadership potential made by managers and their male and female subordinates. This is achieved by using a framework provided by the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) which outlines two potential barriers to women reaching senior organisational positions. Specifically, women may progress more slowly to leadership positions because (a) managers explain the causes of male and female performance differently, or (b) because there are differences in the way male and female employees explain their own performance. The two barriers in this model have not previously been tested within a single organisational context. This programme of research therefore plans to test both barriers within a single organisational context and to extend the model by investigating how leadership potential is defined, and consider whether this is different cross-cultures. To achieve this, the thesis contains five main studies:

- 1) an investigation of the attributions UK managers use to explain male and female employees' leadership potential;
- 2) an investigation of the attributions UK male and female employees use to explain their own leadership potential;
- 3) an exploration of the behaviours used by UK managers and employees to define leadership potential;
- 4) a validation study examining behaviours associated with leadership potential and beliefs about gender differences; and
- 5) a cross-cultural comparison of UK and US managers' explanations for male and female leadership potential.

Chapter 2: Literature Review

2.1. Theories of Leadership

The term 'leadership' means different things to different people. In fact it has been argued that there are as many different definitions of leadership as there are people who have attempted to define it (Stogdill, 1974). Fieldler (1995) defined a leader as someone who is appointed, elected or informally chosen to direct and co-ordinate the work of others in a group (Fiedler, 1995). Hogan, Curphy and Hogan (1994) have argued that leadership is about '*persuading other people to set aside for a period of time their individual concerns and to pursue a common goal that is important for the responsibilities and welfare of a group*' (p 493), suggesting it is about the ability to persuade rather than dominate, building cohesive and goal-oriented teams. Similarly, Katz and Kahn's (1978) definition of leadership as involving 'influence increment' emphasises the importance of going beyond fulfilling one's organisational role

In terms of leadership at work, there has been considerable interest in how 'leadership' is different from 'management' or 'supervision', although in practice the terms are often used interchangeably (Alimo-Metcalfe & Lawler, 2001). Bennis and Nanus (1985) make the distinction that managers 'do things right' while leaders 'do the right things'. This was supported by interpretative interview and focus group research in 38 countries involved in the GLOBE (Global Leadership and Organizational Behavior Effectiveness) project, which consistently revealed that leadership and management include different activities. Leadership involved the articulation of an organizational vision, introducing organisational change, providing inspiration and dealing with stressful or troublesome aspects of an organization's external environments. Management was generally viewed as the implementation of visions and changes introduced by leaders and the maintenance and administration of organisational infrastructures (*cf.* House & Aditya, 1997).

Yukl (1994) observes that *'the essence of the argument seems to be that managers are oriented towards stability and leaders are oriented towards innovation; managers get people to do things more efficiently, whereas leaders get people to agree about what things should be done'* (p 4). However, he also argues that, whilst leadership and management involve separate processes, this does not necessarily preclude someone from being both a leader and a manager. Similarly Lord and Maher (1991) note that leaders may or may not be good managers, and managers may or may not be viewed as leaders. This may be particularly relevant to the identification of leadership potential in more junior employees. It seems highly likely that someone who is earmarked for future success would be required to demonstrate ability in both categories.

2.1.1. Trait theories of leadership

Hunt's (1996) historical review of leadership traces the origins of the formal and empirical study of leadership to the 1930s. Some of the earliest theories, known as 'trait theories', attempted to identify who would make a good leader. They developed from the proposition that leaders are born and, as such, that there may be stable personality traits associated with effective leadership. Reviews of the trait leadership literature (e.g. Gibb, 1947; Jenkins, 1947; Stogdill, 1948) identified several studies in which traits were associated with measures of leader effectiveness, with correlations as high as .50. For example, Stogdill (1948) reviewed research on personality and emergent leadership in a variety of unstructured groups. He concluded that measures of dominance, extraversion, sociability, ambition or achievement, responsibility, integrity, self-confidence, mood and emotional control, diplomacy and cooperativeness were all positively related to emergent leadership. Similarly, House and Baetz (1979) reported that, due to the nature of leadership, the traits of sociability, need for power and need for achievement were important leadership qualities. However, findings were rarely replicated in multiple studies and it appeared to other scholars that there were few if any universal traits associated with effective leadership (House & Aditya, 1997).

Since the 1980s there has been something of a re-emergence of trait research, which has been helped by substantial progress in the developments of personality theory and the operationalization of traits (House & Aditya, 1997). For example, using a meta-analysis to estimate correlations between personality traits and leadership emergence in 41 previous studies, Lord, de Vader and Allinger (1986) reported correlations between leadership emergence in small groups and masculinity-femininity, dominance, extraversion-introversion, adjustment and conservatism, ($r = .34, .13, .26, .24,$ and $.22$ respectively). Similarly, Kenny and Zaccaro (1983) reported that, across a number of leaderless discussion groups, between 48% and 82% of the variance in leadership emergence rankings could be explained by personality. Support from an applied context can be found in work by Bentz (1985, 1990). He reported that individuals promoted to senior executive roles at Sears demonstrated high levels of extraversion, emotional stability and conscientiousness. Moreover, Bentz reported comparable multiple correlations between these factors and leaders' pay, immediate and second-level superiors' ratings, and peer groups' ratings of effectiveness over a 21-year period. In addition Collins (2001) has argued that high-performing organisations are often led by 'Level Five' leaders who blend traits of humility and strong personal will, resulting in ambition for the organisation rather than personal success.

However, despite the re-emergence of trait theories there is still a lack of agreement regarding desirable leadership traits. Indeed, a review by Wright (1996) concluded that there are '*no consistent differences between leaders and followers with respect to their characteristics*'. Similarly, Hollenbeck, McCall & Silzer (2006) have argued that situational factors (e.g. organisational culture and values) will always impact how leaders emerge and develop, regardless of a leader's personality. In addition, there is also concern with the apparent 'maleness' of identified leadership traits (e.g. Schein, 2001) and the possible impact this might have on ensuring organisations have a diverse set of future leaders . This is discussed more fully in section 2.6.

2.1.2. Behavioural theories of leadership

In the 1950s, when researchers first became disenchanted with trait approaches, attention was turned to investigating what leaders do that contributes to their group's success. Such research fell into two categories: first comparing the behaviour of effective and ineffective leaders; and secondly understanding the nature of managerial work. Early influential work included the simultaneous but separate work of the Ohio State leadership studies (e.g. Stogdill & Coons, 1951; Fleishman, 1953) and at Michigan University (e.g. Kahn & Katz, 1953; Likert, 1961; Mann, 1965). These researchers attempted to identify the pattern of leadership behaviours that resulted in optimum performance. A major empirical contribution was the identification of two broad classes of leader behaviour: task-oriented and people-oriented behaviours.

The Ohio state researchers achieved this by asking subordinates to describe their managers' work style. From an initial list of around 2000 questions, repeated factor analysis led to ten dimensions of leader behaviour, later grouped in two more general dimensions. The first of these 'Consideration' was defined as the extent to which a leader demonstrates trust of subordinates and shows respect and consideration for their ideas and feelings. The second was defined as 'Structure'; the extent to which a leader structures work towards goal attainment and provides clear definitions of role responsibilities (Arnold, Silvester, Patterson, Robertson, Cooper & Burnes, 2005).

Researchers from Michigan University focused on the differences in behaviour between effective and ineffective leaders, collecting information via questionnaires and interviews. Effective and ineffective leaders were classified using objective measures of group productivity and their behaviours compared. They identified two groups of behaviours which clearly paralleled the Ohio findings: task-oriented and people-oriented behaviour. In terms of task-oriented behaviours, effective managers were those who guided subordinates in setting challenging but realistic goals. They avoided doing the same type of work as subordinates, focusing on co-coordinating and planning of work instead. Effective managers also showed relationship-oriented behaviours such

that they were considerate, supportive and helpful, kept others informed and provided recognition for others' contributions. They tended to avoid close supervision.

However, the earlier leadership behaviour research has been criticised for relying on participants who worked at lower organisational levels or were university students and for the use of questionnaire methodology. Furthermore, Yukl (1989) argued that 'task' and 'relationship' behaviours are too abstract for fully understanding how leaders handle specific role requirements. In addition, the use of such broad terms to categorise leadership can encourage global judgements, which are more likely to be influenced by stereotyped beliefs (Martell & DeSmet, 2001). To increase understanding of the nature of managerial work associated with effective leadership, Yukl, Wall & Lepsinger's (1990) therefore proposed an integrated taxonomy of behaviours which is intended to capture what leaders actually do on the job.

Yukl *et al.*'s (1990) preliminary report for the Management Practices Survey identifies 14 categories of concrete leadership behaviours: Planning & Organising; Problem Solving; Clarifying; Informing; Monitoring; Motivating; Consulting; Recognising; Supporting; Managing Conflict & Team Building; Networking; Delegating; Developing & Mentoring; and Rewarding. It is proposed that these actions are required by employees at organisational levels ranging from first-line supervisors to CEOs, but that their relative importance will differ at each level. For example, at lower organisational levels the requirements of leadership are more likely to involve administration, the utilisation of existing procedures and face-to-face contact with individuals or small groups (Lord & Maher, 1991). As there are some behaviours one can expect to see in some degree even at more junior levels, these are likely to be relevant to perceptions of leadership potential.

2.1.3. Contingency theories of leadership

Significant debate has arisen as to whether leadership can be viewed as a universal concept. Rather than suggesting a static model of what is effective, contingency

theories suggest that different situations require different styles of leadership. As House & Aditya (1997) note, there is currently no agreed pattern of leadership behaviours that is consistently associated with any criterion of supervisor or manager effectiveness. Fiedler's Contingency Model (1967) stresses that leadership performance is dependent upon a leader's personal characteristics and the degree to which they control a given situation. Fiedler's model also introduces the concept of the 'least-preferred co-worker', proposing that how positive a leader feels towards this person is an indication of how person-oriented they are. In addition, Fiedler outlines three contingency variables, group atmosphere, task structure and position power, which determine the extent to which the situation is favourable to the leader by providing control over the subjects. He concluded that task-oriented leaders are most effective in very favourable or unfavourable situations while those that are more person-oriented will be best suited in less extreme (i.e. moderately favourable or moderately unfavourable) situations. Some studies (e.g. Strube & Garcia, 1981; Peters, Hartke *et al.*, 1985) have concluded that, although research does generally support this model, the results tend to be stronger for laboratory-based work.

Fiedler's later work included the Cognitive Resource Theory (e.g. Fiedler & Garcia, 1987), which stated not only that certain individual traits are necessary for effective leadership, but also that the environment can have a potential moderating effect on trait expression. Specifically, it maintains that whether a leader's cognitive resources, which include their intelligence levels, technical competence and experience, will affect a group's performance is subject to certain conditions, including whether the group is supportive and whether the environment is likely to make the leader experience stress. For example, within a supportive group with clear aims, a leader may not have to be particularly dominant to be successful and thus the correlation between their intelligence and successful group performance is likely to be increased (Fiedler & Garcia, 1987). Conversely, in difficult situations people are more likely to rely on automatic behaviours (Arnold *et al.*, 2005). At such times, leaders will need to rely on their experience, rather than intelligence, to be effective.

Support for a contingency rationale can be gleaned from findings reported by Ilies, Gerhardt & Le (2004) that only 17% of variance in leadership emergence is explained by intelligence and 'Big Five' measures of normal personality. While this suggests that a combination of intelligence and personality testing may predict future leadership potential, it also indicates that other factors (including contextual issues) are playing a substantive role.

2.1.4. Transformational and transactional theories of leadership

Much of the early approaches to leadership research can be defined as 'transactional' (Shackleton & Wale, 2000). However, over the past thirty years or so, many researchers have turned their attention to other types of leadership styles by distinguishing between 'transactional' and 'transformational' leadership. This was largely in response to Burns' (1978) argument that existing leadership research excluded some of the most important areas of effective leadership. Burns defined these aspects of leadership as 'transformational'. Leaders with this style were likely to set especially high standards of behaviour, establish themselves as role models gaining the trust and confidence of others, mentor and empower followers, state future plans and how to achieve them and, finally, even if organisations that they led were generally successful, continue to innovate. Such leaders were contrasted with 'transactional' leaders, who were characterised by their exchange relationships with subordinates. Transactional leaders aim to monitor and control employees through rational or economic means by clarifying subordinate responsibilities, monitoring work, rewarding objective attainment and correcting behaviours.

Bass (1985) identified eight dimensions of leadership behaviour which covered the broad domains of transformational and transactional leadership. He argued that they were separate constructs, and that the best leaders would be both transformational and transactional. The first transformational behaviour was 'idealised influence'. This refers to leaders who have high moral and ethical standards and are likely to be well regarded and loyally supported by subordinates. The second behaviour, 'inspirational

motivation', refers to leaders who have a strong vision of the future based on values and ideals. The third, 'intellectual stimulation' relates to leaders who challenge organisational norms, engage in divergent thinking and push followers to develop innovative strategies. The final transformational dimension, 'individual consideration', relates to the recognition of followers' development needs and acting as a coach for them while also adopting a consultative approach to work.

'Contingent rewards' is a transactional dimension which focuses on the exchange of resources, such that support and resources are provided in exchange for followers' effort and performance. 'Managing by exception – active' and 'managing by exception – passive' are also both transactional dimensions. The 'active' behaviours refer to leaders who monitor performance and take corrective action as necessary; while, 'management by exception – passive' refers to leaders who only intervene once a problem becomes serious. Thus the difference between them is the timings of the leaders' intervention (Howell & Avolio, 1993). Finally, a 'laissez-faire' approach to leadership was also included by Bass (1985) within the transactional behaviours. In this instance leaders are not involved with followers' work and avoid taking a stand, thus appearing disorganised or indifferent. Bono and Judge (2004) have argued that 'laissez-faire' behaviours can also be perceived as non-leadership or the avoidance of leadership responsibilities. Thus, as it represents the absence of any leadership, transformational or transactional, researchers have argued that it should be treated separately from the other dimensions (Avolio, 1999; Bass, 1998).

Considerable research has now been conducted investigating the concept of transformational leadership. Indeed, as Judge and Bono (2000) note, over half the psychological research papers published on leadership in the 1990s focused on transformational leadership. In a review of transactional, transformational and laissez-faire leadership styles Bryman (1992) summarised the research. In general, he concluded that, first, laissez-faire leadership is undesirable. Secondly, transformational leadership style is associated with desirable outcomes such as satisfaction, effectiveness and increased effort. Specifically, the transformational components of

inspiring others by envisaging the future and having idealised influence so that one appears as a role model with a strong vision, were most likely to be associated with desirable outcomes. Bryman also noted that the transactional component of rewarding others' performance is associated with subordinate satisfaction, increased effort and leader effectiveness. Thus, the research appears to suggest that leaders demonstrating transformational styles will be viewed as more effective than those who are simply transactional in their approach and that optimum leadership is essentially transformational but has elements of transactional behaviours as well.

2.2. Organisational outcomes of leadership

Over the last century organisations have become increasingly keen to identify the traits or characteristics associated with effective leadership (Higgs & Aitken 2003). This is largely underpinned by the belief that effective leaders can deliver effective organisational performance (e.g. Conger & Toegal, 2002), with several empirical analyses demonstrating that leadership can have a substantial impact on organisational outcomes (e.g. Day & Lord, 1988; Oeth, 1996). However, leaders are often not selected via established principles of personnel selection but on the basis of principles that guide leadership emergence, i.e. by deciding who seems most 'leader-like'. Hogan *et al.* (1994) argue that this is an ineffective solution, resulting in a 50-60% leadership failure rate.

Furthermore, the organisational impact of appointing inept leaders is substantial, leading to many negative consequences including increased staff turnover, industrial sabotage and loss of productivity due to employee dissatisfaction. For example, Hogan, Raskin and Fazzini (1990) note that, across all organisational climate studies conducted between 1950 and 1990, 60-70% of employees reported the most stressful aspect of their job to be their immediate supervisor. Indeed, Hogan *et al.* (1994) conclude that, if leadership potential is not correctly identified, *'teams lose, armies are defeated, economies dwindle and nations fall'* (p 493). With the risk of such destructive consequences, it is perhaps somewhat surprising that there has been relatively little

work investigating the ways in which organisations identify individuals they perceive as having leadership potential.

2.3. Leadership potential

Some exceptions to this have, however, been carried out within a military context. Atwater, Dionne, Avolio, *et al.* (1999) tracked the leadership development of 236 male cadets from matriculation to graduation at a military college. They reported that cognitive ability, physical fitness, prior influence experiences and self-esteem predicted who would assume formal leadership positions, suggesting that these characteristics were associated with leadership potential. In addition, Marshall-Mies, Fleishman, Martin, *et al.*, (2000) reported the initial development of an online computer-based cognitive and meta-cognitive skill assessment battery to predict leadership potential in the armed forces. Stricker and Rock (1998) have also constructed a biographical inventory to assess personality traits predictive of leadership for US Navy Academy midshipmen. They concluded that the 'Sociability' scale, which measures concepts such as social know-how, confidence in social contact, being a social organiser and enjoying being the centre of attention may be useful for assessing leadership potential in this context.

However, studies in more mainstream areas of work are limited. While there is considerable debate about what constitutes 'leadership potential', little of this is based on research evidence. For example, in an article in HR Focus Winters (1997) identifies being slightly irreverent, inquisitive, action-oriented, intuitive, tenacious, open-minded to learning, candid and a networker as traits that may indicate leadership potential, but Winters does not link this to published research. Similarly, Campbell (1990) reports the development of the Campbell Leadership Potential Index (CLPI), which is a 160 adjective checklist, which compares self and other ratings for six 'Orientations' (Leadership, Creativity, Physical Energy, Productivity, Likeability and Psychological Comfort) that have '*a fairly direct relationship to leadership and creativity*' (p. 249). However, Campbell notes that when developing the measure the adjectives were

grouped into Orientations using '*a fair amount of reasoned judgement, what in the past has been called armchair psychology*' (p. 263), indicating a lack of empirical research guiding the work. A comprehensive literature review indicates that the CLPI has not been used in any further published research so the proposed factor structure remains untested and validity of the model not investigated. This paucity of high quality research suggests that there is a clear gap in the literature relating to what junior employees need to do to make managers identify them as having leadership potential.

2.4. Gender and Leadership

Meta-analytical research into gender differences suggests that men and women are equally effective leaders (e.g. Eagly & Johnson, 1990; Eagly, Karau & Makhijani, 1995). However, there has been considerable research investigating whether male and female leaders display different behaviours, producing mixed results.

Research which has reported differences includes Eagly and Karau's (1991) meta-analysis of studies examining the emergence of leaders in leaderless groups. They concluded that male leaders were more likely to emerge by adopting a task-oriented style of leadership and women by becoming social leaders who facilitate interpersonal relations and contribute to good morale. Other research also supports this supposition, reporting that men are more likely to demonstrate task-oriented leadership behaviours which include making problem-focused suggestions, speaking assertively, influencing others and initiating activities related to an assigned task (Eagly & Johannessen-Schmidt, 2001).

However, as Anderson, Lievens, van Dam and Born (2006) note, much of the research citing gender differences on leadership dimensions is based on simulated laboratory studies and thus may lack ecological validity. Eagly and Johnson (1990) have argued that the differences in task and interpersonal styles which are reported in lab-based research disappear in organisational studies, with participants' managerial roles taking precedence and gender becoming only a background influence. For example, Shore, Tashchian and Adams (1997) examined the behaviour of male and female participants

attending a development centre in a large financial services organisation. Attendees' behaviour was observed, recorded and rated for eight dimensions, which included a general category of 'leadership'. Positive indicators included being able to influence the actions of others and show good interpersonal relations and effective planning, organising, decision making and problem solving, across three exercises. In all instances, there were no differences in the way men and women performed. Alimo-Metcalf (1993) has also reviewed previous research investigating management and leadership styles and argues that '*most studies have concluded that there is no greater difference between women and men than between women as a population*' (p 73). Similarly, Kanter (1993) concluded '*there is overall a lack of research evidence that makes a case for sex differences in either leadership aptitude or style*' (p 99).

2.5. Perceptions of leadership

Traditionally, theories of leadership have focused primarily on the characteristics and actions of the leader alone. This historic focus on first order constructs has led researchers to the neglect of second order constructs (e.g. processes) that may underlie leadership (Calder, 1977). Although leader qualities are clearly important in understanding leadership (Lord, Brown & Harvey, 2001), Brown and Lord (2001) have also argued that '*the foundations of a comprehensive theory of leadership requires researchers to understand the social-cognitive processes of organizational actors*' (p 197).

Leadership ultimately involves the behaviours, traits and characteristics of leaders as interpreted by observers. It therefore involves the behaviours and perceptions of both leaders and those around them. For example, research by Bass (1981) and Green and Mitchell (1979) has defined leadership in terms of social influence processes whereby the role of leader is recognised by both the leader and the follower and thus governed by rules of perception and interaction in social settings. Similarly, Meindl (1995) has argued that perceptions of leadership are constructed by followers and observers.

Implicit Leadership Theory, as first proposed by Hollander and Julian (1969), posits that an individual is seen as leader-like to the degree that their characteristics (e.g. intelligence, personality or values) match other people's preconceived notions of what leaders should be. Many researchers have shown that people have generalised ideas about leadership which they use to evaluate the leadership potential of strangers (e.g. Eden & Leviathan, 1975; Rush, Thomas & Lord, 1977, Weiss & Adler, 1981). Specifically, the researchers suggest that most people seem to regard intelligence, honesty, sociability, understanding, aggressiveness, verbal skills, determination and industriousness as important aspects of leadership, regardless of the team task or situation. As such, leadership traits may be seen as important constructions of perceivers that help them make sense of social situations (Mischel, 1973). Implicit Leadership Theory has since been advanced by Lord and colleagues (e.g. Lord, Binning, Rush & Thomas, 1978; Lord, DeVader & Alliger, 1986; Lord, Foti & DeVader, 1984; Lord & Maher, 1991) addressing the evaluations people make about leaders and the cognitive processes underlying evaluations and perceptions of leadership.

Lord and Maher (1991) have proposed that to be a leader is as much about being perceived as a leader as demonstrating any particular behaviours. They argue that leadership perceptions can be formed based on two alternative processes. These are either automatic and spontaneous recognition-based processes or deliberate and controlled inferential processes based on the outcomes of salient events (Lord & Maher, 1990). Once formed, such perceptions are used as a cognitive framework for the evaluation of future behaviour and performance.

Lord *et al.* (1984) argue that an individual's perceptions of leadership form a number of hierarchically organised cognitive categories, each of which is represented by a prototype. Prototypes are formed through exposure to social events and interpersonal interactions, while prior knowledge about human behaviour and underlying traits make up implicit leadership theories. Lord *et al.* propose that an individual will therefore use the prototypes, based on their implicit theory, to observe and categorise another

person's behaviour wherever they find maximal fit. Several laboratory studies have supported the existence of leader prototypes. For example, Lord *et al.* (1984, Study 3) gave students vignettes about a hypothetical manager and asked them to rate the manager's leadership ability. The vignettes were manipulated in order to produce three versions of the scenario: prototypical, neutral and anti-prototypical. Results indicated that ratings of leadership were highest in the prototypical condition and lowest in the anti-prototypical conditions.

By arguing that, unless a person is perceived as a leader, no amount of leadership behaviours will turn an individual into a leader, Kaufmann, Isaken and Laurer (1996) have suggested that Lord and Maher are '*pushing the subjective, perceptual dimension of leadership to an excessive extreme*' (p 30). However, it is hard to disagree with the proposition that perceptions of leadership have crucial significance in the promotion and acceptance of any leader or person wishing to be identified as a leader. The categorisation of an individual as a leader by subordinates can affect both the influence that a leader can have over his or her subordinates (Lord & Smith, 1999) and more formal assessments of leadership (Murphy & Cleveland, 1995).

2.6. Stereotypes

According to Hilton and von Hippel (1996), stereotypes are the beliefs held about the characteristics, attributes and behaviours of members of certain groups. They are variously accounted for by either the 'attribution hypothesis' (e.g. Krueger, Hasman, Acevedo & Villano, 2003) or the 'categorisation hypothesis' (e.g. Oakes, Haslem & Turner, 1994). The attribution hypothesis posits that an observer will note the common behaviours of a particular group and come to view those behaviours as the norm for the group, whilst the "categorisation hypothesis" suggests that a person will use the perceived relative frequency of a behaviour or trait in a number of groups to categorise an observed person, exaggerating perceived intra-group similarities and inter-group differences. In either case, McCauley and Stitt's (1978) definition of stereotypes as '*composed of those attributes for which within-group predictions differ from base-rate predictions*' (p 929) is a useful explanation of what is meant by the term.

Furthermore, McCauley and Stitt's definition reveals a key feature of stereotypes, which is their reliance on predictions, provided by schemas produced from past experience, information and beliefs (Hamilton & Sherman, 1994). The potential usefulness of such predictions about a person's attributes is immediately apparent. A social category such as race, age or gender is almost instantly recognisable (Banaji & Hardin, 1996; Zarate & Smith, 1990), and the information provided by the categorisation leads to perception and the capacity for rapid assessment when faced with limited information (Operario & Fiske, 2001). This is perfectly normal and not necessarily malevolent. Indeed, Ottati and Lee (1995) stress the degree to which stereotypes can be correct, often being endorsed by a range of social groups, including the subjects of the stereotyping, and even reflected in objective measures. Stereotypes also have several adaptive functions such as simplifying the social environment (McCann, Ostrom, Tyner & Mitchell, 1985), speeding up judgements (Dovidio, Evans & Tyler, 1986) and freeing capacity to concentrate on other tasks (Macrae, Milne & Bodenhausen, 1994).

However, as Operario & Fiske (2001) note, '*the cognitive benefit of stereotyping comes with two vital costs: accuracy and fairness*' (p 47). Stereotypic thinking often leads to faulty judgements (Judd & Park, 1993), by blurring variability within a group (Mullen & Hu, 1989), facilitating misjudgements about group members and preventing detailed consideration of individuals (Sanbonmatsu, Akimoto & Gibson, 1994). Glick and Fiske (1996) emphasise the lack of awareness that often accompanies stereotyping. A perceiver may deny the stereotype-based beliefs they hold because of the impression of balance inherent in many stereotypes. As Fiske, Xu, Cuddy & Glick (1999) have noted, out-group stereotypes tend to follow two patterns: nice but incompetent or competent but disagreeable.

Stereotypes can have a direct effect upon the members of the stereotyped group, with Jost (1999) reporting members of both high and low-status groups equally likely to perceive that low-status group members possess negative or undesirable traits. A

combination of anxiety at contradicting the stereotype and the belief of all parties in the veracity of the stereotype may lead to the stereotype taking on the quality of a self-fulfilling prophecy (Darley & Fazio, 1980). Steele and Aronson (1995), for example, argued that African-Americans performed worse on a standardised intelligence test once they were informed that it measured intelligence because of their stereotyped beliefs.

The more common and significant consequences of stereotyping are found in the interactions of the perceiver and the stereotyped person. These may be at their most apparent in the workplace, particularly between men and women. Research has consistently shown that female employees are treated disadvantageously compared to male colleague in relation to hiring decisions (Davison & Burke, 2000), evaluations of performance (e.g. Bowen, Swim & Jacobs, 2000) and task assignment (Lyness & Thompson, 1997).

Gender stereotypes have been defined as '*common culturewide beliefs about how men and women differ in personal qualities and characteristics*' (Haslett, Geis & Carter, 1992, p 29). The stereotypical conceptions of men and women are well-known, and can be summarised in the terms "communal" for the female stereotype (meaning kind, gentle, supportive, expressive, affectionate and tactful) and "agentic" for the male (meaning assertive, competitive, dominative and courageous) (e.g. Carli & Eagli, 1999; Deaux & Kite, 1993). For example, Heilman, Block & Martell (1995) noted that women managers were '*characterized as less competent, active and potent, emotionally stable, independent, and rational than men managers*' (p 247).

Assessments of perceptions of sex roles and management characteristics have typically used the Schein Descriptive Index (SDI) or modified versions of it. The SDI is a 92-item attribute inventory where respondents are asked for either descriptions of 'women in general', 'men in general' or 'successful managers'. For each attribute ratings are made on a scale ranging from 1 (not characteristic) to 5 (characteristic). However, each

participant rates only women in general, men in general or successful managers so that they are unaware of the purpose of the study.

In Schein's original study (1973) using a sample of 300 male middle managers, she found that participants perceived more similarity between characteristics of men and managers than between those of women and managers. Two years later (Schein, 1975) these findings were replicated using a pool of both male and female managers. Characteristics such as leadership ability, a desire for responsibility and objectivity were seen as requisite management characteristics and more likely to be held by men than women. This led to the development of Schein's argument that 'to think manager was to think male' and that it was this stereotype which was preventing women from entering and advancing in management positions. Many replications of Schein's original work followed, including studies by Brenner, Tomkiewicz and Schein (1989) and Dodge, Gilroy and Fenzel, (1995). For example, Brenner *et al.* examined middle managers across a range of US companies and reported findings similar to Schein's earlier work when examining the views of male managers. However, they found that female manager participants associated both male and female characteristics with effective managers. This was interpreted as a change in views of women rather than a change in perceptions of men or of the requirements to be a successful manager.

Other studies have indicated some reduction in the 'think manager – think male' phenomenon when targets for judgment are labelled as 'successful'. Heilman, Block, Martell & Simon (1989) reported that when women were labelled as 'successful' there was a reduction in gender stereotyping, although overall women continued to be seen as more different from 'successful managers' than men. Using a similar approach, Martell, Parker, Emrich and Crawford (1998) also investigated whether men and women are perceived differently in terms of the attributes associated with being a successful executive (vice-president level roles and above). Martell *et al.* developed a modified 32 item version of the Schein Descriptive Index, covering characteristics deemed important for successful executives. These related to four factors: Change Agent, Managerial Courage, Leadership Ability and Results Orientation. Respondents

then rated either women middle managers, men middle managers, successful women middle managers or successful male middle managers. Results indicated that overall women were rated less favourably than men for all but the Results Orientation factor. In addition the inclusion of 'successful' labels only eliminated sex differences on the Leadership factor ratings. Thus, whilst the inclusion of success labels made slight reductions to the gender stereotyping reported in these studies, overall differences still persisted.

More recently, Schein (e.g. Schein & Mueller, 1992; Schein & Davidson, 1993; Schein, Muller, Litutchy & Lu, 1996) has argued that the globalization of management means that 'think manager – think male' needs to be considered in an international arena. These studies, which have examined management students' perceptions, revealed that managers were seen as possessing characteristics more commonly ascribed to men than women in Germany, the UK, China and Japan. However, in the US, although male students adhered to 'think manager-think male', female management students no longer gender-typed the management position (Schein *et al.*, 1996).

Overall, Schein's 'think manager – think male' research has demonstrated an enduring, global stereotype of the successful manager, which overlaps considerably with the stereotype of the agentic male. Stereotypes can lead to negative evaluations of women and preferences for masculine traits in management roles, which in turn can result in description-based bias in hiring, firing, promotion and appraisal. Indeed, as Heilman (1995) argues, due to the visibility and immediacy of gender as an attribute, sex stereotypes are '*prominent elements in organizational decision making*' (p 3) and can influence selection decisions and performance evaluations.

Heilman (1983, 1995) proposed the Lack of Fit model, which states that men are more likely than women to be selected for male sex-typed jobs because men are perceived to be a better fit with the jobs' requirements. If the expectations of a candidate's performance fit poorly with the model of a successful manager, that candidate is unlikely to be offered the post. Since women's predicted characteristics are shown to

differ from those of successful managers, they 'lack fit' and are less likely to be considered suitable for management roles.

As well as having a descriptive element, gender stereotypes can also act prescriptively, describing not only what it is expected that a woman is, but also what it is expected that she should be. This can be equally, if not more, restrictive. For example, in a series of experiments Heilman *et al.* (2004) demonstrated that when women are successful in a traditionally male task the result is lower personal approval and derogation amongst colleagues compared with equivalently successful men. Candidates whose performance was met with disapproval also received lower performance evaluations and reward allocations. This reaction against the violation of prescriptive stereotypic norms was seen as confirmation of the "backlash effect" (Rudman, 1998) against women who are seen as overly agentic and correspondingly not communal enough. Rudman and Glick (2001) conclude that, for a woman to be successful in the long term, she must follow a "tightrope", balancing a suitable level of competence with sufficient niceness. Indeed, in their review of men's and women's leadership styles, Eagly and Johannesen-Schmidt (2001) note that female leaders' choices are constrained by threats from two directions. First, conforming to their gender role and thus behaving more communally can amount to failure to meet the requirements of their leadership role. Secondly, conforming to their leadership role, and thus behaving more agentially, can lead to a failure to meet the requirements of their gender role and expectations to behave in a more nurturing and communal manner.

According to the conversion model of stereotype change suggested by Rothbart (1981), stereotypic beliefs tend only to be altered in response to overwhelming, undeniable disconfirming evidence. This goes some way to explaining the longevity of gender stereotyping demonstrated by Powell and Butterfield (1979, 1989, 2002) and by work carried out by Schein and colleagues (e.g. Schein *et al.*, 1996; Schein, 2001). Despite an increase in the proportion of female managers in the USA and the growing emphasis on the "feminisation" of management (e.g. Tomlinson, Brockbank & Traves, 1997) the belief that a good manager possesses predominantly male characteristics still pervades.

Powell and Butterfield stress that, as long as masculine characteristics continue to be valued in managers, self-selection and organisational selection will create a self-fulfilling prophecy from the stereotypic equation of “manager” with “man”.

2.7. Leadership and gender stereotyping

Stereotypes, therefore, still play a major role in the evaluation of individuals for leadership roles. Being perceived as a leader not only affects social and self-evaluations but also creates or limits future job opportunities (Lord & Maher, 1991). Perceptions of leadership potential are therefore clearly an area deserving of attention. When such evaluations or judgements are made by a supervisor they are likely to be central to many appraisal systems. Leadership potential is often seen as a necessary skill for moving into more senior organisational roles and, as Baumgardner, Lord and Maher (1991) note, while perceptions may not be reality, they are inevitably used to evaluate and subsequently distinguish leaders from non-leaders.

Thus, women are potentially disadvantaged by the previously mentioned phenomenon that Schein (e.g. 1973, 1975, 1996) has termed ‘think manager – think male’. This suggests that the behaviours and personality traits stereotypically associated with leadership, such as self-confidence or aggression, are more often associated with men than women. In addition, Brown and Lord’s discussion of the implications of a connectionist approach to leadership category prototypes (2001) highlights what happens when a masculine task environment combines with an individualistic culture, as might arguably occur at managerial levels in many Western organisations. Brown and Lord state that, through connectionist processes, culture and task environment will be assimilated to activate a strong agentic leadership prototype. In such cases female workers are likely to find it especially difficult: agentic behaviours make up the leadership prototype against which people will evaluate them, but people’s stereotypes are also likely to create assumptions that female workers will be more communal and less agentic than male workers (e.g. Carli & Eagli, 1999; Deaux & Kite, 1993).

For these reasons, supervisors' perceptions of leadership behaviours are seen as crucial in understanding why women are continuing to have limited success in reaching senior management roles, particularly in business areas such as investment banking where there has traditionally been a more masculine working environment. This view is supported by Nieva and Gutek's (1980) review of research into sex bias in performance evaluation. They concluded that there are at least two prospective factors to consider when examining women's progression: obstacles residing within women, such as their own attitudes and motivations, and external obstructions, which include attitudes of women's peers and supervisors.

Attribution theory provides an opportunity to understand the contribution of both factors relative to the identification of women as having leadership potential. This theory is reviewed in the next section.

2.8. Attribution theory

According to attribution theorists, individuals are motivated to understand why events occur and to predict when they might be repeated in order to make their environment more controllable. Attribution theory is concerned with the everyday causal explanations individuals produce when they encounter events which are new, important, unusual or potentially threatening (e.g. Baucom, 1987; Weiner, 1985; Wong & Weiner, 1981). Indeed, it has been argued that Heider's (who is generally credited as the founding father of attribution theory), main contribution to social psychology was the personalising of the social psychology focusing attention on the way ordinary people make sense of the world (Antaki, 1994).

Traditionally, attributional research has conceptualised causal attributions as internal and relatively private cognitions (Edwards & Potter, 1993). However, Antaki (1988) has noted that attributions occur frequently and spontaneously in natural discourse. Similarly, Bies and Sitkins (1992) indicated that, for middle managers, attributions and excuse-making were 'normal' components of everyday business. Not only do

individuals need to make sense of their world so that they have a sense of mastery over their environment (Kelley, 1973), but they also need to share this understanding if they are to react consistently to events and co-operate with colleagues (Silvester & Chapman, 1997; Snyder & Higgins, 1988), and thus spoken attributions are produced. Research by Jones and Berglas (1978) has further shown that causal attributions are particularly prevalent in evaluative contexts, which would include performance appraisals or assessments of leadership potential. As Nieva and Gutek (1980) comment, *'the process of evaluation includes not only the judgement of the worth of the performance being evaluated but also the attributions of causality for that performance'* (p 269).

Attribution theories originated in experimental social psychology with the aim of establishing general rules about how individuals operate in a social world (Antaki, 1984). While the theories all derive from the same basic principles, there is no unified body of knowledge that neatly fits into one specific attribution theory. However, all are concerned with perceptions of causality (e.g. Heider, 1958; Jones, Kanouse, Kelley, *et al.* 1972; Kelley, 1967; Weiner, 1985, 1986). Weiner (1992) notes that research surrounding perceptions of causality can be clustered into three areas. The first area concerns the specification of the perceived causes of behaviour, with particular consideration to the distinction between internal or personal causality and external or environmental causality. Secondly, general laws have been developed that relate to the antecedent information and cognitive structures of causal inferences, and thirdly causal inferences have been associated with observed behaviours. The following section provides a brief overview of the history of attribution theories.

2.8.1. History of attribution theories

Heider (1958) argued that *'it is an important principle of common-sense psychology ...that man grasps reality and can predict and control it, by referring transient and variable behaviour and events to relatively unchanging underlying conditions'* (p 79). It was for this reason that Heider believed individuals were motivated to attribute

causes to the events they observed. To enable a person to infer the cause of an effect, Heider suggested that a person would need to follow the principle of covariation which states *'that condition will be held responsible for an effect which is present when the effect is present and which is absent when the effect is absent'* (p 152). In addition, he proposed that actions were dependent upon two sets of conditions or causes, either those that were individual or personal features and residing within a person or external conditions within the environment.

The principles set out in Heider's theory were developed by Jones and Davies (1965). They were concerned with ways in which observers arrive at explanations of another's behaviour. When deciding whether it is due to individual or to circumstances, Jones and Davis claim that people consider two issues. First, whether the effect is non-common (i.e. if the purpose of the action could be achieved equally as well by another action) and; secondly, the social desirability of the outcome of the action. If the effect is deemed non-common and the social-desirability of the outcome is seen as low, an internal attribution is more likely. If non-common effects and social desirability are both high, then an external attribution is more likely.

A further significant development came from Kelley (1973). He contended that people look for three different types of information when deciding on attributing someone's behaviour to internal or external causes: how consistent their action is with their previous behaviour, how distinct their behaviour is to this situation, and consensus information in terms of how many other people would be likely to behave like that in the same circumstances.

As Munton, Silvester, Stratton and Hanks (1999) note, the common theme across Heider's, Jones and Davies' and Kelley's work is the distinction between internal and external explanations for behaviour. In all three theories, internal attributions are equated with personal causal factors, personality factors or dispositions, and external attributions are defined as impersonal or situational factors and environmental features.

The next major developments in attribution theory can be traced to the work of Bernard Weiner (e.g. Weiner, Freize, Kukla, Reed, Rest & Rosenbaum, 1971; Weiner, 1979; Weiner 1985; Weiner 1986). Weiner *et al.* (1971) argued that, as some internal causes of behaviour fluctuate over time while others remain relatively stable, a second dimension for explaining events was required. This was termed 'Stability'. In addition, Weiner (1979) then noted that the concept of volitional control also merited consideration. While factors such as mood and temporary effort are both internal and unstable causes, temporary effort is affected by whether an individual increases or decreases expenditure, yet mood is not perceived to be under an individual's volitional control.

Weiner's model of achievement attributions (e.g. 1985, 1986) therefore delineates causes along three dimensions: internality or locus, stability and control. He maintained that, as the causal configuration of any situation is likely to be complex, it is important to consider factors in conjunction with one another (Weiner, 1986). By doing so Weiner identified the following eight attribution patterns:

- Internal, stable, uncontrollable (e.g. innate intelligence)
- Internal, stable, controllable (e.g. works hard for all projects)
- Internal, unstable, uncontrollable (e.g. a good mood)
- Internal, unstable, controllable (e.g. happened to work hard for this project)
- External, stable, uncontrollable (e.g. given easy projects)
- External, stable, controllable (e.g. supervisor's consistently high level of providing developmental feedback)
- External, unstable, uncontrollable (e.g. good luck)
- External, unstable, controllable (e.g. given help with that project)

Weiner and colleagues (e.g. Weiner, Russell & Lerman, 1978; Weiner 1979) have also focused on the consequences causal attributions for success and failure have on emotional or affective responses and the subsequent implications these have for future motivations and behaviours. For example, Weiner (1985) suggests that attributing a

negative outcome to an internal and controllable cause can lead to feelings of guilt or a desire to avoid similar circumstances again, whereas an attribution of external and uncontrollable factors may lead to anger and a reduced desire to avoid similar situations. Similarly, if success is attributed to internal causes such as ability or effort, greater self-esteem or pride will be attributed than when the basis of success is perceived as due to luck or another person (Weiner, 1986). The stability dimension relates to expectancy changes, with relatively enduring causes indicating that past outcomes will be repeated again in the future, whereas variable causes signify that the future may differ from the past. Thus, failures attributed to stable causes such as lack of ability can be particularly debilitating, generating low self esteem or shame (Weiner, 1992). It is perhaps not surprising that stable attributions for failure have been linked with learned helplessness and the manifestation of depression (e.g. Seligman, 1986).

The development of the re-formulated learned helplessness model of depression also led to the identification of a further attributional dimension: global-specific (see Munton, Silvester, Stratton & Hanks, 1999). The rationale behind this dimension is that a belief that one is helpless may relate to a specific area of an individual's life or may be generalised across all areas. For those suffering with depression, experiencing failure in one area of their life will typically lead to the development of a generalised belief that everything they do will fail (e.g. Abramson, Seligman & Teasdale, 1978). Weiner (1986) argues that a distinction between general and specific causes cannot be faulted on grounds of face validity. Although he notes that globality has not emerged as a specific property in empirical investigations, Weiner discusses how personality psychologists consider both temporal aspects (consistent over time) and generalisability (consistent across situations) concluding that, logically, causes can also be construed in this manner, covering stable and global dimensions, but that more evidence must be collected before this possibility can be fully accepted.

However, numerous studies have supported the generality of Weiner's model in a variety of domains and have documented the empirical validity of the presumed causal dimensions. For example, Weiner (1986) reviewed the use of a number of

mathematical techniques including multi-dimensional scaling and factor analysis, to analyse the responses of research participants for underlying casual structure. Data from these studies supports the contention that there are three main dimensions of perceived causality. In addition, there is strong evidence (e.g. Weiner & Kukla, 1970) that poor performance ascribed to lack of effort gives rise to greater reprimand and criticism than failure attributed to low ability.

Overall, Weiner's attributional theory has been applied successfully to a range of areas including alcoholism (McHugh, Beckman & Frieze, 1979), helping behaviour (Reisenzein, 1986), parole decisions (Carroll, 1978), giving blood (Anderson & Jennings, 1980) and coping with rape (Meyer & Taylor, 1986). For example, Stanley and Standen (2000) found that, in a care staff role, helping behaviours were associated not with the severity of challenging behaviour of their patients, but with the staff's own attributions for patient and self control.

2.8.2. Applying attribution theory to organisational research

The integration of attributional frameworks into organisational psychology has received only limited attention (Martkino, 1995, Weiner, 1995). One exception to this is Green and Mitchell's (1979) two-stage model of leadership. Based on attribution theory, it starts with the proposition that leaders try to assess the cause of a member's behaviour before deciding how to influence or change it. In the first stage, performance by subordinates leads the leader to formulate attributions regarding their activities. These attributions can be internal (skill, ability) or external (luck, task difficulty) to the subordinate, and controllable or uncontrollable, reflecting the extent to which the subordinate is deemed responsible for their performance. At the second stage, these attributions lead to different leader behaviours towards subordinates such as discipline or reward, selection decisions or task assignments. Thus, even two successful employees could have very different relationships with their manager depending on whether their achievements are perceived as a result of ability and effort or attributed to luck or an easy task.

More recently, there have been applications of attribution theory to personnel decision making. Within this context, an attributional analysis can be used to understand the processes in which managers engage in order to interpret the causes of employees' successes and failures and how such evaluations can influence subsequent employee-related decisions. Traditional research into performance evaluation has been rooted in the psychometric tradition of developing reliable and valid instruments (Landy & Farr, 1980). Using this approach alone has been criticised for neglecting the quality of an employee's performance, the evaluation process and the evaluators' interpretation of events and, as a result, failing to capture the complexity of performance appraisal and decision-making processes (Struthers, Weiner & Allred, 1998). Similarly, in a review of the performance management and appraisal literature, Fletcher (2001) has argued that future research would benefit from the use of techniques such as attributional analysis (such as those employed by Silvester, 1997) which would provide a fuller understanding of the processes involved during performance evaluations.

A recent example of such work is Struthers *et al.*'s study (1998) which applied Weiner's attributional theory of social conduct (1986, 1995) to investigate how personnel decisions are guided by ability and effort attributions. This suggests that judgements regarding the locus (internal or external) and control of a cause lead a decision-maker to decide whether or not an individual can be held responsible for an outcome. In the case of a negative outcome, this judgement of responsibility then results in an affective response of either anger if the individual is perceived as responsible, or sympathy if the cause is perceived as something the individual could have no control over. Affective reaction then impacts on how the perceiver reacts to the individual, with anger leading to reprimand and sympathy leading to consolation. Through studies using students and participants with experience of personnel management, Struthers *at al.* found that each combination of high/ low effort and ability causal attributions for negative outcomes led to different decisions, which were then linked to expectations about the particular employee's future success, judgements of responsibility and either anger or sympathy being directed towards them.



Researchers (e.g. Swim & Sanna, 1996; Deaux, 1976) have also argued that the types of attributions an individual makes can potentially maintain stereotypes about gender differences in competency and influence the level of encouragement given to males and females to pursue different achievement-related goals. Similarly, Basow (1992) has noted that examining attributions made to explain others' behaviour can be a particularly effective way of observing prejudice in a climate, such as the workplace, that no longer endorses overt sexism. It seems that analysing the attributions managers and employees make to explain leadership potential is a valuable way of gaining greater understanding of the underlying socio-cognitive processes which may be contributing to the differential career progression of male and female employees.

2.8.3. A socio-cognitive model of unfair discrimination

A useful framework for such research is the socio-cognitive model of unfair discrimination, originally developed by Silvester and Chapman (1996) that draws on studies of inter-group attributional bias. The authors propose two potential ways in which unfair discrimination can occur. The first arises as a result of decision-makers' ethnocentric attributional bias when explaining the behaviour of individuals perceived as being in-group or out-group members. An example of this is reported by Taylor and Jaggi (1974), who found that Southern Indian Hindus and Muslims were more likely to attribute similar positive events to internal causes for in-group members and to external causes for out-group members. The second proposed process leading to unfair discrimination is where decision-makers interpret situations differently as the result of individuals from different cultural groups using different attributional styles to explain their own performance. For example, Fahr, Dobbins and Cheng (1991) found that employees in Taiwanese organisations tended to demonstrate a 'modesty bias' attributing their own success to external factors, whereas Western employees typically attributed successful outcomes to internal and personal causes, showing a more 'self-serving bias'.

When applied to an appraisal context, Silvester and Chapman's model (1996) suggests two potential barriers to women's progression to senior management or leadership positions. Relating the first barrier, interpersonal attributions, to an appraisal context suggests that managers may use different attribution patterns to explain the behaviour of male and female staff. The second barrier, focusing on intra-personal explanations, proposes that differences in the way male and female employees explain their own performance may impact on their career progress. It is worth noting that these are not competing explanations: it may well be that both barriers contribute to an explanation of unfair discrimination within this context. Supporting the idea that both interpersonal and intrapersonal attributions may contribute to explanations of differential career progress, these barriers relate directly to the research themes identified in Nivea and Gutek's (1980) review of performance evaluation. As previously discussed, these are obstacles within women such as motivation and external obstructions such as attitudes of supervisors.

2.8.4. Interpersonal attributions

During the 1970s there was a considerable body of work which investigated explanations for male and female performance. One example is a lab-based study conducted by Deaux and Emswiller (1974) in which participants were asked to evaluate the performance of male or females performing stereotypically male and female tasks. Their results indicated that, for both tasks, male and female observers attributed male success to internal causes such as skill, while equal female performance was attributed to external causes such as luck. This suggested that, while participants were not biased towards their own sex, both genders were biased towards males. Similarly, Taynor and Deaux (1975) reported that when participants were asked to judge a person's response to the same situation, when the person in the scenario was given a male name, they were judged as behaving in a more logical and skilful way. Research by Feldman-Summers and Kiesler (1974) also noted that good female performance tended to be attributed to a more temporary increase in 'effort' rather than the more permanent factor of 'ability' which was used to explain male success.

With regard to the degree of control a person is perceived to have over their actions, some research has suggested that women are judged as being less in control than their male counterparts. For example, Haccoun and Stacy (1980) asked participants to read paragraphs concerning work performance of males and females. In some cases the employee was also described as having a supportive spouse. Their results indicated that the degree of spouse support had a higher influence over perceptions of female than male successful performance, with higher levels of support associated with work success in female, but not male employees. This suggests that women may not be perceived as having as much unique control over their work outcomes. Similar findings were reported by Russell and Rush (1987), who found that poor performance for males was more likely to be attributed to a temporary lack of effort or a non-interesting workload, whereas for women it was more likely to be seen as a result of spending time on family activities, actions over which they may not have as much choice or control.

However, these studies could all be criticised for being laboratory based and using undergraduate, often psychology, student populations, although a field study from the same period (Feather & Simon, 1975) yielded similar results within a school setting. They found that female success tended to be attributed to 'easy courses', which they identified as an external cause. In terms of other attributional dimensions, such an explanation can also be perceived as uncontrollable as it is not within the individual's volitional control, unstable as it only relates to one instance, having a specific impact as it is unlikely to have impact on other areas of the individuals' lives and universal as it would equally affect any student taking that course. The 'easy course' explanation for success can be directly contrasted with the explanation of 'ability' which was most frequently used to explain male success. As Feather and Simon note, 'ability' is an internal attribution. Moreover, it is also likely to be perceived as an explanation which is stable, has a global impact and is unique (personal) to the individual being discussed.

In addition to explanations for success, Feather and Simon also looked at explanations for failure and found that failure was more likely to be explained in terms of lack of ability for female than for male students and that 'course difficulty' was more likely to

be cited as the cause of male than female failure. Again, this showed clear gender differences in performance evaluations.

The other potential criticism for much of the previous research discussed in this section is that it is now over 25 years old. As women's status improved markedly throughout the 20th century (Carli & Eagly, 2001) and society has undoubtedly changed, these results may no longer be relevant to today's workplace. For example, research conducted by Rosenthal (1996) as part of a larger scale project investigated managers' attributions for subordinate performance. By using a critical incident technique, she asked 93 managers to describe one incident of successful and one incident of unsuccessful subordinate performance. After describing the example in some detail, participants were asked to rate attributions regarding each subordinate's skills, abilities, effort, the circumstances in which the situation arose and the ease of the task discussed. Rosenthal then compared the ratings given to describe incidents involving male and female subordinates, finding no support for the proposal that the performance of female employees would be explained differently and less favourably than that of men. However, although the interview method used did allow the managers to produce natural discourse about the events, these were not examined. Rather, the results were deduced from the ratings each participant gave after the discussion. As attributions can be a controlled and effortful process (Barnes-Farell, 2001) it is possible that, by specifically drawing attention to the types of explanations on offer, the participants modified their answers to be more socially appropriate.

Indeed, the first study in Silvester, Conway & Fraser's (2004) research examined spoken attributions when, as in Rosenthal's study, managers were asked to describe successful and unsuccessful male and female employee performance. Using the LACS method (see section 3.6.3 for details) to assess their attributions, Silvester *et al.* found that, for both successful and unsuccessful incidents, female behaviour was considered less controllable than that of male counterparts. In Silvester *et al.*'s second study, using a larger sample and a questionnaire design, they again found that female success tended to be attributed to causes that were more external, uncontrollable and also more

temporary, while male success tended to be attributed to causes that were more internal, controllable and stable. When related back to Weiner's original research, the implications of such different explanations can easily be seen. If female participants were perceived as having less control over an outcome, there is less reason to assume that they will be able to achieve similar results if they encounter the same situation in the future. However, Silvester *et al.*'s second study found no significant differences in the types of attributions made to describe male and female unsuccessful performance.

In addition, a recent series of experimental studies by Heilman and Haynes (2005) explored evaluations of women in male-female teams. Participants were instructed to read descriptions of a mixed-sex dyad's work and evaluate its male and female members. Results indicated that, even when work outcomes were favourable, working with men in traditionally male domains can be detrimental for women. Unless there was specific information about the female team member's excellence on the task, their contribution to the task was irrefutable because of the task structure, or there was derivative information about their excellent past performance, women were thought to be less competent, less influential in arriving at the successful team outcome and less apt to have taken on a leadership role in the task than were their male counterparts. Although this was a lab-based study with a student population, it suggests that differences in attributional judgements made for male and female performance are still prevalent, unless strong counter-evidence is provided. Following Weiner's theory that attributions lead to affective and behavioural responses or Greene & Mitchell's (1979) model, it is again clear to see how, if such judgements take place in the workplace, they are likely to lead to different decisions about future task allocation or promotions for male and female employees.

Overall, the evidence presented here suggests that a bias in how male and female performance is perceived still exists. As Silvester and Chapman (1996) argued, interpersonal attributions appear to be operating as a barrier in reducing unfair discrimination, with female employees likely to be disadvantaged in any evaluative situation such as an appraisal or promotion decision.

2.8.5. Attributions made by male and female managers

Heneman, Greenberger and Anonyuo (1989) have argued that managers and leaders may differentiate employees, identifying them as in-group or out-group members, with more favourable attributions being made to members of the in-group than to members of the out-group for similar behaviours. Specifically, for in-group members, managers are more likely to attribute effective performance to internal and controllable factors, and ineffective performance to external and uncontrollable causes. Conversely, effective out-group performance will be attributed to external and uncontrollable causes and ineffective performance to internal controllable causes (Greene & Mitchell, 1979; Heneman *et al.*, 1989; Tucker & Rowe, 1979). In-group members are therefore favoured as they are seen to be more personally responsible for their successes and less responsible for their failures than out-group members. Indeed, Heneman *et al.*, (1989) found that, for effective performance, more internal attributions were made for in-group than out-group members while for ineffective performance more internal attributions were made for out-group than in-group members. However, they found no difference in the amount of external attributions made for in-group and out-group members. As managers then use their judgements about causality to make decisions regarding the administration of rewards and reprimands, being an in-group or out-group member can potentially have a beneficial or a damaging effect (Greene & Mitchell, 1979).

Applying this theory to male and female managers, it is possible to extrapolate that male and female managers will make different attributions towards their employees based on whether the employee's gender is the same as their own or not. However, previous research into this area is mixed. For example, although the first study in Silvester *et al.*'s (2004) recent research into explanations for performance found no differences in the way male and female managers explain their employees' successes and failures, differences were found in their second study when a questionnaire design was used. Specifically, they reported that female managers attributed causes of poor

performance to factors that were more controllable by employees and good performance to causes that were significantly less controllable than their male counterparts. Furthermore, in line with an in-group out-group theory, they found that female managers also attributed good female performance to more stable causes than male managers did and that male managers attributed good male performance to more stable causes than did female managers. Similarly, Lyness & Heilman (2006) found that both male and female managers' performance ratings for male and female employees were influenced by attributions regarding lack of fit for female employees in some line jobs.

Rosenthal's field research (1995) conducted in a health authority and a financial services firm also reported gender differences in terms of the attributions made by male and female managers, although these were not specifically related to in-group and out-group biases. By asking participants to rate different attributional causes on a Likert scale, she found that, when accounting for success of subordinates, female managers made more generous ability attributions than male managers. Thus, although both male and female managers rated subordinates' ability as the most important factor for successful performance, women managers' ratings were significantly stronger for this than men's ratings. However, as ratings for all causes of positive behaviour were higher for women managers it is possible that this result is more due to male and female participants using the rating scale differently, rather than any real variance in preference for attribution type.

Conversely, as in Silvester *et al.*'s (2004) first study, other research has found no significant differences in the types of attributions made by males and females. Examples of this include Deaux and Emswiller's research (1974) where male and female participants were asked to evaluate the performance of men or women performing stereotypically male and female task. They found no gender differences in the types of attributions male and female participants used to evaluate others' performance but, rather, that both genders were biased towards making more positive attributions for male performance. Similarly, in an analysis of the types of attributions

made by undergraduates for male and female poor performance in a hypothetical employment scenario, Russell and Rush (1987) found that all effects tested using rater gender as a variable were non-significant. In addition, a simulated employment interview (Silvester, Koczwara & Meinke, 2003) in which candidates had to explain their own behaviour in response to the same set of questions found no difference in the types of attributions made by male and female interview candidates.

Although differences in explanations made by male and female managers to explain employee behaviour are not a main area for investigation within the test of the socio-cognitive model of unfair discrimination, as there are conflicting previous findings relating to this, it will still be considered within this research programme. Thus, before comparisons of explanations for male and female performance are conducted (e.g. study one), analyses will also be carried out to determine whether men and women are making different attributions to explain others' behaviour.

2.8.6. Intra-personal attributions

The evidence discussed so far has been related to the first barrier proposed by the socio-cognitive model of unfair discrimination, inter-personal attributions. The following section now turns to look at evidence relating to barrier two, which suggests that men and women may explain their own performance differently.

Self-confidence and belief are valuable commodities in the workplace. They encourage the types of achievement behaviours, such as taking on high profile or risky projects, which are important for being identified as a future leader in most organizations (Rosenthal, 1995). However, as reflected through the particular emphasis on training courses targeted at women managers which focus on development of self-confidence and assertiveness (Alimo-Metcalf, 1993), there is a popular assumption that female staff may lack these necessary skills. One way people infer self-confidence in others is via the explanations they provide for their performance. Thus, if men and women use different explanatory styles this could impact on perceptions of their self-confidence and a possible reluctance to promote seemingly less confident women into leadership

roles. For example, Basow and Medcalf (1988) reported that a greater use of 'effort' and 'task difficulty' attributions by women than men might indicate a lower sense of self-confidence, particularly within fields which are stereotypically male. Furthermore, Hirschy and Morris (2002) have suggested that men and women achieve different levels because the different attributions they make to explain successes and failures have a negative consequence on women's future achievement strivings. As such, the second potential barrier to women achieving career success proposed by the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) suggests that differences in the way men and women explain their own behaviour may impact upon career progression.

This possibility has received considerable research attention, from both laboratory based and examination achievement perspectives. However, there has been little research specifically applied to the world of work to date. Many of the laboratory and examination based studies have reported significant differences in the explanatory styles of males and females. For example, although Gitelson, Petersen, Tobin and Maryse (1982) found no sex differences in performance on spatial or verbal lab-based tasks, for both tasks, male participants expected to do better than females. After completing the task, females continued to evaluate their performance on the spatial tasks more negatively than did males. Female participants also attributed less ability to self and perceived the tasks as more difficult. In Levine, Gillman and Reis's experiment (1982) participants competed in same or mixed sex pairs on an anagram task that was prearranged in difficulty so that one participant would clearly win. Results indicated that male participants were more likely to attribute their outcomes to ability, and less likely to attribute their outcomes to effort and luck, than were female participants.

More recent research investigating hypothetical examination results (Beyer, 1998, 1999) has also reported differences in the attributions used by male and female students to explain success and failure. Students were asked to imagine that they had received either an A or F grade examination result and then rank possible causes for this grade. Beyer reported that, for successful results, male students tended to make stronger

ability attributions, whereas female students tended to perceive success as the result of careful studying or paying attention. Beyer also found that, when explaining failure, male students tended to favour explanations that attributed blame to specific, unstable causes such as a lack of study or interest, whereas female students tended to make more stable internal attributions which suggested a lack of ability was the key reason for failure. However, Sweeney, Moreland and Gruber (1982) found that, when reflecting upon actual recent examinations, unsuccessful female students were more likely to make external attributions for their performance and male students to make internal attributions for failure.

There has also been some debate as to whether women are more likely to display a 'pessimistic' and men a more 'optimistic' attributional style (e.g. Campbell, 1999, Poropat, 2002). The implication of this is that, if women are more likely to attribute events to external, stable causes, they are less likely to believe they can take control of a given situation and may subsequently give up trying.

For example, Campbell (1999) used a modified version of the Attributional Style Questionnaire (related specifically to academia) to examine gender differences in general attributional style and specific explanations for performance in a course. Although there were no gender differences in terms of demonstrating an optimistic or pessimistic attributional style, male and female students made different specific explanations for course performance. Although effort was the most chosen explanation for course performance among all students, this was selected significantly more often by women than men. Women were also much less likely to attribute their performance in the course to ability than were men. Campbell concluded that '*taken together with data from other studies, the data from this study suggest that gender differences are rather stable*' (p 101). However, as Campbell reports that there was no difference in the general attribution style of men and women, this interpretation seems somewhat questionable. In addition, it is also worth noting that, in his commentary for this paper, Campbell misinterprets Seligman (1990), quoting that Seligman has argued that '*women are more likely to possess a "pessimistic" attributional style, whereas men are*

more likely to possess an “optimistic” attributional style (p 96). In fact, what Seligman actually suggests is somewhat different. Seligman notes that one potential explanation for why depression strikes women more frequently than men could involve learned helplessness and explanatory style. He notes that it can be argued that women receive abundant experience with helplessness over a lifetime, stemming from childhood when boys are trained for self-reliance and activity, whilst girls are trained for passivity and dependence. Even in adulthood, Seligman observes that culture tends often to deprecate the roles of wife and mother, while women’s achievements at work receive less credit than men’s, commenting that what he described as learned helplessness is ‘*at every turn*’ (p 85). However, he goes on to note that this theory is ‘*plausible but not without holes*’ (p 85), noting that no-one has proved that women are more pessimistic than men, nor that women see their lives as less controllable than men do. Indeed, he concludes that a more plausible explanation for the increased prevalence of depression in women is that women’s likelier first reaction to trouble is rumination, which he defines as ‘*taking problems more earnestly and analyzing them endlessly rather than taking action*’ (p 86) and that it is this, not a pessimistic attributional style, which leads to depression.

It is clear that there is a lack of consistent results across studies investigating sex differences in explanatory styles for successful and unsuccessful outcomes. Several possible explanations for this have been proposed. These include potential publication biases, the types of task under consideration, and the influence of social context.

As both Greenwald (1975) and McGuire (1973) have discussed, there can be a prejudice towards publishing research which rejects the null hypothesis. This can lead to a tendency to publish only studies which find sex differences, while those documenting sex similarities often remain unpublished (Maccoby & Jacklin, 1974).

Secondly, Beyer and Bowden, (1997) have argued that ‘task type’ plays an important role in determining whether differences emerge. Specifically, they found gender differences in participants’ perceptions of ability, with females underestimating their levels of ability, on traditionally considered masculine but not feminine or neutral

tasks. Eccles, Adler & Meece (1984) argued that differences in perception of task ability was do with expectation of success, suggesting that 'task type' is a mediating variable and a barrier to whether women believe they can or cannot perform it.

Thirdly, the context in which individuals are asked to explain their own behaviour may also be important and has the potential to shed light on differing results. McHugh, Frieze and Hanusa (1982) note that the external validity of many 'traditional' attributional research studies is suspect because of the laboratory setting. Such studies force a contrived outcome based on a single task in particular contexts. They argue that, given the number of possible situational variables and tasks and their interactions, it is not surprising that many observed inconsistencies in the literature can be found. The applicability of findings from lab-based studies to applied settings may therefore be questionable. In relation to organisational settings specifically, Crombie (1983) has argued that, as women enter managerial positions, role expectations can influence attributions in ways different from prior laboratory research. She therefore suggests that it may be wrong to consider 'women' as a homogeneous group. If women in leadership roles in management are apt to hold more non-traditional sex role orientations and are higher achievers, they are more likely to attribute their successes as do men. In her research Crombie found that 'high-achieving' women tended to attribute their academic success to ability (as one would predict for men), while women with more traditional sex role orientations were less likely to make such an attribution. Indeed, Markus and Kunda (1986) reported that, although the self-concept was resistant to change, the working self-concept tended to vary with social situations. Similar arguments have also been made by Eagly and Johnson (1990). They found that the gender stereotypic styles were stronger in the laboratory and assessment studies, but that such tendencies were eliminated in task and interpersonal style for those participants studied in organisational studies. They concluded the significant relationship between research context and the extent to which leadership styles were gender stereotypic was due to the fact that, in organisational studies, gender simply became a background influence and the participants' managerial roles took precedence.

In addition much of the research reporting gender differences in attributions was conducted over a decade ago and, as such, these findings may no longer be as relevant in today's society. Research conducted by Rodler, Kirchler and Hölzl (2001), analysing terms used to describe leaders between 1974 and 1998, has found that, although gender differences were still evident in the later years, during the 1990s male and female stereotypes became more similar, suggesting that gender differences may be reducing. Furthermore, although Hendy and Boyer's study was conducted in 1993, they reported changes to 'traditional' gender differences in sport attributions. Unlike findings from previous studies, female triathletes attributed more importance than males to factors they could control, such as psychological state, diet, or weight and were more likely to downplay the importance of luck and social support following a success. Similarly, Bornholt and Moller (2003) found that, contrary to expectations that boys and girls explain school achievement differently, regardless of gender, pupils at mixed and single sex schools made similar explanations focusing on personal rather than social or contextual reasons.

There are relatively few studies which have examined managers' attributions for their own performance which have been carried out in the field. Notable exceptions include Rosenthal (1995) and Heimovics & Herman (1990). However, even within these two studies, results are not consistent. Using a sample from 3 British organisations Rosenthal instructed managers (57 women, 101 men) to rate the degree to which a series of causes had contributed to a recent success or failure in their work. Rosenthal found that, overall, managers tended to attribute the attainment of their goals equally to ability and hard work, while poor performance was chiefly explained in relation to negative circumstances and secondly to task difficulty. However, in terms of success factors, women's ratings of ability were significantly weaker than men's, whilst their ratings of effort were on average significantly stronger than men's, indicating some differences in explanations.

Conversely, Heimovics & Herman (1990), using a similar methodology to examine explanations made by chief executives in not-for-profit organisations, found no

differences between men and women's attributions for the causes of successful or unsuccessful experiences. Both men and women chief executives saw themselves as responsible for success and failure. They recognised how success was a consequence of hard work and ability, but also how their failures could be partly their own making, regardless of how negative the environment. Echoing the propositions made by Eagly and Johnson (1990) discussed above, Heimovics & Herman (1990), argued that the similarities found between men's and women's explanatory styles suggests that the role of organisational leadership may well overwhelm an individual's stereotyped gender roles. They therefore concluded that similarities in attainment values and similar job expectations for managers regardless of gender may help explain similarities in attributions when comparing the men and women.

Although both Rosenthal's and Heimovic and Herman's work has investigated the explanations made by managers for real experiences, they have still relied on the administration of questionnaires in which participants have to rate the extent to which a list of pre-defined different factors have contributed to the outcome of any event. However, recent research using Leeds Attributional Coding System (Stratton, Munton *et al.*, 1988) methodology has enabled researchers to examine the actual attributions made by candidates during selection interviews to explain their own past successful and unsuccessful performance (e.g. Silvester, 1997; Silvester, Koczwara & Meincke, 2003). Again, these studies have found little evidence to suggest that there are any differences in the types of attributions made by male and female candidates across all five attributional dimensions (control, internal, stable, global and personal). Furthermore, an exploratory study conducted with 20 HR Officers in the host organisation (Crofts, 2003) found no significant differences in the types of attributions male and female officers used to describe their own successes and only one difference in explaining failures, such that female officers made more internal attributions than their male counterparts.

As the discussion in this section illustrates, there has been considerable debate in the literature regarding gender differences in explanatory styles, with inconsistent research findings reported. However, Silvester and Chapman's model (1996) does raise intra-

personal attributions as a second potential barrier to unfair discrimination and it is certainly a theory that has some popular support. Therefore one of the key aims of this programme of research is to test both barriers one and two within the same organisational context.

2.8.7. Attributional biases

Whilst testing the socio-cognitive model of unfair discrimination there are two attributional biases which are likely to be evident in any data collected: differences in explanations for successes and failures and the self-serving bias. These are briefly discussed in the following two sections.

Differences in explanations for successes and failures

Previous research by Silvester and colleagues to examine explanations for successful and unsuccessful past performance has yielded generally consistent results. These studies have examined patterns of attributional responses via questionnaires and via analysis of attributions occurring naturally in discourse. For example, when interview candidates are talking about their positive experiences, Silvester *et al.* (2003a) found that they were significantly more likely to make internal, controllable, stable, global and personal attributions than when discussing past events that did not go as well. Similarly, in a previous series of studies Silvester, Anderson-Gough, Anderson and Mohamed (2002) found that students and personnel managers rated internal and controllable attributions as most likely to create a positive impression. Furthermore, in a selection process for trainee general practitioners, Silvester, Patterson, Koczwara and Ferguson (*in press*) reported that physicians who attributed positive patient outcomes in hypothetical scenarios to causes that were more stable, internal and controllable to themselves received higher subsequent ratings of empathy from assessors during the assessment centre. Finally, Silvester, Patterson and Ferguson (2003b) have found that sales assistants who make more internal and controllable attributions to explain outcomes receive higher evaluations at performance review. Taken together, these

results suggest that, when considering past performance, attributions that are more internal, controllable, stable, global and personal are more likely to be used when considering someone who is perceived as successful. Indeed, DeNisi and Stevens (1981) have argued that stable patterns of performance are generally evaluated more positively than patterns which are variable, whilst Rosenthal (1995) has reported that managers generally recognise subordinate successes, giving individuals personal credit by making attributions that are internal, controllable and personal to the subordinate. Therefore, one would expect that when managers are talking about employees of whom they have a positive impression, including employees they perceive as having leadership potential, they are more likely to make attributions to explain this performance that are internal, controllable and personal to the employee and stable and global in nature. Indeed, the first study in Silvester *et al.*'s (2004) research into explaining managers' performance, which measured only the internal and controllable attributional dimensions, found that employees' successful performance was mostly perceived as being more internal and controllable than their failing performance. These findings were also replicated in their second study, which considered all five attributional dimensions and also reported that causes of successful performance were seen as more long-lasting than causes of failures.

Thus, it is anticipated that, whenever managers are asked to discuss the performance of employees they hold in high regard and perceive as having leadership potential, they are more likely to make attributions to explain this performance that are internal, controllable and personal to the employee and stable and global in nature.

The self-serving bias

Greenwald (1980) has argued that the tendency for individuals to accept more causal responsibility for positive than negative outcomes is one of the most robust findings in social psychology. This self-serving bias, as originally defined by Miller and Ross (1975), suggests that individuals are most likely to attribute their own positive behaviour to dispositional variables, such as ability and effort, and their own negative

behaviours to situational variables, such as task difficulty or problems in the environment. By taking credit for good acts and denying blame for bad outcomes, such explanations enable an individual to protect or even enhance their self-esteem. For example, Sweeney, Moreland and Gruber (1982) found that students who had achieved examination success were more likely to make internal attributions to explain their performance. In a study of British managers Rosenthal (1995) found that managers perceived that they had attained their goals mainly as a result of hard work and ability, both of which are dispositional tendencies. In contrast poor performance was primarily attributed to negative circumstances and secondly to task difficulty, which are both situational variables. Similarly, an analysis of newspaper accounts of sports matches (Lau & Russell, 1980) demonstrated that players, coaches and journalists all tended to make internal attributions for success and external attributions for failure.

Previous research which has examined a broader range of attributional dimensions has also provided evidence in relation to self-serving biases. Generally they suggest that not only are individuals more likely to take responsibility for positive outcomes, but that the causes are perceived as more unique to the individual, with consequences having a more important and long-lasting impact. For example, Silvester *et al.* (2003a) found that, when interview candidates were discussing their positive experiences, they were significantly more likely to make internal, controllable, stable, global and personal attributions than when discussing less successful past events. Similarly, in a study of physicians' explanations for patient consultation outcomes, Silvester, Patterson, Koczwara and Ferguson (*in press*) found that physicians were more likely to see the causes of successful consultations as being more controllable by the physician, being of greater importance and having a longer-lasting impact than when a consultation had an undesirable outcome. Again, the differences on these additional dimensions of explanatory style have the benefit of presenting the self in a more positive light, hence benefiting self-esteem.

Indeed, in a review of over 500 published studies, Mezulis, Abramson, Hyde, and Hankin (2004) reported that in Western nations, including the UK, US, Canada, Australia, New Zealand and parts of Western Europe, individuals had a strong self-

serving bias which was more pronounced than in other cultures or continents. However, they found evidence of self-serving biases, to differing degrees, in all cultures studied, concluding that there is a universal self-serving attributional bias that exists across gender, race and nation.

It is therefore anticipated that, when asked to explain their own performance, evidence of a self-serving bias will be detected such that employees will generally make more internal, controllable, stable, global, personal attributions for positive than for negative outcomes.

2.9. Aims of the research

Earlier discussion of the socio-cognitive model of unfair discrimination identified two potential barriers to women's progression at work. These were inter and intra personal explanations for male and female performance. One of the main aims of this programme of research was therefore to investigate more thoroughly both barriers, within one organisational context and using the same methodology.

As literature has demonstrated that attributions are important part of decision making processes, the Leeds Attributional Coding System (see chapter three, section 3.6.3.) was used to analyse the explanations managers and employees give for current employee leadership potential.

In addition, the discussion of theories of leadership has identified that certain behaviours are related to leadership, yet little research has looked at behaviours in relation to the identification of potential. To enhance the investigation of attributions associated with explanations of leadership potential, attempts were also made to extend the socio-cognitive model to understand not only explanations of why people possess leadership potential, but also how this is demonstrated.

Chapter 3: Methods

3.1 Introduction

This chapter examines the methodologies used throughout this thesis. First, a discussion of the epistemological approach adopted for the thesis, including a justification for the decision to combine quantitative and qualitative methods within a positivist paradigm is presented. Second, the context of the research is described, including the host organisation and the practicalities of conducting research in the financial services industry. The main data collection techniques and methods of analyses are then considered.

3.2 Methodological approach

The qualitative/quantitative debate has been taking place in social science research since at least the mid nineteenth century. During the 1940s and 1950s there was considerable argument about the scientific status of social science, with quantification often seen as a key determinant of natural science (Fogel & Elton, 1983). Indeed, by this time quantitative methods, such as social surveys or experiments, had become the dominant approach in both psychology and sociology, with psychology adopting the research model of the natural sciences (Woolgar, 1996). However, as Hammersley (1992) notes, since the 1960s there has been something of a revival in qualitative research. This has resulted in an increased interest in the possibilities of combining qualitative and quantitative research.

Positivist epistemology is based on the verification principle, which suggests that the only route to 'true' knowledge is to produce statements that can be empirically tested (e.g. Ayer, 1946; Bernstein, 1978). A positivist approach therefore stipulates that the real world is objective, independent and value free with researchers aiming to predict what will happen (Burrell & Morgan, 1979). Extreme positivists go so far as to argue that, while human behaviour may be more complex, in principle it is no different from

any other natural process. As reality is construed in terms of causes and effects, the goal of positivist researchers is to strive for quantification in order to allow them to predict and control future events, behaviours and outcomes (Steckler, McLeroy, Goodman, Bird & McCormick 1992).

The strengths of quantitative approaches have been identified as its ability to produce factual, reliable outcome data that can then be generalised to some larger population. In terms of methodology, quantitative research is typically associated with the process of enumerative induction (Brannen, 1992). This aims to infer a relationship between variables, as tested within a sample, to a parent or general population and thus to make generalised statements based on statistical inference (Blalock, 1960). Data collection techniques include controlled experimental designs, questionnaires, structured interviews and diary studies.

Qualitative work has often been described in terms of a hermeneutic or interpretive epistemology, with good research identifiable by the degree of insight it provides into human action (Buchanan, 1992). Miles and Huberman (1994) have argued that qualitative approaches are particularly useful in understanding perceptions in a given context, stating that they '*explicate the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-to-day situations*' (p 7). This was considered an important factor when situating this research within the context of a financial services firm; particularly in terms of identifying the behaviours associated with leadership potential in this organisation (see study three).

The term 'qualitative' is used to refer to a plethora of research methods which are distinctive and varied. They include ethnography, case studies, analytic induction, research diaries, free association narrative and pictorial representations to name but a few. Whilst there are numerous specific qualitative methods, it has often been argued (see Cassell & Symon, 2004) that there are essentially three different kinds of qualitative research: participant observation, document analysis and, the most common form of gathering data in qualitative research, interviews (King, 2004). Within this

classification, the ‘qualitative’ approaches adopted during this thesis clearly fall into the latter category.

This, however, is still not a straightforward categorisation. The analytical techniques used to interpret much of the interview data within this PhD have as one of their primary aims the quantification of responses. For example, the attributional coding technique used in studies one, three and five culminates with the statistical comparison of explanations given by or about male and female employees. This may not be perceived as a ‘traditional’ outcome for qualitative research, but is something which is important when working within a positivist paradigm.

The end result of quantifying data collected by qualitative methods is not unique to this thesis or to attributional coding more generally. As noted by Cassell and Symon (2004), several researchers purporting to be engaged in qualitative research use mechanisms to count frequencies or statistically compare groups. This is a reflection of the fact that qualitative methods can be underpinned by all possible epistemological positions, including those traditionally associated with quantitative methods (Gephart, 1999).

‘There is no inherent logic of the limitations (of exclusive paradigms) established by tradition, other than tradition itself.’ (Roter & Fankel, 1992, p 1097)

As Roter and Frankel’s quotation illustrates, there is an increasing body of researchers who believe that approaching research within a single paradigm can be restrictive. In addition, the more one reads the views of various academics, the more apparent it becomes that what defines qualitative methods and separates them from the quantitative is not always clear-cut. Indeed, many researchers have argued in support of combining the two methodological approaches, proposing that, to some extent, the weakness of either paradigm can be compensated by the inclusion of the other (e.g. Steckler *et al.* 1992). McKeganey’s (1995) commentary on the use of mixed methods in addiction research is an illustration of this. He concludes that, while large scale

quantitative research is useful for identifying relationships, it is less useful in evaluating the processes by which social, structural and psychosocial factors are mediated at the individual level and that, for this purpose, qualitative methods have found their metier. Similarly, Bartunek and Seo (2002) have proposed that qualitative research can add new meanings to quantitative research, arguing that by only using questionnaire studies to explore variables, researchers exclude the sense-making and sense-giving which occurs in each local context.

'The practice of research is a messy and untidy business which rarely conforms to models set down in text books.' Brannen (1992, p 5)

Many researchers (e.g. Hammersley, 1992; McKeganey, 1995) argue that the selection of appropriate research techniques ought not to depend on philosophical or methodological commitments but rather on the purposes and the circumstances of the research project. Roter and Frankel (1992) have stated that a respect for alternative approaches need not preclude combining methods to maximise discovery and insight. Anderson (1998) also argues that a general lack of creativity in the methodologies applied by psychologists, such as adhering to traditionally quantitative methods, may actually stifle the discipline.

A willingness not to restrict one's approach to a limited set of techniques may be particularly important when engaging in applied psychology. Research methodologies that have been appropriate for previous psychological research are increasingly challenged within complex organisational settings (Pryce, 2005). Organisations place a number of constraints upon the researcher, sometimes making it impossible to impose a rigorous experimental design or administer a large scale questionnaire to a random selection of participants. In such cases, complying exclusively with one paradigm or set of techniques can be difficult and having a more extensive range of techniques can be particularly valuable.

For the reasons discussed above, it was decided that a combination of qualitative and quantitative research approaches would be appropriate. Qualitative methods were deemed particularly useful in helping to investigate and understand the processes by which individuals explain their own potential and evaluate others. The inclusion of quantitative methods enabled comparisons to be made between groups of employees and for any differences to be measured. By situating these techniques within a positivist epistemology, sufficient assumptions regarding the scientific nature of psychology are being observed to allow for the possibility of making generalisations and predictions based on statistical inferences.

3.3 Context

3.3.1. The host organisation

It is important to contextualise organisational research in order to make models more accurate and interpretations of results more robust (Schneider, 1985). This programme of research was co-sponsored by a financial services firm. Therefore, all research was carried out within that organisation. Consequently, attention is given to the factors which may make this context different from and similar to other organisational contexts.

The host organisation is a leading global financial services firm, with assets of more than \$1.2 trillion and over 160,000 employees working in fifty countries. With headquarters in New York, the company offers a broad spectrum of financial services across six lines of business: Retail Financial Services, Asset & Wealth Management, Treasury & Securities Services, Card Services, Investment Banking, and Commercial Banking.

Following a recent merger, the firm now occupies a market leadership position in both business-to-business (wholesale) and mass-market (retail) banking. The main organisation has had an established presence in Europe since the mid 1800s. In the UK it currently has multiple offices over six geographical locations, employing

approximately 12,000 staff. The business exists to serve clients with complex financial needs, including governments, financial institutions, major corporations, private firms, non-profit organisations and individuals. The firm's current mission statement includes the aim of becoming '*the best financial services company in the world*'.

The host organisation does not have difficulty in attracting high calibre applicants for jobs, with starting salaries amongst the highest offered by graduate recruiters. Turban and Cable (2003) found that firms with better reputations attract more applicants and some evidence that they can also select high-quality applicants. However, in recent years, there have been substantial job losses across the financial services industry: between 2000 and 2003 at least 30,000 UK City workers were made redundant (Rana, 2003). This has resulted in an extremely competitive internal environment where the majority of employees are consistently high performers. For example, one of the company's guiding principles states that all employees should strive to '*be a leader regardless of title, level or tenure*'.

Consequently, rather than differentiating between good and poor performers, the challenge for human resources in this and many other financial services organisations is to identify future leaders among individuals who are all performing well in current roles. As Campbell, Dunnette, Lawler and Weick (1970) note, identifying leadership potential is a critical issue for succession planning and continuity in organisational performance.

3.3.2. Commitment to diversity

The organisation articulates a strong commitment to diversity, recognising it as a key competitive advantage. Senior management believes that a culture of inclusion facilitates creativity and high performance. In a global firm with global clients, it is seen to be necessary for the organisation to have a workforce that reflects this. The company's employees represent an extensive range of nationalities and ethnicities. For

example, within the Europe, Middle East and Africa (EMEA) region there are employees of 75 different nationalities with 58 first languages.

As part of its commitment to diversity, the firm is also involved with actively enhancing opportunities for women. They have set up dedicated networking groups for women at all stages of their career and run annual women's conferences throughout the UK.

Despite equal numbers of men and women entering at graduate (analyst) level, the percentage of men at managing director level rises to 95% across the organisation. Focus groups, interviews and surveys with women within the Investment Banking segment have sought to investigate why female employees are not reaching the higher levels. Results have indicated that factors such as overt discrimination or work/life balance issues do not provide a full explanation for why women consistently fail to reach senior positions. This is contingent with findings from surveys of female CEOs in other multi-national companies (Catalyst, 1996) which have identified more subtle forms of gender stereotyping and preconceptions about women as barriers to female career progression. As such, senior managers within the host organisation were keen to be involved in research contributing to a more detailed understanding of the processes leading to the differential career progress of men and women into leadership roles.

3.3.3. Promotion and appraisal structure

The organisation has a comprehensive performance management process for all employees. This is an ongoing framework for establishing objectives, developing plans to reach the objectives and reviewing progress throughout the year. The approach includes traditional performance appraisals, 360 feedback, self-appraisals, evaluation committees and structured development programmes to be completed prior to promotion to more senior levels.

Performance appraisals used by the organisation take the form of written documents which review performance against an individual's personal objectives, competencies for their job, the firm's operating principles and summarise the individual's strengths and development needs. In addition, employees participate in a 360 degree feedback process during which feedback is collected on-line from manager(s), direct reports, colleagues, and others (a category for internal clients, business partners or colleagues outside their immediate department). The feedback consists of qualitative information on performance and a quantitative assessment on a one-to-ten scale (1-3 = needs improvement, 4-7 = average, 8-10 = great) of general leadership qualities. The aims of this process are to gather information from a range of sources, to increase individual's self-awareness and to foster a culture which is open to giving and receiving feedback.

Overall annual performance assessments for employees are made by an evaluation committee. The committee consists of managers of those whose performance is to be reviewed and representatives from HR. Prior to the evaluation committee, members collect relevant performance information for each individual to be discussed, including their performance appraisal and 360 reports described above, a self-review and input from those who work closely with the individual. During the meetings, committee members present the information gathered about each employee objectively, focusing on their performance in terms of Financial Performance (results and contribution level), Controls (integrity and efficiency), Partnership (teamwork and communication) and People (development and participation in firm-wide initiatives).

Based on the information presented, employees are then ranked, using a 20:70:10 ratio. The top 20% of employees are rated as '1 - Exceeds', with the category defined as *'employees whose performance results far exceed the accomplishments of most others'*. The middle 70% of employees are rated as '2 - Meets', defined as *'performance results are comparable to the accomplishments of most others'*. The bottom 10% of employees are rated as '3 - Needs improvement', defined as *'employees whose performance results are less than the accomplishments of most others'*.

The information gathered during the meeting is then fed back to the individuals concerned and used to help each employee create an action plan to capitalise on their strengths and address development areas. The committees are therefore used as the organisation's primary personnel evaluation tool and the means by which promotion decisions take place. For this reason, committee rankings were the performance measure used in this programme of research.

Criteria for promotion to a Vice President role are based on an individual's performance over a sustained period (as measured by their ranked scores), the skills and scope of their role (i.e. complexity and diversity of responsibilities, businesses supported and client base), as well as each business area's needs. Promotions are generally considered after three-four years of Associate-level experience, although relevant advanced education is also considered when assessing experience level. Associates will have to satisfy all the above criteria, including a '1' rating in order to be considered for promotion to a VP role.

3.4. Conducting organisational research

'One of the challenges about carrying out investigations in the "real world" is seeking to say something sensible about a complex, relatively poorly controlled and generally "messy" situation'. Robson (1993, p 3).

As Robson's quotation indicates, there can be many difficulties in conducting organisational research. Particular challenges experienced during this research included time constraints, cost implications and working with an organisation which was experiencing considerable change. Organisational timeframes can dictate when research may be conducted and deadlines for the feedback of results. Time constraints can also impact on the willingness of often already very busy employees to participate in projects. Cost implications must also be considered when designing organisational studies. In this programme of research, this has been an issue in relation to data collection. For example, thorough plans and interview schedules for study four (US

interviewees) had to be made well in advance so that the minimum time in the US would generate the maximum amount of data.

The financial services industry is a fast-paced environment which is continuously changing. During this three year research programme the organisation experienced two mergers and a major restructure, leading to many changes in personnel. As a result, the researcher was required continually to re-negotiate relationships with key stakeholders and be flexible in terms of how research would be conducted.

3.5. Sampling

It can be very difficult to achieve representative sampling from a known population when conducting field research (Robson, 1993). Within this research project, access to participants from certain lines of business or working in particular locations were more readily available than others. Availability was also affected by issues such as which key stakeholders were involved in a particular study, the current organisational climate and the time of the year. For example, the participants involved in the US data collection (study four) were all recruited via the organisation's leadership development programme and worked within the investment banking business area. This was largely because, after approaches to several senior managers, the Chief Operating Officer for Investment Banking agreed to be the US project sponsor. By using their name and contacting people who had already indicated that they were interested in leadership initiatives by signing up to the development programme, a high take-up rate could be ensured. Similarly, when designing study three (employee's own perceptions of potential), agreement had been secured to carry out research within the Equities & Derivatives teams and potential interviewees identified. However, once the organisation's planned merger was announced this no longer became a suitable participant group as some employees were placed at risk of being made redundant. In addition, in order not to conflict with other times when individuals have extra demands placed upon them, such as during 360 appraisal reviews, the firm has a strict timetable about when questionnaire research could be conducted.

As these examples indicate, there were many organisational issues that were outside the researcher's immediate control which impacted on how samples were selected. However, considerable efforts were made to recruit appropriate samples and for particularly salient variables, such as the need to match participants' gender and previous performance ratings in study three, no compromises were made.

3.6. Methods and analysis

The main aims of this thesis were to test a socio-cognitive model of unfair discrimination in terms of the intra and inter personal attributions used to explain employee leadership potential and also to extend the model to look at perceptions of how leadership potential is demonstrated. To do this a number of data collection and analytical techniques were applied, which are reviewed in the following sections. Comparisons are made with other potentially useful approaches to explain why particular methods were chosen.

3.6.1. Measuring attributions

Attributions can be measured using questionnaire designs or coding systems which allow the classification of attributions that occur naturally in the environment. The two approaches are reviewed below.

Questionnaire designs

As causal attributions have traditionally been conceptualised as an internal and private phenomena (e.g. Edwards & Potter, 1993) researchers have often investigated them via quantitative methods such as questionnaires or behavioural vignettes (Silvester, 2004). The general aim of such measures is to understand people's explanatory styles, as previous research has suggested that this impacts on an individual's level of motivational and decision making processes (e.g. Weiner 1985).

Questionnaire approaches to measuring attributions are perceived as having many benefits including relative ease of administration and analysis, so being cost and time effective. Employing the use of Likert-type rating scales, questionnaires have the advantage of capturing data which can be analysed using parametric statistics (Hewstone, 1989) whilst also ensuring a more consistent approach across respondents than any measurement of spontaneous or spoken attributions can afford. However, questionnaire approaches do have some limitations. In order to understand the impact of such limitations it is first important to understand the basic structure of an attributional questionnaire.

Examples of attributional questionnaires include the Attributional Style Questionnaire (ASQ: Peterson, Semmel, Von Baeyer *et al.*, 1982) and the Occupational Attributional Style Questionnaire (OASQ: Furnham, Sadka & Brewin, 1992). In both cases, participants are presented with hypothetical scenarios and are asked to identify possible causes and then rate these causes on a series of causal dimensions.

The ASQ was designed within the context of the reformulated learned helplessness theory, which suggests that individuals learn to externalise the causes of negative outcomes in order to receive help (Abramson, Seligman & Teasdale, 1978). The theory postulates that attributional style is comprised of three dimensions: internal, stable and global. Although the ASQ has been mainly employed in studies of depression (Furnham, Sadka & Brewin, 1992), it has also been used in other settings, including occupational contexts (e.g. Seligman & Schulman, 1986).

On the ASQ respondents are asked to make causal interpretations for 12 hypothetical situations: six affiliation events involving relationships with other people and six achievement events. Half of the scenarios in each subset have positive outcomes and half negative. Respondents are asked to imagine the outcome as if it had happened to them and first write down one major cause of the event. Example questions include '*you meet a friend who compliments you on your appearance*' and '*you go out on a*

date and it goes badly'. Respondents indicate their perception of the major causes for the event on seven-point scales representing internal (1 = totally due to other people or circumstances to 7 = totally due to me) and stable (1 = will never again be present to 7 = will always be present) and global (1 = influences just this particular situation to 7 = influences all situations in my life). Thus, the ASQ does not create or constrain the causal explanations provided by respondents (although the situations are pre-determined) and allows for quantification of responses.

Although Schulman, Castellon and Seligman (1989) have argued that the ASQ has satisfactory internal consistency, reviews such as Sweeney, Anderson and Bailey's (1986) meta-analysis of attributional style in depression have found only modest internal consistency scores for ASQ sub-scales ranging from .44 -.73. Tennen and Herzberger (1982) also report only modest internal consistency for ASQ scales, with Cronbach's alpha score of .56 and .66 for stable and global ratings respectively and only .21 for internal ratings, which are lower than the generally accepted consistency scores of 0.7. However, Peterson and Seligman (1984) suggest that modest levels of internal consistency are not unusual in scales that have few items. In fact, using a revised version of the ASQ, which contained 18, as opposed to six negative events, they reported satisfactory levels of internal consistency with coefficient alphas ranging from .66 to .88. With regard to test-retest reliability, Golin, Sweeney and Schaeffer (1981) have reported reliability ranging from .47 to .67.

Cutrona, Russell and Jones (1984) also examined the reliability and validity of the attributional style concept by examining subjects' responses on the ASQ and analysing the factor structure of the measure. Only weak evidence of cross-situational consistency was found, particularly for the internal dimension, with an average of 8.5% of the variance in these items appearing to reflect the influence of an attributional style. This indicates that responses may be more related to the situational factors than a person's attributional style, which suggests that it may be difficult to construct scenarios that do not lead people to respond in a particular way. This may be of especial concern when researching more sensitive issues such as gender and diversity. In these situations it

may be hard not to invoke socially accepted norms about what is the 'correct' way to respond.

A number of studies have also found the ASQ to predict educational and work performance (e.g. Schulman, Seligman, Kamen, *et al.*, 1990; Seligman & Schulman, 1986). However, Cutrona *et al.* (1984) found ASQ scores to be poor predictors of actual causal attributions for negative events. This may be because a questionnaire format constrains how an individual responds in terms of both the scenarios they are asked to consider and the dimensions with which they are presented in order to do this. However, Schulman, Seligman and Amsterdam (1987) have reported no differences in scores on the ASQ between participants provided with an incentive to produce the best overall scores and those simply asked to complete the test. They concluded that participants could not easily fake optimal responses and, therefore, that the ASQ was '*not transparent*' (p 391).

The poor internal consistency and limited face validity of the ASQ for business applications (Proudfoot, Corr, Guest & Grey, 2001), has led to the development of Occupational Attributional Style Questionnaires [OASQs] e.g. (Furnham, Sadka & Brewin, 1992). The OASQ is modelled on the ASQ in terms of format, instructions and response scales. The key difference is that it has been designed to assess how a person makes causal attributions for occupational outcomes, and as such describes ten hypothetical events (five positive, five negative) which are specifically related to a work setting. Examples include '*imagine that you apply for a promotion and get it*' and '*imagine that you can't get all the work done that others expect of you*'. For each event participants write down what they believe to be the single most likely cause of the event, then rate this cause on nine separate seven-point scales covering dimensions of internality, stability, probability, externality, chance, personal control, colleague control, foreseeability and importance. A particular benefit of the OASQ is that, by providing a context (i.e. work), the amount of situational variance in responses is likely to be reduced. Indeed, the value of providing a specific context in terms of increasing

predictive validity of personality variables has also been demonstrated in relation to the 'Big Five' personality traits (Woods, 2006).

Using a sample of 90 working adults, Furnham *et al.* (1992) reported satisfactory internal reliability scores, with Cronbach's alpha ranging from .44 to .84, (mean alpha of .68), which overall are somewhat higher than those for the original ASQ. Test-retest correlations of $r = .87$ were reported, indicating a high level of stability, although it is worth noting that only 10 subjects were included in this analysis. In addition, Furnham *et al.* argued that partial construct validity could also be assumed as there were significant correlations between participants' OASQ scores, particularly for positive events, and their occupational status, salary, satisfaction and motivation levels. Such results are similar to Seligman and Schulman's (1986) findings that optimistic attribution styles (i.e. attributing success to internal factors and failure externally) predicted survival and productivity in sales agents.

The OASQ has been used to demonstrate relationships between attributions for positive events and salary, intrinsic job motivation and perceived social consensus (Furnham, Stewart & Medhurst; 1996). However, Heaven's (1994) attempt to replicate Furnham *et al.*'s (1992) original findings using a sample of Australian workers found low job involvement to be significantly related to internal locus for positive events and significantly related to external locus of negative events. He also found that job commitment, involvement and satisfaction not to be related to the stable or global scales and that age, but not occupational status or salary, was significantly related to attributional dimensions. Heaven concluded that such results raised '*serious questions*' (p 60) about the validity of the OASQ and, in fact, the OASQ has since been used in very few published studies.

The effectiveness of using questionnaire measures to investigate attributions has been debated. Many of these concerns surround ecological validity. In a review of methodological issues in measuring parental attributions Bugental, Johnston, New and Silvester (1998) concluded that, '*in short, the circumstances under which spontaneous*

attributional processes occur are often at odds with those found in the assessment of attributions' (p 475). Indeed, attributional style questionnaires present events as isolated incidents, without the contextual background in which real events take place, which in reality may influence the way in which an individual construes meaning (Silvester, 1998). Furthermore, Silvester *et al.* (1999) found employees to have marked differences between their beliefs about actual and hypothetical relationships, a distinction which can be difficult to draw from questionnaire-based studies, where all presented scenarios are hypothetical. Similarly, as previously discussed, Cutrona *et al.* (1984) found ASQ scores to be a poor predictor for attributions for actual negative events.

Further concerns arise from the possibility that questionnaires may reflect the researcher's view of the world rather than that of the respondents, who may construe causes in a way the researcher did not consider. Questionnaires force participants to rate their causal beliefs in terms of pre-determined limits and dimensions. By providing scenarios which may not be critical to how each individual makes sense of their world or by asking them to make ratings on dimensions which may not be key for impacting on their motivations and decision-making, Antaki (1994) argues participants are left with little freedom to negotiate their responses.

Questionnaire approaches can also be perceived as somewhat intrusive and potentially threatening, factors which are likely to be particularly relevant when investigating sensitive issues, such as perceptions of gender in the workplace. In such cases formal assessment of attributions '*may allow and even demand considerable impression management*' (Bugental *et al.*, 1998, p 476). Results from Rosenthal's (1996) research examining managers' attributions for male and female performance in the workplace highlight this concern. After managers discussed subordinate performance using a critical incident approach, managers were then asked to make causal attributions for the performances using a Likert scale covering factors such as the individual's skills and abilities, the circumstances and supervisor input. Contrary to many other studies (e.g. Silverter, Conway & Fraser, 2004) Rosenthal found no differences in the types of

evaluations given for male and female performance, a result that surprised the researcher, suggesting that social desirability may have influenced their responses.

Under conditions which limit the possibility for self-presentation management (e.g. during discourse), a more accurate picture of a person's causal reasoning may be afforded. Furthermore, the use of semi-structured interviews has been supported in terms of being more flexible (Antaki, 1994) which is useful when investigating difficult topics, and allows the discussion to be driven more by the participant's construction of events.

Spontaneously occurring attributions

In addition to being viewed as a private phenomena (e.g. Edwards & Potter, 1993), causal attributions can also be seen as a public activity (Antaki, 1994). Snyder and Higgins (1988) have argued that the communication of causal attributions is an important means by which individuals negotiate a 'shared reality' and generate a common understanding about the causes of events in their environment. While people may be motivated to make sense of their own environment, in order to be able to interact successfully with others this understanding has to be shared (Silvester & Chapman, 1997). Such naturally occurring attributions can be investigated by reviewing a variety of sources including written material such as organisational documents or emails and via the analysis of spoken attributions, perhaps made during an interview or meeting.

Methodological approaches which focus on spontaneously produced attributions can be a means for addressing some of the criticisms, particularly those surrounding ecological validity, which are levied at the more traditional attributional questionnaire approaches. Investigating naturally occurring attributions allows an individual to focus on real events, discuss material that is personally relevant to them and for explanations to be provided from the respondent's, not the researcher's, view of the world. Furthermore, such 'free response' methodology has been viewed as particularly useful when

identifying attributions from individuals who may be sensitive or resistant to discussing issues (Harvey, Turnquist & Agostinelli, 1988). This is especially relevant to the investigation of beliefs about performance and gender, where individuals may be reluctant to provide responses they perceive as socially undesirable. For many of these reasons, Bugental *et al.* (1998) concluded that '*there is considerable promise for the measurement of attributions as they occur within natural discourse*' (p 475).

However, there are some potential disadvantages to the analysis of naturally occurring attributions. From a practical viewpoint, coding processes tend to be somewhat complex, requiring considerable training in order for acceptable standards of reliability to be achieved. In many situations, projects involve the analysis of discourse, which requires the use of transcripts, and is therefore both time-consuming and expensive. Therefore, the techniques are unlikely to be suitable for projects with shorter timescales.

In addition, viewing spoken attributions as a direct reflection of internal cognitions can be problematic (Leggett, 2003): distortions may occur for several reasons. As with all self-report data, some participants may be untruthful or try to present themselves in more favourable ways. However, the effect of this may be less than when a questionnaire approach is used and it is perhaps easier to manage one's responses. Barker, Pistrang and Elliot (2002) also note that participants are not always able to provide the level of detail or use the concepts required by the researcher to make interview data meaningful. This is not necessarily a reason to avoid these techniques but, rather, may require some contingency planning from researchers, for example scheduling extra interviews as a back-up plan. In each interview study reported in this thesis, at least one participant had to be replaced for these reasons.

Despite these concerns, researchers (e.g. Body 1995; New 1995) have argued that, in terms of methodology, investigating attributions within natural discourse, but with the use of directed subject matter to increase comparability across respondents, is likely to '*have its highest yield*' Bugental *et al.* (1998, p 475) and produce rich research data.

Measuring attributions in this programme of research

After considering the potential advantages and disadvantages of alternative ways of measuring attributions it was decided that comparing attributions, which occur through natural discourse would be the most appropriate approach for this programme of research. Specifically, spoken attributions which were produced in response to questions within a semi-structured interview format would be investigated. The interview format is discussed in the following section.

3.6.2. Interviews

Interviews were used to investigate explanations of why and how employees demonstrated leadership potential. The interview is a popular data collection technique within organisational research and, depending on the degree of structure within the interview, can be used within a quantitative or qualitative approach. Interviews can be particularly useful in that they allow the researcher to direct the focus of discussion, while also providing the participant with considerable control over the content of material discussed (Silvester, 2004). This is likely to lead to the discussion of issues and explanations which the participant identifies as most important.

'...partial or not, biased or not, such accounts (as given by interviewees) constitute their reality, and arguably it is the way they view the world which shapes their future actions' Chell (2004, p 58).

As the quotation from Chell illustrates, the analysis of interview data can help in understanding how an individual perceives events around them and thus what motivations or beliefs may underpin their actions. Such insights have great utility for this programme of research. Attribution theorists (e.g. Weiner 1985) have argued that the attributions an individual uses to make sense of a situation can affect both their motivation and behaviours. In this context, how people identify future leaders is closely

related to the perceptions they have of others' performance, which subsequently impacts on their judgements and decision-making processes.

The interviews used in this research were all semi-structured and used a critical incident technique (CIT: Flanagan, 1954) to investigate specific discussion points. Flanagan defines the aim of CIT as the exploration of an incident which is '*an observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about a person performing the act*' (1954, p 327). CIT provided a framework for the interviews. Twelker (2003) argues that CIT is most useful as a flexible set of guidelines which can be modified and adapted to meet specific research needs.

Semi-structured interviews were used in all studies, involving critical incident techniques, such as deliberate probes to control the interview. Full copies of schedules are presented in appendices one, two and three. When designing all schedules the key practical issues for interview research as identified by King (2004) were considered. These are presented in appendix four along with descriptions of the steps taken to counter the potential difficulties experienced in using this method. With permission, all interviews were recorded and the subsequent transcripts used to carry out the attributional and behavioural analyses.

3.6.3. Extracting and coding attributions

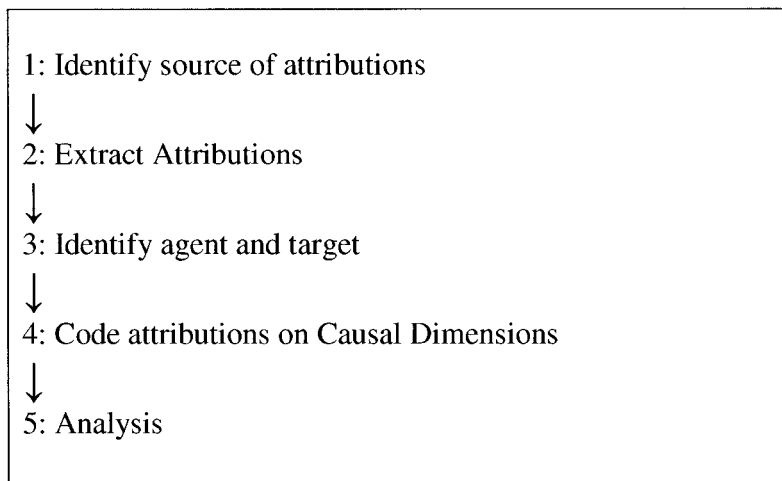
Attributional analyses of the interview transcripts were carried out using Leeds Attributional Coding System [LACS]. This was originally developed by researchers at the Leeds Family Therapy and Research Centre (Stratton, Munton, Hanks *et al.*, 1988) to analyse attributions produced during therapy sessions. The system is designed specifically for extracting and coding attributions as they occur naturally during discourse. It has already been used in various research settings including family therapy (Munton & Antaki, 1988), graduate recruitment interviews (Silvester, 1997), investigations of staff caring for violent patients (Leggett & Silvester, 2003), evaluation

of culture change (Silvester, Anderson & Patterson, 1999) and investigations of post-traumatic stress disorder in disaster victims (Joseph, Brewin, Yule & Williams, 1993).

LACS is seen as more ecologically valid and less intrusive than other approaches (e.g. Stratton *et al.*, 1988; Silvester, 2004) and is particularly useful for investigating sensitive research topics, such as perceptions of diversity. Indeed, Basow (1992) has argued that the examination of attributions made to explain others' behaviour is an effective way of observing prejudice in climates which no longer endorse overt sexism.

LACS is a five-stage coding process (see Figure 3.1) in which the researcher must identify sources of attributions, extract attributions, identify agents and targets, code attributions on causal dimensions and finally analyse data. This process is described in the following sections.

Figure 3.1: Leeds Attributional Coding System five-step process



Step1: Identify source of attributions

As discussed previously, attributions can be found in a range of sources. However, a higher number of attributions per minute tend to be generated when individuals discuss important events or justify decisions and behaviour (Silvester, 2004). For this research

programme, the sources of attributions were a series of semi-structured interviews conducted by the researcher with managers and employees working for the host organisation.

Step 2: Extract Attributions

All interview data was transcribed verbatim and coding conducted on the resulting transcripts. Using Joseph, Brewin, Yule and William's's definition (1993), attributions were identified as '*statements identifying a factor or factors that contribute to a given outcome*' where '*a stated or implied causal relationship has to be present*' (p 250). In studies one and five (UK and US managers) the 'given outcome' was why an employee had/had not shown leadership potential and in study two (UK employees) the 'given outcome' was why the interviewee had/had not demonstrated leadership potential.

Examples of extracted attributions are presented in Figure 3.2 below. As is common convention in attributional coding, causes are underlined, an arrow is placed indicating the direction of the associated outcome and a slash is placed at the outcome's end. It is also worth noting that, in some instances, the outcome for one attributional statement can also be the cause for another. This is demonstrated by the statement '*he had increased his visibility with senior management*' in the example below which is both the outcome for statement five and the cause for statement six.

Figure 3.2: Examples of extracted attributions from a study one interview

<p><u>Interview excerpt</u></p> <p><i>Interviewer: Can you think of an example of when that individual had shown leadership potential?</i></p> <p><i>Manager: He does it all the time, every task, it's like dealing with a small puppy dog. You know? /he says 'isn't it a really good idea we do this thing?' ←<u>because he's just so enthusiastic. Because he wants everybody to come and help him;</u> → he'll lead the charge and wait for them to follow./ It is like that for every task that's of any substance. And an example would be we needed to get, we've got 45 relationship managers and <u>we've been given instructions</u> → so we need to get them galvanised around a project to do with interest rates./ So... <u>he did do more than half the work</u>→ which got the other 45 brought in. / The project was really successful. We met our targets and <u>because he had been the main driver</u> → <u>he had increased his visibility with senior management</u>/→, so this is always good for his career!/ I think he's now well known for his enthusiasm.</i></p>
<p><u>Extracted attributions (causes are underlined)</u></p> <p>1: He says 'isn't it a really good idea we do this thing?' ←<u>because he's just so enthusiastic.</u></p> <p>2: <u>Because he wants everybody to come and help him;</u>→ he'll lead the charge and wait for them to follow.</p> <p>3: <u>We've been given instructions</u> →so we need to get them galvanised around a project to do with interest rates.</p> <p>4: <u>He did do more than half the work</u> →which got the other 45 brought in.</p> <p>5: <u>Because he had been the main driver</u>→ he had increased his visibility with senior management.</p> <p>6: <u>He had increased his visibility with senior management,</u> → so this is always good for his career.</p>

Step 3: Identify agent and target

The first coding stage for each attribution is to identify the 'Agent' and the 'Target'. These are defined as the person, entity or group which are causing an outcome to occur (Agent) and to whom something is happening (Target) (Silvester 2004). Agent and Target categories were devised based upon categories used in similar previous research (e.g. Silvester *et al.*, 2004; Silvester, Koczwara & Meincke, 2003) and after reviewing several of the transcripts for study one (see Table 3.1 below):

Table 3.1: Agent and target categories for studies one, two and five

<u>Manager's explanations for employee leadership potential</u> (studies one and five)	<u>Employee's explanation for own leadership potential</u> (study two)
1 = Employee (individual being discussed)	1 = Speaker (i.e. employee)
2 = Speaker/ other managers (i.e. senior to employee)	2 = Managers (i.e. senior to Speaker)
3 = Business (any reference to the organisation/its operations)	3 = 'Business (any reference to the organisation/its operations)
4 = Other	4 = Other
5 = Colleagues (working at the same level as employee)	5 = Colleagues (working at the same level as speaker)
6 = Work team (group of colleagues including employee)	6 = Work team (speaker includes self in this e.g. 'we')
7 = Clients	7 = Clients
8 = Staff (junior to employee)	8 = Staff (junior to speaker)
9 = Family	9 = Family

Step 4: Code attributions on Causal Dimensions

LACS suggests five causal dimensions along which each attribution can be coded: Internal-External, Controllable-Uncontrollable, Personal-Universal, Stable-Unstable and Global-Specific. In order to relate these to this specific research programme, definitions for each dimension were modified slightly. For example, the 'Global' dimension which refers to the sphere of influence for a cause was defined in terms of the degree of influence the cause had across the host organisation. In addition, for studies one and three, Controllable-Uncontrollable was split so that each attribution was coded in terms of perceived control for the speaker (i.e. manager control) and perceived control for the employee being discussed (i.e. employee control). Full definitions and examples of each dimension are provided in Table 3.2. Following LACS guidelines, each attribution was coded from the perspective of the Speaker, so that the meaning the Speaker wished to convey is what is coded, regardless of the researcher's beliefs regarding the accuracy of the statement. For each dimension, the coding is undertaken using a 1-3 scale (1 = external, uncontrollable, universal, unstable, specific; 3 = internal, controllable, personal, stable, global). Using the approach adopted by Silvester *et al.* (2004) if it was not possible for the researcher to code an attribution along any dimension this was taken as an indication that the attribution was not clear and it was therefore not included in the analyses. In addition the rating '2' was used as a scale mid-point. For example, a rating of '2' for employee control would indicate that the employee had some but not complete control over the cause. By doing this it was possible to produce interval level data.

To aid further analysis, each attribution was also coded in terms of the Speaker's gender, the gender of the employee being discussed (studies one and five) and whether the example related to a demonstration of showing or not showing leadership potential (studies one and two).

The LACS has generally demonstrated good levels of reliability in previous organisational research. For example Silvester (1997) reported Kappa scores for the dimensions as stable .45, global .36, internal .73, personal .42 and control .72. The reliability of codings for this programme of research were also assessed for each dimension. A second coder experienced in using the LACS independently rated 16 interview transcripts for studies one, two and five (approximately 20% of the data). Kappa values for agreement between researchers are shown in Table 3.2 and are comparable to those found in previous research using the LACS (e.g. Brewin, MacCarthy, Duda & Vaughn, 1991; Stratton *et al.* 1988; Silvester 1997, Leggett & Silvester, 2003). For this type of research Kappa values above 0.4 are considered adequate and above 0.6 good (Fleiss, 1971).

Table 3.2: Attributional dimensions, reliability data and examples of coded attributions

<p>Stable - Unstable:</p> <p>A cause is rated stable if it is likely to have an ongoing impact on the employee being discussed.</p> <p>A cause is rated unstable if it is a single event that does not have an ongoing impact on the individual.</p> <p>Kappa = .60</p>	<p>Stable</p> <p><i>'<u>Because they have worked in this sector for a long time they have a lot of industry knowledge</u>'.</i></p> <p>Unstable</p> <p><i>'<u>It was a very busy time so it was hard to give them the right level of attention</u>'.</i></p>
<p>Global - Specific:</p> <p>A cause is rated global if it has an impact on the organisation beyond team level.</p> <p>A cause is rated specific if it has an organisational impact at team level or below.</p> <p>Kappa = .68</p>	<p>Global</p> <p><i>'<u>because she thought about the impact for other groups she introduced a whole range of products to the client</u>'</i></p> <p>Specific</p> <p><i>'it was easier for the junior as <u>X had prepared documents for them.</u>'</i></p>
<p>Internal -External:</p> <p>A cause is rated internal if it resides within the <u>employee</u> being discussed, such as their personality or behaviour.</p> <p>A cause is rated external if it is outside the <u>employee</u> being discussed such as another's behaviour or the circumstances.</p> <p>Kappa = .85</p>	<p>Internal</p> <p><i>'Their overall objectives weren't achieved <u>because they found getting to the bottom of a financial situation with a client too difficult</u>'.</i></p> <p>External <i>'Things turned out so well <u>because the markets were really picking up at that time.</u>'</i></p>

<p>Personal - Universal:</p> <p>A cause is rated personal if it is something unique to the <u>employee</u> being discussed.</p> <p>A cause is rated universal if it is something one would expect anyone in the <u>employee's</u> peer group to display or experience in the same way.</p> <p>Kappa = .67</p>	<p>Personal to employee <i>'I could see them as an MD in 10 years from now, <u>the reason being they are very, very insightful, just understanding complex situations exactly</u>'.</i></p> <p>Universal <i>'<u>Working in client management</u> they have to get involved with the operations team'.</i></p>
<p>Employee Controllable - Uncontrollable:</p> <p>A cause is rated controllable to employee if the <u>employee</u> being discussed could reasonably be expected to influence/control the outcome.</p> <p>A cause is rated uncontrollable to the employee if the <u>employee</u> being discussed could not reasonably be expected to influence the outcome.</p> <p>Kappa = .75</p>	<p>Controllable by employee <i>'They gained a sort of leadership camaraderie <u>by demonstrating that they were one of the rest of the team</u>'.</i></p> <p>Uncontrollable by employee <i>'There was a huge amount to do to meet their deadline <u>because the client changed their mind at the last minute</u>'.</i></p>
<p>Manager Controllable – Uncontrollable:</p> <p>A cause is rated controllable to the manager if the <u>manager (speaker)</u> could reasonably be expected to influence/control by the Speaker.</p> <p>A cause is rated uncontrollable if the <u>manager (speaker)</u> could not reasonably be expected to influence the outcome.</p> <p>Kappa = .74</p>	<p>Controllable by manager <i>'<u>They worked really closely with me (the manager) so the project ran smoothly.</u></i></p> <p>Uncontrollable by manager <i>'<u>They had some fantastic ideas about working cross-departments, which changed how we do some things now.</u>'</i></p>

Step 5: Analysis

Once coding was complete, the data was subject to various statistical analyses. These are discussed in the subsequent chapters.

3.6.4. Behavioural analysis

Whilst one of the main aims of this programme of research is to test the socio-cognitive model of unfair discrimination in terms of inter and intra personal attributions, the researcher was also keen to extend the model to look at explanations for how leadership potential is demonstrated. The approach selected for this was to examine the behavioural indicators used by managers and employees during the interviews to describe examples of leadership potential.

A particular concern was to ensure that the approach used to do this was rigorous and consistent, in the same way that using the LACS to undertake attributional analyses allowed structure to be placed on naturally occurring data and for it to be coded reliably. Thus, before comparisons between behaviours used to describe male and females could be examined, it was first necessary to develop a framework in which the behaviours associated with leadership potential could be categorised. To achieve this, a process was derived which combined best practice competency modelling techniques with principles from Miles & Huberman's (1984) two-level approach to data coding. This process is described in detail in chapter six.

Whilst the behavioural analyses approach was useful in identifying what were the emergent themes in the interview data, the validity of more qualitative approaches, particularly when a 'bottom-up' approach to data categorisation is applied, can be questionable (Mackenzie Davy & Arnold, 2000). It was therefore also appropriate to

include some more quantitative assessment of the behaviours using questionnaire measures.

3.6.5. Questionnaires

Questionnaires are a means of gathering data which can then be used to produce a quantified measure of certain characteristics. As a method of data collection, they benefit from being relatively simple, versatile and very efficient in terms of researcher time and effort (Robson, 1993). They can be useful in hypotheses testing, including investigations of factor structures underlying responses to a set of questions and the testing of differences between groups (Fife-Schaw, 2000). Questionnaires which collect data for factor analytical purposes can be used as part of job analysis and competency model development (e.g. Geal, 1988; Patterson, Ferguson, Lane *et al.*, 2000).

Ideally, different research aims should be kept separate and be investigated in different studies. However, as Fife-Schaw (2000) notes, in reality, limited resources are likely to lead to a combination of aims within one questionnaire study. Due to limited timescales and the difficulty in gaining access to participants, this was the case in study four. A two-part questionnaire was administered in order to achieve two aims related to the development of understanding of the behaviours associated with leadership potential.

The first aim was to further investigate the apparent gender differences in perceptions of leadership potential which emerged in the behavioural analysis described in chapter six. To do this, a questionnaire was designed to measure diagnostic-ratios about the beliefs respondents had regarding men's and women's demonstrations of the leadership potential behaviours, following a previous format as described by Martell and DeSmet (2001).

Secondly, the questionnaire was used to collect data for an exploratory factor analysis [EFA] to examine the constructs in the leadership potential competency model. The aim was to provide data on the adequacy of the competency model, its structure and the

perceived importance of the competency domains (Patterson, Randall, Farrell & Thomas, 2005). In both instances the questionnaire items were therefore generated around the themes identified in the behavioural analysis. The generation of the diagnostic ratio and EFA questionnaires are described in chapter seven. A copy of the questionnaires can be found in appendix five.

3.7. Summary

As discussed, a range of both qualitative and quantitative methods have been used within a positivist paradigm to address the objectives outlined for this programme of research. These methods include attributional analysis resulting in the use of multivariate statistics, behavioural coding, a diagnostic ratio questionnaire and an exploratory factor analysis.

Chapter 4: Study one – An investigation into the attributions UK managers used to explain male and female leadership potential

4.1. Introduction

Using the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) as a framework for investigating differential career progression, it is important to consider how managers identify leadership potential in their more junior employees. Specifically, the model suggests that there may be differences in the types of attributions used to explain male and female potential.

Explanations for male and female leadership potential

Previous research has indicated that managers will attribute male success to more controllable, personal, stable and global causes, such as ability and skill, whereas comparable female success is more likely to be explained by external factors such as luck or level of difficulty (e.g. Deaux and Emswiller, 1974; Feldman-Summers and Kiesler, 1974). However, such research can be seen as limited due to its reliance on questionnaire approaches and laboratory-based studies, which may impact on the ecological validity of any findings. Furthermore, as women's status in society has increased markedly throughout the 20th century (Carli & Eagly, 2001) these findings, which are predominantly from the 1970s, may no longer be relevant to the modern workplace. Although more recent research, particularly in applied contexts, is limited, Silvester, Conway and Fraser (2004) have reported that managers tend to attribute female success to causes that were more uncontrollable and temporary. Similarly, in a series of experimental studies Heilman and Hayes (2005) found that overall women were perceived as less competent than men and less able to take on a leadership role than their male colleagues.

This study therefore aimed to investigate the spontaneous attributions managers used to explain the causes of the behaviour of male and female employees identified as having

leadership potential. Based on previous research it was proposed that managers would use different patterns of attributions to explain the behaviour of male and female leadership potential:

Hypothesis 1: *Managers will attribute the behaviour of male employees with leadership potential [MLP] to causes that are more a) controllable to the employee b) global, c) personal to the employee d) stable e) internal to the employee and f) uncontrollable to self than for females with leadership potential (FLP).*

Explanations for successful and unsuccessful performance

Previous research by Silvester and colleagues examining explanations for successful and unsuccessful past performance has yielded generally consistent results. These studies have examined patterns of attributional responses via questionnaires (e.g. Silvester, Anderson-Gough, Anderson and Mohammed, 2002) and through the analysis of naturally occurring discourse (e.g. Silvester, 1997; Silvester, Koczwara & Meincke, 2003). Taken together, they suggest that, when considering past performance, attributions that are more internal, controllable, stable, global and personal are more likely to be used to explain the behaviour of someone who is perceived as successful. Similarly, De Nisi and Stevens (1981) have argued that stable patterns of performance are generally evaluated more positively than variable performance patterns and Rosenthal (1995) has reported that managers generally recognise subordinate successes, giving individuals personal credit by making attributions that are internal, controllable and personal to the subordinate.

In addition, based upon research surrounding the self-serving bias (Miller & Ross, 1975) it was also proposed that managers would perceive themselves as having more control over positive outcomes, such as demonstrations of leadership potential, than instances where employees had not shown leadership potential. Rosenthal (1996) reported that managers took significantly more credit for their subordinates' successes than responsibility for their failures.

Therefore, it was anticipated that when managers discussed the performance of employees they perceive as having leadership potential, they are more likely to make attributions to explain this performance that are internal, controllable and personal to the employee, controllable to self and stable and global in nature:

Hypothesis 2: *Managers will attribute the behaviour of employees identified as having leadership potential [LP] to causes that are more a) controllable to the employee b) global c) personal to the employee d) stable e) internal to the employee and f) controllable to self than for employees without leadership potential (NLP).*

Further analysis

As previous literature has raised the possibility of same-gender bias in explanations for performance due to in-group and out-group biases (e.g. Heneman, Greenberger & Anonyuo, 1989; Tucker & Rowe, 1979), this study aimed to also explore the differences between the attributions made by male and female managers. Previous findings regarding differences in the attributions men and women use to evaluate the performance of others are mixed, although results using methodologies similar to this study's approach have reported no differences (e.g. Silvester *et al.*, 2004 Study 1). Therefore, it was not anticipated that there would be any differences in the attributions made by male and female managers and, as such, no specific hypotheses were made regarding manager gender.

Research by Rosenthal (1995) has analysed managers' explanations for unsuccessful subordinate performance and found no differences in relation to subordinate gender. Rosenthal's findings are comparable to those from Russell and Rush's (1987) investigation into evaluations of hypothetical poorly performing male and female employees. Drawing on such findings, it was not anticipated that there would be any differences in the types of attributions made to explain the behaviour of male and female employees perceived to be competent but unlikely to progress into positions of

leadership (NLP). Therefore, no specific hypotheses were made in relation to employees who did not demonstrate leadership potential.

4.2. Method

Participants

Participants were 40 middle managers (20 men and 20 women) who were randomly selected from two business sectors in the host organisation: Investment Banking, and Treasury and Securities Services. All participants supervised UK based junior managers. Middle managers were targeted because organisational statistics identified this as the starting point of significant differential career progression for male and female employees. As such, judgements made by these managers regarding the leadership potential and ability of their junior managers are important in determining differential promotion between these two groups.

Senior managers within two areas of the bank, Investment Banking and Treasury and Securities Services identified suitable managers for participation in the study.¹ Suitability was defined in terms of working at a middle management level for at least six months and to be currently supervising a team of junior managers.

Ten male and ten female managers (27-52 years of age, median =38) were randomly selected from each of IB and TSS, 37 described their ethnic origin as 'White', one as 'Indian', one as 'Chinese' and one as 'Other'. They represented nine nationalities: 57.5% were British, 12.5% Irish, 10% American, 5% Dutch and 5% French. Remaining nationalities were Australian, Italian, Chinese and Canadian. All managers had been working within the organisation for at least nine months prior to the study and been working in the UK for at least 18 months. As the business language for the host

¹ Inspection of the data indicated no differences in responses on any of the attributional dimensions or demographics from managers in IB and TSS.

organisation is English it was assumed that they would be able to communicate effectively in English, even if this was not their first language. No participants were excluded due to their language skills.

Participants were told that the purpose of the research was to better understand how leadership potential could be identified and developed in junior managers. It was made clear that participation was voluntary and assurances were given that all information would be treated confidentially.

Procedure

Each manager participated in a semi-structured interview lasting approximately 45 minutes. Managers were asked to describe the performance of four employees: two junior managers (one male, one female) who they perceived as having leadership potential [LP] and were likely to move quickly to the next management level and two junior managers (one male, one female) who, although performing well in their current role in the manager's opinion, did not have leadership potential [NLP] and were unlikely to progress quickly to the next level. For an employee to be identified as having LP they had to have received the highest rating of 'one' in their most recent appraisal committee ranking and, to be included as an example of NLP, been awarded a 'two' indicating average performance

To avoid confusion between discussions of middle-manager participants and the junior-managers whose performance was described, from this point onwards, the LP and NLP junior managers will on be referred to as 'employees' and the term 'manager' will be reserved for the participants.

Using a critical incident approach (Flanagan, 1954) managers were asked to describe behaviours that led them to judge the employees as having or not having leadership potential [LP] and to then discuss a specific example to illustrate this for each person. All managers described examples of LP first as it was believed they would be more

comfortable with this and that it would therefore help build rapport. To control for order effects, half of the managers were prompted to think of a male employee with LP first and half a female employee with LP. The same ordering approach was also used for discussions of NLP. A full interview schedule is supplied in appendix one. With participants' permission, all interviews were recorded and transcribed.

Managers' causal attributions for four categories [female employee with leadership potential – FLP, male employee with leadership potential – MLP, female employee without leadership potential – FNLP and male employee without leadership potential – MNLP] were extracted and coded using a modified version of the Leeds Attributional Coding System (Munton, Stratton, Silvester & Hanks, 1999). Examples of extracted attributions are presented in Figure 4.1.

Each attribution was coded on a one-to-three scale according to the degree to which the manager saw the cause of the employee's behaviour as (a) uncontrollable to controllable by the employee, (b) having a specific to global impact, (c) universal to personal to the employee, (d) having an unstable to stable impact, (e) internal to external to the employee and (f) uncontrollable to controllable by the manager. A rating of 'two' indicated a mid-point. For example with employee control a 'two' would indicate that the employee had some control, but not complete control over the cause. Therefore, the data produced by coding was at an interval level. Data was then placed on an SPSS spreadsheet for further analysis.

Figure 4.1: Examples of extracted attributions used to describe employees with and without leadership potential

Leadership Potential
<ul style="list-style-type: none"> ▪ <u>They had worked in this sector for a long time</u> → so they had a lot of industry knowledge. ▪ Things turned out so well ← <u>because the markets were really picking up.</u> ▪ <u>He is never protective with data,</u> →so if he is sending out an email he will always copy in the appropriate people. ▪ <u>Because she has managed to successfully renegotiate a number of clients already</u> → our project about reviewing profitability is really running with great results. ▪ <u>He has also got a global view about the product that is not pitching in the context of the product, but what's around it like the total solution,</u> → which obviously creates more interest or attention from IB.
Not Leadership Potential
<ul style="list-style-type: none"> ▪ <u>She is not comfortable in group meetings</u> → so she will say nothing. ▪ Deliverables are late ← <u>because of a lack of focus and spending too much time on too many things that are not relevant</u> ▪ <u>She hasn't been working for many years</u> → so it is also a lack of experience. ▪ <u>They are very content within their comfort zone</u> → so they respond 'why do we need to do that?' when something new is suggested. ▪ <u>They just started analysing without benchmarking</u> → so they don't really know where they are in their process.

4.3. Results

Description of data

A total of 1615 attributions were extracted from the 40 interview transcripts. 843 (52.2%) were for employees perceived as having leadership potential [LP] and 765 (47.8%) for employees perceived as not having leadership potential [NLP]. Numbers of attributions made by male and female managers for male and female employees with or without leadership potential, plus means and standard deviations per interview are presented in Table 4.1.

Table 4.1: Descriptive statistics of attributions produced to describe male and female employees

	<u>Male Managers</u>			<u>Female Managers</u>			<u>All</u>		
	<u>N</u>	<u>M</u>	<u>sd</u>	<u>N</u>	<u>M</u>	<u>sd</u>	<u>N</u>	<u>M</u>	<u>sd</u>
MLP	210	10.50	(5.49)	248	12.40	(5.21)	458	12.40	(5.22)
MNLP	187	9.35	(4.20)	205	10.25	(4.67)	392	10.25	(4.67)
FLP	176	8.80	(3.60)	209	10.45	(4.07)	385	10.45	(4.07)
FNLP	179	8.95	(3.25)	201	10.05	(4.91)	380	10.05	(4.91)

Note: MLP = Male with leadership potential, MNLP = Male without leadership potential, FLP = Female with leadership potential, FNLP = Female without leadership potential.

Overall, managers produced 22 – 90 attributions per interview (M = 40.2, SD = 14.42) with 4 to 26 for each category of employee (MLP, FLP, MNLP, FNLP). As the total number of attributions managers produced in each case was not equal, following guidelines for LACS (e.g. Silvester, 2004) to allow exploration of the nature of these explanations, mean scores were calculated for each manager for the six attributional dimensions (internal, employee control, personal, manager control, stable, and global) for the four categories of employee (MLP, FLP, MNLP, FNLP).

Pre-analysis checks

To ensure assumptions for parametric tests were not violated, variables were first checked for normal distributions using Kolmogorov-Smirnov tests. There were no significant deviations from a normal distribution for the internal, employee control, personal, stable and global dimensions for any of the four employees discussed. However, manager-control was significantly skewed in all instances (MLP, $D(40) = .28, p < .01$, FLP, $D(40) = .36, p < .01$, MNLP, $D(40) = .24, p < .01$, FNLP, $D(40) = .31, p < .01$). Inspection of histograms for these variables indicated that positive skew, as a result of manager control being attributed in few cases, was so strong that transformation would not be possible. Therefore, manager control was not included in the subsequent multivariate analysis and was tested separately via non-parametric tests.

Analysis

In order to test the hypotheses, a series of analyses were conducted. First, a multivariate ANOVA was conducted including all independent (manager gender, employee gender, leadership potential) and dependent (attributional dimensions) variables. Secondly, to investigate main effects, a repeated measures univariate ANOVA was conducted for each attributional dimension. Next, to identify where specific differences were present, simple effects tests were conducted (repeated measures one-way ANOVAs). Finally, a series of non-parametric tests were conducted to investigate the effect of the independent variables on the manager control attributional dimension.

Multivariate Analysis of Variance

A $2 \times 2 \times 2$ repeated-measures multivariate analysis of variance (MANOVA) was conducted for dependent variables, with manager gender [MG] as the between-group variable and the presence/absence of employee leadership potential [LP] and employee gender [EG] as within-subjects variables (see Table 4.2.). This was used to investigate whether mean differences among groups at different levels of the independent variables

(MG, EG, LP) on a combination of the dependent variables (attributional dimensions) were larger than expected by chance when all else was held constant (Tabachnik and Fidell, 2001). To measure the strength of association between the independent and dependent variables, effect sizes were also computed. According to Cohen (1977), effect sizes, measured by means of η^2 , are small at .01, medium at .09 and large at .25.

Table 4.2. Multivariate analysis of variance for all dependent variables with MG as a between-group variable and EG and LP as within-subjects variables

Source	F	η^2
<u>Between subjects</u>		
Manager Gender (MG)	0.15	
<u>Within subjects</u>		
Leadership Potential (LP)	16.96***	.71
LP x MG	0.64	
Employee Gender (EG)	3.79**	.36
EG x MG	0.31	
LP x EG	6.54***	.49
LP x EG x MG	1.38	

*Note: MG = manager gender, LP = leadership potential, EG = employee gender. Df = 5. Effect sizes reported for significant effects only. * $p < .05$, ** $p < .01$, *** $p < .001$*

Results indicate a large multivariate effect for leadership potential ($F = 16.96$, $df = 5$, $\eta^2 = .71$, $p < .001$), a large multivariate effect of employee gender ($F = 3.79$, $df = 5$, $\eta^2 = .36$, $p < .01$) and a large multivariate interaction of leadership potential and employee gender ($F = 6.54$, $df = 5$, $\eta^2 = .49$, $p < .001$). No significant multivariate effects were found for manager gender ($F = .14$, $df = 5$, $p = .98$), indicating that male and female managers did not differ in the types of attributions they made for their employees. This independent variable was therefore excluded from further analyses.

Repeated measures univariate ANOVAs

To fully test hypotheses one and two, repeated measures univariate tests were performed for each dependent variable (see Table 4.3).

Table 4.3. Descriptive statistics and repeated-measures analysis of variance (ANOVA) statistics for the attributional dimensions as a function of employees' leadership potential (LP) and gender (EG)

Dimension	LP		NLP		Effect	ANOVA	
	<u>M</u>	sd	<u>M</u>	Sd		F ratio	η^2
Internal							
Male	2.57	(.26)	2.60	(.25)	LP	.74	
Female	2.46	(.29)	2.52	(.39)	EG	3.86	
					LP x EG	.25	
Control							
Male	2.45	(.32)	1.93	(.32)	LP	52.21***	.58
Female	2.23	(.33)	1.96	(.30)	EG	4.29**	.10
					LP x EG	12.14***	.24
Global							
Male	2.02	(.33)	1.98	(.36)	LP	1.94	
Female	1.79	(.31)	2.01	(.43)	EG	4.65*	.10
					LP x EG	6.65*	.15
Stable							
Male	2.31	(.35)	2.45	(.26)	LP	15.40**	.29
Female	2.10	(.41)	2.34	(.38)	EG	10.63**	.22
					LP x EG	.93	
Personal							
Male	2.48	(.32)	2.22	(.33)	LP	9.98**	.21
Female	2.27	(.38)	2.28	(.26)	EG	2.32	
					LP x EG	8.17**	.18

*Note: Effect sizes reported for significant ANOVA results reported only. EG = employee gender. LP = leadership potential. df = 1, 38 * p < .05, ** p < .01, *** p < .001*

Repeated measures one-way ANOVAs

Simple effects tests (repeated measures one-way ANOVAs) were then performed to investigate the specific nature of the effects found in the previous analyses. This applied to the control, global, stable and personal dimensions. As multiple tests were conducted, the significance level was dropped to .01 for each test to reduce the chance of Type One errors. A full Bonferroni correction was not considered appropriate as the significance level would be too stringent, leading to an increased possibility of Type Two errors (see Howell, 2002). In addition, the use of an initial MANOVA had already eliminated variables which were not having an effect, and the repeated-measures ANOVAs had indicated where interactions were present.

Table 4.4. Repeated measures one-way ANOVAs investigating interactions for the control, global, personal and stable attributional dimensions

	Control		Global		Personal		Stable	
Simple Effect	F	η^2	F	η^2	F	η^2	F	η^2
MLP-FLP	13.92**	.26	10.61*	.21	8.42**	.18	6.13	
MNLP-FNLP	.19		.14		1.06		3.67	
MLP-MNLP	70.69**	.64	.37		18.87**	.33	4.56	
FLP-FNLP	12.76**	.25	6.07		.04		9.78*	.20

*Note: MLP = male employee with leadership potential, FLP = female employee with leadership potential, MNLP = male employee without leadership potential, FNLP = female junior employee without leadership potential. df = 1, 39 * p < .01, ** p < .001. Effect sizes reported for significant effects only.*

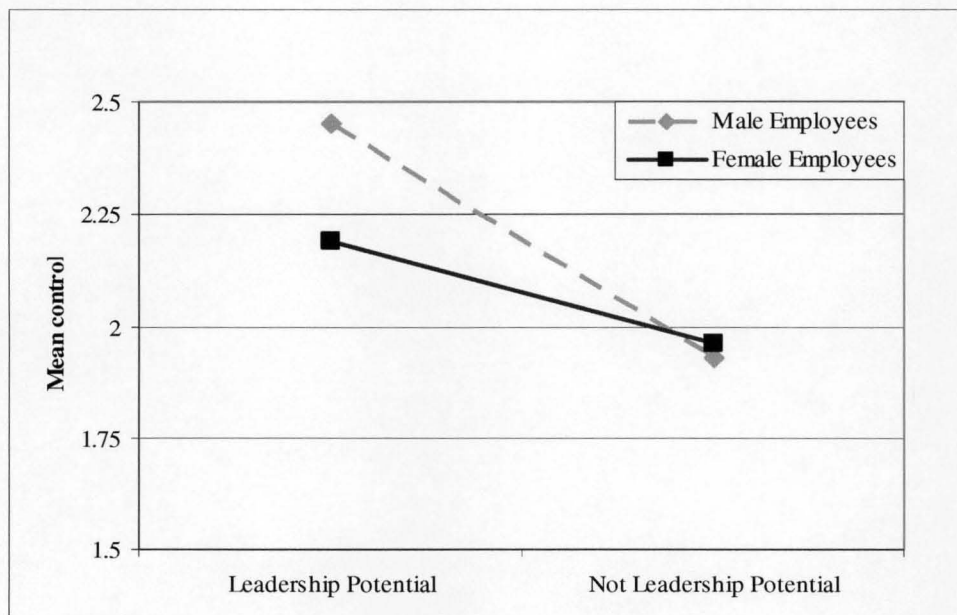
4.3.1. Summary of results

The following sections provide a summary of results (Tables 4.3. and 4.3.) for each attributional dimension.

Control

Managers produced significantly more controllable attributions for LP than NLP employees ($F = 52.21, df = 1, 38, \eta^2 = .58, p < .001$), providing support for Hypothesis 2 (a) and significantly more control was also attributed to male than female employees ($F = 4.29, df = 1, 38, \eta^2 = .10, p < .05$). A medium interaction effect between LP and EG ($F = 12.14, df = 1, 38, \eta^2 = .24, p < .001$) was investigated using a repeated measures one-way ANOVA. There were significant differences for all simple effects except MNLP and FNLP. More control was attributed to MLP than FLP ($F = 13.92, df = 1, 39, \eta^2 = .26, p < .001$), providing support for Hypothesis 1(a). No significant difference was found for control attributed to MNLP and FNLP employees ($F = .19, df = 1, 39, p = ns$). Mean scores are presented in Graph 4.1 below.

Graph 4.1. Employee control attributions for male and female leadership potential



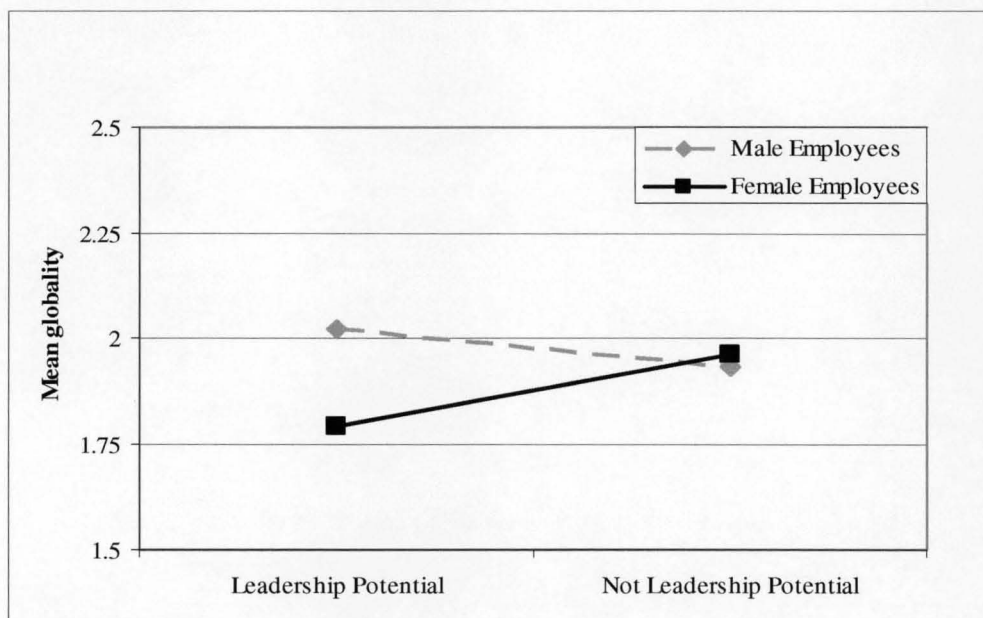
Note: Higher scores = more controllable.

Global

Overall managers did not produce significantly more global attributions for LP than NLP employees ($F = 1.94$, $df = 1, 38$, $p = ns$) therefore Hypothesis 2 (b) is not supported.

A main effect of employee gender was found ($F = 4.65$, $df = 1, 38$, $\eta^2 = .10$, $p < .05$) such that managers made significantly more global attributions for male than female employees. A medium interaction effect between LP and EG ($F = 6.65$, $df = 1, 38$, $\eta^2 = .15$, $p < .05$) was investigated using a repeated measures one-way ANOVA. Planned contrasts indicated that the main effect of EG was a result of significant differences between global mean scores for MLP and FLP only ($F = 10.61$, $df = 1, 39$, $\eta^2 = .214$, $p < .0125$). As causes of MLP were seen as more global, this provided support for Hypothesis 1 (b). No significant differences were detected for the global dimension between MNLP and FNLP employees ($F = .14$, $df = 1, 39$, $p = ns$). Mean scores are presented in Graph 4.2 below.

Graph 4.2. Global attributions for male and female leadership potential



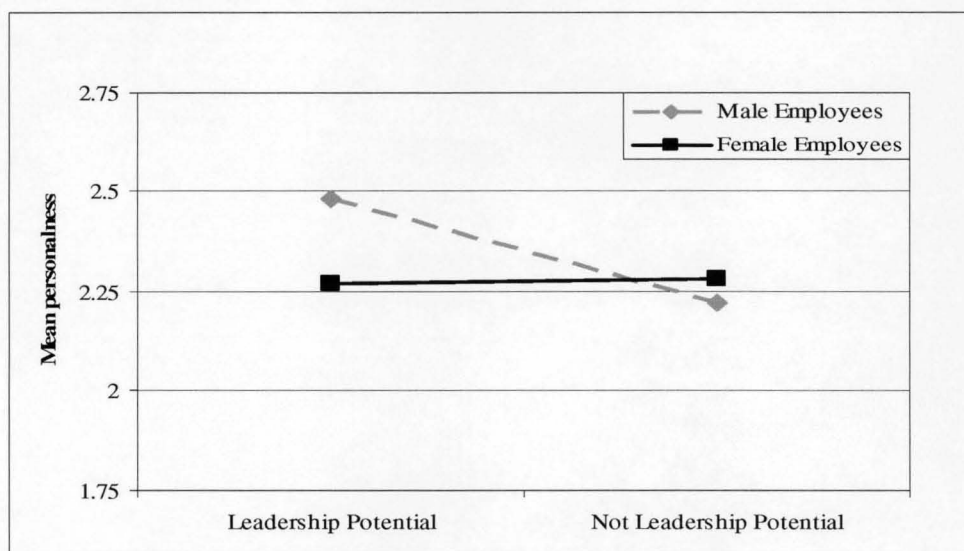
Note: Higher scores = more global.

Personal

Managers produced significantly more personal attributions for LP than NLP employees ($F = 9.98, df = 1, 38, \eta^2 = .21, p < .01$). There was no overall effect of EG ($F = 2.32, df = 1, 38, p = ns$). A medium sized interaction effect between LP and EG ($F = 8.17, df = 1, 38, \eta^2 = .18, p < .001$) was investigated using a repeated measures one-way ANOVA. These planned contrasts found that there were significantly more personal attributions were made for MLP than FLP ($F = 8.42, df = 1, 39, \eta^2 = .18, p < .001$). Therefore Hypothesis 1 (c) was supported.

In addition, the contrasts showed that the main effect of LP was a result of managers making significantly more personal attributions for MLP than for MNLP ($F = 18.87, df = 1, 39, \eta^2 = .33, p < .001$). However this result was not replicated in descriptions of female employees where mean scores for FLP and FNLP did not significantly differ. Therefore Hypothesis 2 (c) was supported for male but not female employees. No significant difference was found for personal attributions for MNLP and FNLP employees ($F = 1.06, df = 1, 39, p = ns$).

Graph 4.3. Personal attributions for male and female leadership potential



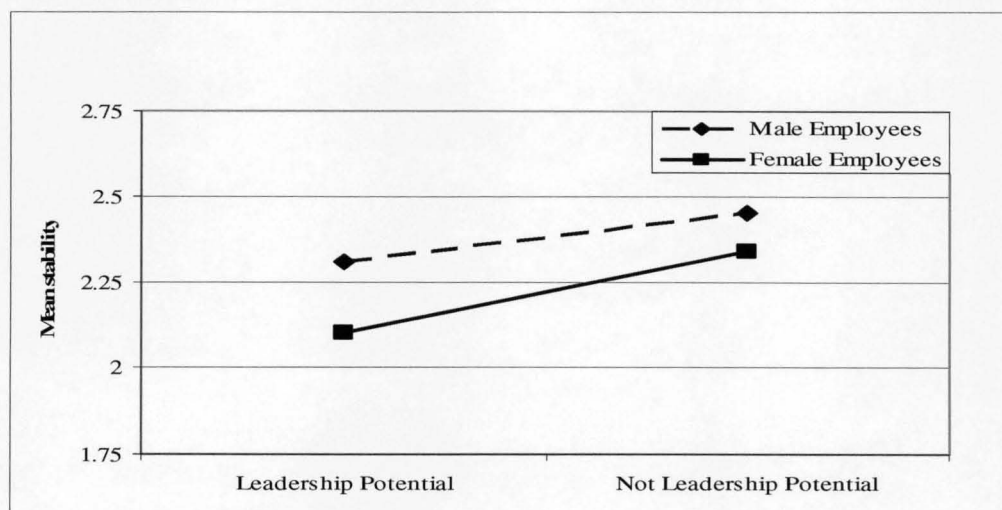
Note: Higher scores = more personal

Stable

Overall, managers made more stable attributions for male than female employees ($F = 6.01, df = 1, 38, \eta^2 = .137, p < .05$). There was no significant interaction between LP and EG ($F = 2.49, df = 1, 38, p = ns$). Whilst the MLP-FLP planned contrast was found to be non-significant at the more stringent .01 level, this result approached significance ($F = 6.13, df = 1, 38, \eta^2 = .14, p = .02$) with the causes of MLP seen as more stable. Therefore partial support was found for Hypothesis 1 (d) that managers would make more stable attributions to explain male than female leadership potential. Mean scores are presented in Graph 4.4 below.

Contrary to predictions made in Hypothesis 2 (d), managers produced significantly more unstable attributions for LP than NLP employees ($F = 8.6, df = 1, 38, \eta^2 = .184, p < .01$). Planned contrasts found that this was primarily a result of significantly less stable explanations for FLP than for FNLP ($F = 9.78, df = 1, 38, \eta^2 = .20, p < .01$). No significant differences were found between MLP and MNLP, although the difference between the mean scores also approached significance contrary to the hypothesis ($F = 4.56, df = 1, 38, \eta^2 = .11, p = .02$)

Graph 4.4. Stable attributions for male and female leadership potential

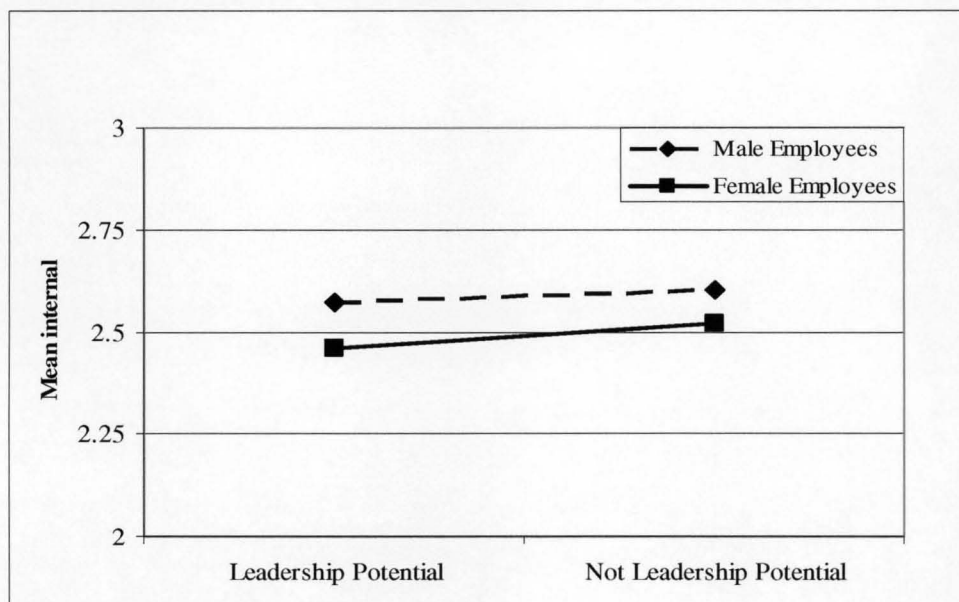


Note: Higher scores = more stable

Internal

There were no significant differences in the way managers attributed internal causes to LP and NLP employees ($F = .74, df = 1, 38, p = ns$) and to male and female employees ($F = 3.86, df = 1, 38, p = ns$). Therefore Hypotheses 1 (f) and 2 (f) were not supported. Mean scores are presented in Graph 4.5 below.

Graph 4.5. Internal attributions for male and female leadership potential



Note: Higher scores = more internal

Non parametric tests for Manager control

As manager control was skewed, to test hypothesis 1(f), and hypothesis 2(f) Wilcoxon signed-rank tests were carried out. The exact correction was used in both instances as the data was particularly poorly distributed (Field, 2005). Results indicated that there were no significant differences between the degree of control for self managers used to describe examples of LP ($Mdn = 1.09$) and NLP ($Mdn = 1.14$), [$T = 203.00, p = .39$] or

examples of male (*Mdn* = 1.00) and female (*Mdn* = 1.00) leadership potential [$T = 98.00, p = .81$]. Hypotheses 1(f) and 2(f) were therefore not supported.

4.4. Discussion

This study set out to test the first barrier of the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) by investigating whether managers make different attributions when explaining the performance of male and female employees identified as having leadership potential.

Summary of results

For hypothesis one, results indicated that managers make attributions that are more controllable and personal to the employee and more global to explain male than female leadership potential. Whilst results for the stable attributional dimension were not significant, they were in the predicted direction and it is possible that, with a larger sample size, this effect would have also reached significance. There were no differences in the amount of internal or manager control attributed to MLP and FLP.

In general there was some support for hypothesis two, with managers making attributions that were more controllable to the employee to explain LP than NLP. In line with hypothesis two(c), explanations for male leadership potential were more personal than explanations for males without leadership potential. However, this result was not found for female employees. Contrary to predictions in hypothesis two(d), there was a significant difference such that, for female employees, the causes of NLP were seen as more stable than the causes of LP. Whilst results for male employees' LP and NLP on the stable dimension were not significantly different, mean scores were also contrary to the hypothesis and this difference approached significance. No differences were found for the internal, global and manager control dimensions therefore hypotheses two (b), (e) and (f) were not supported.

In addition there were no significant differences in the types of attributions made for MNLP and FNLP employees, nor by male and female managers.

Male and Female Leadership Potential

Results for hypothesis one demonstrate that, when discussing equally matched employees, managers explain the leadership potential of men and women differently. More specifically, the causes of successful outcomes for MLP are seen as uniquely influenced by the employee, having a large organisational impact and a long-term effect on their career. Conversely, females were perceived as less likely to have influenced successful outcomes, with similar outcomes expected of anyone in their peer group, and the impact of any event more likely to be restricted to the specific circumstances being discussed. Thus, the attributions made for leadership potential are different for men and women, with those afforded to men creating a more positive impression. To illustrate this, two extracted attributions explaining why a male and a female employee were able to secure a new client contract are presented in Figure 4.2. Whilst the explanation for the male's leadership potential is controllable, personal and global, the reason for the female's success is seen as uncontrollable, universal and specific.

Figure 4.2: Example explanations of male and female leadership potential

'He got the deal because, he is a really ambitious guy, he just goes at everything he's given with an incredible amount of commitment that's rarely seen in guys at this level'.

(Male with Leadership Potential – causal attribution is controllable, personal, stable and global)

'In reality the contract was secured relatively easily because the client really wanted to set something up straight away, they (the client) didn't have time to consider many options'.

(Female with Leadership Potential – causal attribution is uncontrollable, universal, unstable and specific)

Such differences in explanations have implications for women within an evaluative context and may provide some explanation for the apparent persistence of the glass ceiling effect. If the causes of success for FLP are perceived as having a specific impact, as opposed to the global far-reaching explanations afforded to MLP, or as less within the female's control, the effect of a favourable evaluation for any single instance of leadership potential for the female employee may be limited.

These results are largely comparable with attributional research studies from the 1970s (e.g. Deuax & Emswiller, 1974; Feather & Simon, 1975) all of which have found male success to be attributed to more controllable, personal, global and stable causes. This suggests that, although women's status in society and, specifically the workplace, has improved over the last thirty years (Carli & Eagly, 2001), the same biases that

adversely affected decision-making are still disadvantaging women's career progression today.

Differences in explanations for the performance of employees with and without leadership potential

Managers attributed more employee control when discussing those identified as having leadership potential. In addition, for male employees only, the causes of LP were seen as more personal than the causes of NLP. These results are similar to previous findings, including those by Rosenthal (1995), who reported that managers generally award subordinates personal credit for their successes and Silvester *et al.* (2002) who found a relationship between higher performance review evaluations and a tendency to explain outcomes in terms of controllable causes.

Contrary to predictions, managers made more stable attributions for employees without leadership potential. This implies that managers within the host organisation tend to see the reasons why people are not succeeding as more long-lasting. Example stable attributions for NLP performance include *'he just stays in his comfort zone, so he never gets involved in extra activities'* and *'because she's poor at the admin side of things she'll always be forgetting when documents need to be prepared'*. In practice, this may mean that managers are less willing to consider training and development for employees without leadership potential, believing the causes of their behaviour to be more fixed and less open to change. These results may also reflect the fact that the host organisation operates in a fast-paced environment where there is frequent change and so success does not rely on long-standing causes.

Explanations for the performance of employees without leadership potential

In line with previous research findings (e.g. Rosenthal, 1995; Russell & Rush, 1987), no differences in explanations for NLP male and female performance were found. One explanation for this is that judgements about individuals who are seen as competent but

unlikely to progress quickly to leadership roles are seen as less important with fewer immediate consequences, such as the promotion or dismissal. Promoting a woman into a peer group which mainly consists of men will be more noticeable than promoting another male, so the effect of identifying a woman as having leadership potential may have a greater impact than identifying another MLP. It may be that, only when the outcome is likely to have a large or noticeable impact, do people's biases about male and female employees come into play. Such an explanation would relate to Rational Bias Theory (Larwood, Szwajkowski & Rose, 1988) which suggests that discrimination can be the result of intentional biases by managers acting out of their own self interests and do not wish to eliminate gender discrimination. Whilst such an interpretation suggest that the decision-maker is motivated to make biased decisions, alternatively it could be that the bias is schema-related. If the category of 'without leadership potential' is non-gender specific biases would not emerge when discussing NLP employees. However, if as much previous research has suggested (e.g. Schein, Muller, Lituchy *et al.* 1996), the category of 'leadership' is associated with men more than women, focusing on employees with leadership potential may be a trigger for more unconscious schema-related biases to influence decision-making.

When identifying future leadership potential, successful female behaviour may be seen as unusual, unexpected or even threatening to current power structures (e.g. Kanter, 1977). As individuals are motivated to make sense of their world (e.g. Heider, 1958, Weiner, 1985), this may influence how a manager interprets employee leadership potential. Making different attributions for male and female performance can protect the manager from changing their current view of the world and enable them to maintain a sense of mastery over their environment (Kelley, 1973).

Such reinterpretation of out-group (female) behaviour links to much of the in-group – out-group attitude bias literature (e.g. Tucker & Rowe, 1979). This has consistently found that equivalent behaviour by members of minority or out-groups is viewed less positively than that of a majority or in-group members. Similarly, contextual explanations of differential career progression such as Kanter's Structural Theory

(1977) state that personnel decisions can be biased in favour of a dominant (i.e. male) group because job incumbents tend to select others who are similar to themselves. This may be because they want to avoid being burdened with additional changes to their working environment which are perceived as more likely with the inclusion of different, more diverse, individuals into leadership positions. Indeed, Cleveland and Murphy (1992) have argued that many of the judgement 'errors' identified in traditional performance appraisal research are not errors at all, but rather reflections of decision-makers' conscious attempts to modify their responses to fit the broader socio-political arena in which they are operating.

Explanations provided by male and female managers

No differences were found in the types of attributions made by male or female managers. Regardless of their own gender, managers explained male and female success differently. This result is similar to findings by Virginia Schein (e.g. Schein et al, 1996; Schein, 2001) that, across many nationalities, both male and female managers tend to adhere to the 'think manager-think male' gender stereotype, which is based on the assumption that women are less likely to have the necessary attributes to be a successful manager.

The 'Internal' and 'Manager Control' attributional dimensions

A lack of significant difference found in relation to the internal attributional dimension can be explained by considering the study design. By asking participants to describe specific instances relating to when employees had or had not shown potential, managers were actually being prompted to make attributions which were internal to the employees. This interpretation is supported by examination of the mean scores for each dimension presented in Table 4.3., which show that the mean scores for Internality are higher than for all other dimensions.

Attributions for manager control were heavily skewed for discussions of all employee groups, indicating that managers rarely discussed any personal input they had into their employees' performance. It was therefore unsurprising that this variable did not predict in either hypothesis. Again, this result can be explained by reviewing the interview schedule, which did not specifically ask managers about their personal involvement.

Limitations and future research

A potential criticism of this study is that asking managers to discuss both male and female performance could alert them to the investigation of perceptions of gender differences and encourage them to adapt their examples to provide more gender-aware responses. However, after considering the culture of the organisation, in which managers are often requested to focus on men and women as part of its commitment to diversity, it was deemed acceptable to instruct participants to discuss men and women specifically. In addition, researchers (e.g. Harvey, Turnquist *et al.*, 1988; Silvester, 2004) have also argued that LACS is a particularly effective method of investigating sensitive topics, such as gender stereotypes, which may be at risk from social desirability effects. The significant differences in explanations for male and female performance support the decision to use this design, suggesting that managers were not alerted to the specific nature of the research. Furthermore, by ensuring every manager discussed the four cases, MLP, FLP, MNLP and FNLP, a within-subjects design was allowed whereby each manager's perceptions across the four cases were compared.

A second potential criticism is that the study is based on reports of past behaviour which, it can be argued, reduces the accuracy of information reported. However, within an appraisal context, or when making promotion decisions, managers engage most in retrospective analysis of subordinate performance. As such, the study design may give some insight into the sorts of processes involved in such judgements.

An additional potential criticism is that judgements made during this study had no real consequences as they were not directly related to organisational personnel decisions.

However, as those judged as having LP had received high previous appraisal ratings and those identified as NLP had received average ratings, one could infer that the types of evaluations made during this study were similar to those used to make appraisal judgements or in the workplace. Whilst it was not possible to gain access to actual decision-making processes for this project, a valuable future research project will be to investigate this further by examining the types of explanations made during real promotion decisions.

Managers' perceptions of which employees possess leadership potential are subjective. Whilst those identified as having potential may be the people most likely to be promoted according to their appraisal ratings, this is not a measure of whether in fact they would make the best leaders. Therefore, future longitudinal research tracking the success of those identified as having potential and comparing this to managers' previous explanations for their performance should also be considered.

A further cautionary note is that the events reported as examples of demonstrating LP or NLP are single examples. As the managers only chose one individual to represent each group discussed, it is possible they did not choose 'typical' examples and perhaps focused on extreme examples of demonstrating or not demonstrating leadership potential. However, previous research using a questionnaires, and thus not relying on single examples of male and female performance (e.g. Silvester *et al.*, 2004), has found similar differences in attributions used to explain male and female success, suggesting that findings in this study are not the result of atypical examples.

To summarise, this study has tested the first barrier proposed by a socio-cognitive model of unfair discrimination by examining the attributions managers use to explain leadership potential. Specifically, the research aimed to test the hypothesis that there would differences in the attributions used to explain male and female performance. This proposition was well supported with results showing that, in general, managers saw male employees' leadership potential as more controllable by the employee, stable, global and personal than equal female potential.

Chapter 5: Study two - An investigation of the attributions UK male and female employees use to explain their own leadership potential

5.1. Introduction

This study follows from study one by investigating the second barrier proposed by the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996), intra-personal attributions. Applied to this context, barrier two proposes that differences in the way male and female employees explain their own performance may also impact on career progress.

This is important because appraisals frequently include employees' self assessments. How an employee explains instances of when they have or have not shown leadership potential is likely to contribute to the tone for the appraisal event and may impact on overall evaluations of a person's future potential. As Fletcher (2001) notes, there has been little research into the interpersonal discussions which surround appraisals despite the appraisal interview being identified as the 'Achilles heel' in any such process. Fletcher (2001) further argues that a fruitful method for investigating this area could be attributional analysis.

Gender differences in attributions

There has been considerable debate in the literature regarding gender differences in causal attributions, with inconsistent research findings reported. Whilst some studies have suggested that women are more likely to demonstrate a 'modesty bias' and attribute their successes to less internal, controllable, personal, stable or global causes (e.g. Gitelson, Peterson, Tobin & Maryse, 1982; Levine, Gillman & Reis, 1982), others have criticized these findings as being the result of artificial lab-based studies and a reliance on student samples (e.g. McHugh, Freize & Hanusa, 1982), reporting no such differences in organisational-based research (e.g. Silvester, 1997). Thus, due to these

mixed findings, in order to test the second barrier of the socio-cognitive barrier which proposes that men and women may make different attributions to explain their performance, the following hypothesis was tested:

Hypothesis 1: *Male employees will attribute incidents where they have demonstrated the potential to be a leader to more a)internal, b) controllable, c) stable, d) global and e) personal causes than female employees.*

Further research has also suggested that women are more likely to blame themselves when things go wrong. For example, Hirschy & Morris (2002) proposed that men and women achieve different levels of success because the different explanations they make to explain successes *and* failures have a negative consequence on women's future achievement strivings. As missing an opportunity to demonstrate leadership potential can be viewed as failure a second hypothesis was also investigated:

Hypothesis 2: *Male employees will attribute incidents where they failed to demonstrate the potential to be a leader to more a) external, b) uncontrollable, c) unstable, d) specific and e) universal causes than female employees.*

Self-serving bias

When individuals discuss their own performance, the explanations they make are likely to be subject to the self-serving bias (Miller & Ross, 1975). Indeed, Greenwauld (1980) has argued that the tendency for individuals to accept more causal responsibility for positive than negative outcomes is one of the most robust findings in social psychology. Therefore, for all employees (male and female) evidence of the self-serving bias was anticipated. Thus a third hypothesis was tested:

Hypothesis 3: *Employees will attribute incidents where they have demonstrated the potential to be a leader to more a) internal, b) controllable, c) stable, d) global and e) personal causes than for incidents where they have failed to demonstrate the potential to be a leader.*

5.2. Method

Participants

Participants were selected from the Treasury and Securities Services [TSS] business area of the host organisation. All participants were based in the UK and were junior managers working at the same Assistant Vice President [AVP] level. This is typically the level from which differential career progression begins for men and women and the level of employee discussed in study one. Therefore, participants' perceptions of their own leadership potential could be compared to the perceptions of their managers.

Participants in study one were referred to as 'managers' and to avoid confusion, participants in this study will be referred to as 'employees'.

HR Business Partners responsible for TSS identified a random sample of employees who would be suitable participants. Employees were then contacted by the researcher who explained that the purpose of the study was to understand how AVP level employees displayed their leadership potential. It was made clear that participation was voluntary and assurances were given regarding confidentiality. All participants were offered an opportunity to see a summary of the research findings at a later date.

Participants came from a range of different teams inside TSS including Global Treasury Management, Financial Markets Solutions & Delivery and Global Trade Services. An equal number of men and women were selected from each team. Furthermore, to ensure the men and women participating in the study were equal in terms of performance, participants' most recent appraisal ratings were considered. The organisation operates a one to three ranking appraisal system, with the top twenty percent of employees rated 'one', the middle seventy percent 'two' and the bottom ten percent 'three' (see section 3.3.3. for more details). As the research was concerned with leadership potential it was decided not to include any individuals who had been ranked

in the lowest ten percent. In total 20 male and 20 female employees participated in the study. Six (three male, three female) had been ranked in the top 20% of employees with the remaining 34 (17 male, 17 female) ranked in the middle 70%. These groups were very different in size (as expected with the ranking system) and initial comparisons of those ranked '1' or '2' showed there were no significant differences on any of the dependent variables. Performance rating was therefore not considered as an independent variable in this study. Importantly, as a whole, performance levels of male and female participants were equal.

Participants were between 27 and 48 years of age, ($M = 35.15$, $s.d. = 5.79$). 38 described their ethnic origin as 'White', one as 'Black African' and one as 'Other'. The sample was primarily British ($N = 37$). There was also one participant each from New Zealand, Belgium and South Africa. To ensure familiarity with how leadership potential is perceived within the host organisation, all participants were required to have worked in the host organisation for at least 9 months prior to the study. All employees had also been working in the UK for at least 18 months and had excellent English language skills.

Procedure

Each employee participated in a semi-structured interview lasting approximately 30 minutes (see appendix two). Participants were first asked to discuss a time when they had demonstrated their leadership potential and, secondly a time when they failed to demonstrate their potential to be a leader. Using a critical incident approach (Flannagan, 1954), they were prompted to explain the situations, their specific roles, the outcomes and why they thought each event had occurred. All participants were invited to discuss examples of leadership potential first as this was more effective for building rapport and encouraging open and honest responses. With participants' permission, interviews were recorded and transcribed.

Attributions were extracted from transcripts using a modified version of the LACS (Munton, Stratton, Silvester & Hanks, 1999). Attributions were coded along the following dimensions: internal, control, global, stable and personal. The dimension of ‘manager control’ was not included in the analysis as, due to the nature of the research questions which focus on the employee’s own behaviour, it was not relevant. Examples of extracted attributions for demonstrations of leadership potential are presented in Figure 5.1.

Figure 5.1. Examples of extracted attributions

<u>Dimension</u>	<u>Leadership Potential</u>
Internal	<u>Because I am willing to help</u> → I said to the people staying late do you need me too?
External	<u>There were a lot of people on calls during the night</u> → which made it run smoothly
Controllable	<u>I haven’t made any promises to the client either</u> → so I’ve been strong in that respect
Uncontrollable	A new centre needed setting up in Mumbai ← <u>because the bank decided it would be more cost effective running operations from there</u>
Global	<u>We wrote up a case study and posted it on the intranet</u> → so other teams could see how to handle similar situations.
Specific	The presentation was a success ← <u>because I had carefully researched it</u>
Stable	<u>The amount of work that I have to do means</u> → I’m always making contacts for the future.
Unstable	<u>By rechecking the figures</u> → I worked out where the money had been lost.
Personal	<u>Because I suggested we presented at X’s conference</u> → we received a whole load more business.
Universal	<u>When anyone is busy</u> → they up their game.

5.3. Results

Description of data

A total of 1304 attributions were extracted from the 40 interview transcripts. 752 (57.7%) of these related to examples of showing leadership potential [LP] and 552 (42.3%) to examples of not showing leadership potential [NLP]. Table 10 presents a breakdown of totals of attributions and averages per interview made by male and female employees for examples of demonstrating and not demonstrating leadership potential.

Table 5.1. Descriptive statistics for attributions produced by male and female employees

	<u>LP</u>			<u>NLP</u>			<u>All</u>		
	<u>N</u>	<u>M</u>	<u>sd</u>	<u>N</u>	<u>M</u>	<u>Sd</u>	<u>N</u>	<u>M</u>	<u>sd</u>
Males	316	15.80	(4.26)	249	12.45	(4.52)	565	28.25	(7.30)
Females	436	21.80	(9.31)	303	15.15	(8.08)	739	36.95	(16.33)
All	757	18.80	(7.77)	552	13.80	(6.61)	1304	32.60	(13.24)

Note: LP = Leadership Potential, NLP = Not Leadership Potential

Employees produced between 17-78 attributions (M = 32.6, s.d. = 13.24) with ranges of 8-47 and 4-36 respectively for numbers of LP and NLP attributions.

As employees made different numbers of attributions, following guidelines recommended in LACS (Stratton *et al.* 1988), a set of mean scores were computed for each employee covering the five attributional dimensions (internal, control, stable, global, personal) for LP and NLP examples.

Pre-analysis checks

The mean score variables for each attributional dimension were then checked to see if they were normally distributed. LP stable, LP global and NLP personal variables were significantly different to a normal distribution (see Table 11) ($D(40) = .16, p > .01$, $D(40) = .16, p > .05$, and $D(40) = .14, p > .05$ respectively) and were therefore subject to a logarithmic transformation. Kolmogorov-Smirnov tests on the logged scores for the attributional dimensions indicated they were all normally distributed (LP stable $D(40) = .13, p = .12$, LP global $D(40) = .12, p = .2$, and NLP personal $D(40) = .09, p = .20$). As planned analyses included directly comparing LP stable with NLP stable, LP global with NLP global, and NLP personal with LP personal these variables were also logarithmically transformed. Kolmogorov-Smirnov tests indicated that these were also normally distributed (NLP stable $D(40) = .12, p = .13$, NLP global $D(40) = .10, p = .20$, and LP personal $D(40) = .10, p = .20$). All other dimensions were normally distributed and did not require any transformation. The transformed scores for these variables were used in all further analyses.

Table 5.2. Descriptive statistics and Kolmogorov-Smirnov normality tests for LP and NLP internal, controllable, stable, global and personal attributional dimensions.

	Descriptives		Kolmogorov-Smirnov
	<u>M</u>	Sd	<i>D</i>
LP			
Internal	1.99	(.31)	.08
Controllable	2.23	(.29)	.89
Stable	1.82	(.39)	.16**
Global	1.54	(.36)	.16*
Personal	1.92	(.33)	.13
NLP			
Internal	1.79	(.34)	.11
Controllable	1.55	(.32)	.09
Stable	1.79	(.39)	.10
Global	1.36	(.28)	.11
Personal	1.47	(.35)	.14*

*Note: LP = Leadership Potential, NLP = Not Leadership Potential, N = 40. Dimension scale 1-3, high scores equal more internal, controllable, stable, global and personal. * p < .05, ** p < .01.*

Analysis

To test the hypotheses, first, a multivariate ANOVA was conducted including all independent and dependent variables. Secondly, to investigate main effects, ANOVAs were conducted for each attributional dimension.

Multivariate Analysis of Variance

A 2 x 2 repeated measures-anova (MANOVA) was conducted involving all dependent variables (attributional dimensions). Employee gender [EG] acted as a between-subjects variable and leadership potential (LP vs. NLP) as a within-subjects variable. This was to investigate whether mean differences among groups at different levels of the independent variables (EG & LP), on a combination of the dependent variables (attributional dimensions), were larger than expected by chance when all else was held constant (Tabachnik & Fidell, 2001). To measure the strength of association between

the independent and dependent variables, effect sizes were also computed. According to Cohen (1977), effect sizes, measured by means of eta-squared, are small at .01, medium at .09 and large at .25.

Results indicated a multivariate effect of LP ($F = 35.82, df = 5, \eta^2 = .84, p < .001$) and a multivariate effect of EG ($F = 2.75, df = 5, \eta^2 = .18, p < .05$). There was no significant interaction ($F = 1.59, df = 5, p = ns$).

ANOVAs

To investigate fully the significant multivariate effect found for employee gender univariate ANOVA tests were performed for each independent variable. Results are presented in Table 5.

Table 5.3. Analysis of variance (ANOVA) statistics for the attributional dimensions as a function of employee gender (EG)

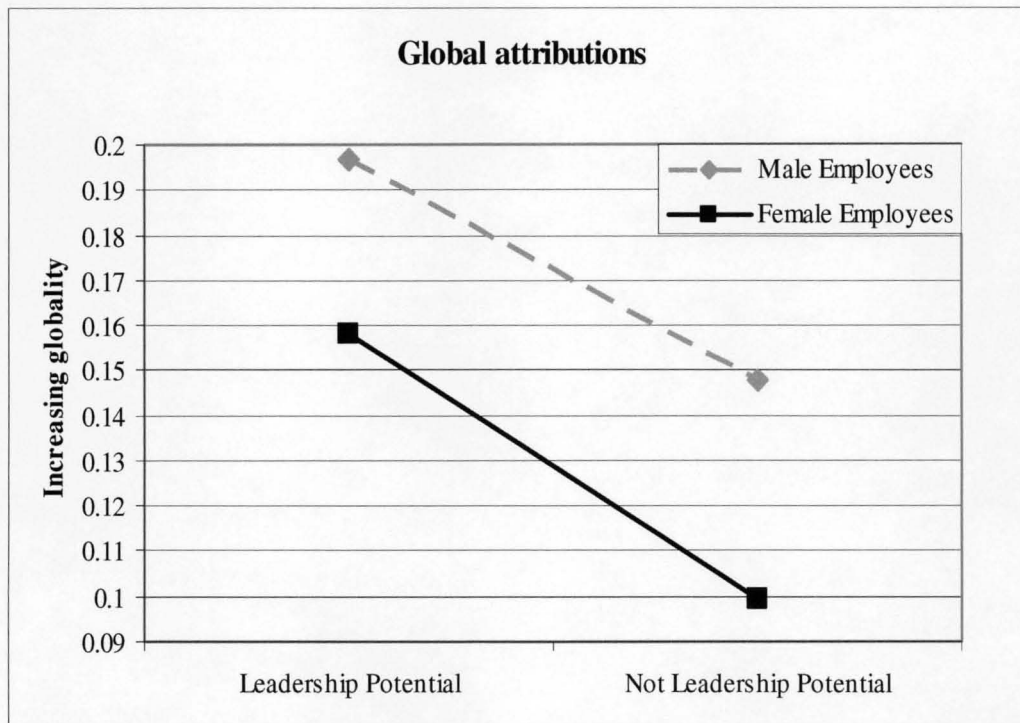
Dimension	F	η^2
Internal	1.50	
Control	2.61	
Stable	3.68	
Global	4.53*	.10
Personal	.07	

*Note: * $p < .05$, ** $p < .01$, *** $p < .001$, $df = 1$. Effect sizes reported for significant ANOVA results reported only.*

Results show that for the internal, control, stable and personal dimensions there were no significant differences in attributions made by male and female employees. The significant F value for global indicates overall differences in the types of explanations made by men and women. For both examples of LP and NLP male employees made somewhat more global attributions than female employees. Interestingly, this appeared to be slightly more prevalent in explanations of why leadership potential had not been

demonstrated than for explaining when it had (see graph 5.1). Hypotheses one and two were rejected.

Graph 5.1: Male and female employees' global attributions for LP and NLP



Note: High scores=more global. Scores presented are logarithmic transformations

To investigate fully the significant multivariate effect found for leadership potential repeated measures ANOVA tests were performed for each independent variable. Results are presented in Table 5.4:

Table 5.4: Repeated-measures analysis of variance (ANOVA) statistics for the attributional dimensions as a function of employees' leadership potential (LP)

Dimension	F	η^2
Internal	5.98*	.14
Control	119.31***	.76
Stable	.22	
Global	7.33**	.16
Personal	46.03***	.55

*Note: * $p < .05$, ** $p < .01$, *** $p < .001$, $df = 1$. Effect sizes reported for significant ANOVA results reported only.*

Results show that, with the exception of stable, medium and large effects were found for each attributional dimension such that employees made significantly more internal, controllable, global and personal attributions when explaining when they had than had not demonstrated leadership potential, providing support for hypothesis three.

5.4. Discussion

This chapter aimed to test the second proposed barrier of the socio-cognitive model of unfair discrimination as applied to an appraisal context by investigating the explanations equally matched male and female employees provide to explain when they have and have not demonstrated leadership potential. Whilst results showed that both male and female employees were more likely to make internal, controllable, global and personal attributions to explain LP than NLP examples, little gender differences were found for how men and women explained LP and NLP. Specifically there were no differences in the amount of internal, controllable, stable and personal attributions employees made to explain their leadership potential. Men were somewhat more likely to make more global attributions, although this was an overall trend (for both LP and NLP) rather than specific to discussions of leadership potential. Thus little support was found for hypothesis one and none for hypothesis two. Hypothesis three

was largely supported with both men and women using different attributions to explain examples of demonstrating and not demonstrating leadership potential.

The findings related to hypotheses one and two have clear links with several previous organisationally-based research studies. Researchers have suggested that at work the working self concept will take precedence for an individual and any self gender stereotype will become a background influence (e.g. Markus & Kunda, 1986; Eagly & Johnson, 1990). For example, Crombie (1983) reported that 'high achieving' women, such as those in management roles, tend to attribute their successes in a way that was more similar to men than to women with more traditional sex role orientations. Similarly, Heimovics and Herman (1990) reported that both male and female chief executives recognised how success was a consequence of hard work and ability, but also how their failures could be partly their own making, regardless of how negative the environment. What is particularly interesting is that Heimovics and Herman's (1990) research was carried out in a not-for-profit organisation, which may be assumed as more stereotypically female environment, whilst this study's host organisation is from a traditionally more masculine industry and yet both found little differences in men and women's attributions for their own performance.

The findings also relate closely to previous research regarding the self-serving bias (Miller & Ross, 1975). Results for hypothesis three, which compared LP and NLP explanations, are similar to those reported by Rosenthal (1995) who found that managers were more likely to attribute goal attainment to hard work and poor performance to negative circumstances or a difficult task. Using a similar methodology to the this study, Silvester, Koczwara and Meincke (2003) also found that interview candidates were significantly more likely to make internal, controllable, stable, global and personal attributions when discussing positive than negative experiences..

Limitations and future research

A further consideration is the possibility that, when interviewed, the employees did not present themselves in the same way as they would when explaining their performance to a manager. Employees may have felt more comfortable explaining their successes when specifically asked by the researcher than if they were in an appraisal or promotion review or even just in conversation with a manager. Although it is not clear whether this would affect male and female employees differently this is an area that would warrant further research. As previous research (e.g. Silvester, 1997; Silvester & Anderson, 2003) which has examined the attributions made by male and female interviewees have reported no significant differences, one possibility could be that, in evaluative contexts where one is specifically asked to describe performance, men and women make the same types of attributions but, during everyday contact women behave more 'modestly' and hence make different attributions.

Future avenues for research could therefore include exploring men's and women's intra personal attributions in actual promotion situations by recording and analysing actual appraisal interviews, and the observation of men and women identified as having leadership potential in their workplace to compare the attributions they make on a daily basis.

5.5. Combining findings from studies one and two

When findings from this study are combined with those from study one, a full test of the socio-cognitive model of unfair discrimination within an appraisal context is possible. Results have provided strong support for barrier one, inter-personal explanations and little support for barrier two, intra-personal explanations. Managers made different attributions to explain examples of leadership potential from male and female employees who are equally matched in terms of performance. Conversely, there was little difference in the patterns of attributions equally matched male and female employees used to explain their potential.

Such results have clear implications in terms of increasing understanding of the processes contributing to differential career progression. Whilst organisations have traditionally invested heavily in training programmes designed to 'help' women to be more assertive and confident in telling others about their accomplishments (e.g. Rosenthal, 1996; Alimo-Metcalfe, 1993), these findings suggest that women are already taking credit for their successes. Rather, it could be inferred that, at least in the host organisation, resources may be best spent channelling efforts into raising managers' awareness of the gender stereotypes and biases they hold and what the impact may be when others' behaviour is interpreted.

Chapter 6: Study 3 - An exploration of the behaviours used by UK managers and employees to define leadership potential

6.1. Introduction

Studies one and two, designed to test the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996), have provided an understanding of how male and female leadership potential is explained, from intra and inter personal attributional perspectives. Results indicated that whilst managers made different attributions to explain male and female leadership potential, there were little differences in the attributions male and female employees made regarding their own leadership potential.

Whilst attributional analysis can provide an understanding of how male and female leadership potential is explained, it does not increase understanding of what behaviours managers and employees use as the basis for these judgements. More specifically, we do not know whether the behaviours that trigger attributions regarding leadership potential are different for male and female employees.

Meta-analytical research into gender differences suggests that men and women are equally effective leaders (e.g. Eagly & Johnson, 1990; Eagly, Karan & Makhijani, 1995). Despite this it has been suggested that they may use different styles of leadership (e.g. Eagly & Karan, 1991), although other studies have reported few differences in the leadership behaviours demonstrated by men and women (e.g. Shore, Tashchian & Adams, 1997). However, there is strong evidence that stereotypes exist concerning men, women and leadership ability (e.g. Schein, Muller, Lituchy *et al.*, 1996). Therefore this study aimed to extend the socio-cognitive model to include competencies as a way of examining the behaviours associated with men's and women's leadership potential.

Competency models are a way of classifying behaviours which are associated with effective performance; they define relevant behaviours or behaviour patterns (Arnold, Silvester & Patterson *et al.*, 2005). Definitions of competencies include: *'the knowledge, skills and attributes that differentiate high performers from average performers'* (Shippmann, Ash & Battista *et al.*, 2000 p 706) and; *'more business-oriented and broader versions of KASOs (knowledge, abilities, skills and other attributes)'* (Brannick & Levine, 2002, p 241). A noted benefit of introducing competency models is that they create and communicate shared understanding within organisations of what is expected for a given role (Feltham, 1992).

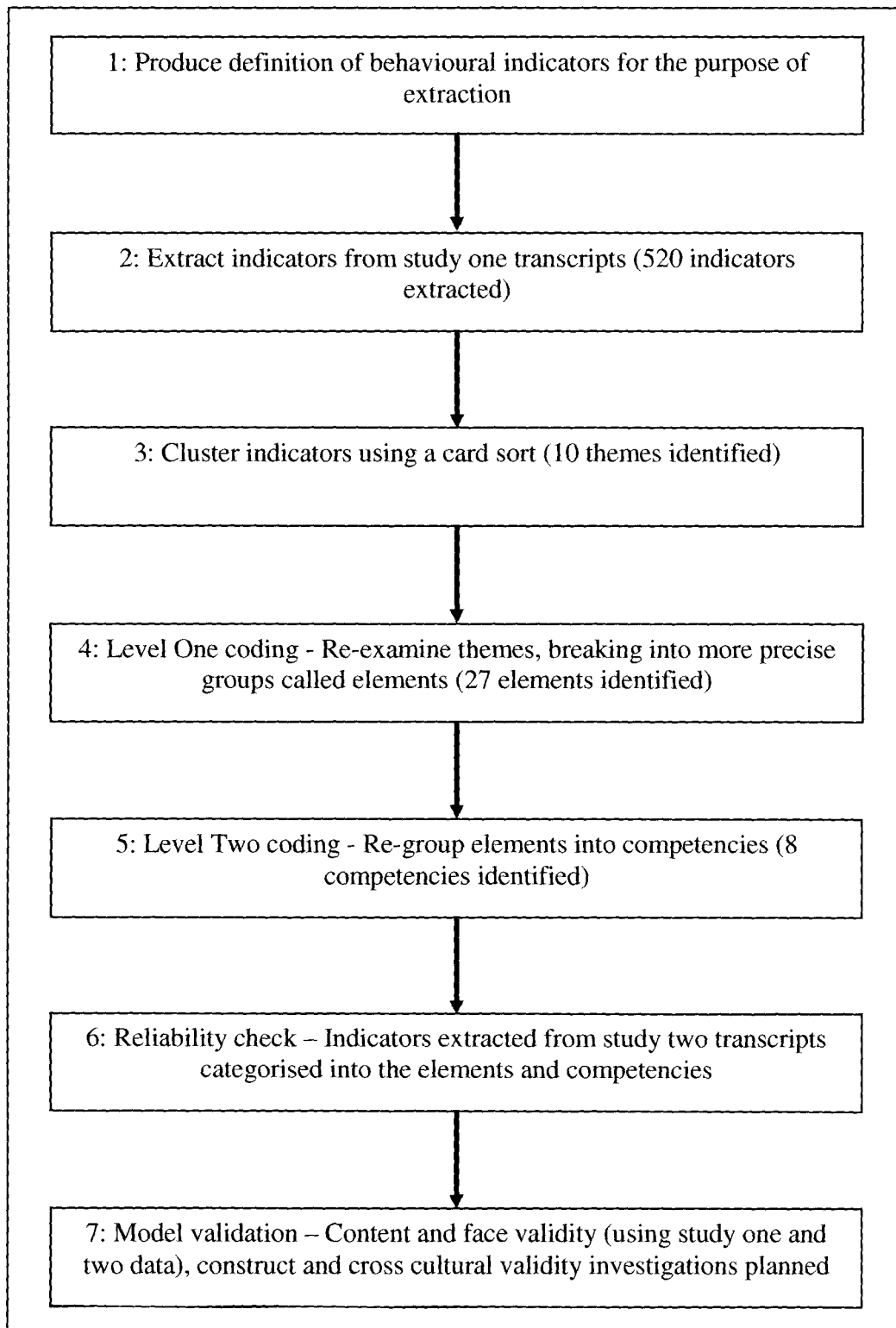
Thus, in order to consider whether there are gender differences in the behaviours associated with leadership potential it was first necessary to develop a model which reflected the shared understanding of leadership potential in the host organisation. Therefore the aims of this study are twofold:

- 1: Generate a leadership potential competency model
- 2: Test for gender differences in behaviours associated with leadership potential

6.2. Part one: Generating a leadership potential competency model

A competency model was developed by combining best practice competency modelling techniques with principles from Miles and Huberman's (1984) two-level approach to data coding using interview data from study one. A flow chart summarising the process (see Figure 6.1.) is followed by a detailed description of the development of the framework.

Figure 6.1: Flow chart for the exploratory behavioural analysis process



6.2.1. Description of the process

Step one

The first step was to produce a definition of behavioural indicators for the purposes of extraction. This was '*employee behaviours identified to explain why a person has/has not got leadership potential*'.

Step two

Behavioural indicators were extracted from study one interview transcripts of managers' discussions of employees with and without leadership potential. Indicators were extracted separately from the attributions described in study one. Examples of how indicators were identified from the transcripts are provided in Figure 6.2. Specific indicators are underlined and presented within the surrounding text from the transcript.

Figure 6.2: Examples of indicators of leadership potential

<p>Extract from transcript explaining why an employee has leadership potential</p>
<p><i>'He came from a background that has nothing to do with what he has ended up in. He was in technology, but he started to <u>generate some innovative ideas about how technology could be applied to trading</u>. And he wasn't being rewarded for it; his management weren't necessarily supporting him, but he was doing it because he was <u>taking an opportunity to prove to us that he would be really valuable in trading</u>. ...</i></p> <p><i>...And when he talked about his ideas, he did it in a way everyone liked. <u>He appreciated people's expertise and asked them what they thought</u>. And since joining our team he's <u>used a real sense of fun and camaraderie to motivate people and make his ideas work</u>.</i></p>
<p>Extract from transcript explaining why an employee has not got leadership potential</p>
<p><i>'Her style as a manager is poor in terms of getting people to feel like they are in the same team. <u>She doesn't appreciate their day or circumstances</u>, so someone will say 'my house is burning down' and she'll say 'well can you do this?' We get it in her 360 all the time, <u>she doesn't listen, she doesn't take on board or attend to what I say</u> so we have to have the conversation a number of times before it gets through</i></p> <p><i>... I think she is generally weak in those sorts of skills. In meetings if she disagrees with something <u>she never speaks up, she just makes notes</u> to discuss with me one-on-one. She doesn't feel comfortable but, guess what, this is a big boy's game; you need to be able to speak up. She just <u>lacks the self-confidence to give it a go</u>.</i></p>

Note: indicators are underlined

Each behavioural indicator was recorded on a separate card, along with a code to indicate whether it referred to leadership potential or not, the gender of the manager and the gender of the employee being discussed. To check reliability of the extraction, indicators from ten interviews were re-extracted by another researcher. This resulted in 78% of indicators being similarly identified by both researchers, suggesting a high level of agreement in using the definition to extract examples of having or not having leadership potential.

Step three

The next stage was to group the indicators into similar themes. An initial card sort was undertaken using principles from competency modelling techniques to reduce the large numbers of descriptor statements into smaller numbers of categories (Shippmann *et al.*, 2000). To perform the card sort, six occupational psychologists worked together to group the behaviours recorded on the cards into similar themes. This resulted in ten themes: Communication, Political Skills, Teamwork, Learning & Development, Planning, Problem Solving, Takes Responsibility, Ambition, Commercial Awareness and Personal Attributes.

Labelling indicators in a post-hoc way can be effective in reducing potentially hundreds of behaviours into simpler groups. However, groupings made by individuals can result in a cluster of behaviours remaining which cannot easily be interpreted (Sparrow & Bognanno, 1993). In this case, the psychologists reported that they had some difficulty with grouping several indicators. This led to some disagreement in the placing of some of these indicators, whilst others were placed in a general 'Personal Attributes' theme. Therefore it was necessary to re-examine the themes to ensure that all indicators were appropriately grouped. Combining competency modelling techniques with principles of two-level coding helped to overcome this problem. This approach is discussed in steps four and five.

Step four

Miles and Huberman's (1984) two-level coding approach, which includes first level and pattern coding, is a useful way of reducing data into a smaller number of analytical units. In fact, they argue that it is a qualitative analogue to the cluster-analytical or factor-analytical statistical techniques used by quantitative researchers. Before first level and pattern coding can be undertaken, codes must be created and an initial sort completed. This was achieved during the initial card sort, described in step three, which resulted in ten themes being identified. Thus, in this analysis, the codes were created using a 'grounded' approach (Glaser, 1978).

Once codes are created, Miles and Huberman suggest that first-level coding should be undertaken to summarise segments of the data. To do this, the ten initial themes were re-examined by two occupational psychologists to check for any inconsistencies and then separated into more precise clusters, termed elements. An element can therefore be defined as *'a specific set of behaviour patterns, relating to a precise component of how a person can demonstrate their leadership potential'*.

In total, 27 elements were identified. Inspection of the indicators then allowed a label and description for each element to be created, a key outcome of first level coding (Miles & Huberman, 1984). For example, the indicator from Figure 6.2. *'generate some innovative ideas about how technology could be applied to trading'* was grouped under an 'Idea Generation' element. Idea Generation was defined as *'demonstrates an ability to think outside the box and suggest creative solutions or initiatives'*. Within each element, some of the indicators were positive and some negative. For example *'never speaks up, she just makes notes'* was grouped as a negative indicator within the 'Courage of Conviction' element. This element was defined as *'is honest, not afraid to challenge the status quo and make unpopular decisions where necessary'*. A full description of the competency model including element definitions is provided in Figure 6.3.

Step five

The second stage of the two-level coding approach involves pattern codes. These can be described as explanatory or inferential codes that identify emergent themes, patterns or explanations. They pull large amounts of material together into more meaningful and parsimonious units of analysis (Miles & Huberman, 1984). Thus, second-level pattern coding enabled the 27 elements to be re-grouped into a smaller number of overarching competencies.

Again, two researchers performed this task. This resulted in eight competencies each of which could be defined as *'a set of specific behaviour patterns, including knowledge, skills and abilities, a person is required to have to demonstrate that they have leadership potential'*. Each competency consisted of three or four elements (see Figure 6.3.). Competencies were then defined, based on the elements of which they consisted, thus using a post-hoc approach to labelling them (Boyatzis, 1982). Example indicators for each leadership potential competency and element are provided in appendix six.

Step six

Reliability of coding into the competency model was checked by asking different researchers to code indicators extracted from study two, (employees' own discussions of leadership potential) into the leadership potential competency model.

Behavioural indicators from employee interviews were extracted using the same definition *'employee behaviours, identified to explain why a person has/has not got leadership potential'*. Two pairs of coders were then instructed to independently categorise the indicators (N = 636) at the element level using the definitions developed with study one data. Their allocations were then compared and any discrepancies discussed.

Agreement levels for the groupings by each pair were high, ranging from 72.7% for the 'Flexibility' element to 100 % for the 'Ambition', 'Developing Skills' and 'Client

Focus' elements. At a competency level, agreement levels ranged from 81.5% for Problem Solving to 95.6% for Business & Organisational Awareness. After discussion, which involved checking the context of some indicators by referring back to interview transcripts or checking where similar indicators had been placed for study one data, disagreements were resolved or indicators were discarded for not being specific enough (N = 5). This suggests that the definitions developed with study one data are reliable and can be used to code further indicators of leadership potential.

Step seven

The final step identified in the process was to validate the model. Therefore, in order to ensure that the structure of the competencies was an accurate reflection of how leadership potential was perceived and not just specific to the coders, descriptions of the competencies were sent to the managers and employees who participated in studies one and two. They were asked to comment on the accuracy and range of behaviours covered as well as the language used in the definitions. This was important, as face validity can be improved by ensuring that descriptive content captures the language and spirit of the organization it reflects (Shippmann *et al*; 2000). Feedback was very positive (e.g. *'rings very true'*, *'it is useful to see such an abstract subject summarised so clearly'* and *'it gives a clear and concise picture as to what we should all be aspiring to'*). However, several respondents commented that the definition for Work/life Balance (*demonstrates that work is their number one priority*) was not compatible with the host organization's commitment to supporting a healthy work/life balance. This description was therefore amended to *'demonstrates that work is a high priority in their lives'*; a phrase suggested by two respondents.

To investigate construct validity, a quantitative questionnaire study was planned for a later stage of the programme of research (see chapter seven) and, to check cross cultural content validity an analysis of US managers' perceptions of leadership potential was also scheduled (see chapter eight).

Figure 6.3: Leadership potential competency model - Competency and element definitions

Planning and Organising:

Structures, plans and prioritises workload ensuring high standards of detail and quality.

- ❑ **Planning:** has a structured and prepared approach, considering how to achieve objectives through effective project management including delegation and co-ordination of work and resources
- ❑ **Prioritising:** demonstrates an ability to detect important issues and multi-task ensuring critical activities are given priority
- ❑ **Attention to Detail and Quality:** produces thorough and considered work consistently to high standards.

Communication:

Communicates information constructively, gains buy-in from relevant parties effectively and listens to others' points of view

- ❑ **Influencing:** has the ability to persuade others and gain buy-in from senior management, juniors and colleagues outside of line management effectively
- ❑ **Listening:** displays active listening skills, paying attention to and considering others' points of view
- ❑ **Clear and Effective Communication Style:** demonstrates an ability to explain information in a constructive manner, ensuring relevant parties at all levels are kept informed

Accountability

Takes personal responsibility for project delivery, demonstrating confidence in self and the courage to challenge the status quo and make unpopular decisions where necessary.

- ❑ **Courage of Conviction:** is not afraid to take risks, challenge the status quo and make unpopular decisions whilst remaining honest and acting with integrity
- ❑ **Ownership and Control:** feels personally responsible for projects, follows through and takes actions to ensure delivery
- ❑ **Self-Belief:** has confidence in self and is not constantly trying to impress others

Leadership potential competency model -Competency and element definitions

Problem Solving

Demonstrates the flexibility to accommodate different way of working and the ability to generate solutions or initiatives that consider possible impact for the whole organisation.

- Idea Generation:** demonstrates an ability to think outside of the box and suggest creative solutions or improvements
- Flexibility:** can accommodate different or changing practices, alternative ways of working, and operate outside the formal organisational hierarchy where appropriate
- Global Thinking:** thinks strategically, sees the bigger picture and considers possible impact and implications of their actions across the whole organisation

Managing Career

Demonstrates an ambition to be personally successful at work and actively seeks opportunities to display their potential to management, receive feedback or engage in development activities.

- Willingness to Learn:** has an awareness of own development areas and actively seeks out feedback and training opportunities to improve these areas quickly
- Ambition:** shows a desire to be successful and an ability to identify appropriate opportunities to demonstrate their potential to management
- Work/Life Balance:** demonstrates that work is a high priority in their lives

Team Relationships

Adopts a collaborative approach to work, participates in team projects, demonstrates an ability to build relationships and ensures junior employees are given development opportunities.

- Collaborative Approach:** a willingness to share information, ask colleagues for help/advice and bring together the most appropriate people for project work
- Developing Others:** takes action to empower juniors and ensure they are given opportunities to develop and improve
- Empathy and Relationship Building:** takes the time to show consideration for individuals in order to build a relationship
- Participation:** demonstrates a willingness to get involved with team projects at a hands-on level and help others

Leadership potential competency model - Competency and element definitions

Business and Organizational Awareness

Identifies client needs and displays a commercial awareness. Builds and utilises a network of contacts whilst demonstrating an understanding of the political environment operating within the organisation.

- ❑ **Networking:** has an ability to build, maintain and utilise a network of contacts throughout the organisation
- ❑ **Client Focus:** demonstrates the ability to identify and understand client needs, build professional relationships and ensure delivery meets client expectations
- ❑ **Commercial and Business Understanding:** makes an effective business case and demonstrates commercial awareness and business knowledge
- ❑ **Political Awareness:** understands the political environment operating within the organisation so involves senior management where appropriate and does not become embroiled in office politics

Motivation and Drive

Has a pro-active 'can-do' approach to work, demonstrating a willingness to take the initiative and the determination and energy to ensure outcomes are achieved.

- ❑ **Proactive:** is able to take the initiative, work from few instructions without close supervision and volunteer for new challenges outside their comfort zone
- ❑ **Commitment:** demonstrates an interest and focus on the task in hand, works hard and goes the extra mile, taking on extra tasks and roles to ensure outcomes are achieved
- ❑ **Energy:** creates a sense of urgency to get results, displays tenacity to keep going and a passion for what they do
- ❑ **Positive Approach:** has a 'can-do' attitude and demonstrates an upbeat and enthusiastic work style, never focusing on the negatives and remaining composed under pressure

6.2.2. Part one discussion - Generating a leadership potential competency model

The first aim of this study was to identify and classify the behaviours associated with demonstrating leadership potential. This was achieved by developing a leadership potential competency model from analysis of the interview data collected in studies one and two. Eight competencies emerged from the data: Planning & Organising, Communication, Accountability, Business & Organisational Awareness, Problem Solving, Team Relationships, Managing Career and Motivation & Drive.

In a review of previous work identifying competencies associated with General Practitioners, Patterson, Ferguson, *et al.* (2000), noted that such work tended to be weak for three primary reasons concerning validity. Thus in designing this study efforts were taken to ensure these issues were addressed. First, Patterson *et al.* noted that poor competency modelling studies had relied on participants with little experience of the role under investigation. The managers interviewed in study one were all able to discuss what employees needed to be successful at a more senior level as they had been operating at this level for a minimum of 18 months.

The second criticism raised by Patterson *et al.* was that studies only included the GPs' perspective. To address this point, development of this model not only included managers' perspectives but also employees' own perceptions of how they can demonstrate leadership potential. The third weakness identified by Patterson *et al.* was that the studies used single samples and did not attempt to triangulate or validate findings. Thus, in this study, the competency model was developed using two samples, UK managers and employees.

Sparrow and Bognanno (1993) have argued that the power of competency modelling approaches lies in both the relevance of the behaviours identified, and the quality and consistency with which rules are applied to govern the way the written profile is expressed. As behaviours were extracted from both manager and employee

perspectives in this study, and because feedback on the leadership potential model's face validity was positive it suggests the behaviours included in the model were relevant. Furthermore, because the process for creating the model was rigorous, following a clear procedure which allowed for indicators to be reliably coded, there can also be confidence that high-quality rules were applied in a consistent manner.

Whilst there has been little published work which has examined the behaviours associated with leadership potential, research has documented what constitutes leadership and work performance. For example, Yukl, Wall & Lepsinger (1990) presented an integrated taxonomy of 14 categories of leadership behaviours, based on theoretical deduction and statistical analyses, which are intended to capture what leaders actually do which makes them effective. The 14 categories are: Planning & Organising; Problem Solving; Clarifying Role & Objectives, Informing; Monitoring; Motivating & Inspiring; Consulting; Recognising; Supporting; Managing Conflict & Team Building; Networking, Delegating; Developing & Mentoring, and Rewarding. There are clear links between the behaviours identified in this study as important for leadership potential and Yukl *et al.*'s (1990) categories for effective leadership.

Campbell, McCloy, Oppler and Sager (1993) argue that '*performance is ... something that people actually do and can be observed*' (p 40) and describe an eight factor general model of work performance. The eight factors are intended to be sufficient to describe, at the most general level, factors associated with all job performance. The factors are: Job-specific Task Proficiency; Non-job-specific Task Proficiency; Written & Oral Communication; Demonstrating Effort; Maintaining Personal Discipline; Facilitating Team & Peer Performance; Supervision, & Leadership and; Administration. Again, there are overlaps between these areas and the behaviours discussed in the leadership potential model.

Table 6.1 presents a mapping of the leadership potential competency model onto Yukl *et al.*'s categories of leadership behaviours and Campbell *et al.*'s factors of work performance. Inspection of this table shows that the behaviours identified as necessary

for demonstrating leadership potential generally fit within existing literature regarding leadership and work performance. Twelve of the fourteen leadership categories link closely to leadership potential competencies, particularly in relation to Planning & Organising and Team Relationships. The two categories which do not match the leadership potential competencies (Motivating and Rewarding) are behaviours that someone not currently in a leadership role may have little opportunity to demonstrate.

Six of Campbell *et al.*'s work performance categories map onto leadership potential competencies. Again, it is likely that the 'Supervision & Leadership' category does not relate to the competencies for leadership potential, as an individual may need to be in a more senior role to show these qualities. Indeed, Campbell *et al.* suggest that many of these behaviours are similar to those in 'Facilitating Team & Peer Performance' but that the distinction is between peer and supervisory leadership. The other work performance factor which does not relate to this model is 'Job-specific task proficiency'. The reason for this may be that task proficiency is closely related to technical knowledge, which was briefly discussed by some interviewees but was not extracted as an indicator of leadership potential as it related more closely to performance in a current role than to judgements of potential for future roles. This explanation is further supported by the fact that job-specific task proficiency is not covered by Yukl *et al.*'s categories of leadership. Moreover, employees who are seen to lack task proficiency are actively managed out of the host organisation, so in this context it is likely to be seen as a pre-requisite for all employees.

Whilst the leadership potential competencies contain some overlap with work performance and leadership categories, there are also some unique themes. These relate to showing Business & Organisational Awareness, taking Accountability and Managing Career. It may be that once at a leadership level, such qualities are implicit. By definition, leaders are accountable for projects, are likely to have an awareness of their business area and have progressed to a senior position within their field. However, the emergence of these behaviours as specific categories in this model suggests that, for someone to show that they have potential, it is important for them to take personal

responsibility for success of work projects and their career development. Indeed, Guinn (2000) has argued that any identification of high-potential employees must ultimately hold them accountable for their own development if they are to progress as future leaders.

Table 6.1: Mapping the leadership potential competency model onto previous models of leadership and performance

Leadership potential competency	Yukl <i>et al.</i> (1990)	Campbell <i>et al.</i> (1990)
Planning & Organising	<ul style="list-style-type: none"> ▪ Planning & Organising ▪ Monitoring ▪ Delegating 	<ul style="list-style-type: none"> ▪ Administration
Communication	<ul style="list-style-type: none"> ▪ Informing ▪ Clarifying 	<ul style="list-style-type: none"> ▪ Written & oral communication
Team Relationships	<ul style="list-style-type: none"> ▪ Consulting ▪ Supporting ▪ Recognising ▪ Managing Conflict & Team Building ▪ Developing & Mentoring 	<ul style="list-style-type: none"> ▪ Facilitating team and peer performance
Problem Solving	<ul style="list-style-type: none"> ▪ Problem Solving 	
Business & Organisational Awareness	<ul style="list-style-type: none"> ▪ Networking 	
Motivation Drive		<ul style="list-style-type: none"> ▪ Demonstrating effort ▪ Non-job-specific task proficiency ▪ Maintaining personal discipline
Managing Career*		
Accountability*		

* *Unique to leadership potential competency model*

The development of a leadership potential framework has practical implications for the host organisation, including the identification of the requirements for potential managers, the recruitment of people for the present and the future (Sparrow & Bognanno, 1993), the provision of a realistic job preview of the skills required to be successful (Patterson *et al.*, 2000) and hence the creation of shared understandings (Feltham 1992). A recent case study regarding how Shell Chemicals identify and develop future leaders (Ferrarie, 2005) concluded that having a framework of desired future leadership competencies benefits the company and their employees. The company is in a stronger position to judge the shape and needs of its talent pool for senior leaders, and employees are better able to understand and achieve their full potential.

6.3. Part two: Investigating gender differences in the leadership potential competency model

6.3.1. Manager descriptions

In total, 520 indicators of leadership potential were extracted from the 40 interviews with managers. 339 indicators related to examples of demonstrating leadership potential and 181 indicators related to examples of not possessing leadership potential. An inspection of how these indicators related to the 8 behavioural competencies suggested that managers were focusing on having and not having leadership potential in qualitatively different ways (see Table 6.2.).

Table 6.2: Frequencies of positive and negative indicators elicited from managers

Competency	Total	LP	NLP
Accountability	68	48	20
BOA	65	49	16
Communication	44	30	14
Managing Career	71	27	44
Motivation & Drive	99	61	38
Planning & Organising	39	24	15
Problem Solving	63	36	27
Team Relationships	71	64	7

Note: BOA = Business & Organisational Awareness. LP = Leadership Potential, NLP = Not Leadership Potential

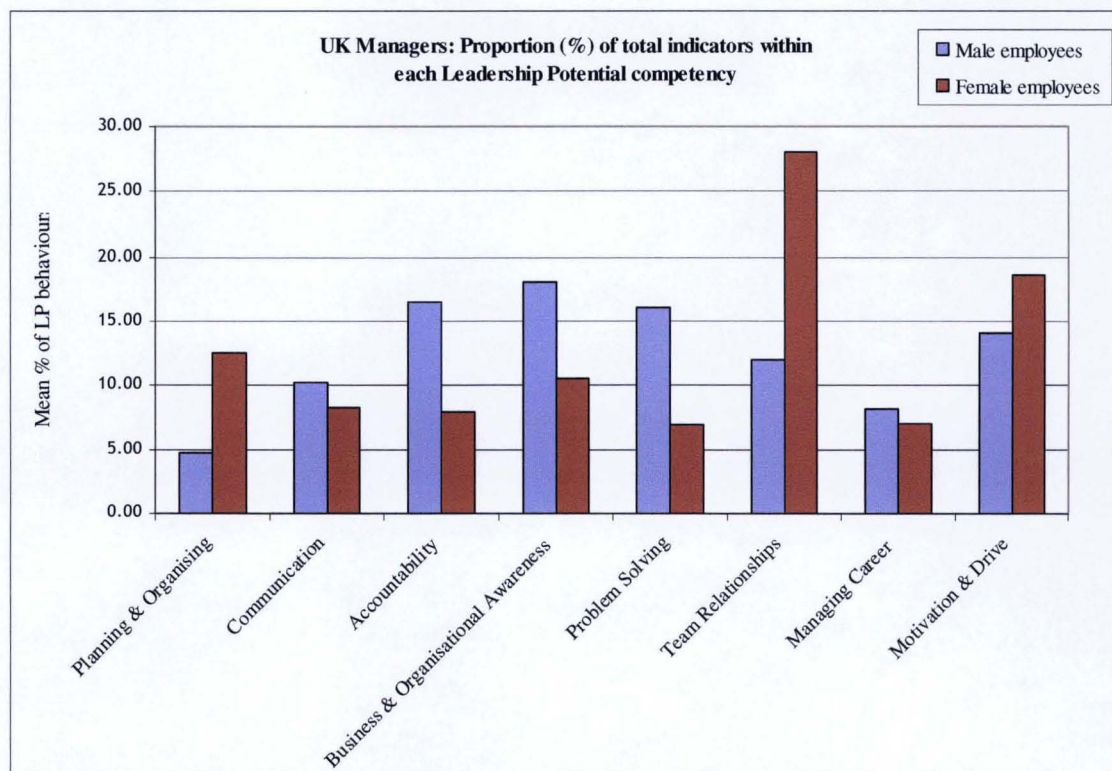
For employees perceived as having leadership potential it appeared that indicators from Team Relationships (N= 64), Motivation & Drive (N = 61), Business & Organisational Awareness (N = 49) and Accountability (N = 48) were particularly important. Conversely, explanations for not showing leadership potential focused particularly around an individual's Motivation & Drive (N = 38), whether they are Managing Career (N = 44) and their Problem Solving skills (N = 27). Therefore, because the aim of this study was to examine whether managers focus on different behaviours when explaining male and female leadership potential the subsequent sections of this chapter examine positive indicators only.

Managers' perceptions of competencies for male and female employees

180 leadership potential indicators related to male employees and 159 to female employees. However, comparing frequency counts for each competency or element would therefore be problematic for two reasons. First, the total number of indicators in relation to male and female employees was not equal. Secondly, using frequency counts could result in findings being susceptible to over-inflation of indicators discussed by managers who generally talked more. Therefore, to control for this

potentially confounding variable, the percentage of indicators within each competency each individual manager used to discuss their male and female employees' leadership potential were examined. Thus, if Manager One provided ten indicators of behaviour for the male employee's leadership potential of which five related to the 'planning' element this would indicate that 50% of that example consisted of planning behaviours. Conversely, if Manager Two also gave five indicators of planning but actually produced twenty indicators of leadership potential in total for their male employee, the planning element would only contribute to 25% of the behaviours in the example. This approach controls for the possibility that managers may vary in the amount of information they provide. Therefore, the proportion of extracted behaviours each element and competency accounted for when managers described male and female leadership potential in each interview were calculated. Mean scores of these proportions for all managers at competency level are presented in Graph 6.1 below:

Graph 6.1: UK managers – proportion (%) of total indicators within each leadership potential competency



As Graph 6.1 illustrates, there appear to be some differences in the competency areas that managers focused on when discussing male and female leadership potential. Specifically, for male employees, managers were most frequently identifying leadership potential in terms of Accountability (16.6%), Business & Organisational Awareness (18.1%), Problem Solving (16.1%) and Motivation & Drive (14.1%). However, whilst managers were also commenting on female employees' Motivation & Drive (18.6%) and Business & Organisational Awareness (10.6%) relatively frequently, it appears that managers' major focus for identifying female potential was via their Team Relationships (28%). In addition, indicators relating to Planning & Organising appeared to be important (12.5%) when discussing women. Communication skills and Managing Career were not the main areas of focus in descriptions of either male or female leadership potential.

In order to test if there were significant differences in how often managers used each competency to describe male and female leadership potential, a series of Wilcoxon signed-rank tests were carried out on the proportion of behaviours per competency, as the data were unsuitable for parametric testing. The exact correction was applied (Field, 2005) because the data was poorly distributed. Results indicated some significant differences such that the Team Relationships competency was used more often to describe female (Mean = 28.04%, *Mdn* = 25%) than male (Mean = 12.02%, *Mdn* = 0%) leadership potential, ($T = 90.00$, $p < .001$, $r = -.33$) and Accountability was used to describe a greater proportion of male (Mean = 16.56%, *Mdn* = 0%) than female (Mean = 7.92%, *Mdn* = 0%) leadership potential, ($T = 65.50$, $p < .01$, $r = -.22$). Differences in the proportion of behaviours relating to the Planning & Organising ($T = 36$, $p = .05$, $r = -.22$) and Problem Solving ($T = 94.50$, $p = .06$, $r = -.21$) competencies also approached significance with the former used by managers more to describe female potential and the latter male potential.

Manager gender and perceptions of competencies for male and female employees

As there has been some discussion around the possibility that male and female managers may explain the behaviour of their subordinates differently, a series of Mann-Whitney U Tests were carried out to see if there were any such differences in this data set. The tests compared the proportion of behaviours per competency used by male managers and female managers in relation to examples of male and female leadership potential. Results were non-significant for all dependent variables indicating that male and female managers were discussing the same types of behaviours. Thus male and female managers described male leadership potential in similar ways and for both groups this was different from their descriptions of female leadership potential.

Descriptions of competencies managers used frequently to describe both male and female leadership potential

The proportions of Motivation & Drive, Business & Organisational Awareness, Communication and Managing Career indicators managers used to explain leadership potential were not significantly different when discussing male and female employees. However as Graph 6.1 illustrates, Motivation & Drive and Business & Organisational Awareness were used more often for all employees than indicators relating to Communication or Managing Career.

The Motivation & Drive competency consisted of behaviours relating to being proactive, taking on new challenges whilst working outside one's comfort zone, demonstrating an interest and focus on the task in hand, having the energy to get results and displaying an enthusiastic and up-beat work-style. Example indicators included *'taken on a couple of things that are not their direct responsibility, but that they know need doing in the next few months'* which was used to describe a female employee and *'100% reliable, always do what they say they will'* which was used to describe a male employee.

Indicators within the Business & Organisational Awareness competency covered an ability to build and maintain networks, demonstrating an understanding of the political environment in which one operates and involving senior management appropriately, the ability to make an effective business case and build professional client relationships. Example indicators included *'built a network of contacts who are reliable sources of confidence'* to discuss male potential and *'has a commercial awareness, so doesn't block the bank from making money'* when describing a female's behaviour.

Descriptions of competencies managers used more frequently in discussion of male employees with leadership potential

Indicators relating to the Accountability and Problem Solving competencies accounted for a greater proportion of leadership potential behaviours for male than female employees. Accountability indicators included feeling personally responsible for projects and taking actions to ensure delivery, having the courage to stand up and challenge convention or make unpopular decisions and a strong self-confidence. Examples extracted for male potential included *'worked through the night on 9/11 to ensure contingency plans were in operation for opening the next day'* and *'they are bold and prepared to be perceived as controversial'*. The Problem Solving competency focused on how employees address high-level, complex problems covering how employees think outside of the box, see the bigger picture and accommodate changing work practices. Examples included *'given a cost-cutting exercise and area to focus on, they decided to look at the whole process and ended up saving 50% of the costs'* and *'able to come up with innovative ways to solve a problem'*.

Descriptions of competencies managers used more frequently in discussion of female employees with leadership potential

Over 28% of the indicators managers used to describe female leadership potential were from the Team Relationships competency, making it the most frequently used category for explaining women's successes. Furthermore, this proportion is much higher than

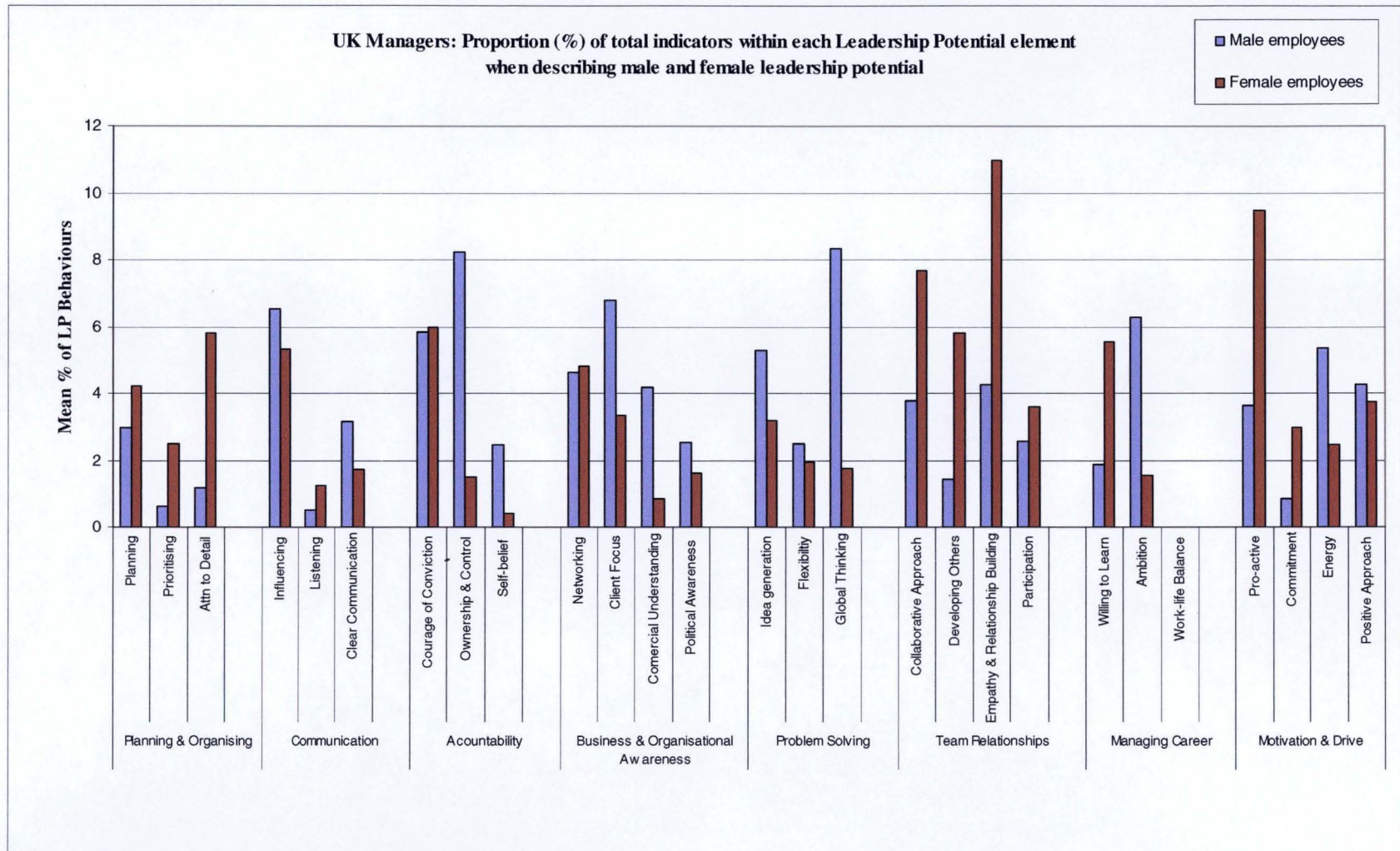
any other found for descriptions of either male or female employees. Indicators covered a willingness to bring together the most appropriate people for team projects, getting personally involved at a hands-on level, showing consideration for others and taking time to develop juniors. Example indicators used to describe women within this competency include *'emotionally has a good temperament, they're not nasty to people'* and *'develops people to help them to improve their weak areas'*.

The proportion of Planning & Organising indicators managers used to explain leadership potential was also significantly greater for female than male employees. Indicators covered behaviours related to structuring, planning and prioritising work, ensuring high standards are maintained. Indicators for female performance included *'never hands anything over unless it is completely checked'* and *'Well organised: to-do list always completed'*.

Managers' perceptions of elements for male and female employees

To get a more detailed understanding of the types of behaviours elicited from managers when describing male and female leadership potential, an examination of the indicators at an element level was then undertaken, again using proportions of behaviours. These are presented in Graph 6.2.

Graph 6.2: UK Managers – Proportion (%) of total indicators within each leadership potential element when describing male and female leadership potential



Note: No positive leadership potential indicators for Work/life Balance were extracted from managers' interviews

Inspection of Graph 6.2 shows different patterns in behaviours elicited from managers to describe MLP and FLP. Ownership & Control and Global Thinking make up a larger proportion of the behavioural indicators for male potential than female potential, whilst Empathy & Relationship Building and Pro-active make up a larger proportion of the indicators of leadership potential for female than male employees.

Due to the relatively small sample size and large number of elements, statistical tests are not appropriate on the data at this level. To better understand the differences, however, the elements were ranked in terms of the proportion of the indicators they covered for male and female leadership potential separately and these lists compared. The top ten ranked items used to discuss male and female employees are presented in Table 6.3 below.

Table 6.3: Ranked elements for managers' discussions of male and female leadership potential

Male Employees			Female Employees		
	Proportion (%)			Proportion (%)	
1 st	Global Thinking	8.32	1 st	Empathy & Relationship Building	10.96
2 nd	Ownership & Control	8.24	2 nd	Pro-active	9.46
3 rd	Client Focus	6.78	3 rd	Collaborative Approach	7.67
4 th	Influencing	6.54	4 th	Courage of Conviction	6.00
5 th	Ambition	6.27	5 th	Developing Others	5.81
6 th	Courage of Conviction	5.85	6 th	Attention to Detail	5.79
7 th	Energy	5.38	7 th	Willing to Learn	5.53
8 th	Idea Generation	5.28	8 th	Influencing	5.32
9 th	Networking	4.63	9 th	Networking	4.82
10 th	Positive Approach	4.26	10 th	Planning	4.24

Examination of this table reveals that there are three elements, Influencing, Courage of Conviction and Networking, which were ranked in the top 10 elements for explaining both male and female leadership potential.

Fourteen elements (7 per list) appeared only in relation to managers' discussions of male or female employees. When discussing male leadership potential these were, Global Thinking, Ownership & Control, Client Focus, Ambition, Energy, Idea Generation and Positive Approach. For explaining female leadership potential these

were Empathy & Relationship Building, Pro-active, Collaborative Approach, Developing Others, Attention to Detail, Willing to Learn and Planning. Examples of indicators from these elements which were used more to discuss either male or female potential are provided in Figure 6.4 below.

Figure 6.4: Example indicators from elements contributing to a greater proportion of managers' descriptions of MLP or FLP

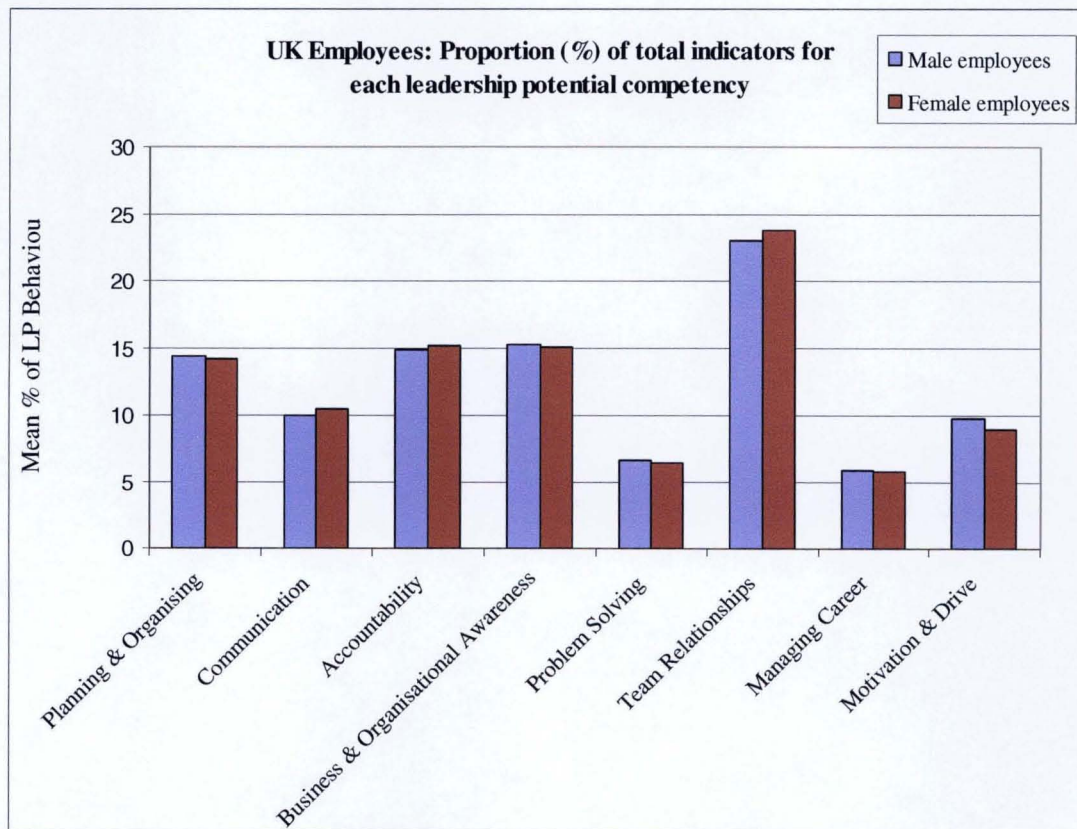
Male Leadership Potential (MLP)	
Element	Example Indicators
Global Thinking:	<i>Broad understanding of the issues that affect them and how they fit into broader business areas</i> <i>Acted out of remit because they could see the benefit for the whole organisation</i> <i>Focuses on implications of actions for the institution not just for self</i>
Ownership & Control:	<i>Takes control of situations when it looks like problems will arise</i> <i>Tries to solve problems themselves before escalating</i> <i>Takes ownership of specific area to distinguish self in the business</i>
Client Focus:	<i>Understands their clients thoroughly</i> <i>Able to identify what is important to the client</i> <i>Has friendly relationship with clients</i>
Ambition:	<i>Understands what work is important in terms of building an internal reputation</i> <i>Hunger to assume more responsibility and be successful</i> <i>Makes no secret of the fact they want to progress</i>
Energy:	<i>Has passion and belief in what they do</i> <i>Unlimited energy and enthusiasm</i> <i>Has an urgency to make things happen</i>
Idea Generation:	<i>Suggests ideas rather than just stating the problem</i> <i>Comes up with suggestions to do things differently</i> <i>Thinks laterally so does not restrict ideas to a strict set of parameters</i>
Positive Approach	<i>Positive – doesn't focus on the negatives</i> <i>Responds to adversity positively</i> <i>Enjoy works and looks forward to it</i>

Female Leadership Potential (FLP)	
Element	Example Indicators
Empathy & Relationship Building	<i>Takes time to deliver difficult messages sensitively Spends a lot of time with key workers to build good working relationships Cares about colleagues</i>
Proactive	<i>Volunteered to take on running of cross-department project even though it was not something they'd done before Takes it upon self to change inefficiencies and improve ways things are done without being prompted Works without daily contact with manager</i>
Collaborative Approach	<i>Facilitated conference call to discuss the problem and gain joint agreement for implementation Builds consensus Not worried about their space being impinged upon and so asks others to participate</i>
Developing Others	<i>Will train and help new employees Encourages their team to present at meetings Coaching style to get the most out of people</i>
Attention to Detail & Quality	<i>Never hands anything over unless it is completely checked Analysis is always very considered Very focused and dedicated to gaining results that are of high quality</i>
Planning	<i>When they run the report they check what people want and plan how to do it Structured and organised approach to work Focused on objectives so can plan what they will do</i>

6.3.2. Employee descriptions

489 positive indicators of leadership potential were extracted from the 40 employee interviews conducted during study two. 254 indicators related to women's descriptions of demonstrating leadership potential and 235 came from transcripts of men's experiences. Following the same approach as used for managers' responses, the proportion of extracted behaviours grouped within each element and competency were calculated for each employee who was interviewed. Comparisons were then made between male and female employees' responses. Mean scores for proportions of behaviours at competency level are presented in Graph 6.3 below:

Graph 6.3: UK employees: Proportion (%) of total indicators for each leadership potential competency

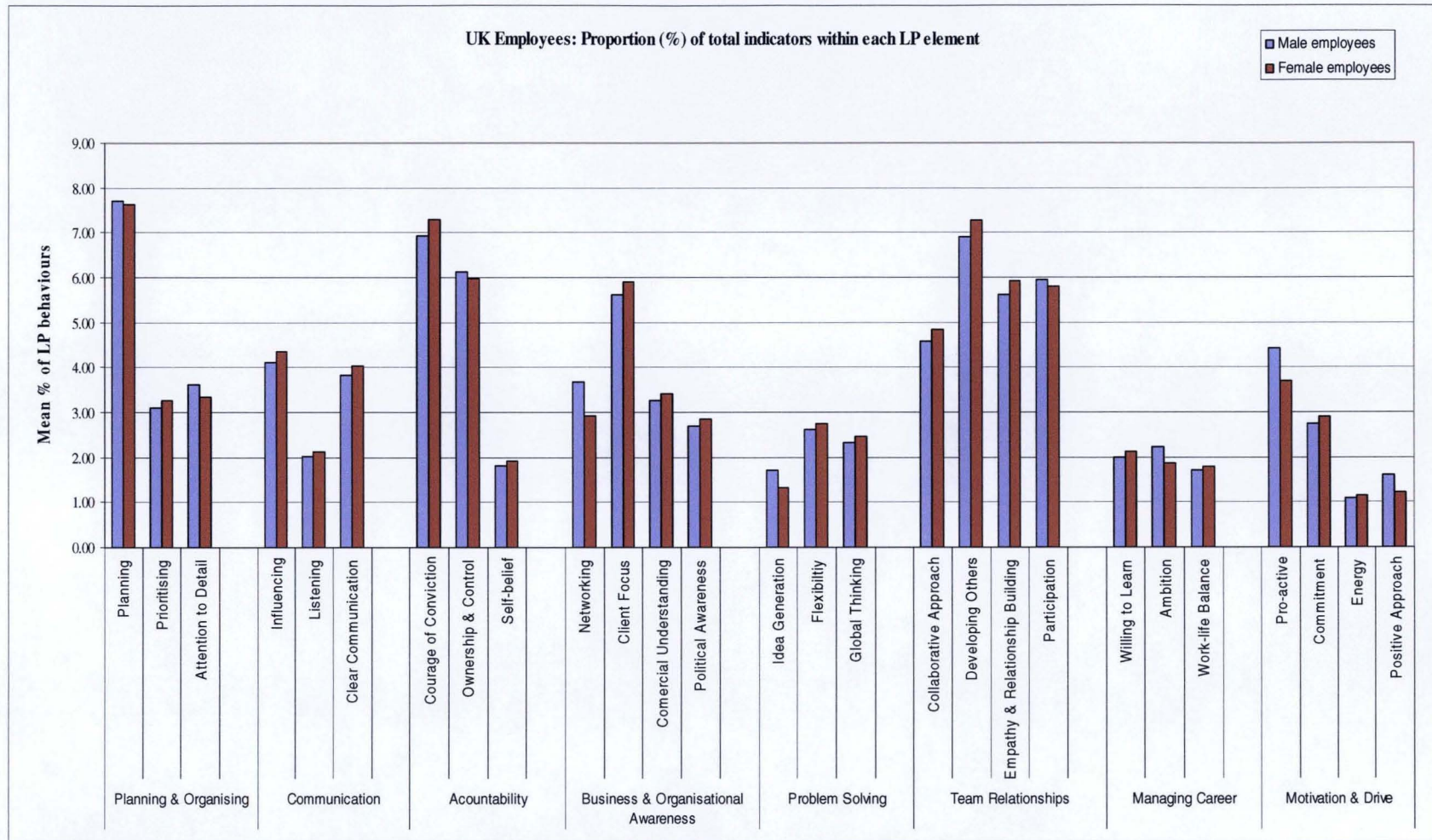


As Graph 6.3 illustrates there is little difference between the types of behaviours used by men and women to show why they have leadership potential. For both men and women, the Team Relationships competency accounted for the greatest proportion of indicators (23.1% and 23.8% respectively), followed by Accountability (14.87% for men and 15.2% for women), Business & Organisational Awareness (15.2% for men and 15.1% for women) and Planning & Organising (14.4% for men and 14.2% for women). Behaviours relating to Problem Solving and Managing Career accounted for the smallest proportions of indicators used by both men and women. The similarity in terms of the proportion of behaviours accounted for by each competency for men and women was confirmed by a series of Mann-Whitney tests. There were no significant differences in how men and women used all eight competencies to describe their own leadership potential (Planning & Organising $U = 127.5$, $p > .05$, Communication $U = 160$, $p > .05$, Accountability $U = 126.5$, $p > .05$, Business & Organisational Awareness $U = 136$, $p > .05$, Problem Solving $U = 147.5$, $p = >.05$, Team Relationships $U = 143$, $p = >.05$, Managing Career $U = 189.5$, $p = >.05$, Motivation & Drive $U = 175.5$, $p = >.05$).

Elements used by male and female employees to explain their leadership potential

The analysis at competency level suggested that male and female employees were focusing on the same types of behaviours when describing their potential. To confirm this, the proportion of behaviours relating to each element used by men and women used to describe their potential were also examined. These are presented in Graph 6.4 below.

Graph 6.4: UK Employees – Proportion (%) of total indicators within each leadership potential element



Inspection of this graph suggests that there is some variation in terms of the proportion of the behaviours accounted for by each element. However, the pattern is very similar for male and female employees. Planning, Courage of Conviction and Developing Others accounted for greater proportions of the indicators, whilst Energy, Positive Approach, Work-life Balance, Idea Generation and Self-belief account for smaller proportions of the total indicators.

Elements were then ranked in terms of the proportion of the indicators they covered for male and female employees separately and these lists compared. The top 11 ranked items for male and female employees are presented in Table 6.4 below.

Table 6.4: Ranked elements for employees' discussion of their leadership potential

Male Employees			Female Employees		
	Proportion (%)			Proportion (%)	
1 st	Planning	7.70	1 st	Planning	7.62
2 nd	Courage of Conviction	6.92	2 nd	Courage of Conviction	7.29
3 rd	Developing Others	6.91	3 rd	Developing Others	7.27
4 th	Ownership & Control	6.13	4 th	Ownership & Control	5.97
5 th	Participation	5.96	5 th	Empathy & Relationship Building	5.92
6 th	Empathy & Relationship Building	5.62	6 th	Client Focus	5.90
7 th	Client Focus	5.61	7 th	Participation	5.79
8 th	Collaborative Approach	4.59	8 th	Collaborative Approach	4.83
9 th	Pro-active	4.43	9 th	Influencing	4.33
10 th	Influencing	4.12	10 th	Clear Communication	4.03
11 th	Clear communication	3.83	11 th	Pro-active	3.71

The elements which make up this list for men and for women are the same, with the first four elements appearing in the same order, lending further support to the proposition that male and female employees use the same types of behaviours to describe how they have demonstrated leadership potential. Examples of each indicator taken from men's and women's interviews are presented in Figure 6.5.

Figure 6.5: Example indicators from elements contributing most to how men and women describe their leadership potential

Element	Male Example	Female Example
Planning	<i>Sets milestones for people to get projects running smoothly</i>	<i>Plans resources to be available for the dry-run merger</i>
Courage of Conviction	<i>Owened up to making a mistake</i>	<i>Willing to say when think someone else is doing things which are unnecessary</i>
Developing Others	<i>Provided ways to give team developmental feedback</i>	<i>Constructively 'challenges' juniors so that they can learn</i>
Ownership & Control	<i>Took responsibility for driving project through to completion</i>	<i>Followed through to ensure all aims of project were fully met</i>
Empathy & Relationship Building	<i>Set up a 1-day team building session</i>	<i>Spends time with team, so all aware of each others' personalities</i>
Client Focus	<i>Worked with the client to ensure they understood how the product would work</i>	<i>Takes on colleagues' work once they have left to give smooth customer services</i>
Participation	<i>Spent time 'getting hands dirty' in the day-to-day work</i>	<i>Happy to help whenever anyone wants it</i>
Collaborative Approach	<i>Shares ideas and asks advice from other project managers</i>	<i>Involved most appropriate people in project (e.g. asked for HR input)</i>
Influencing	<i>Persuaded manager by explaining how idea fitted in with other work</i>	<i>Persuades people by over-emphasising the benefits of what they are doing</i>
Clear Communication	<i>Changed data into a report others could easily interpret</i>	<i>Writes procedures in a clear and concise manner</i>
Pro-active	<i>Works from fewer instructions 'there's more slack on the leash'</i>	<i>Taking the initiative to contact people before they realised there was a problem</i>

6.3.3. Part two discussion - Investigating gender differences in behaviours associated with leadership potential

Managers' perceptions

Results indicated that managers did not discuss male and female employees in the same way, with clear differences in the proportion of indicators used to describe examples of male and female leadership potential.

For male employees, Accountability, Business & Organisational Awareness, Motivation & Drive and Problem Solving competencies accounted for the most indicators. Similarly, with the exception of Influencing, examination of the top ten ranked elements also indicated that they came only from these competencies.

These indicators cover strategic thinking, producing innovative solutions, taking personal responsibility, demonstrating tenacity and generally being successful in business. Together, they produce a strong positive picture of an employee who has a focus on themselves, makes a significant impact on their surroundings, is brave, takes decisions, and strives for success; one generally in control of their surroundings. This suggests these are the sorts of qualities managers are focusing on when deciding whether a male employee has leadership potential.

When considering females, indicators elicited from managers most often came from Motivation & Drive, Business & Organisational Awareness, Team Relationships and Planning & Organising competencies. Analysis of the ranked elements revealed that a broad range of competencies were associated with female leadership potential. Indicators used frequently to describe female employees only (i.e. not often discussed in relation to MLP) covered consistently producing high quality work, working collaboratively, building effective relationships, developing juniors, taking the initiative and volunteering for new challenges.

Thus, the behaviours that were perceived as important for female leadership potential appear to be split into two areas. First, women have to be seen as accountable and driven. This reflects the competencies which are common to discussions of both male and female potential. Secondly, women also have to be perceived as good at teamwork, working with and through others to ensure success.

With the added focus of a consideration for others, it appears that being perceived as having leadership potential is more dependent on other people for female employees than male employees. Rather than being entirely responsible for one's own success, the ability to work collaboratively, build relationships and develop others are all two-way processes and thus are dependent on another person. Similarly, actions related to planning involve the co-ordination and delegation of work to other people. It could therefore be argued that these are actions over which an individual does not have complete control. The successful planning of human resources will in part be impacted by what these individuals do and, by definition, working collaboratively implies at least two people working towards a common goal.

This interpretation is further supported by comparing the highest ranked element for describing male and female leadership potential: Ownership & Control (*feels personally responsible for projects and takes actions to ensure delivery*) and Empathy & Relationship Building (*takes the time to show consideration for individuals in order to build a relationship*). Below are interview extracts which cover these two elements and illustrate the different emphasis for male and female employees. Whilst the male employee is remembered for taking exclusive control of a business area, the female employee is recalled because she cares and nurtures others.

Male Employee – Ownership & Control: *'As an investment banker, there are many things you can do, but he has actually taken a sub-niche area, and said 'that's mine'. He now owns it ... even a senior MD will go to him to ask his opinion on it.'*

Female Employee– Empathy & Relationship Building: *‘People want to work for her and for her to be successful. Her caring, sharing, nurturing nature goes a long way; everybody feels she know and understands them.’*

Examining the indicators used to describe male and female performance at an element level enabled a more thorough understanding of the differences in how leadership potential is construed for men and women. For example, whereas the proportion of indicators relating to Managing Career was the same for men and women, analysis at the element level demonstrated that, for males, indicators were primarily related to Ambition and for females to being Willing to Learn. These reflect an overall trend of male potential being described in terms of being more go-getting, dynamic and impactful and female potential as more mild-mannered or agreeable.

These findings are compatible with previous research which indicates that, in general, men are stereotyped as competitive, logical, independent, aggressive, responsible, rational and ambitious whereas stereotypes about women often include characteristics such as being gentle, emotional, intuitive, dependent, sensitive, passive, nurturant, warm and accommodating (Dubno, 1985; Eagly & Wood, 1991; Haslett, Geis & Carter, 1992).

There is also an expectation that most leaders in professional and management positions are driven, objective, assertive and authoritative (Wajcman, 1998) and therefore possess and display the characteristics associated with masculine rather than feminine stereotypes (e.g. Deal & Stevenson, 1998; Heilman, Block, Martell & Simon, 1989; Schein 1973, 1975). For example, Martell, Parker, Emrich and Crawford (1998) identified four factors necessary to be a successful executive: Results-Orientation (proactive, action-oriented), Change Agent (risk-taker, energetic), Managerial Courage (courageous, resilient) and Leadership Ability (strategic thinker, team builder). Martell *et al.* reported that, with the exception of Leadership Ability, all factors were perceived as more likely to be possessed by successful male than female executives. Similarly, Rodler (2001) noted that obituaries written about male leaders typically identified their

success in terms of their goal attainment, whilst for female leaders the emphasis tended to be on the importance of their social relationships.

Differences in how managers perceive male and female leadership potential may have considerable implications for female career progression. As Dennis and Kunkel (2004) have noted, masculine characteristics can become viewed as the standard in leadership while characteristics which are perceived as more feminine, such as supportiveness, attentiveness and collaboration, can become marginalised or dismissed even though research has found that they tend to enhance morale and productivity (Wood, 2003). Results from this study suggest that one of the main ways in which female employees were seen to identify leadership potential was through their team relationships. However, Bartram's (2005) meta-analysis of validation studies using SHL's 'great eight' competencies indicated that overall job performance is mainly predicted by the competencies such as 'Organizing & Executing' and 'Leading & Deciding', which reflect more agentic behaviours. Furthermore, Bartram reported job performance to be negatively associated with 'Supporting & Co-operating' competencies, which has conceptual overlap with the Team Relationship competency in the leadership potential model. Bartram concludes that these findings, *'may have more to say about what factors drive managers' general ratings of job performance than anything else. It suggests a pattern whereby managers favour people who are dependable, high achieving and focused on the task rather than those who show prosocial behaviours of helping and supporting others'* (p 1195). Translating Bartram's results to this context, it is particularly noteworthy, that prosocial behaviours relate to the indicators managers are most likely to use when describing female employees' potential. Moreover, previous work by Heilman, Block and Martell (1995) has found that women tended to be described as more concerned for others than were men, but that successful female leaders were less concerned than women in general.

In addition, managers were also more likely to use the Attention to Detail and Planning elements to describe female than male leadership potential. It is likely that there is some relationship between how a person is evaluated in terms of these behaviours and

judgements made regarding their conscientiousness. However, Judge, Bono, Ilies and Gerhardt (2002), have reported that correlations between conscientiousness and ratings of leadership qualities are moderated by sample effects and that, particularly in business and commercial settings, the relationship can be as little as .05. Again, this seems to suggest that the reasons managers give for why women show potential are not actually related to what is necessary for success at senior levels.

In fact, examining element rankings for managers' descriptions of male and female employees, shows that three of the indicators relating to female potential are devalued in the Sternberg and Lubart's (1996) observation about CEOs, whilst only elements related to male potential are praised: *'CEOs are selected not for their pleasant personalities ... or their learning and memory skills ... but for their creative vision of how to turn a company around'* (p 677).

To summarise, the results indicate differences in how managers identified leadership potential behaviours for male and female employees. These differences link to previous findings regarding stereotypes and perceptions of leadership potential. Consideration of these differences in evaluations of leadership potential can help increase our understanding of why, although men and women may be rated equally in terms of overall performance, differential career progression persists.

Employees' perceptions

The analysis of managers' perceptions does not indicate whether men and women are actually demonstrating different behaviours in the workplace. Some researchers have argued that men and women may lead in different ways (e.g. Anderson, Lievens, van Dam & Born, 2006) with, for example, men adopting a more task-oriented style of leadership and women emerging as social leaders (Eagly & Karan, 1991). The differences in descriptions provided by managers in this study also suggest that they perceive this to be the case. However, to investigate if men and women report different approaches to demonstrating leadership potential themselves, an analysis of the

behaviours elicited from male and female employees when describing their own potential was undertaken.

Results suggested that there were no differences in the types of behaviours men and women were using to describe their leadership potential. This is consistent with earlier research by Alban Metcalfe (1987) who examined how male and female employees perceive themselves at work, reporting that the contents of their self-concepts were similar.

In addition, the similarity of men's and women's descriptions of their own potential relates to other previous literature which has found little difference in the way men and women actually display various behaviours associated with leadership, including emotion-based communication skills (Kunkel & Burlison, 1999) and task-oriented and interpersonal styles, particularly when these factors are investigated in real-world, non-laboratory settings (Eagly & Johnson, 1990). For example, Shore, Tashchian and Adams (1997) examined the behaviour of male and female participants attending a development centre in a large financial services organisation. Attendees' behaviour was observed, recorded and rated for eight dimensions, which included a general category of 'leadership' which included influencing, interpersonal skills, planning and organising, decision making and problem solving, across three exercises. Across all development centre exercises, there were no differences in the way men and women performed. Indeed, as Kanter (1993) notes, there is *'overall a lack of research evidence that makes a case for sex differences in either leadership aptitude or style'* (p 99).

There were however differences in this study in the emphasis employees and managers placed on various behavioural competencies. Males and females employees both used a greater proportion of indicators which came from Team Relationships, Planning & Organising, Accountability and Business & Organisational Awareness and were less likely to focus on Problem Solving or Managing Career. Interestingly, this pattern was more similar to managers' descriptions of female than male potential. Furthermore,

inspection at an element level showed that the behaviours employees were most likely to use to describe their own potential related to Planning, Courage of Conviction, Developing Others and Ownership & Control. It is perhaps more realistic that someone operating at a more junior level will have opportunity to show these skills rather than the problem solving elements of Idea Generation or Global Thinking. This has implications for educating managers about the way in which employees believe they can show potential and what it is perhaps reasonable to expect someone at a junior level to have opportunities to demonstrate.

These findings may also suggest that, currently, employees are not fully aware of what senior people in the organisation see as behaviours associated with leadership potential. In this case, the proposed competency model also has practical implications by providing a realistic preview (Patterson *et al.*, 2000) of what is expected for someone to be identified as high potential. As, Ferrarie (2005) notes, introducing a competency model of desired leadership behaviours, enables employees better to understand and achieve their potential.

6.4. General Discussion

This study set out to achieve two aims:

- 1) Identify and classify the behaviours associated with demonstrating leadership potential by generating a leadership potential competency model.
- 2) Investigate gender differences in behaviours associated with leadership potential.

To complete the first aim, a leadership potential competency model was developed following guidelines for best practice by applying a consistent and rigorous process. Eight competencies were identified which consisted of 27 elements. The identified leadership potential behaviours linked closely to factors cited by previous research as important for leadership and work performance but also highlighted some unique

themes for identifying future potential. The competency model has potential practical implications for the host organisation.

A series of analyses was then undertaken to test for gender differences in behaviours associated with leadership potential. Results indicated that different behaviours were elicited from managers when describing male and female leadership potential. No differences were found in the behaviours men and women used to describe their own leadership potential.

These findings are consistent with previous research which has investigated perceptions of male and female leadership behaviour and some analyses of actual behaviours demonstrated by men and women. In addition, there are also clear links between these findings and the attributional results presented in chapters four and five. In both the attributional and behavioural analyses, results supported the propositions of barrier one from the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) which states that managers explain the performance of men and women differently. However, for barrier two, which suggests that there may be differences in how men and women present their own performance, little support was found from either analysis.

Limitations and Next Steps

This chapter has made some progress in developing the understanding of what behaviours are associated with leadership potential and how these are used by both managers and employees to explain male and female successes. Again a potential criticism of this work is that it is not linked to actual promotion decisions. Whilst the employees that managers discussed had all received equal performance ratings and the male and female employees who described their own potential were matched for previous appraisal ratings, the examples they described were not necessarily related to these ratings. The reasons and possible implications of this are discussed more fully in chapter nine.

One could also argue that the categories used for the leadership potential competency model should have been derived from a clear theoretical base, as has been suggested in relation to content analysis (e.g. Mackenzie Davy & Arnold, 2000). Using categories derived from the data has been criticised as a ‘fishing expedition’ (Krippendorff, 1980). However, since this study was an exploratory analysis, a ‘bottom-up’ or more grounded approach was seen as more appropriate. Moreover, there is insufficient existing literature regarding leadership potential to provide a theoretical basis for such a framework and it would have been inappropriate to use existing theories of leadership to analyse conceptualisations of leadership potential. This supposition is supported by the fact that the comparison between the leadership potential framework and the Management Practices Survey (Yukl *et al.*, 1994) indicated many similarities in behaviours, but also several differences (see Table 6.1).

Due to the more exploratory and qualitative approach used in this study, only basic statistical analyses were feasible. As such, further quantitative investigations are required, first to undertake additional research into the apparent differences in how leadership potential is identified in male and female employees and secondly to check the properties of the competency model. Therefore, the next steps identified for this research programme were to undertake an exploratory factor analysis of the competency model and to use a questionnaire based study to investigate perceptions of men and women in relation to the leadership potential competencies.

Chapter 7: Validation study to examine behaviours associated with leadership potential and beliefs about gender differences.

7.1. Introduction

This chapter describes a two-part questionnaire study which was undertaken as a follow-up to study three, an exploration of behaviours used to describe leadership potential. In the previous study, a leadership potential competency model was developed and used to examine a) how managers described male and female employees' leadership potential and b) how male and female employees described their own performance. This revealed differences in how managers perceive MLP and FLP, but little differences in the types of behaviours men and women used to explain their own potential. The purpose of this study is therefore to build upon these findings in two ways:

1: By using a diagnostic-ratio approach to measure gender-stereotyped beliefs about perceptions of leadership potential in the host organisation.

2: To undertake an exploratory factor analysis to test the properties of the leadership potential framework and the perceived importance of the competency domains.

7.2. The diagnostic-ratio approach

There has been considerable debate within the social psychology literature regarding the most effective way to measure stereotypes. One area of discussion has been whether stereotypes should be defined by the 'frequency' or 'distinctiveness' of a feature. Frequent features can be identified as factors which are characteristic of a group and occur in many group members, such as the assumption that many women are communal. Conversely, although distinctive features also occur more often in one group than another, overall they are low in frequency. Martin (1995) provides an example of distinctiveness as the use of aggression by a person to achieve desired

means. She argues that, whilst there may be a belief that only as few as ten percent of men would do this, the percentage of women people might expect to do this would be even fewer, perhaps around five percent. Thus, whilst people may believe that it is relatively unlikely for men or women to do this, they still think men are considerably more likely to do this than women, suggesting that use of aggression is a distinctive feature of a male stereotype.

Ashmore and Del Boca (1981) have argued that both frequency and distinctiveness, should be used to characterise stereotypes. Indeed, research investigating racial (e.g. McCauley and Stitt; 1978) and gender stereotypes (e.g. Martin, 1987), has found that both aspects play an important role. Martin (1995) therefore argues that assessments of stereotypes which include both types of information will provide the greatest understanding.

In addition, stereotypes often involve perceptions of how groups differ from one another (Martin, 1987). In Martin's (1995) example of the use of aggression, stereotypes for women may implicitly include some conception of how women differ from men in terms of the amount of aggression they will use to achieve something. Biernat and Crandell (1994) have proposed that, in order to capture this comparison, stereotypes may best be measured using probabilistic group differentiation methodology. One method for this, which also captures both frequency and distinctiveness features of stereotypes, is a diagnostic ratio approach.

A diagnostic ratio is a likelihood ratio which measures the extent to which group membership elicits the probability of a particular characteristic. A diagnostic ratio formally expresses the extent to which any behaviour is seen as more probable in one group than another on the basis of knowledge of group membership alone. For example, a diagnostic ratio for stereotypes about the use of aggression to achieve desired results would be calculated by asking respondents to make percentage estimates for the number of men and the number women they believe are likely to demonstrate that behaviour. The diagnostic ratio would then be calculated by dividing the

percentage of men the individual believes demonstrate that behaviour by the percentage of women they think would demonstrate the same behaviour. This is valuable as it allows for the fact that people's stereotypes are 'far from exception-less generalisations' (McCauley & Stitt, 1978). So, continuing the example of use of aggression, whilst few would agree that all men are more aggressive than all women, gender is likely to serve as a probabilistic function insofar as knowing a person is male increases the probability that they will use aggression to achieve their means.

Diagnostic ratios are calculated such that a ratio of one (which would arise only if the same percentage estimate was given for males and females) indicates that there were no differences in the perceived likelihood of a behaviour being shown by either group. If the diagnostic value is significantly greater or significantly less than one, the perceived likelihood of that behaviour being demonstrated is greater for one group than another.

A diagnostic ratio approach to questionnaire design differs from a format which gathers responses on Likert scales in that only one diagnostic ratio is calculated per variable being tested. Conversely, a Likert response scale would produce average scores for all respondents' reported perceptions for each group (e.g. men and women) for each questionnaire item. For example, if a Likert-type measure was administered, two average aggression scores, one for males and one for females, would be produced. However, if a diagnostic ratio was used a single diagnostic ratio for aggression would be produced.

With Likert-type approaches, statistical tests can then be carried out to see whether there is a significant difference between these scores, but the method frequently employed to do this merely allows one to conclude with either 95% or 99% confidence that there is a difference between the two averages. It says nothing of the magnitude of the difference. In these circumstances, best practice encourages the researcher then also to compute an effect size statistic. By contrast, the diagnostic ratio produced for each questionnaire item is a measure of effect size as it reflects the size of the difference in perceptions for the two groups (e.g. males and females) on that item. Thus the larger

the diagnostic ratio, the larger the difference between the sample's perceptions of the groups.

A diagnostic ratio approach is also valuable as it allows the researcher to detect perceived group differences in behaviours which do not occur frequently. It has been argued that perceptions of such behaviours are especially important in determining whether or not individuals are seen as having the necessary attribute to be effective leaders: these behaviours are likely to have a low base-rate in terms of the general population (Martell & DeSmet, 2001).

There is a considerable body of research which suggests that using a diagnostic ratio approach is an effective method of assessing stereotypes (e.g. McCauley & Stitt, 1978; McCauley, Stitt & Segal, 1980). For example, Stephan, Ageyev, Stephan and Abalakina (1993) in an investigation of American and Russian stereotypes held by American and Russian students compared three techniques for measuring stereotypes, checklists, percentages, and diagnostic ratios. A high level of agreement in results was found across all techniques, which led the authors to conclude that the same type of cognitive processing was elicited by all techniques.

Research by Allen (1995) and Martin (1987) has also produced results which increase understanding of the level of accuracy in gender stereotyping using a diagnostic ratio approach. Allen reported that, out of 64 comparisons across both his and Martin's studies, participants were inaccurate on 50 occasions, such that stereotypic attributions of difference between men and women were significantly discrepant with self-report ratios of men's and women's actual behaviour, indicating that gender stereotypes are rarely accurate.

More recently, Bajdo (2005) has also detected a difference in stereotypes of male and female managers in terms of transformational, transactional and laissez-faire leadership dimensions using diagnostic ratio measurements. Bajdo reported that, in general, males perceived male managers to possess more of the characteristics typically associated

with effective leadership, whereas females perceived female managers as more likely to display attributes and behaviours associated with effective leadership.

Martell and DeSmet (2001) have also adopted a diagnostic ratio approach to measure beliefs about the leadership abilities of male and female managers. They criticise previous research which has investigated leadership stereotypes as having '*assumed a very narrow conceptualisation of leadership, relying either on a single trait-like rating of perceived leadership ability or on ratings of men and women on a limited number of abstract behavioural dimensions derived from two-factor theories (e.g. task-oriented and relationship-oriented: Fleishman, 1953)*' (p 1223). Citing research by Bass (1998) and Yukl (1989; 1994) as evidence, Martell and DeSmet argue that, in reality, effective leadership is dependent on a mix of behaviours, not all of which are stereotypically male, and that research which instructs respondents to give an overall summary evaluation of leadership ability may encourage entirely male-oriented constructions of leadership.

In their own study, Martell and DeSmet therefore asked participants to make percentage estimates regarding the likelihood of male and female managers displaying 14 categories of leadership behaviour. Their results produce a more balanced picture of gender stereotyping in the leadership domain, with some behaviours perceived more likely to be demonstrated by male managers, some by female managers and some as equally likely to be displayed by males and females. However, the perceived likelihood of a number of key leadership behaviours, including 'inspiring', 'intellectual stimulation' and 'problem solving', were deemed significantly lower for female than male managers, especially by male respondents.

Current Study

Based on the evidence discussed above regarding the utility of investigating stereotypes using a diagnostic ratio approach and the need to consider specific behaviours which contribute to conceptions of effective leadership, this study set out to investigate further

the apparent differences in how leadership potential is identified in male and female employees in the host organisation. By combining the principles of a diagnostic ratio approach to assessing stereotypes with the content of the leadership potential competency model devised in study three, the aim was to assess perceptions of the likeliness of male and female managers demonstrating the behaviours which had already been identified as important for leadership potential within the host organisation.

Based on the findings of the exploratory behavioural analysis, where managers focused on different behaviours male and female leadership potential, it was possible to make the following predictions:

Hypothesis 1: *Male employees will be perceived as significantly more likely to effectively demonstrate, a) Business & Organisational Awareness, b) Problem Solving and c) Accountability behaviours than female employees.*

Hypothesis 2: *Female employees will be perceived as significantly more likely to effectively demonstrate, a) Planning & Organising and b) Team Relationship behaviours than male employees.*

Hypothesis 3: *Male and Female employees will be perceived as equally likely to effectively demonstrate, a) Communication, b) Motivation & Drive and c) Managing Career behaviours.*

7.2.1. Method

Participants

Participants were members of the host organisation, who responded to email requests to be involved in the research (see appendix five). Requests for participants were sent out via various UK networks and by UK based business heads within the organisation, such

as the Leadership Council, the Women's Network, and the Financial Trade Services Head. Thus, it is not possible to be certain exactly how many individuals received the questionnaire, but the figure is approximately 500. 154 participants responded, giving a response rate of around 30%, which is reasonable for a survey of this type.

Sixty-nine respondents were male and 85 female. They ranged in age from 20-54 years ($M = 33.75$, $sd = 7.66$) and had been working in the firm for between two months and twenty-nine years ($M = 7$ years, $sd = 5.9$). The sample was predominantly British (92.2%), with three US, three New Zealand, two Spanish nationals plus one respondent each from Ireland, Italy, Germany and India. All participants currently worked in UK offices. 95.5% respondents described their ethnic origin as White. Two respondents stated they were Indian, two Pakistani, one Black African and one person described their ethnicity as 'Other'. Respondents held a range of roles throughout the organisation: administrators ($N = 8$), analysts ($N = 18$), associates ($N = 37$), assistant vice presidents ($N = 34$), vice presidents/managers ($N = 35$) and various professional roles ($N = 9$). Thirteen participants did not state their current role.

Measurement instrument

The measure used to assess gender stereotyping of leadership potential followed the format used by Martell and DeSmet (2001) in their research into beliefs about leadership abilities of male and female managers. The primary objective for administering a diagnostic-ratio questionnaire in this setting was to quantitatively test the differential perceptions of male and female leadership potential which managers appeared to hold as discussed in chapter six. Therefore, Martell and DeSmet's categories of leadership behaviour were replaced by the behavioural competencies identified in the leadership potential competency model developed in study three. In line with Martell and DeSmet's original study, participants were provided with a fixed behavioural standard for each leadership potential competency that included the name and definition of the competency and three or four specific examples of the behaviour. The examples were derived from the 'element' descriptions contained within each

competency in the leadership potential model as these provided examples of the main behaviours associated with each competency. For instance, with the ‘Accountability’ item the behavioural examples (see Figure 7.1 below) were based on the ‘Courage of Conviction’, ‘Ownership & Control’ and ‘Self-Belief’ element definitions from the framework. By using the leadership potential competency model definitions, the questionnaire had the added benefit of being specific to the host organisation, so that confidence about the relevance of the behavioural categories to judgements about leadership potential could be ensured.

The questionnaire contained eight items, covering the eight leadership potential competencies. For each item participants were instructed to estimate the percentage of male employees and female employees that they knew who were likely to effectively demonstrate each leadership potential behaviour. As Allen (1995) has noted, one potential problem with previous diagnostic ratio research has been *‘what subjects had in mind when they made their estimates’* (p 587), the word ‘employees’ was used in the instruction to make it clear who respondents should consider when making their estimates. Example questions are presented in Figure 7.1 below. To ensure instructions were clear the following example response was provided at the start of the questionnaire: *‘For example you may think that 80% of men and 70% women effectively demonstrate planning & organising.’* The example specifically used estimates which did not equate to 100 as, during piloting², one participant interpreted the instructions to mean that the percentage estimates for men and for women must equate to 100%. However, as Martell and DeSmet did not report any problems with responses in their study or highlight the need for further explanations on completing the questionnaire, the example response was deemed sufficient for this issue. A full copy of the questionnaire is provided in appendix six.

² The questionnaire was piloted with a group of 15 trainee Business Psychologists. They completed the questionnaire and provided feedback on the format, instructions and questions. Their responses were reviewed to ensure a range of responses could be anticipated.

Figure 7.1. Example questions from the diagnostic-ratio questionnaire

<p>Planning and Organising - Structures, plans and prioritises workload ensuring high standards of detail and quality.</p> <ul style="list-style-type: none"> ▪ has a structured approach, considering how to achieve objectives and organise necessary resources ▪ detects important issues and multi-tasks, ensuring critical activities are prioritised ▪ produces thorough and considered work consistently to high standards. <p>% males..... %females.....</p>	
<p>Accountability -Takes personal responsibility for project delivery, demonstrating confidence in self and the courage to challenge the status quo and make unpopular decisions where necessary.</p> <ul style="list-style-type: none"> ▪ is honest, prepared to be controversial and make difficult decisions ▪ feels personally responsible for projects and takes actions to ensure delivery ▪ has confidence in self and is not constantly trying to impress others <p>% males..... %females.....</p>	

7.2.2. Results

Diagnostic ratios were computed for each respondent by dividing their male percentage estimate by their female percentage estimate for each leadership potential competency. To illustrate, if a participant had estimated that 60% of male employees and 30% of female employees were likely to effectively demonstrate Accountability, their Accountability diagnostic ratio would be ‘two’ (60/30). Next, it was necessary to transform the data so that equivalence in ratios ranging from zero to one and from one to infinity could be ensured (Martin, 1987). This was achieved using the procedures described by Martell and DeSmet (2001), which centred the diagnostic ratios around zero, with an approximated normal distribution. First, all diagnostic ratios greater than

or equal to one were transformed by subtracting one from the original diagnostic ratio. Secondly, for all diagnostic ratios less than one, the inverse of the diagnostic ratio was subtracted from one. Following the example presented above for Accountability, as the diagnostic ratio (two) was greater than one, it would be subject to the first transformation (two minus one) leaving a transformed diagnostic ratio of one. Conversely, if another respondent estimated that 60% of male employees and 80% of female employees were likely to demonstrate Accountability, their diagnostic ratio would be 0.75 (60/80) and therefore transformed using the second rule. As such, the transformed diagnostic ratio would be one minus (80/60) creating a transformed diagnostic ratio of -.33.

Descriptive statistics for the transformed diagnostic ratios were then run to identify any potential outliers. Three were detected. For the transformed Communication Diagnostic Ratio, there was an extreme score of - 49, the result of a participant making estimates of 2% and 100% for men and women respectively. The transformed Problem Solving Diagnostic Ratios included extreme scores of - 8 and + 9 due to two participants making estimates of a) 10% and 90% and b) 100% and 10% for men and women's likelihood to show problem solving behaviours respectively. Following Martell and Desmet's (2001) guidelines, the extreme ratios were truncated to values of + or - 4.5. All further analyses were conducted using the transformed and truncated diagnostic ratios.

Identifying leadership potential competencies subject to gender stereotyping

Using the transformed diagnostic ratios, leadership potential competencies for which respondents have stereotyped perceptions were identified. These were any competencies where the diagnostic ratio significantly departed from zero, with positive means indicating a bias towards beliefs that men will demonstrate the behaviour and negative means indicating a bias towards female demonstration. Adopting the methodology used by others in stereotype research (e.g. McCauley & Stitt, 1978; Allen, 1995; Martell & Desmet, 2001), one-sample t-tests with the test-value set at zero were

used to investigate whether any of the diagnostic ratios were significantly different from zero. Results are presented in Table 7.1 below:

Table 7.1. Diagnostic-ratio scores for all raters

	<u>M</u>	sd	ES
Accountability	.07	(.50)	.14
Business & Organizational Awareness	.13**	(.48)	.27
Communication	-.23***	(.66)	.35
Managing Career	.27***	(.56)	.48
Motivation & Drive	.01	(.46)	.02
Planning & Organising	-.35***	(.70)	.50
Problem Solving	.03	(.62)	.05
Team Relationships	-.26***	(.52)	.50

*Note: Transformed diagnostic ratios less than 0 favour female managers, and those greater than 0 favour male managers. Asterisks indicate that mean diagnostic ratios were significantly different from 0. ** $p < .01$, *** $p < .001$. ES (effect size) = M/SD*

Results indicated that, for all raters the diagnostic ratios for Accountability, Motivation & Drive and Problem Solving, did not significantly depart from zero and therefore were not subject to gender stereotyping. The diagnostic ratios for Business & Organizational Awareness and Managing Career were significantly greater than zero, indicating that the men were perceived more likely to demonstrate the behaviours than women. Conversely, diagnostic ratios for Communication, Planning & Organising and Team Relationships all significantly departed from zero in a negative direction, showing that they were perceived more likely for women than men.

Therefore hypothesis one, that there would be gender stereotyping such that male employees would be perceived as significantly more likely to demonstrate certain leadership potential behaviours was only supported in relation to a) Business &

Organizational Awareness. As predicted by hypothesis two, female employees were perceived as significantly more likely to demonstrate Planning & Organising and Team Relationship competencies. There was also partial support for hypothesis three with no differences found in relation to perceived likelihood of men and women demonstrating Motivation & Drive.

To investigate whether the same stereotypic beliefs regarding perceptions of leadership potential were held by male and female respondents, additional exploratory one-sampled t-tests were conducted on the diagnostic ratios.

Table 7.2. Diagnostic-ratio scores for male and female raters

	Male Raters			Female Raters		
	<u>M</u>	Sd	ES	<u>M</u>	sd	ES
Accountability	.12***	(.30)	.40	.04	(.62)	.06
BOA	.02	(.51)	.04	.22***	(.42)	.53
Communication	-.12	(.76)	.16	-.31***	(.56)	.55
Managing Career	.20***	(.45)	.44	.33 ***	(.63)	.53
Motivation & Drive	.11*	(.43)	.26	-.09	(.46)	.20
Planning & Organising	-.10	(.51)	.20	-.55***	(.77)	.71
Problem Solving	.15*	(.60)	.25	-.07	(.61)	.11
Team Relationships	-.13*	(.43)	.30	-.37***	(.56)	.66

*Note: Transformed diagnostic ratios less than 0.0 favour female managers, and those greater than 0 favour male managers. Asterisks indicate that mean diagnostic ratios were significantly different from 0, * $p < .05$ ** $p < .01$, *** $p < .001$. ES (effect size) = M/SD . BOA = Business & Organisational Awareness. Males: $N = 69$, Females: $N = 85$.*

For male raters, diagnostic ratios significantly departed from zero in a positive direction for Accountability, Managing Career, Motivation & Drive and Problem Solving, indicated that male respondents believed that men were more likely to

effectively demonstrate these behaviours. Male raters perceived women to be significantly more likely to demonstrate Team Relationships.

Female raters perceived males as significantly more likely to demonstrate Business & Organizational Awareness and Managing Career behaviours and significantly less likely to demonstrate Communication, Planning & Organising and Team Relationships than female colleagues.

Male and female respondents both perceived the likelihood of demonstrating the behaviours associated with the Managing Career competency to be significantly greater for men than women. Diagnostic ratios for Problem Solving and Motivation & Drive showed non-significant negative departures from zero for female raters, but significant positive departures for male respondents, indicating that only male raters perceived men more likely to display these behaviours. In addition, only male respondents perceived men as more likely to demonstrate Accountability. Interestingly, whilst the male respondents' diagnostic ratio for Business & Organizational Awareness did not depart significantly from zero, the diagnostic ratio for female respondents revealed a large effect, such that females perceived male colleagues significantly more likely to show Business & Organizational Awareness than female colleagues.

Responses from managers and employees

The data was next split to analyse manager and employee responses separately. To retain comparability with previous studies, 'Managers' (N = 35) were defined as working at a Vice President level or above and respondents below the Vice President level as 'Employees' (N = 106). There were missing data for 13 participants on this variable so their responses were excluded from subsequent analyses. Due to the relatively small number of respondents in the 'Manager' category, it was not feasible to look at male and female respondents separately. Results of the one-sample t-tests for Manager and Employee raters are presented in Table 7.3.

Table 7.3. Diagnostic-ratio scores for manager and employee raters

	Employee Raters			Manager Raters		
	<u>M</u>	sd	ES	<u>M</u>	Sd	ES
Accountability	.01	(.49)	.02	.26**	(.57)	.46
BOA	.16***	(.44)	.36	.16**	(.32)	.50
Communication	-.21**	(.68)	.31	-.15*	(.38)	.39
Managing Career	.24***	(.55)	.44	.35**	(.63)	.56
Motivation & Drive	-.02	(.53)	.04	.09*	(.22)	.41
Planning & Organising	-.42***	(.73)	.58	-.25***	(.38)	.66
Problem Solving	-.05	(.56)	.09	.15**	(.31)	.48
Team Relationships	-.23***	(.51)	.45	-.35***	(.55)	.64

*Note: Transformed diagnostic ratios less than 0.0 favour female managers, and those greater than 0 favour male managers. Asterisks indicate that mean diagnostic ratios were significantly different from 0. * $p < .05$ ** $p < .01$, *** $p < .001$. ES (effect size) = M/SD . BOA = Business & Organisational Awareness. N: Managers = 35, Employees = 106*

For Employees, there were no differences from the findings reported for all respondents. Women are perceived as more likely to demonstrate Team Relationships, Planning & Organising and Communication behaviours, men are perceived as more likely to demonstrate Business & Organizational Awareness and Managing Career. There was an absence of gender stereotyping for Accountability, Motivation & Drive and Problem Solving.

However, when Managers are considered separately gender stereotyping appears to increase. For all leadership potential competencies, the diagnostic ratios depart significantly from zero. Managers perceive women as more likely to demonstrate Communication, Planning & Organising and Team Relationships and men more likely to demonstrate Business & Organizational Awareness, Managing Career, Accountability, Motivation & Drive and Problem Solving.

7.2.3. Discussion

The first part of this questionnaire study aimed to investigate further the apparent differences in how male and female leadership potential was perceived. After reviewing existing literature regarding stereotypical beliefs, a diagnostic-ratio approach was selected as the most appropriate way to achieve this. Previous research which had examined beliefs about leadership abilities of male and female managers (Martell & DeSmet, 2001) reported that likelihood ratings for some leadership behaviours were greater for male managers, other behaviours were greater for female managers whilst some were no different for men or women. Based on the findings of the behavioural analysis regarding behaviours associated with leadership potential presented in chapter six, it was anticipated that a similar pattern of results would be found in this study. Specifically, three exploratory hypotheses were tested:

Hypothesis 1: *Male employees will be perceived as significantly more likely to effectively demonstrate, a) Business & Organisational Awareness, b) Problem Solving and c) Accountability behaviours than female employees.*

Hypothesis 2: *Female employees will be perceived as significantly more likely to effectively demonstrate, a) Planning & Organising and b) Team Relationship behaviours than male employees.*

Hypothesis 3: *Male and Female employees will be perceived as equally likely to effectively demonstrate, a) Communication, b) Motivation & Drive and c) Managing Career behaviours.*

Results indicate significant differences in the way male and female behaviour was perceived and provided partial support for the hypotheses. Specifically, men were seen as more likely to effectively demonstrate Business & Organisational Awareness and Managing Career, women more likely to effectively demonstrate Communication, Planning & Organising and Team Relationships, whilst there were no differences in

perceptions of effectiveness for Accountability, Motivation & Drive and Problem Solving. Perceived differences relate to general themes surrounding gender stereotypes, with females being seen as more communal and conscientious and men more ambitious and task focused.

The exploratory analysis indicated that there were some differences between the perceptions of male and female leadership potential held by both male and female respondents. Whilst both groups believed that women were more likely to effectively demonstrate Team Relationships the effect was stronger for female respondents. Additionally, although in the same direction, only the diagnostic ratios for female respondents were significant in terms of demonstrations of Communication and Planning & Organising skills. Similarly, only male respondents believed that male employees were more likely to show Accountability, Motivation & Drive and Problem Solving behaviours than female employees. These results suggest there may be some evidence towards a same-gender bias, which is similar to findings reported by Martell and DeSmet (2001).

Interestingly, this may not be consistent across all types of leadership potential behaviours. Effect sizes indicated that female respondents had stronger stereotyped beliefs than male respondents that men would be more likely to show Managing Career behaviours. Similarly, whilst male respondents believed men and women were equally likely to show Business & Organisational Awareness, female respondents believed this to be significantly more likely of male than female employees. This suggests that in some situations female perceivers may be more biased against other female employees than male perceivers.

The results of the diagnostic ratios for beliefs held by Manager respondents raise particular concerns. When responses from those holding positions which entail responsibility for evaluating others' performance only were analysed, sex-stereotyped beliefs were found for all leadership potential competencies. A possible explanation for this is that, as people become more senior, they become more socialised into the culture

of the organisation, adopting the norms of 'how things are done around here'. Support for this explanation is provided by examining some of the demographic data. Whilst there was no significant differences between the age of manager (\underline{M} = 36.15, sd = 6.52) and employee (\underline{M} = 33.19, sd = 8.03) respondents ($t(138) = 1.95, p >.05$), manager respondents had worked for in the host organisation for significantly more months than employees (\underline{M} = 110.23, sd = 64.74, \underline{M} = 75.92, sd = 74.94 respectively), ($t(139) = 2.43, p <.05$).

The extent of sex stereotyped beliefs at a managerial level has implications for how individuals' leadership potential is identified in the host organisation. Research has found that stereotypes are most likely to influence decision-making when the people involved can be readily categorised, such as by their gender, when the perceiver's time is limited and when the failure to gather complete information has only minor consequences for the perceiver (Barnes-Farrell, 2001). Thus, when faced with a need to complete an appraisal or evaluation process under tight time pressures, managers may be tempted rush through and skip the considered, analytical approaches necessary to make accurate judgements and rather focus their attention on the behaviours they assume the employee will demonstrate. Such an explanation would account for why supposedly equally good male and female leadership potential was described in terms of different behaviours in the previous study. Practical implications of what an organisation may be able to do to reduce this are discussed more thoroughly in chapter nine.

One potential limitation with the approach taken in this chapter is that, unlike questionnaires which measure perceptions of sex roles and management characteristics based on the Schein Descriptive Index (see section 2.6.), participants provide judgements for both males and females. As the diagnostic ratios were calculated using an within-subject design, it raises the question of potential demand characteristics influencing the results. However, as Martell and DeSmet (2001) note, *'to date, all researchers have followed the advice of McCauley and calculated diagnostic ratios by having research participants provide percentage estimates for both groups under*

study. There is no evidence that demand characteristics are operating in these studies” (p 1228).

For example, in a study of racial stereotypes McCauley and Stitt (1978) investigated the possibility that participants might see the questionnaire as a disguised measure of prejudice. They compared responses from participants more and less likely to be concerned with appearing prejudiced (on the basis of their socioeconomic status and education level) and found no differences in responses between the two groups.

In addition, the patterns of results found in this study do not appear consistent with those of respondents who are trying to avoid showing stereotypes. If demand characteristics had played a role in influencing responses one would have expected to see no or less evidence of gender stereotyping.

To summarise, there were clear differences in how likely respondents thought male and female employees were to demonstrate various leadership potential behaviours. Men were seen as more effective in displaying behaviours such as Problem Solving and Business & Organisational Awareness and women more effective at displaying behaviours such as Team Relationships and Planning & Organising. Overall, the patterns of beliefs displayed by the diagnostic ratios maintain the impression of balance inherent in many stereotypes (Fiske, Xu, Cuddy & Glick, 1999). Women are seen as good with people and reliable, but with less commercial understanding and ambition, whilst men are perceived as being career-minded and business-focused, but less concerned with interpersonal relationships and planning. As Glick and Fiske (1996) note, this is why stereotypes can be particularly difficult to tackle and resistant to change: perceivers deny holding stereotyped beliefs because their view is not wholly negative against any particular group.

7.3. Exploratory factor analysis

The second part of the questionnaire was designed to test the leadership potential competency model derived from the qualitative behavioural data collected during the interviews described in chapter six.

7.3.1. Method

Participants

Due to the practicalities associated with organisational research, including the time taken to collect data and the limited windows in which the host organisation permitted survey administration, data for the validation study and the diagnostic ratio questionnaire were collected simultaneously. A full description of the participants is provided in section 7.2.1. By using a variety of network groups and business managers to support the project, the aim was to achieve a random sample across the population of UK-based employees, thus making the sample appropriate for exploratory factor analysis (Ferguson & Cox, 1993).

Measure

The validation questionnaire asked participants to rate each leadership potential element on a one (not at all important for leadership potential) to six (of utmost importance for leadership potential) scale. Although either true interval or ratio scales are ideal for exploratory factor analysis, these are rarely achieved in practice and Likert-type scales are often deemed adequate in psychological investigations (Comrey, 1978). Following guidelines (e.g. Rust & Golombok, 1999), a 1 - 6 scale was selected to exclude a middle option.

As a first stage, each element from the leadership potential model was used as a single indicator, giving the questionnaire 27 items. This was then administered in person to a

group of 15 trainee business psychologists. Feedback from this group indicated that a number of the items contained more than one statement. These were therefore split into separate items, creating a 35-item scale. Examples include splitting the Participation element into 'demonstrates a willingness to get involved with team projects at a hands-on level' and 'help others' and Ambition & Drive into 'shows a desire to be successful' and 'identifies appropriate opportunities to demonstrate their potential to management'.

Once these changes had been made, the questionnaire was then sent to five people working within the organisation who had agreed to be project sponsors. Again, they were asked to complete the questionnaire and comment on the instructions, wording, layout and format. Feedback from one sponsor raised the question of providing a definition of leadership potential at the start of the questionnaire. This had not been included initially because the aim of the questionnaire was to validate whether all of the indicators were relevant to leadership potential and therefore it was important not to bias responses by suggesting what the researcher or project sponsors believed to be the 'right' answer. After discussion with internal sponsors, the following explanation was agreed upon and included: *'The term "Leadership Potential" could be used to refer to anybody who, although they may not currently occupy a leadership role, you think shows the potential to progress to a more senior leadership role in the future'.*

Inspection of the responses collected during the pilot stage indicated that, whilst the full range of responses were being used, mean scores for many items were above the mid-point. As respondents were rating items in terms of importance, which had already been identified as playing a role in leadership potential, this was not unexpected and follows response patterns found in other research using a similar approach (e.g. Patterson, Randall, Farrell & Thomas, 2005). It was therefore then deemed appropriate to use the questionnaire for data collection.

7.3.2. Results

Pre-analysis checks

To check that the data was appropriate for exploratory factor analysis [EFA], a number of pre-analysis checks were completed. The data set sample size was $N=154$. This was above the acceptable level ($N=100$) suggested by Kline (1986). Furthermore, Zwick and Velicer (1986), in a comparison of rules for identifying the number of factor components, noted that, when using relatively small data set (approximately 36 variables), sample sizes for educational and applied psychological research ranged from 72-180. As this data set has 35 variables and 154 respondents, it falls within this appropriate range. In addition, the subject-to-variables ratio was 4.4:1, which was also above the minimum 2:1 ratio discussed by Ferguson and Cox (1993).

As EFA techniques require variables to demonstrate univariate normality skew and kurtosis were checked for each item. This revealed that there was a substantial negative skew with most indicators being rated as having importance above the scale mid-point. To correct for this, the data was first reversed scored (creating positive skew) and then logarithmically transformed. This created acceptable levels of skew and kurtosis. Transformed variables were used in all further analyses. Finally, the appropriateness of the correlation matrix was checked to ensure that there was some systematic covariance among the variables. This is important as without demonstrable covariation results are not interpretable (Dziuban & Shirkey, 1974). A Kaiser-Mayer-Olkin test ($KMO = .863$) and a Bartlett test of Sphericity ($BS = 2450.20$, $p < .0001$) revealed the data to be appropriate for the application of factor analysis (Ferguson, 2001).

Factor extraction

The purpose of extraction is to identify and retain the factors which are necessary to adequately reproduce the initial correlation matrix (Ferguson & Cox, 1993). There are several proposed methods to achieve this. The Kaiser One (K1) heuristic, which

recommends the extraction of all factors with eigenvalues greater than 1, is the most widely used method. There were nine eigenvalues greater than one (eigenvalues ranging from 10.67-1.20) for the data set, explaining 64.68% of the variance. However, K1 has been found to be unreliable and often leads to over-factoring (Wood, Tataryn & Gorsuch, 1996; Zwick & Velicer, 1986). Similarly, the use of scree plots also indicates more factors than are actually required (Ferguson, *personal communication*, 2006). Therefore Minimum Averaged Partial (MAP: Velicer, 1976) and Parallel Analysis (PA: Horn, 1965) were carried out.

The rationale for MAP is that, based on a matrix of partial correlations, the extraction of factors should finish when the average of the squared partial correlations reaches a minimum. MAP indicated that a 3-factor solution was preferable.

Parallel Analysis involves comparing a randomly produced set of eigenvalues (based on the same sample size as the observed data) with those produced by the observed data. A number of such runs with randomly generated data are performed. The observed and average randomly produced eigenvalues are then both plotted against the number of variables, in this case 35, and the point where the two plots cross is identified. The number of extractable factors is the value immediately prior to the crossing point of the two plots (Ferguson & Cox, 1993). Following the approach used by Ferguson (2001), a series of parallel analyses at the 50th and 95th percentile were run, based on 40 and 100 sets of randomly generated data. These also indicated that a 3-factor solution was most appropriate.

Factors were extracted using principal component analysis, as recommend as a first step in EFA by Tabachnick and Fidell, (1989), followed by varimax rotation. Based on the MAP and PA results, three factors were extracted (eigenvalues = 10.67, 2.47 and 1.92) accounting for 43.0% of the variance, which is acceptable for this type of research (Woods, *personal communication*, 2006). The item loadings onto the three factors are presented in Table 7.4.

Table 7.4. Factors and item loadings

Factor labels and items	Factor Loadings		
	1	2	3
<u>Factor 1: Global & Dynamic Impact</u>			
Influencing	.716	.208	.055
Commercial and Business Understanding	.671	.235	.009
Idea Generation	.638	.199	.276
Global Thinking	.604	.286	-.092
Networking	.593	.304	-.052
Courage of Conviction	.576	.300	.043
Flexibility (Operates outside of Formal Organisational Hierarchy)	.560	.002	.099
Proactivity (Initiative)	.516	.220	.293
Proactivity (Works Outside Comfort Zone)	.493	.124	.311
Political Awareness (Works with Seniors Appropriately)	.481	.436	-.022
Ambition and Drive (Desire to be Successful)	.478	.049	.435
Energy (Sense of Urgency)	.475	.111	.351
Energy (Tenacity)	.467	.212	.435
<u>Factor 2: Project Management</u>			
Clear and Effective Communication	.277	.705	.258
Prioritising	.092	.646	-.076
Client focus (relationships and meeting client expectations)	.225	.626	.198
Empathy and relationship building	.120	.613	.167
Planning	.244	.522	.420
Willingness to Learn	.273	.517	.363
Collaborative approach	.295	.509	.335
Flexibility (accommodating different ways of working)	.362	.503	.082
Client focus (identifying and understanding client needs)	.251	.502	.264
Attention to Detail and Quality	.128	.477	.436
Developing Others	.284	.385	.352
<u>Factor 3: Work & Career Commitment</u>			
Commitment (focus on task in hand)	-.028	.364	.662
Listening	.089	.445	.639
Participation (helps others)	-.054	.414	.626
Commitment (goes the extra mile)	.417	.220	.602
Participation (gets involved at hands on level)	-.116	.080	.595
Positive approach	.323	.114	.508
Ownership & control	.393	.079	.432
Work/life balance	.390	-.334	.394
Political Awareness (avoids office politics)	.052	-.008	.377
Self-belief	.340	.128	.344
Ambition and drive (opportunities to demonstrate potential)	.247	.257	.264

The acceptable magnitude of loading for a variable to define a factor varies. The most commonly accepted level is 0.3, whilst some have argued that, in order to increase factor saturation, a loadings of 0.4 is desirable (Velicer, Peacock & Jackson, 1982). However, other published studies have defined loadings as low as 0.19 as significant (e.g. Ferguson, 1999). Inspection of Table 7.4 reveals that Item 28 ('Identifies appropriate opportunities to demonstrate their potential to management') has a loading lower than 0.3. (.26) and that a further 4 items had loadings lower than 0.4 (Item 7 'takes action to empower juniors and ensure they are given opportunities to develop and improve' = .39, Item 8 'demonstrates that work is a high priority in their lives' = .39, Item 34 'does not become embroiled in office politics' =.38, and Item 6 'has confidence in self and is not constantly trying to impress' = .34'). To investigate the impact these variables would have on factor saturation and thus on factor stability, the average loading on each factor was calculated with and without these additional variables (see Table 7.5 below). Guadagnoli and Velicer's a-posteriori measures of factor stability (1988) were then calculated for each factor using the formula: stability co-efficient = $(1.1 \times \text{the reciprocal of the square root of } N) - (0.12 \times \text{factor saturation}) + 0.066$. Whilst no calibration exists for the factor stability coefficient, the smaller the value, the more stable the solution.

The figures presented in Table 7.5 indicate that each factor has a level of factor saturation, of at least .50, even when all items are retained. In addition the factor stability coefficients are small. Inspection of the items with lower loadings onto factors indicated that they were all conceptually interpretable in their specific factors. For instance, the lowest loading item 'Identifies appropriate opportunities to demonstrate their potential to management' loads on to Factor 3 which is concerned with a person's commitment to their work and career. Therefore, it was decided to leave all items in the factors at this stage.

Table 7.5. Factor saturations and stability coefficients

Items	Factor Saturation			Stability Coefficient		
	All	Loading <.3 removed	Loadings <.4 removed	All	Loading <.3 removed	Loadings <.4 removed
Factor 1	.56	.56	.56	0.087	.087	0.087
Factor 2	.55	.55	.56	0.089	0.089	0.087
Factor 3	.50	.52	.58	0.105	0.092	0.085

The internal psychometrics of each factor were then further explored in terms of their coefficient alphas, mean inter-item correlations and item means. These were conducted using the untransformed data to enable interpretation of item means. A factor is said to be internally reliable if its coefficient alpha is greater than .7 and its mean inter-item correlation is in the range .1 to .5 (Briggs & Cheek, 1986; Cox & Ferguson, 1994). Item means above the scale midpoint were seen as indicative that the item was perceived as an important indicator of leadership potential. Factor 1 (eigenvalue 10.67, 13 items) had an alpha coefficient of .90, a mean inter-item correlation of .41 and item means ranging from 3.95-5.14 (\underline{M} = 4.74). Factor 2 (eigenvalue 2.47, 11 items) had an alpha coefficient of .90, a mean inter-item correlation of .46 and item means ranging from 4.81-5.17 (\underline{M} = 4.92). Factor 3 (eigenvalue 1.92, 11 items) had an alpha coefficient of .81, a mean inter-item correlation of .29 and item means ranging from 3.51-5.03 (\underline{M} = 4.54). The results indicated that the three factors each had good internal reliability and that all items were seen as important for leadership potential.

Finally, factor loadings were examined in terms of cross-loadings. Cross-loadings arise when a variable loads onto two or more factors and can indicate that a variable relates to more than one factor (Ferguson & Cox, 1993). Inspection of the factors presented in Table 7.4 shows that there is some degree of cross-loading for 12 of the items. Ferguson and Cox (1993) argue that if the difference in magnitude between variables is

0.2 or above then it is acceptable to allow the variable to load onto the factor for which it has the highest loading. Following this rule the cross-loadings for 'listening' and 'participation' were not considered as the differences in their loadings for Factors 1 and 2 were above .2.

In addition, Ferguson and Cox note that a further important question when considering the treatment of cross-loadings is whether the scales are required to be psychologically pure. As the three factors are all related to the concept of leadership potential, it is reasonable to expect that there would be some cross-over between sub-scales. Indeed, analyses of the concepts of transformational and transactional leadership dimensions have indicated that there is some overlap between these concepts (Judge & Piccolo, 2004).

Conceptually, there is some overlap between Factors 1 and 3. This is particularly reflected in items relating to the 'Motivation & Drive' competency, for which items are split across the two factors. In addition, some items relating to the 'Planning & Organising' competency also cross-loaded. Again, this is perhaps not surprising, as the ability to effectively demonstrate these behaviours is likely to underpin success in all areas. Nevertheless, from a pragmatic point of view it was decided to retain all items, based on two main reasons. First, mean importance ratings indicated that all items were seen as relevant for identifying leadership potential and, secondly, no inter-item correlations were above 0.8, suggesting that each item measures something different. This decision was further supported by the results from the previously described qualitative behavioural analysis, where examples of each item had been reliably extracted from the 80 interviews, indicating that they were distinct concepts that are important for demonstrating leadership potential. The items were therefore left in the factor for which they had the highest loading. In all cases the items fitted conceptually with the other items loading onto the factors, further reinforcing this decision.

Factor naming

Factor names were agreed by discussions through an expert panel (N=5) who examined the behavioural indicators associated with each factor.

The first factor was defined as 'Global and Dynamic Impact'. The items reflected primarily behaviours associated with leading the organization and ensuring it remains at the cutting edge of business. Such behaviours included making an effective business case, demonstrating commercial awareness, thinking outside the box, suggesting innovative solutions, not being afraid to challenge the status quo or make unpopular decisions, and an ability to think strategically, considering implications across the organisation.

The second factor was defined as 'Project Management'. Items represented behaviours associated with leading a team, covering areas such as effective communication, coordinating people and resources and developing skills for future performance. Behaviours included explaining information in a constructive manner, ensuring relevant parties are kept informed, detecting important issues, multi-tasking, prioritizing critical issues, meeting client expectations and working collaboratively by sharing information, asking others for help or advice and bringing together the most appropriate people for a project.

The final factor was labelled 'Work and Career Commitment'. Items within this category broadly fit into a theme of 'personal leadership', reflecting behaviours concerned with conducting oneself in the correct manner, having integrity in one's approach to work, self-confidence, a focus on work, a commitment to the job and career ambition. Example items include demonstrating an interest and focus on the task in hand, paying attention to others' points of view, working hard, a willingness to get involved with projects at a hands on level, having an enthusiastic work style and demonstrating that work is a high priority in their lives.

Importance ratings for Factors

Mean importance ratings for each factor were then calculated. These were computed using the transformed data to enable the use of parametric tests. As items were reverse scored during transformation, lower scores equated to greater perceived importance. Results show that overall perceptions of importance were significantly different for the three factors; ($F = 29.47, df = 2, \eta^2 = .16, p < .001$). Factor Two 'Project Management' received the lowest mean importance score ($M = .27, sd = .14$) indicating that it was rated most important. Factor One 'Global & Dynamic Impact' had the second lowest mean score ($M = .30, sd = .13$) and Factor Three 'Work and Career Commitment' had the highest mean score ($M = .33, sd = .12$) demonstrating that it was perceived as the least important factor. Pair-wise comparisons revealed that the differences in perceived importance ratings for all factors were significant (see Table 7.6 below).

Table 7.6. Pair-wise comparisons for mean importance factor ratings for all respondents

Comparison	Mean Difference	SE
Factor 1- Factor 2	.034***	.01
Factor 1 – Factor 3	-.035***	.01
Factor 2 – Factor 3	-.068***	.01

*Factor 1 = Global & Dynamic Impact, Factor 2 = Project Management, Factor 3 = Work and Career Commitment *** $p < .001$*

As the further exploratory analysis for the diagnostic ratio questionnaire indicated significant differences on the basis of respondent gender or employment level, additional analyses examining these variables were then conducted on the importance ratings. Unfortunately, due to the differences in group sizes (Male Managers, $N = 15$; Female Managers, $N = 20$, Male Employees, $N = 47$ and Female Employees, $N = 59$) and particularly because there were only 15 male managers, a full comparison of

gender and employment level together was not appropriate. Thus, investigation of any potential interaction between these variables could not be undertaken.

A MANOVA indicated that overall there were no differences in the importance ratings given by male and female respondents ($F = 2.62$, $df = 3, 150$, $\eta^2 = .05$, $p = .06$), such that both men and women perceived Project Management to be the most important factor and Work and Career Commitment to be the least important factor.

However, a separate MANOVA revealed that there was a difference between perceptions of factor importance given by managers and employees ($F = 4.57$, $df = 3$, $\eta^2 = .09$, $p < .01$). Therefore, importance ratings given for each factor by managers and employees were analysed separately. Results showed that, for employees, there were significant differences in the ratings for each factor ($F = 28.15$, $df = 2$, $\eta^2 = .21$, $p < .001$). Consistent with findings for all respondents, Factor Two 'Project Management' was rated most important ($M = .25$, $sd = .14$) followed by Factor One 'Global & Dynamic Impact' ($M = .30$, $sd = .13$) and lastly Factor Three 'Work & Career Commitment' ($M = .33$, $sd = .12$). Pair-wise comparisons revealed that the mean differences (md) in perceived importance ratings for all factors were significant (Factor 1-Factor 2, $md = .05$, $p < .001$; Factor 1-Factor 3, mean difference = $-.03$, $p < .001$; Factor 2-Factor 3, $md = -.08$, $p < .001$).

Managers' perceptions of importance were also significantly different for the three factors ($F = 13.30$, $df = 2$, $\eta^2 = .28$, $p < .001$). In contrast to the Employees, Managers perceived Factor One 'Global & Dynamic Impact' to be the most important ($M = .27$, $sd = .13$), followed by Factor Two 'Project Management' ($M = .30$, $sd = .12$) and then Factor Three 'Work and Career Commitment' ($M = .35$, $sd = .12$). Pair-wise comparisons revealed that the importance ratings between Factors One and Three and Factors Two and Three were significantly different ($md = -.08$, $p < .001$, and $md = -.06$, $p < .001$ respectively). The difference in mean scores between Factors One and Two was not significant ($md = -.03$, $p = ns$). Thus managers perceived Factor One,

Global & Dynamic Impact, and Factor Two, Project Management, to be equally important for leadership potential.

7.3.3. Discussion

The aim of the second part of the study was to test the structure of the leadership potential model and the perceived importance of the behavioural competencies. To do this a 35 item questionnaire was developed in which respondents rated the importance of the leadership potential behaviours. Responses were then used to carry out an exploratory factor analysis [EFA]. A three factor solution was produced which accounted for 43% of the variance. The three main factors underpinning the leadership potential model related to personal leadership (Work & Career Commitment), team leadership (Project Management) and organisational leadership (Global and Dynamic Impact). Overall, Work & Career Commitment was perceived as the least important aspect of leadership potential. Respondents who were in non-management positions (employees) rated Project Management items as the most important, whilst respondents who were managers rated Project Management and Global & Dynamic Impact factors as equally important.

Relating the leadership potential competencies to the factors

In general, the original leadership potential competency model, as developed during the behavioural analysis, appears to be a good construction of leadership potential. However, it can be further grouped into three over-arching factors which each cover different aspects of behaviour. A best-fit of how competencies map onto the factors is summarised in Table 7.7.

Table 7.7. Mapping competencies to the three factors

Factor	Leadership Potential Competencies
1: Global & Dynamic Impact (Leading the Organisation)	Problem Solving Business & Organisational Awareness Drive (from Motivation & Drive)
2: Project Management (Leading the Team)	Planning & Organising Team Relationships
3: Work & Career Commitment (Personal Leadership)	Accountability Managing Career Motivation (from Motivation & Drive)
<i>Note: Communication splits across all three factors</i>	

Factor 1: Global & Dynamic Impact

This factor contains the majority of the Problem Solving and the Business & Organisational Awareness [BOA] competency items. The Problem Solving items relate to generating solutions or initiatives whilst considering possible impact for the whole organisation. BOA covers demonstrating commercial awareness and business focus and developing a network of contacts throughout the organisation. The exception to the BOA items is that Client Focus splits as a separate facet related to Project Management. Conceptually, however, this is interpretable since all the other relationship building indicators also cluster into Factor Two. Similarly, the one exclusion from the Problem Solving competency is the item representing half of the Flexibility element relating to accommodating different ways of working. Again, this can be interpreted in terms of being flexible to others' needs so also fits well within the Project Management Factor.

There are also four Motivation & Drive indicators which cluster inside Global & Dynamic Impact. These relate to the Proactive and Energy elements and are the more dynamic components of this competency. They reflect the 'Drive' for success and are more likely to be associated with having a global impact than the other Motivation & Drive elements which are more about personal motivation and load onto Factor Three.

'A desire to be successful', which was part of the Managing Career competency also loads most heavily onto Global & Dynamic Impact. The Communication competency is split across all three factors, which is perhaps unsurprising as it is likely to underpin most successful workplace behaviour. However 'Influencing' which loads strongly onto Factor One is the most assertive part of the competency, involving persuading other people to do what one wants. The Accountability competency has one element which loads onto Factor One, 'Courage of Conviction' and relates to being prepared to be controversial and take risks to ensure impact.

Factor 2: Project Management

The Project Management behaviours are associated with the potential to lead a team, covering areas such as effective communication, coordinating people and resources and developing skills for future performance. For example, all three of the Planning & Organising items load most highly onto this factor, reflecting an individual's ability to structure, plan and prioritise whilst ensuring high standards of detail and quality are maintained. In addition, three of the Team Relationship items also load most highly onto this factor. These skills cluster around working relationships, such as demonstrating empathy, working collaboratively or developing other people's skills to be able to work more effectively. Considered in this context, the two Client Focus items also fit conceptually within Project Management as they are also related to working relationships. The part of the Flexibility element which loads onto this factor is concerned with accommodating different ways of working. Arguably, this part of the element in isolation is less concerned with Problem Solving and more to do with being able to work in different styles or with different people. 'Clear & Effective

Communication’ is the item which loads most highly onto this factor and is concerned with sharing information constructively and keeping relevant parties informed, so is also clearly related to effective project management. The ‘Willingness to Learn’ item from Managing Career is concerned with taking opportunities to improve own delivery and fits within the competency in terms of ensuring the best possible resources, including oneself, are available for a project work.

Factor 3: Work and Career Commitment

The third leadership potential factor ‘Work and Career Commitment’ covers a general theme of ‘personal leadership’ in terms of how motivated and committed an individual is to their work and to their career. There are three Motivation & Drive items, which cover having a positive approach to and showing commitment to the task. The two items which reflect the ‘Participation’ element of team working also load most highly onto this factor and, interestingly, not with the other Team Relationships items which are all part of Factor Two. When looking at the descriptions for the Participation items it is apparent that they are somewhat different to the other teamwork elements, focusing less on working relationships and more on getting the task done, either by becoming involved at a hands-on level or helping others to achieve the task. Two of the three Accountability items also load most highly onto this factor, although there is some cross-loading with Factor One. These items refer to taking ownership of a project, which relates to task commitment and having a self-belief which can be seen as important for career ambition. In addition two of the Managing Career items cluster within this factor, relating to placing work as a high priority and finding opportunities to demonstrate potential. Finally, avoiding office politics and paying attention to others’ views also fall inside this factor. Both can be seen in terms of work commitment; focusing on the task rather than being sidetracked by office issues and ensuring everyone’s advice is listened to in order to complete projects as best as possible.

Being able to group the behaviours at both the factor and competency level has potential benefits as a practical tool for the organisation. Using the factor level descriptions, the behaviours associated with leadership potential are clearly grouped into three separate areas. Feedback from the host organisation indicates that this is helpful in creating a 'take-home message' and enabling managers and employees to begin to start understanding how leadership potential is construed in their organisation. However, Martell and DeSmet (2001) make two strong arguments as to why it is important also to consider the behaviours at a more detailed level. First, if concepts of leadership are reduced to a small number of dimensions, it can be difficult to capture the wide range of behaviours required by effective leaders. Secondly, in appraisal or promotion contexts, instructions to use summary evaluations of leadership ability (or potential) can invite respondents to rely more heavily on stereotypes and construe leadership as more male oriented. Thus, being able to discuss leadership potential at both a factor and competency level may increase the feasibility of the host organisation and other companies being able to make use of the findings.

7.4. General discussion

Perceived importance ratings indicated that, overall, the items from the Work and Career Commitment factor were seen as least important for leadership potential. Diagnostic ratios for employee respondents alone indicated no sex-stereotyped beliefs for Accountability and Motivation & Drive parts of the factor, but a belief that men were more likely to be effective at Managing Career. However, diagnostic ratios for manager respondents indicated gender biased beliefs on all three factors, such that men were perceived more positively. Project Management items were rated the most important by employees and as important as Global & Dynamic Impact by managers. For all respondents, sex-stereotyped beliefs were evident on both the Team Relationships and Planning & Organising items, such that women were seen as more likely to have strong skills in this area. Manager respondents also rated items from the Global & Dynamic Impact factor as more important for leadership potential. For the competencies most strongly associated with this factor, Business & Organisational

Awareness, Motivation & Drive and Problem Solving, diagnostic ratios indicated that men were perceived as more likely to show these behaviours. This was not the case for employee respondents, who saw women as only significantly less likely to show Business & Organisational Awareness.

These results are interesting for a number of reasons. At the employee level women are seen as more likely to demonstrate the most important aspects of leadership potential, Project Management. This suggests that, at least in the eyes of their direct reports and colleagues, female employees are perceived as having the skills necessary to make them effective leaders. It may also help explain previous findings by Alimo-Metcalfe and Alban-Metcalfe (2003) who reported that middle-managers tend to rate direct supervisors more highly if they are female.

However, when one considers the people who are occupying decision-making positions (i.e. managers), another factor is also seen as equally important, and this is one where women are perceived as less likely to possess the right skills. Here the results can perhaps be best interpreted in terms of ideas presented in chapter six. Based on previous observations (e.g. Bartram, 2005; Sternberg & Lubart, 1996), it was noted that, whilst all the leadership potential behaviours may be desirable for workplace success, when it comes to identifying future leaders who will occupy the most senior positions, areas such as strategic vision, desire for high achievement and a task focus are preferred over Project Management behaviours such as being a good administrator or supporting others. This is particularly worrying for aspirant female workers: the areas where it is most likely to be assumed they have leadership potential is not what selection for the most senior roles is based upon. Indeed, as Martell & DeSmet (2001) argue, *'regardless of whether gender stereotypes are accurate, prejudging and treating individuals as necessarily representative of their social group, possessing the attributes (positive and negative) presumed to characterise the group, seems neither fair nor justified'* (p 1229).

A further point which arises from the differences in importance ratings given by employee and manager respondents is that employees may not have a realistic or complete understanding of what managers believe to be crucial behaviours for demonstrating leadership potential. Thus, another practical application is using the outputs of this research as an educational tool, in terms of explaining all aspects of the behaviours someone is expected to display to show they are a future leader.

Limitations and areas for future research

There are a number of potential criticisms which could be levied at this research and some clear areas for future research which could be taken to address these issues.

As discussed in the methods chapter, different research aims should ideally be kept separate and investigated in different studies. Due to the constraints of collecting organisational data in a tight timeframe, this was not possible and the diagnostic-ratio and exploratory factor analysis data had to be administered concurrently. Thus, as some of the competency elements split into different factors, the diagnostic ratios could not be perfectly calculated for each factor. A best-fit approach to matching competencies to factors was therefore undertaken, which still allowed for good interpretation of the data. However, one future step would be to use the diagnostic-ratio questionnaire with ratios calculated at the element, not competency, level so that sex-stereotyped beliefs for each factor could be more fully assessed. Moreover, as with the behavioural analysis, percentage estimates at the element level may also increase further understanding of sex-stereotyped beliefs. For example, it would allow for the possibility that, as with managers' descriptions of how male and female employees demonstrated Work/life Balance, beliefs about demonstrating different elements within a competency are associated with one gender more than the other.

As the investigation of the constructs within the leadership potential competency model was an exploratory factor analysis, a natural progression would be to do a confirmatory factor analysis in which the exact factor structure could now be specified and its

adequacy tested. There would also be an argument for doing this using a sample from across the financial services industry to begin to test the generalisability of this model to other organisations within this sector.

Whilst the suggestions made so far are outside the scope of this programme of research, a related issue which is particularly important within the context of working in a global organisation is whether the findings can be generalised cross-culturally. As the host organisation is an American multi-national, for any findings to have a significant organisational impact they must also be relevant to the US. Therefore, an important next step would be to investigate the validity of the leadership potential model for US employees and to see whether the gender differences UK managers hold regarding behaviours associated with leadership potential are also present in the US.

The next chapter describes a study which begins to address the final issue by investigating the explanations, in terms of both attributions and behaviours, US managers use to describe male and female employees they perceive as having leadership potential.

Chapter 8: A cross-cultural comparison of UK and US managers' explanations for male and female leadership potential

8.1. Introduction

The previous four chapters have described tests of both proposed barriers (inter and intra personal explanations) of the socio-cognitive model of unfair discrimination. Results have produced consistent support for barrier one, with managers making different attributions and describing different behaviours to explain male and female leadership potential. Conversely, little support has been found for barrier two, intra-personal explanations, with male and female employees describing their own potential using similar patterns of attributions and types of behavioural examples.

In multi-national organisations promotion to senior positions often happens on a global basis. It is therefore also important to consider whether the processes affecting women's career progression are comparable across nations. A recent international review of diversity by Haq (2004) concluded that there is '*probably no single country that does not have workplace diversity concerns of its own*' (p 277). This suggests that some issues of unfair discrimination are likely to arise no matter where promotion or appraisal decision-making takes place. Although a full cross-cultural comparison across all areas where the host organisation operates would be beyond the scope of this research programme, this study describes a first step by comparing the explanations given by UK and US managers.

Stereotypes in the US

There is considerable evidence to suggest that stereotypes of effective leaders are more typically associated with male rather than female characteristics and that such stereotypes appear to hold throughout the world (e.g. Schein, 2005). Indeed, Antal and Izraeli (1993) have argued that '*probably the single most important hurdle for women in management in industrialized countries is the persistent stereotype that associates*

management with being male' (p 63). The one exception to this may be the US, where substantial legislation and diversity training have been implemented. Research conducted in the US appears to show the start of a shift in stereotyped beliefs, at least for female participants (e.g. Brenner, Tomkiewicz, Schein, 1989; Schein, Muller, Lituchy *et al.*, 1996). For example, Schein *et al.* reported that American female management students, many of whom are now likely to be within management roles, are no longer '*thinking manager – thinking male*'. This implies that in the US, at least for middle-management roles, attitudes are beginning to change. However, Schein's study also reported that the 'think-manager, think male' phenomenon was still present in many other countries, including the UK, for both males and females participants.

The purpose of this study is therefore to provide the first investigation of perceptions of male and female leadership potential across the UK and US within a single organisational context. It aims to test the first barrier of the socio-cognitive model of unfair discrimination internationally by examining the explanations (attributions and behaviours) managers use to describe male and female employees identified as having leadership potential.

Based on the research described above which suggests that, whilst stereotypes are present globally, their effect may be weaker in the US, the following two hypotheses are tested:

Hypothesis 1: *The differences between managers' attributions to explain male and female leadership potential will be significantly smaller in the US than in the UK.*

Hypothesis 2: *The differences between the behaviours elicited from managers to explain male and female leadership potential will be significantly smaller in the US than in the UK.*

8.2. Method

To undertake a cross-cultural comparison, data already collected in the UK (see chapters three and five) were compared with additional data collected from a matched US sample. UK data is described in Section 4.2. The following paragraphs describe the process used for US data collection.

US participants

Forty middle managers (20 men and 20 women) were recruited via an internal leadership development programme which all staff must complete to be eligible for promotion to senior roles. The programme database was used to create a random sample of employees who were working at the appropriate (Vice President) level, had supervised US based junior staff for at least six months and had been in the host organisation for at least nine months. As study sponsorship came from the Chief Financial Operator for Investment Banking [IB], only managers working in IB were contacted. In total, 76 managers were invited to participate in the research. The final 40 participants were selected on a first come, first served basis.

Participants were told that the purpose of the research was to improve understanding of how leadership potential could be identified and developed in junior managers. It was made clear that participation was voluntary and that information would be treated confidentially.

Participants were aged from 28-55 years (median = 38). Ninety percent described themselves as American. One participant stated that they were German, one Norwegian, one Spanish and one 'Other'. All participants had been working in the US for at least four years prior to the study. Ninety-two and a half percent of the sample described their ethnic origin as 'White', two as 'Asian' and one as 'Hispanic'.

Procedure

Each US manager participated in a semi-structured interview. This followed the same format as study one (see Section 4.2.2). However, managers were only asked to describe the performance of a male and a female employee with leadership potential. The reasons for this were two-fold. First, study one results suggested that unfair discrimination occurs when managers are explaining examples of potential and not average performance. Secondly, due to organisational constraints, the researcher was only permitted to schedule 30 minute interviews.

With participants' permission, all interviews were recorded and transcribed. The transcripts were then subjected to an attributional and behavioural analysis.

8.3. Attributional analysis

8.3.1. Coding

US managers' causal attributions for each employee category [female employee with leadership potential – FLP, male employee with leadership potential – MLP] were extracted and coded using a modified version of the Leeds Attributional Coding System (Munton *et al.*, 1999) (see Chapter 3). The US data were then compared to the previously coded data for UK managers (see Section 4.2.).

8.3.2. Results

Description of US data and pre-analysis checks

786 attributions were extracted from the 40 interview transcripts. 404 (51.40%) of these related to female employees with leadership potential [FLP] and 382 (48.60%) to male

employees with leadership potential [MLP]. Descriptive statistics are presented in Table 8.1.³

Table 8.1. Descriptive statistics for number of attributions produced for male and female employees

<u>Managers</u>	<u>Male</u>			<u>Female</u>			<u>All</u>		
	N	<u>M</u>	sd	N	<u>M</u>	sd	N	<u>M</u>	sd
Male LP	205	10.25	(2.99)	193	8.85	(2.28)	398	19.90	(4.28)
Female LP	177	9.65	(2.89)	211	10.55	(2.84)	388	19.40	(3.87)

Note: LP = Leadership Potential

Overall, managers produced 13-28 attributions per interview ($\bar{M} = 19.65$, $sd = 4.04$) with 5 to 18 for each category of employee (MLP/ FLP). As the total number of attributions managers produced in each case were not equal, mean scores were calculated for each manager for the six attributional dimensions (internal, employee control, personal, manager control, stable, and global) for the two categories of employee (MLP and FLP).

To ensure that the assumptions for parametric tests were not violated, the variables were checked for normal distributions by conducting Kolmogorov-Smirnov tests.

Results indicated that for the US data there were no significant deviations from a normal distribution for the internal, employee control, personal and stable dimensions

³ A description of the attributions produced by UK managers is provided in Section 4.3.

for MLP or FLP examples. For discussions of FLP, the global dimension was not normally distributed ($D(40) = .16, p < .05$) and was therefore subject to a logarithmic transformation. As the planned analyses would include comparing differences between scores on the global dimension for US-FLP and US-MLP, UK-FLP and UK-MLP, the global dimension for each of these groups was also logarithmically transformed. Kolmogorov-Smirnov tests indicated that all transformed variables were normally distributed and thus suitable for parametric testing. It was not necessary to transform any other dimensions as no direct comparisons between dimensions were planned (Field, 2005).

As with the UK data, the US manager control variable was significantly skewed for both descriptions of MLP and FLP (MLP, $D(40) = .17, p < .01$, FLP, $D(40) = .15, p < .05$). Inspection of histograms indicated positive skew, as a result of manager control being attributed in few cases. These variables were also too heavily skewed in the UK data set to allow transformation, so manager control was tested separately using non-parametric tests.

Analysis

In order to test hypothesis one, first, a multivariate ANOVA was conducted including all independent (manager gender, manager location, employee gender) and dependent (attributional dimensions) variables. Secondly, to investigate main effects a series of repeated measures univariate ANOVAs were run. Next, to identify whether effects within the UK and US were significantly different from each other, a multivariate ANOVA was conducted to compare male-female difference scores for each attributional dimension for the UK and US samples. Finally, a series of non-parametric tests were run to investigate the effect of the independent variables on the manager control attributional dimension.

Multivariate Analysis of Variance

A 2 x 2 x 2 repeated-measures MANOVA was carried out with manager gender (MG) and manager location (UK/US) as the between-group variables and employee gender (EG) as a within-subjects variable. This was used to investigate whether mean differences among groups at different levels of the independent variables on a combination of the dependent variables were larger than expected by chance when all else was held constant (Tabachnik and Fidell, 2001). To measure the strength of association between the independent and dependent variables, effect sizes were also computed. According to Cohen (1977), effect sizes, measured by means of eta-squared, are small at .01, medium at .09 and large at .25.

The repeated-measures MANOVA revealed a large multivariate effect of location ($F = 24.11$, $df = 5$, $\eta^2 = .63$, $p < .001$), such that UK and US managers were making significantly different attributions to explain leadership potential and a large multivariate effect of employee gender ($F = 5.80$, $df = 5$, $\eta^2 = .29$, $p < .001$) so that MLP and FLP were being explained differently. No significant multivariate effects were found for manager gender ($F = .52$, $df = 5$, $p = .>05$) suggesting that male and female managers' attribution patterns did not significantly differ. Manager gender was therefore excluded from further analyses. No significant interactions were detected for any variables.

To investigate the effect of manager location (UK/US), repeated measures univariate tests were performed for each attributional dimension. Results (see Table 8.2 below) indicated that there were significant differences in the degree to which attributions made by UK and US managers were internal to the employee ($F = 4.50$, $df = 1$, $p < .05$, $\eta^2 = .06$), stable ($F = 8.79$, $df = 1$, $p < .01$, $\eta^2 = .10$) and global ($F = 116.12$, $df = 1$, $p < .001$, $\eta^2 = .60$). Specifically, UK managers described leadership potential as more internal to the employee, more stable and global⁴. There were no significant differences

⁴ The original, non-logged, mean scores for the global dimension were 1.91, $sd = .23$ for UK managers and 1.40, $sd = .20$ for US managers.

in attribution patterns for either the employee control ($F = .09$, $df = 1$, $p > .05$) or personal ($F = .37$, $df = 1$, $p > .05$) dimensions.

Table 8.2. Repeated measures ANOVAS for attributions made by UK and US managers

Dimension	<u>UK managers</u>		<u>US managers</u>		<u>ANOVA</u>	
	<u>M</u>	sd	<u>M</u>	sd	F	η^2
Internal	2.51	(.20)	2.41	(.25)	4.50*	.06
Employee Control	2.33	(.24)	2.35	(.25)	.09	
Stable	2.20	(.27)	2.02	(.25)	8.79**	.10
Global	.27	(.06)	.14	(.06)	116.12***	.60
Personal	2.38	(.26)	2.34	(.27)	.37	

*Note: Higher means indicate attributions were coded as more internal, controllable, stable, global and personal. All dimensions except global are on 1-3 scale, as logged data the global scale is 0-1. ANOVA results: $df = 1$, * $p < .05$, ** $p < .01$, *** $p < .001$. Effect sizes reported for significant ANOVAs only*

Given overall differences between the explanations of the UK and US managers, attributions for male and female leadership potential for the UK and the US were examined separately. Repeated measures ANOVAs for the UK sample (see Table 8.3 below) indicated significant differences for all dimensions except internal, such that UK managers attribute leadership potential to more controllable ($F = 13.92$, $df = 1$, $p < .01$, $\eta^2 = .26$), personal ($F = 8.42$, $df = 1$, $p < .01$, $\eta^2 = .18$) stable ($F = 6.13$, $df = 1$, $p < .05$, $\eta^2 = .14$) and global ($F = 10.61$, $df = 1$, $p < .01$, $\eta^2 = .21$) causes for males than females.

Table 8.3. Repeated measures ANOVAS for attributions made by UK managers to describe male and female employees with leadership potential

Dimension	<u>MLP</u>		<u>FLP</u>		<u>ANOVA</u>	
	<u>M</u>	sd	<u>M</u>	sd	F	η^2
Internal	2.57	(.26)	2.46	(.29)	3.73	
Employee Control	2.45	(.32)	2.23	(.33)	13.92**	.26
Stable	2.31	(.35)	2.10	(.41)	6.13*	.14
Global	2.02	(.33)	1.79	(.31)	10.61**	.21
Personal	2.48	(.32)	2.27	(.38)	8.42**	.18

*Note: Higher means indicate attributions were coded as more internal, controllable, stable, global and personal. All dimensions are on 1-3 scale. ANOVA results: df = 1, * p < .05, ** p < .01, *** p < .001. Effect sizes reported for significant ANOVAs only. MLP = Male leadership potential, FLP = female leadership potential.*

Repeated measures ANOVA for the US sample (see Table 8.4 below) indicated that managers made significantly different attributions for male and female leadership potential on only two dimensions, employee control ($F = 8.26$, $df = 1$, $p < .01$, $\eta^2 = .18$) and personal ($F = 6.59$, $df = 1$, $p < .01$, $\eta^2 = .14$). Effect sizes for these two dimensions were also smaller than for corresponding dimensions in the UK sample.

Table 8.4. Repeated measures ANOVAS for attributions made by US managers to describe male and female employees with leadership potential

Dimension	<u>MLP</u>		<u>FLP</u>		<u>ANOVA</u>	
	<u>M</u>	sd	<u>M</u>	sd	F	η^2
Internal	2.47	(.33)	2.35	(.32)	3.46	
Employee Control	2.46	(.34)	2.23	(.37)	8.26**	.18
Stable	2.05	(.44)	1.98	(.37)	.63	
Global	.14	(.09)	.14	(.09)	.01	
Personal	2.45	(.38)	2.24	(.37)	6.59*	.14

*Note: Higher means indicate attributions were coded as more internal, controllable, stable, global and personal. All dimensions except global are on 1-3 scale, as logged data global scale is 0-1. ANOVA results: df = 1, * p < .05, ** p < .01, *** p < .001. Effect sizes reported for significant ANOVAs only MLP = Male leadership potential, FLP = female leadership potential.*

To compare the differences in attributions for MLP and FLP made by UK and US managers, differences between mean scores for male and female employees on each attributional dimension were calculated for each sample by subtracting the mean scores for FLP from mean scores for MLP.

Table 8.5. Comparison of UK and US managers' explanations of male and female leadership potential

MLP – FLP	UK		US	
	<u>M</u>	sd	<u>M</u>	Sd
Internal	.12	(.38)	.12	(.42)
Employee Control	.25	(.42)	.23	(.50)
Stable	.21	(.55)	.07	(.55)
Global	.23	(.45)	.01	(.43)
Personal	.21	(.46)	.21	(.52)

Note: Higher means indicate attributions were more internal, controllable, stable, global and personal for males than for females. All dimensions were on a 0-2 scale, raw global scores reported here to aid comparison, logged global scores were used in the MANOVA. MLP = Male leadership potential, FLP = female leadership potential.

To test if the difference between explanations for MLP and FLP was significantly smaller in the US than the UK, a multivariate ANOVA was run with the difference score for each attributional dimension as the dependent variables and manager location as the independent variable. The multivariate effect was not significant ($F = 1.10$, $df = 5$, $p > .05$), indicating that overall, for the US sample, there were not significantly fewer differences in explanations of male and female leadership potential than for the UK sample.

Nevertheless, the results in Tables 8.3 and 8.4 showed that there were significant differences present on two attributional dimensions (stable and global) in the UK sample, which were not present in the US managers' explanations. In addition, as presented in Table 8.5, the mean difference for UK managers on stable and global are

.21 and .23 respectively, whereas in the US the differences are smaller at .07 and .01 respectively. Therefore, whilst hypothesis one is not supported, there is some indication that in the US the bias in attributions made for MLP and FLP may be less strong than in the UK.

Non parametric tests for Manager Control

A Mann-Whitney U test was conducted to see if there were any differences in how UK and US managers attributed Manager Control. The exact correction was used as the data was poorly distributed (Field, 2005). US managers attributed significantly more manager control ($Mdn = 1.30$) than UK managers ($Mdn = 1.09$) ($U = 476.5$, $p < .001$, $r = -.35$), indicating a further difference in explanations for leadership potential between samples.

Wilcoxon signed-rank tests were conducted to examine the manager control variable for the UK and US samples separately. Again, exact corrections were used. As previously reported, there was no difference found in the amount of self control UK managers attributed to male ($Mdn = 1.00$) and female ($Mdn = 1.00$) examples of leadership potential, ($T = 98.00$, $p = >.05$). Similar results were found for US managers with no differences in the amount of manager control attributed to male ($Mdn = 1.24$) and female ($Mdn = 1.28$) leadership potential, ($T = 252.00$, $p = >.05$). Therefore, for both samples, manager control was not attributed significantly differently for MLP and FLP.

Summary of results

The results from the attributional analysis can be summarised as follows:

- Both UK and US managers make different attributions to explain male and female leadership potential.
- There are overall differences in the types of attributions made by UK and US managers.
- Differences in types of attributions used to explain MLP and FLP are smaller in the US than in the UK for the stable and control dimensions but overall this is not a statistically significant difference.
- Results therefore did not fully support hypothesis one.

8.4. Behavioural analysis

8.4.1. Behavioural coding

Using the definition developed in study three, '*employee behaviours, identified to explain why a person has leadership potential*' behavioural indicators were extracted from the interview transcripts. It was then necessary to check that the leadership potential competency model (see chapter six) was also valid in the US. To do this, the same procedure as used to group employees' own behaviours in study three (step six) was adopted. Therefore two pairs of coders were instructed to independently categorise the indicators at the element level using competency model definitions.

Agreement levels for the groupings by each pair were high, ranging from 72.7% for the 'Listening' element to 100 % for the 'Work/life Balance, 'Flexibility', 'Attention to Detail & Quality' and 'Prioritising' elements. At a competency level, agreement levels ranged from 84.7% for Accountability to 96.6% for Planning & Organising. Through discussion, disagreements were resolved or indicators were discarded for not being

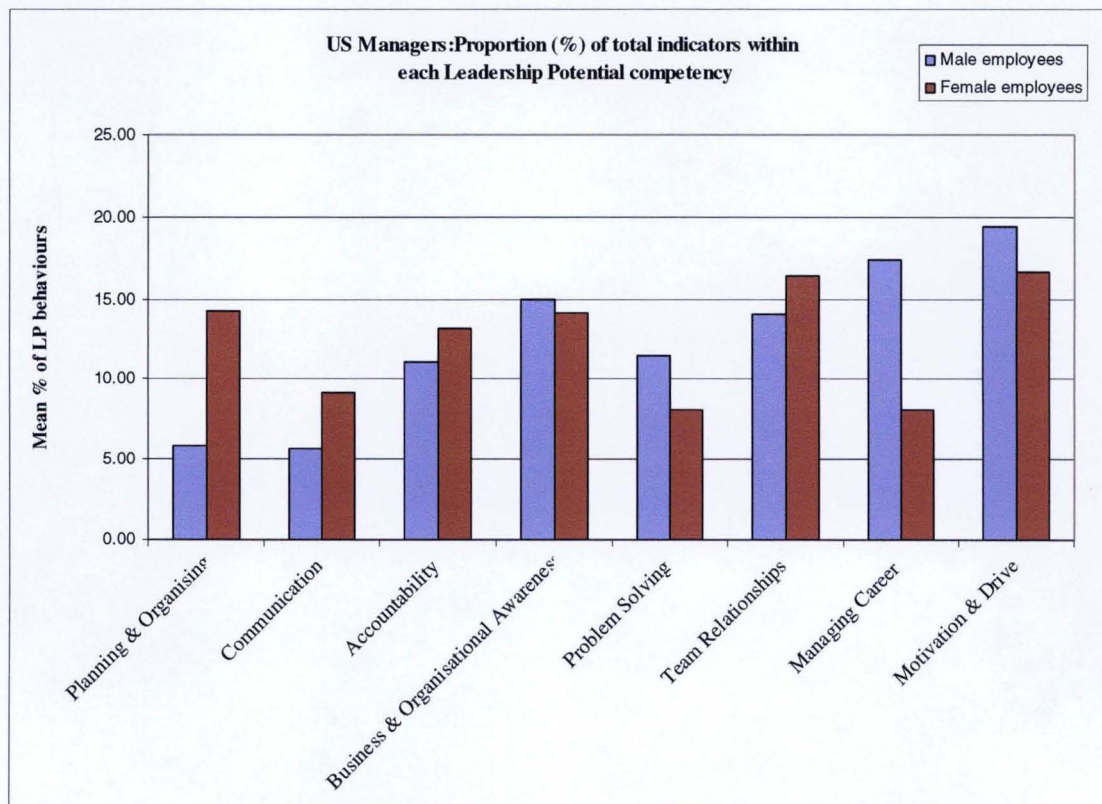
specific enough (N = 3). This indicated that behavioural indicators from the US interviews could be reliably classified into the existing competency model.

8.4.2. Results

US managers' perceptions of male and female leadership potential competencies

A total of 475 leadership potential indicators were extracted. Two hundred and thirty related to male employees and 245 to female employees. Following the same approach as in Chapter 6 (see Section 6.2.1), the proportion of extracted LP behaviours accounted for by each element and competency when describing MLP and FLP were calculated for each manager. Mean scores for these proportions for all managers at a competency level are presented in Graph 8.1 below:

Graph 8.1. US managers- Proportion (%) of total indicators within each LP competency



As Graph 8.1 illustrates, there appear to be some differences in the competencies managers focused on when discussing male and female leadership potential. Specifically, for male employees, managers were most frequently identifying leadership potential in terms of Motivation & Drive (19.41%), Managing Career (17.39%), Business & Organisational Awareness (15.01%) and Team Relationships (14.09%). Managers were also commenting on female employees' Motivation & Drive (16.64%), Team Relationships (16.42%) and Business & Organisational Awareness (14.17%). However, it appears that for US managers an additional focus for identifying female potential was via their Planning & Organising skills (14.24%), whilst Managing Career was discussed somewhat less (8.10%). Accountability and Problem Solving seemed to be moderately important areas of focus for both men and women. Communication skills appeared to be discussed less in descriptions of male leadership potential.

To test if there were significant differences in how often managers used each competency to describe MLP and FLP, a series of Wilcoxon signed-rank tests were carried out on the proportions of behaviours per competency. As data were poorly distributed and the sample size small, the exact correction was applied (Field, 2005). Results indicated some significant differences such that the Planning & Organising competency was used more often to describe female (Mean = 14.24 %, *Mdn* = 14.29 %) than male (Mean = 5.05 %, *Mdn* = 0.00 %) leadership potential, [$T = 90.00$, $p < .05$, $r = -.27$] and Managing Career was used to describe a greater proportion of male (Mean = 17.39%, *Mdn* = 18.33%) than female (Mean = 8.10%, *Mdn* = 0%) leadership potential, [$T = 86.50$, $p < .001$, $r = -.36$.]

Manager gender and perceptions of LP competencies

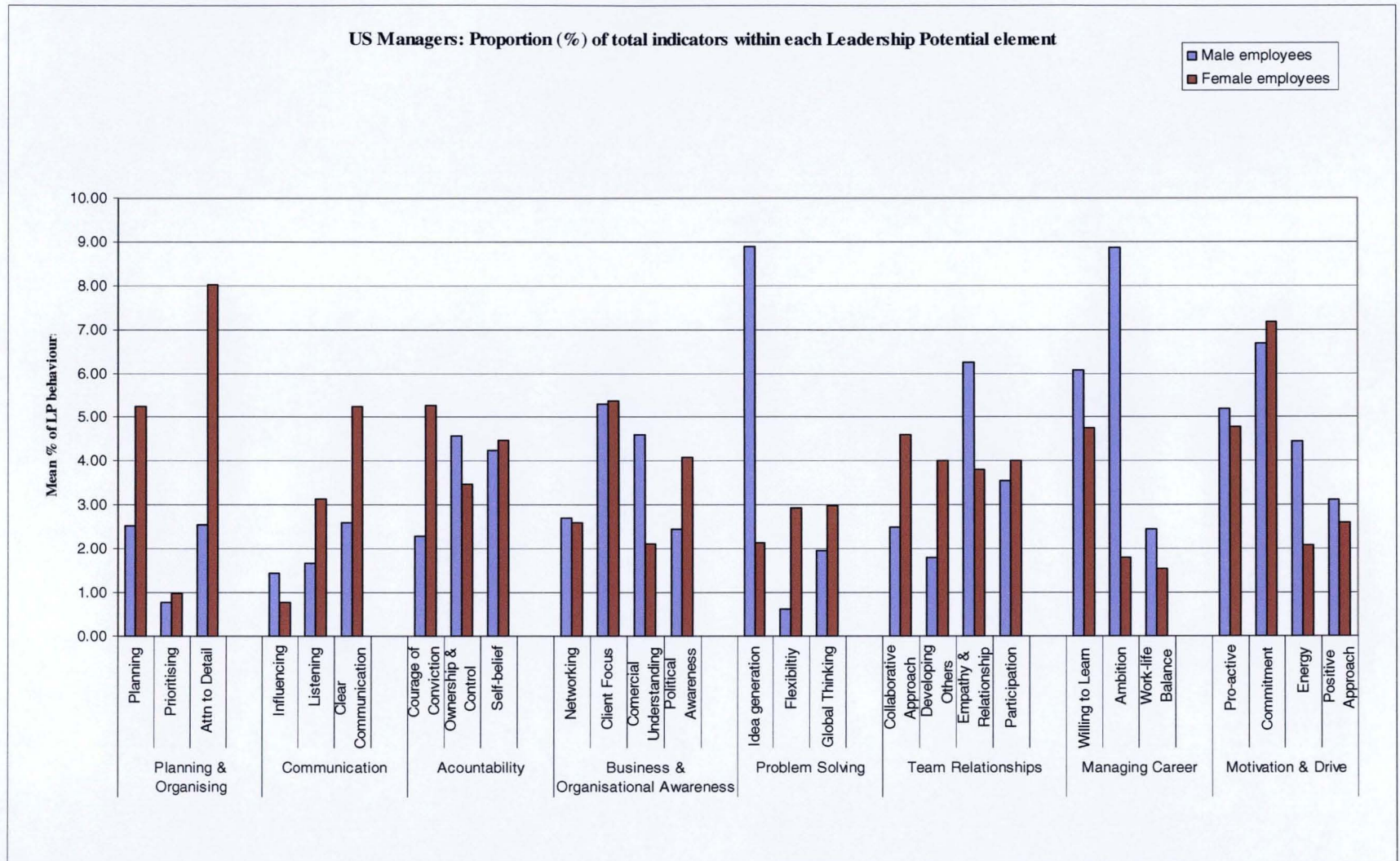
A series Mann-Whitney U Tests, with the exact correction were carried out to see if there were any differences in how male and female managers perceive MLP and FLP. The tests compared the proportion of behaviours per competency used by male

managers and female managers in relation to examples of male and female leadership potential. Results were non-significant for all dependent variables, indicating that there were no differences in how male and female managers described either MLP or FLP.

Comparing managers' perceptions of elements within competencies for male and female leadership potential

To get a more detailed understanding of the types of behaviours elicited from UK managers when describing MLP and FLP, an examination of the indicators at an element level was also undertaken. Mean scores for proportions of behaviours at element level are presented in Graph 8.2 below:

Graph8.2. US Managers- Proportion (%) of total indicators within each LP element -



Inspection of the graph shows that there are differences in how managers use the various elements to explain male and female potential. For example, Idea Generation and Ambition make up a larger proportion of the behavioural indicators for male potential, whilst Attention to Detail and Flexibility make up a larger proportion for female potential.

To understand these differences better, the elements were ranked in terms of proportion of the indicators they covered for MLP and FLP separately and these lists compared. The top ten ranked items used to discuss male and female employees are presented in Table 8.6 below.

Table 8.6. Ranked elements for US managers' discussions of male and female LP

Male Employees			Female Employees		
		Proportion (%)			Proportion (%)
1 st	Ambition	7.66	1 st	Attention to Detail & Quality	7.83
2 nd	Idea Generation	7.39	2 nd	Commitment	6.10
3 rd	Commitment	6.52	3 rd	Client Focus	5.63
4 th	Willing to Learn	5.99	4 th	Clear Communication	5.20
5 th	Ownership & Control	5.79	5 th	Courage of Conviction	5.14
6 th	Empathy & Relationship Building	5.22	6 th	Collaborative Approach	4.73
7 th	Pro-active	5.17	7 th	Self-belief	4.57
8 th	Self-belief	4.74	8 th	Willing to Learn	4.47
9 th	Commercial & Business Understanding	4.47	9 th	Planning	4.44
10 th	Client Focus	4.23	10 th	Ownership & Control	4.27

Examination of Table 8.6 reveals that there are five elements, Commitment, Willing to Learn, Client Focus, Self-belief and Ownership & Control, which were ranked in the top ten elements for explaining both male and female leadership potential.

Remaining elements appeared in relation to discussions of male or female employees. When discussing MLP these were: Ambition; Idea Generation; Pro-active; Empathy & Relationship Building and Commercial & Business Understanding. For explaining FLP these were: Attention to Detail; Clear Communication; Courage of Conviction; Collaborative Approach, and Planning. Examples of indicators from these elements which were used more to discuss either male or female potential are provided in Figure 8.1.

Figure 8.1. Example indicators from elements contributing to a greater proportion of either male or female leadership potential

Male Leadership Potential	
Element	Example Indicators
Ambition:	<p><i>Takes opportunities to show their skills</i></p> <p><i>Constantly promotes their potential to senior management</i></p> <p><i>Approached manager in group they wanted to move to and asked for a job</i></p>
Idea Generation:	<p><i>Is creative in approach to issues</i></p> <p><i>Comes up with new ideas and controls</i></p> <p><i>Innovative – sees alternative investment opportunities</i></p>
Empathy & Relationship Building:	<p><i>Takes time to develop friendships with other people in the group</i></p> <p><i>Talks about football games as an ice-breaker on Monday morning</i></p> <p><i>Engages others in conversation</i></p>
Proactive:	<p><i>Knew would have to deal with an issues, so investigated it before being asked</i></p> <p><i>Able to work with minimal supervision</i></p> <p><i>Takes the initiative to do extra research</i></p>
Commercial and Business Understanding:	<p><i>Presents strong business cases as to why things need to be done</i></p> <p><i>Understands the markets</i></p> <p><i>Gaining more knowledge about the business</i></p>

Female Leadership Potential	
Element	Example Indicators
Attention to Detail & Quality:	<i>Pays attention to detail so everything is right</i> <i>Reviews own work carefully, so no spelling mistakes etc.</i> <i>Very thorough</i>
Clear and Effective Communication Style:	<i>Very clear communication, makes points succinctly</i> <i>Communicates issues to their peers</i> <i>Writes and speaks well</i>
Courage of Conviction :	<i>Not afraid to speak up – has ‘fire’</i> <i>Pushed back on others, no okaying work until quality assured</i> <i>Prepared to say no if they don’t want to do something</i>
Collaborative Approach:	<i>Looks for interesting articles they can share with colleagues</i> <i>Liaised with others to make project work</i> <i>Worked with team member to overcome a problem</i>
Planning:	<i>Breaks complex tasks down into manageable pieces</i> <i>Very prepared for meetings – e.g. prepares summaries of issues beforehand</i> <i>Sticks to the reporting cycle so know when to do things</i>

Summary of US behavioural analysis

This behavioural analysis has examined the explanations made by US managers for male and female leadership potential. Whilst results indicated that male and female managers described leadership potential in the same way, there were some differences in how these managers discussed male and female employees.

For both male and female employees managers focused particularly on Motivation & Drive, Business & Organisational Awareness and Team Relationship competencies. Two Accountability elements (Ownership & Control and Self-belief) were ranked within the top ten elements for both men and women.

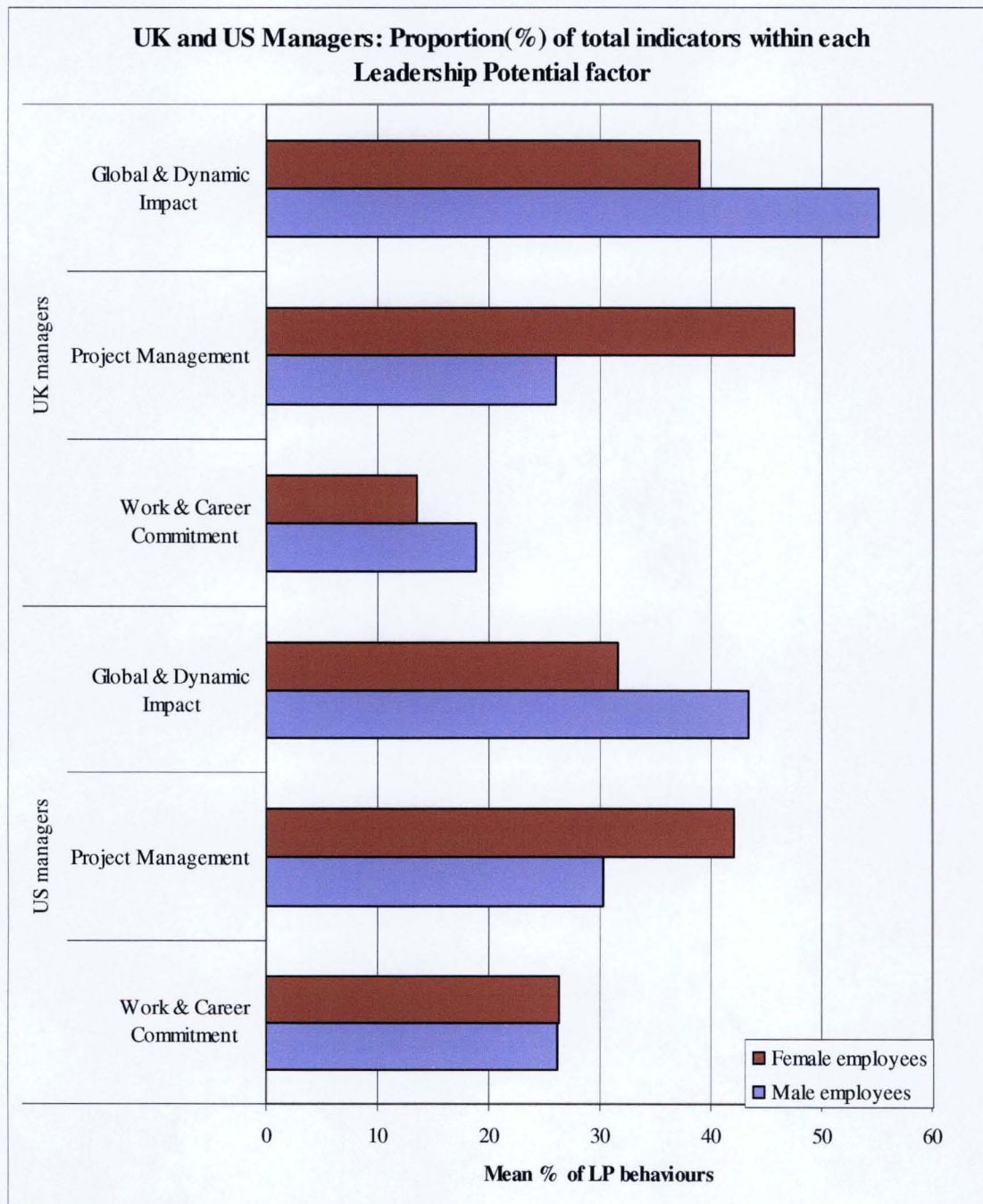
In addition to these behaviours, for MLP, Managing Career was also an important area of focus, with 'Ambition' the highest ranked element, while for FLP Planning & Organising was also important and 'Attention to Detail and Quality' was the highest ranked element.

Comparing UK and US perceptions of leadership potential competencies for male and females

Factor Level Comparisons

Indicators were first compared using the leadership potential competency model factors (Global & Dynamic Impact, Project Management and Work & Career Commitment) derived in study four. The proportion of extracted behaviours accounted for by each factor in descriptions of male and female leadership potential in each interview were calculated. Mean scores of these proportions for all managers are presented in Graph 8.3 below.

Graph 8.3. UK and US managers – Proportion (%) of total indicators within each leadership potential factor



Inspection of Graph 8.3 indicates that there are similarities between the UK and US samples. In both the UK and US, the Global & Dynamic Impact factor was used more often to describe male than female performance and the Project Management factor used more often to describe female than male potential. A series of Wilcoxon-signed ranked tests, using the exact correction, confirmed that these apparent differences were statistically significant (see Table 8.7). However, the effect sizes, particularly for Project Management, were smaller in the US. There appears little difference in how the Work & Career Commitment factor was used in descriptions of MLP and FLP across both samples.

Factor difference scores ($\%$ indicators for males – $\%$ indicators for females), were then calculated for each manager for the three factors. Difference scores for UK and US managers were then compared via Mann Whitney U tests. Results indicated that factor difference scores for UK and US managers were not significantly different for any factor: Global & Dynamic Impact (UK $Mdn=16.57$, US $Mdn = 11.43$, $U = 724$ *ns*, $r = .08$), Project Management (UK $Mdn=-25.28$, US $Mdn = -9.29$, $U = 665$, *ns*, $r = .15$) and Work & Career Commitment (UK $Mdn=0$, US $Mdn = 2.36$, $U = 759.5$, *ns*, $r = .10$). Therefore, when considered at a factor level, whilst the differences between descriptions of male and female behaviour are smaller in the US than the UK, the difference is not statistically significant. Thus the pattern in which the three factors account for male and female potential is similar across samples.

Table 8.7. Differences between frequencies of factors for male and female leadership potential

	<u>Median proportion (%)</u>		T	r	<u>Median difference</u>
	MLP	FLP			scores (%)
					(MLP-FLP)
<u>Global & Dynamic Impact</u>					
UK	53.57	44.44	169.50**	.29	16.67
US	43.65	28.57	197.50*	.26	11.43
<u>Project Management</u>					
UK	21.11	50.00	123.00**	-.37	-25.28
US	26.14	40.00	247.50*	-.22	-9.29
<u>Work & Career Commitment</u>					
UK	15.48	.00	163.50		.00
US	25.00	25.00	319.50		2.36

*Note: Positive effect size denotes males>females, negative denotes females>males. Effect size reported only for significant result. * sig p<0.05, ** sig p<0.01. MLP = Male leadership potential, FLP = female leadership potential.*

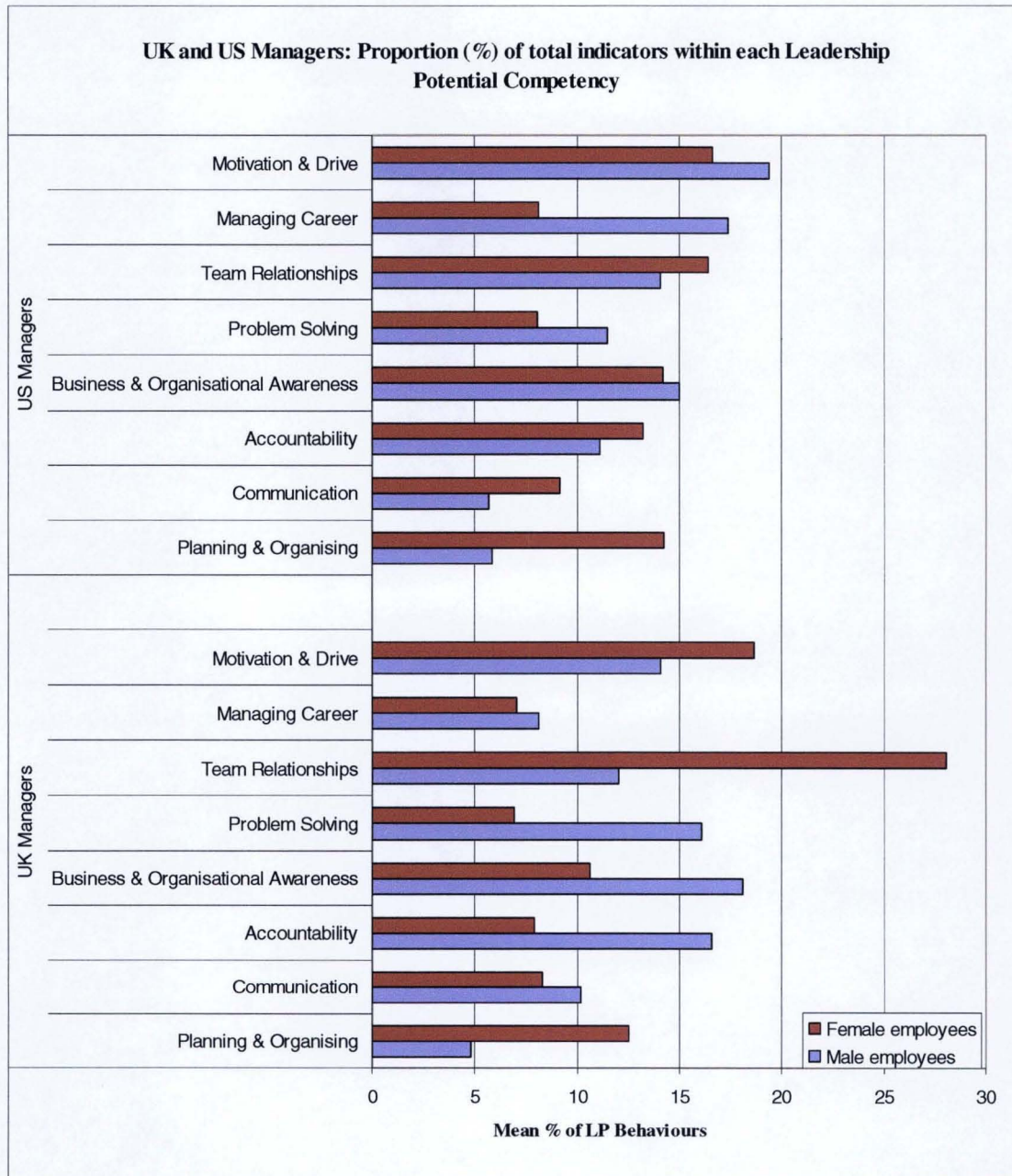
Competency level comparisons

Graph 8.4 shows the proportion of behavioural indicators accounted for by each competency in UK and US managers' descriptions of male and female leadership potential. This illustrates where there are similarities and differences across the four employee groups (UK-MLP, UK-FLP, US-MLP, US-FLP). For example, the Motivation & Drive competency accounts for relatively similar proportions of indicators across all employee groups, whilst the Planning & Organising competency is used significantly more to describe female potential in both the UK and US. Overall, there are no competencies which receive particular emphasis in only the UK or US.

In general, there appear to be more pronounced differences between the behaviours associated with leadership potential for males and females in the UK, providing some support for hypothesis two. In particular, Business & Organisational Awareness and Accountability competencies are used to describe MLP more than FLP in the UK. In the US, proportions of indicators elicited for MLP and FLP on these competencies are more balanced. Team Relationships is the major area of focus for female potential in the UK, whereas in the US, female leadership potential is conceptualised across a greater range of behaviours.

Interestingly, in contrast to the general pattern of less pronounced gender differences in the US, whilst behavioural indicators associated with Managing Career were used equally (and relatively infrequently) to describe both males and females within the UK, it was used significantly more only for male potential by US managers.

Graph 8.4. UK and US managers – Proportion (%) of total indicators within each LP competency



The rankings presented in Figure 8.2 below show that FLP is conceptualised in broadly the same way by US and UK managers, with the same four competencies most frequently identified. However, there is a particularly strong emphasis on Team Relationships in the UK.

US managers discussed MLP in a more similar way to FLP. Three of the four most frequently identified competencies; Motivation & Drive, Business & Organisational Awareness and Team Relationship were the same.

MLP was conceptualised differently in the UK. Whilst Business & Organisational Awareness and Motivation & Drive appeared in the top four competencies, UK managers also discussed Accountability and Problem Solving, which did not feature for US-MLP or FLP in the US or UK. Team Relationships was no longer a key focus of managers' discussions which it was in all three other groups.

Figure 8.2. The four most frequently identified leadership potential competencies

Proportion of Leadership Potential indicators (%)				
Rank	UK-MLP	UK-FLP	US-MLP	US-FLP
1 st	Business & Organisational Awareness (18.11)	Team Relationships (28.04)	Motivation & Drive (19.41)	Motivation & Drive (16.64)
2 nd	Accountability (16.55)	Motivation & Drive (18.64)	Managing Career (17.39)	Team Relationships (16.42)
3 rd	Problem Solving (16.09)	Planning & Organising (12.53)	Business & Organisational Awareness (15.01)	Planning & Organising (14.24)
4 th	Motivation & Drive (14.10)	Business & Organisational Awareness (10.60)	Team Relationships (14.09)	Business & Organisational Awareness (14.17)

Summary of behavioural analysis

The results from the behavioural analysis can be summarised as follows:

- UK and US managers focus on different behaviours to explain male and female leadership potential.
- There are no overall differences in the types of behaviours UK and US managers associate with demonstrations of leadership potential.
- Whilst there was a tendency to use more similar behaviours to describe MLP and FLP in the US, the differences in proportions of indicators relating to each LP factor for MLP and FLP was not significantly less in the US than the UK.
- Results therefore did not fully support hypothesis two. However, when the data was explored at the competency level, differences in explanations for MLP and FLP appeared less pronounced in the US than in the UK sample.

8.5. Discussion

The results from the attributional and behavioural analysis failed fully to support either hypothesis one or two. Statistically fewer differences were not found between the attributions and behaviours used to describe male and female leadership potential by US managers than by UK managers. However, particularly with the behavioural analysis, there were some indications that there may be a non-significant trend towards smaller differences in the US sample.

Explanations for male and female leadership potential in the US

Results from the attributional analysis revealed that in the US the performance of equally rated men and women was perceived differently. Thus, in both countries, women were seen as having less influence over examples of leadership potential and causes to be less unique or something any peer could be expected to demonstrate. Such

results imply that women may be disadvantaged in appraisal situations, not receiving the same personal credit for demonstrations of leadership potential that is afforded to men. Indeed, Green and Mitchell's (1979) two-stage model of leadership asserts that the types of attributions managers make for an employee's performance (e.g. whether it was controllable) lead to different behaviours towards subordinates including the distribution of rewards, promotion decisions and task assignments. Thus, a male and female identified as having leadership potential could experience different relationships with their managers and be offered different opportunities depending upon how their achievements are explained.

The indicators accounting for a greater proportion of behaviours for US managers' descriptions of MLP cover areas such as being ambitious, driven and responsible, with a strong commercial focus and an ability to suggest solutions to organisational problems. Such indicators align with what previous research has identified as common stereotypes about men and managers (e.g. Schein 2001). What is interesting, and perhaps contrary to traditional gender stereotypes is that Team Relationships and particularly indicators relating to Empathy & Relationship Building also accounted for a large proportion of the indicators for male leadership potential in the US.

Inspection of these indicators revealed that they primarily cover examples of building relationships as opposed to demonstrations of empathy. In this context, the indicators appear not to be about being sensitive to others, but rather about developing the necessary links to ensure tasks can be achieved or problems solved. Furthermore, when considered in relation to the results of the factor analysis reported in chapter seven, all but one (Empathy & Relationship Building) of the top ten ranked indicators for male potential relate to the Global & Dynamic Impact and Work & Career Commitment factors. Thus, when considered together these indicators still produce a strong positive picture of an employee who is confident, makes decisions and strives for personal and business success.

When considering women with leadership potential, US managers most often discussed the following behavioural competencies: Motivation & Drive, Team Relationships, Business & Organisational Awareness, and Planning & Organising. Analysis of the specific elements most frequently discussed revealed that they covered all competencies except Problem Solving.

The elements frequently used only when discussing female leadership potential (i.e. not often discussed in relation to MLP) cover indicators such as planning and producing work of a consistently high standard, adopting a collaborative approach, communicating clearly and having the courage to stand up one's beliefs. In general these indicators appear to be more focused on the micro-level, considering how the individual will succeed in their specific tasks, rather than impact across the organisation. Indeed, only one of the top ten ranked elements, Courage of Conviction, is part of the Global & Dynamic Impact factor, whereas five elements relate to Project Management and four to Work & Career Commitment. Thus, when discussing female leadership potential US managers appear to be focusing on behaviours which are more stereotypically female and less associated with management. Moreover, as argued previously, these behaviours, though also seen as desirable for workplace success, may be perceived as less important (e.g. Bartram, 1996; Sternberg & Lubart 1996) when identifying those who will occupy the most senior positions. This result therefore relates to previous research which has indicated that, in general, women are perceived as more gentle, dependent, sensitive, passive and accommodating and less aggressive, ambitious and potent than men (e.g. Heilman, Block & Martell, 1995; Dubno, 1985; Eagly & Wood, 1991; Haslett, Geis & Carter, 1992).

Combining the UK and US attributional and behavioural findings for male and female leadership potential

The attributional and behavioural analyses support the proposition that male and female leadership potential is perceived differently both in the UK and US. Specifically all managers made attributions that were more controllable and personal to explain male

than female leadership potential. In terms of the types of behaviours used the 'Global and Dynamic Impact' factor was used significantly more to describe MLP than FLP, and 'Project Management' was used significantly more to describe FLP than MLP. Thus, although the US may be considered to be ahead of the UK in terms of equal opportunities legislation and training, different patterns of attributions and behaviours were used to explain MLP and FLP in both samples. This suggests that biased explanations for male and female performance, which are based on stereotypes, are enduring and resistant to change.

Results from this study are somewhat in contrast to research by Virginia Schein and colleagues which reported that, during the late 1980s and 1990s, there was a shift in attitudes such that, at least for female participants, the tendency to 'think manager think male' was no more. Conversely, this study found no differences between the explanations given by male and female managers in both the UK and US. However, there were some trends in results in both analyses which suggest that stereotyped beliefs may be weaker in the US.

As biases were equally present for both male and female managers, one explanation for this is that they are the result of organisational socialisation, with managers adopting the beliefs that are dominant within their organisation. Such an interpretation could also explain why Schein, who used management students and who were therefore not socialised into any organisational culture, found that female participants did not stereotype.

Rothbart (1981) suggested that stereotypic beliefs tend only to be altered in response to overwhelming, undeniable disconfirming evidence. As attributions represent an individual's personal understanding of a situation, it may be that managers are rarely asked to justify their reasoning, or to consider contradictory evidence. In this instance managers' differential explanations for male and female performance may remain unchallenged. Managers working in a high-pressured environment are unlikely to make attempts to attend to contradictory evidence, as this would add to their cognitive

workload, unless they are specifically requested to do so (Barnes-Farrell, 2001). Therefore managers' stereotyped beliefs, which in turn can lead to different explanations of men's and women's behaviour, may remain unchallenged.

This has potential practical implications for an organisation in terms of how appraisal and promotion procedures are designed. For example, a process which holds managers accountable and asks for explicit justifications of decision-making processes may force managers to start focusing on all evidence, both that which confirms and which challenges pre-held conceptions. Indeed, a study reported by Powell & Butterfield (1994) found that, when promotion procedures were changed in a US government agency such that all promotions were announced publicly, hence producing undeniable evidence of women's successes, and managers were held accountable by keeping detailed records of the entire decision-making process, women applicants were no longer unfairly disadvantaged.

Cross cultural differences in explanations made by UK and US managers

Attributions

The results of the attributional analysis demonstrated differences in the explanations given by managers in the two locations, suggesting that UK and US managers may have different expectations of what is necessary to be identified as a potential leader. Managers in the UK saw the causes of leadership potential to be more internal to the employee and less influenced by them as managers. This can be interpreted as an expectation that, in the UK, employees need to be more independent and create their own successes to be identified as a future leader. Conversely in the US, managers perceived themselves as having more involvement in the development of leadership potential in their employees. This could indicate that US managers are more willing to provide support to develop and help employees find opportunities to demonstrate potential.

In addition, managers differed significantly on the extent to which they described leadership potential as stable and global. In the US, causes of leadership potential did not need a long-lasting effect on an individual's career nor a large impact across the organisation. When the US managers' criteria for leadership potential is applied, employees may have more opportunities to demonstrate such potential on a day-to-day basis, with achievements that create impact at a team level seen as acceptable examples. Indeed, the focus on less stable and less global examples of leadership potential is perhaps more realistic when considering an employee who is relatively early on in their career. This point can be illustrated by contrasting the following explanations given by a UK and a US manager.

UK manager - *'They had some fantastic ideas about how they could start working cross-departments during the project which had a great impact across our business area and is something they are still doing now'*. (Explanation is uncontrollable by the manager, stable and global.)

US manager - *'They worked really closely with me (the manager) so the project ran really smoothly in our team'*. (Explanation is controllable by the manager, unstable and specific.)

Behaviours

The comparison of behavioural indicators used by UK and US managers suggests that there is no overall effect of manager location; UK and US managers are not focusing on different types of behaviours to explain leadership potential. This conclusion is further supported by the fact that coders were able reliably to classify all the indicators extracted from the US interviews into the competency model developed from UK interviews.

In both countries, indicators from Motivation & Drive and Business & Organisational Awareness were used frequently to explain both male and female potential. This

suggests that these competencies were not subject to gender stereotyped beliefs. Furthermore, female leadership potential appeared to be conceptualised similarly in the UK and the US, with Motivation & Drive, Business & Organisational Awareness, Team Relationships and Planning & Organising competencies accounting for the greatest proportion of indicators.

There was some variation in competencies used most frequently to describe MLP. However, with the exception of Team Relationships in the US, competencies all related to recognisable male stereotypes. The inclusion of Team Relationships indicators in US managers' perceptions of leadership potential for both male and female employees can perhaps be interpreted in terms of some of the 'feminization of management' literature. This suggests that the requirements for senior positions are being redefined in a way which is more consistent with a transformational model of leadership (e.g. Tomlinson, Brockbank & Traves, 1997). Indeed, Alimo-Metcalfe (1993) has argued that women make a better organisational investment because they are more likely to lead in a transformational manner. One transformational leadership dimension 'Individual Consideration' (Burns, 1985), includes recognising followers' development needs and adopting a consultative approach to work. There are parallels between this dimension and the Team Relationship competency, particularly surrounding the 'Developing Others' and 'Collaborative Approach' elements.

However, comparison at factor level showed that the same differences, focusing more on Project Management for FLP and Global & Dynamic impact for MLP were present in both the UK and US manager samples. This difference is congruent with findings by Ashmore, DelBoca, and Wohlers (1986) which identified 'agency' to be the more dominant label for male stereotypes and 'communality' as the dominant label assigned to females. Whilst Global & Dynamic Impact relates to taking control and making things happen, Project Management is more concerned with managing resources to ensure the team achieves its goal.

The apparent difference in findings when considering factor and competency level results provides further support for a rationale presented in chapter eight. There, based on observations originally made by Martell and DeSmet (2001), it was argued that it was useful to be able to consider behavioural indicators at both a factor and competency level. Reasons for this included the fact that a smaller number of dimensions can make it difficult to see the range of behaviours associated with leadership potential and lead to an increased reliance on stereotypes. When this data is compared at the factor level, results show that all managers used Project Management indicators more often to describe FLP than MLP. However, competency level analysis indicates that, in the US, Team Relationships, whose indicators primarily factor into Project Management, is actually used equally in MLP and FLP descriptions. Thus, while the factor level comparisons were useful in giving an overview of the data and enabling the use of statistical analyses, the competency level analysis provided more insight into the different focuses for male and female potential.

Traditionally, there has been an assumption in psychology that research findings from North America can be applied to other countries, particularly if they too are 'Western societies' (Smith and Bond, 1998). For example, Herriot & Anderson (1997) argue that American research findings '*have been unreservedly cited by personnel psychologists in other countries and appear to have been unquestioningly accepted as being generalizable to different national contexts. Social, cultural, legislative and recruitment and appraisal differences have been overlooked.*'(p 28).

Results from the GLOBE ((Global Leadership and Organizational Behavior Effectiveness) project which investigated the skills associated with effective leadership (Den Hartog, House, Hanges, *et al.*,1999) support this concern. By interviewing over 15,000 managers in 60 cultures they found that, whilst there were some similarities in perceptions of effective leadership, such as the importance of being value-based, team oriented and participative, there was also substantial variance in attitudes towards other behaviours, including enthusiasm, risk-taking and compassion.

The findings from this study appear to suggest that, even between the UK and US which may be thought of as culturally more 'similar', perceptions of what constitutes leadership potential may be different. Therefore, in line with Herriot & Anderson's proposition, these results support the need for cautions against generalising findings too broadly or assuming similarities across countries.

In the UK, employees were required to demonstrate a more far-reaching impact to be identified as having leadership potential. This is evident from the significant differences on the stable and global attributional dimensions and the behavioural analysis. Similarly, the Global Thinking element accounts for the greatest proportion of indicators for MLP in the UK, whilst in the US it is not seen as particularly important for any employee.

One possible explanation for the emphasis on global impact in the UK is that it is an effect of not working in the organisation's parent country. Statistics from the host organisation show that, as the level of seniority increases so does the proportion of US employees who occupy positions. Survey evidence across firms has confirmed that multinationals tend to recruit more parent country employees into senior roles, even in other countries (Korbin, 1998). Therefore there may be a perception that it is more difficult for someone who is not based in the US to be promoted to senior levels. Thus, in order for an employee to prove they have the potential to be promoted, their successes may be seen as requiring a global impact. Indeed, even for this programme of research, internal stakeholders were keen for the project to include a US comparison to encourage seniors to attend to the findings.

Limitations and future research

The results from this study have raised some interesting questions about how leadership potential is identified in the UK and US. There are a number of criticisms which could be levelled at the research. These include many of the issues raised in relation to studies one and three, such as the reliance on self-report data and whether the examples

discussed are typical of leadership potential. It is also worth noting, however, that the number of managers interviewed was relatively small ($N = 40$ per country) which may have prevented small size effects from being detected. With a larger sample and thus more statistical power, the non-significant trends towards fewer differences in US managers' explanations might have become significant for some variables.

The investigation of how managers in both countries explain leadership potential is an area that would warrant more research. One possible project could include the administration of an Attributional Styles Questionnaire (modified to look at perceptions of leadership potential) to UK and US managers. Similarly, the administration of a diagnostic-ratio questionnaire (as used in chapter seven) to a US sample would be beneficial in further understanding if and how gender stereotypes for leadership potential differ in the two countries.

In addition, as discussed in chapter four, the recording and analysis of real promotion boards would also be a useful next step, as this would link explanations to actual decision-making. Any research design to examine this could therefore be extended to ensure comparison of UK and US panel members, discussing employees from their own and each others' countries.

A further interesting research question which follows from this research would be to investigate the implications of comparing leadership potential across employees who are based in more Western cultures, such as the UK and US, with employees who are working in more Eastern collectivist cultures such as China or Japan. Although not included in any of the analysis for this study, during the interviews several managers commented that it was hard to gauge performance of employees based in Eastern cultures. The perception was that in such cultures performance was reported differently, making comparisons between employees working in different cultures difficult. Research (e.g. Fahr, Dobbins & Cheng; 1991) has indicated some differences, such that attributional styles in individualistic cultures are more likely to reflect a self-serving bias, and in collectivist cultures a modesty bias. Therefore, an additional future

programme of research could be to test the socio-cognitive model of unfair discrimination in the context of explanations of leadership potential across more culturally diverse countries.

Chapter Nine: Conclusion

The persistent failure of women to reach senior organisational positions is well documented. Despite concerted efforts to raise awareness of gender biases and legislation to prevent unfair discrimination, many women are still prevented from achieving their career potential.

The aim of this thesis was therefore to increase understanding of this effect by investigating the processes that contribute to differential career progression for men and women. This was achieved by testing a socio-cognitive model of unfair discrimination, as described by Silvester and Chapman (1996), within the context of performance appraisal. The model proposes that there are two potential barriers to women reaching senior organisational positions: first, that managers use different attribution patterns to explain the behaviour of male and female staff; and, secondly, that differences in the way male and female employees explain their own performance can also impact on career progress.

Previously, the two barriers in the model had not been tested within a single organisational context. The studies presented in this programme of research set out to achieve this by examining how managers and employees explained employee leadership potential. The research also extended the model by looking not only at the attributions made to explain instances that demonstrate leadership potential but also the specific behaviours associated with such examples. Specifically, the research questions focused on testing whether there were differences in the attributions and behaviours used to describe male and female potential. In addition, a cross-cultural comparison of explanations for male and female leadership potential in the UK and the US was conducted.

In total, five main studies were carried out:

- 1) An investigation of the attributions UK managers used to explain male and female employees' leadership potential;
- 2) An investigation of the attributions UK male and female employees used to explain their own leadership potential;
- 3) An exploration of the behaviours used by UK managers and employees to define leadership potential;
- 4) A validation study examining behaviours associated with leadership potential and beliefs about gender differences; and
- 5) A cross-cultural comparison of UK and US managers' explanations for male and female leadership potential.

9.1. Summary of results

The following sections briefly review each study, considering the methods used, results and key conclusions.

Study One

This study set out to test the first barrier of the socio-cognitive model of unfair discrimination (Silvester & Chapman, 1996) within an appraisal context by investigating whether managers made different attributions when explaining male and female employees' LP. A series of interviews were conducted with managers exploring their perceptions of prospective future leaders. Each manager was asked to describe two pairs of employees (one male and one female) who, according to previous appraisal ratings, were matched in having or not having leadership potential.

The main findings from this study can be summarised as follows:

- There were significant differences in the types of attributions managers used to explain examples of leadership potential [LP] in male and female employees;

- Managers perceived all employees to have more control over instances of leadership potential than instances where LP was not demonstrated; and
- There were no significant differences in the attributions managers made to explain when male and female employees had not demonstrated LP.

These results provided evidence for barrier one of the socio-cognitive model of unfair discrimination, interpersonal attributions, with managers making different attributions to explain the performance of equally matched male and female employees. Specifically, male leadership potential was seen as more controllable, personal and global than female leadership potential.

Study Two

This study investigated the second barrier in the socio-cognitive model of unfair discrimination, intra-personal attributions. In this context, the model suggests that male and female employees will make different attributions to explain their own leadership potential. A series of interviews were conducted with male and female employees who were equally matched by prior appraisal ratings. Analysis of employees' attributions produced the following results:

- There were few differences in the types of attributions male and female employees used to explain examples of their leadership potential;
- There were few differences in the types of attributions male and female employees used to explain examples of where they had not demonstrated leadership potential; and
- All employees made more internal, controllable, global and personal attributions to explain examples of LP than examples of not demonstrating LP.

The results provided little evidence to support barrier two of the socio-cognitive model of unfair discrimination. Specifically, explanations for leadership potential provided by

men and women did not differ on the internal, controllable, stable or personal attributional dimensions. However, men were somewhat more likely to make more global attributions, although this was an overall trend for both LP and not leadership potential [NLP] examples rather than specific to discussions of leadership potential.

Study Three

Study three aimed to extend the socio-cognitive model of unfair discrimination by considering what behaviours managers and employees used to describe leadership potential. A framework for classifying leadership potential behaviours was developed through the use of two-level coding principles (Miles & Huberman, 1984) and competency modelling techniques. The resulting competency model was then used to examine a) behaviours elicited by managers in study one to explain male and female LP and b) behaviours elicited from male and female employees in study two when describing their own leadership potential.

The leadership potential competency model categorised behaviours into eight competencies each made up of three or four component parts termed elements. Examination of the behaviours managers and employees used to describe leadership potential produced the following main findings:

- There were some differences in the types of behaviours elicited from managers when describing male and female leadership potential; and
- There were no differences in the types of behaviours elicited from male and female employees when describing their own leadership potential.

While the same eleven elements accounted for the greatest proportion of male and female employees' descriptions of their own leadership potential, there were several key differences in the types of behaviours used by managers to describe male and female employees' leadership potential. These could be related to common assumptions in gender stereotypes. A greater proportion of the indicators managers

used when identifying male potential related to taking ownership of a situation, being accountable, striving for success and thinking globally. The focus for male LP therefore appeared to be about being agentic, having control over situations and having a broad impact across the organisation. Conversely, the indicators most frequently used when discussing female LP covered behaviours such as building relationships, working collaboratively, developing others and listening to feedback. As these are all processes involving other people, this finding could be interpreted as implying that women are perceived as acting more communally and having less control over their opportunities to demonstrate potential. In addition, the behaviours used place less emphasis on having a broad impact within the organisation.

The findings from the behavioural analysis closely mirrored the attributional results from studies one and two. In general, male employees who demonstrate leadership potential are perceived as having more control over their successes and their impact as being more far-reaching across the organisation than their female counterparts'. Thus, as proposed by the first barrier in the socio-cognitive model of unfair discrimination, managers explained male and female leadership potential differently but, contrary to the proposed second barrier in the model few differences were found in how male and female employees explained their own leadership potential.

Study Four

Study four aimed to validate the leadership potential competency model using a two-part questionnaire administered to a cross-section of UK employees. The first part of the questionnaire measured gender stereotyped beliefs using a diagnostic ratio approach. Part two collected perceived importance ratings for leadership potential behaviours to allow an exploratory factor analysis to be undertaken.

Main findings from the diagnostic ratios were as follows:

- Men were perceived as more skilled than women in terms of their Business & Organisational Awareness and how they approached Managing Career;

- Women were perceived as more effective than men in terms of Communication, Planning & Organising and Team Relationships behaviours;
- There were fewer differences in perceptions of male and female effectiveness for Accountability, Motivation & Drive or Problem Solving behaviours; and
- Overall managers held stronger gender stereotyped beliefs than employees.

Again, these differences were closely related to gender stereotypes, with females being seen as more communal and conscientious and men more ambitious and task focused. For managers, beliefs in gender differences were seen across all competency areas. Competencies that the whole sample saw as equally likely to be demonstrated by men and women became further areas where men were perceived as more competent than women.

A three factor solution was extracted from the exploratory factor analysis, accounting for 43% of the variance. These factors were:

- Work & Career Commitment, which related to personal leadership.
- Project Management, which related to team leadership.
- Global and Dynamic Impact, which related to organisational leadership.

Overall, Work & Career Commitment was perceived as the least important aspect of leadership potential. Employee level respondents rated Project Management items as the most important, while respondents who were managers rated the Project Management and Global & Dynamic Impact factors as equally important.

By comparing the results from the factor analysis and the diagnostic ratios it appeared that:

- For employee level respondents, females were seen as more likely than males to demonstrate the aspects of leadership potential which they rated most important, which was Project Management; and
- For manager level respondents, Global & Dynamic Impact and Project Management were seen as equally important factors. Women were perceived as less likely to demonstrate Global & Dynamic Impact and men less likely to demonstrate Project Management.

These findings were interpreted as increasing the understanding of processes contributing to the glass ceiling. Focus for female participants was on the Project Management factor. While important for success at more junior and middle-level management roles, researchers have argued that the types of behaviours associated with this factor are seen as less critical at senior levels (Sternberg and Lubart, 1996; Bartram, 2005).

Study Five

A cross-cultural comparison of attributions and behavioural indicators used by UK and US managers to explain male and female employees' leadership potential formed the fifth study. Key findings from study five were:

- In both the UK and the US there were significant differences in the types of attributions used to explain male and female employees' leadership potential;
- There were some differences in the types of attributions UK and US managers used to explain causes of employees' leadership potential;
- There are no overall differences in the types of behaviours UK and US managers associated with demonstrations of leadership potential; and
- There was a non-significant tendency to use more similar behaviours to describe male and female leadership potential in the US than in the UK.

Although there appeared to be some trend towards the differences in attributions for male and female potential being smaller in the US than the UK, this was not statistically significant. Thus in both countries managers tended to give female employees less credit for examples of success and see the causes of male potential as more likely to be unique.

Differences in attributions made by UK and US managers indicated that, in the UK, to be identified as an example of leadership potential, a cause had to be more internal to the employee and had to have a more stable effect on the individual's career and a more global impact across the organisation. Additionally, in the US managers were more likely to identify how their own influence had helped an employee demonstrate potential. Thus, even between countries which may be considered as culturally similar, perceptions of what constitutes leadership potential may well be different. These results were seen as further evidence for the need to caution against generalising findings too broadly or assuming similarities between countries (Herriot & Anderson, 1997; Smith & Bond, 1998).

In terms of the behavioural indicators used to explain LP in both the UK and the US, descriptions of males and females tended to relate to gender stereotypes. However, the one exception to this was that US managers placed emphasis on Team Relationships, for both male and female employees. This finding was interpreted in terms of the 'feminization of management' literature, which has suggested that the requirements for senior positions are being redefined, in the US, in a way that is more consistent with a transformational model of leadership (e.g. Tomlinson, Brockbank & Traves, 1997).

9.2. General Discussion

Testing the socio-cognitive model of unfair discrimination

The main theoretical driver for this programme of research was to test a socio-cognitive model of unfair discrimination, as proposed by Silvester and Chapman (1996), within an appraisal context. Silvester and Chapman's original paper suggested that unfair discrimination could occur either as a consequence of ethnocentric attributional biases associated with in-group or out-group status or as a result of different patterns of attributions made by candidates from diverse cultural groups. Thus to increase understanding of the differential career progress of men and women, the aim was first to test whether managers made different attributions about male and female employees and secondly to investigate whether male and female employees used different attributions to explain their own performance.

Previous laboratory-based research investigating interpersonal attributions provided strong evidence that male and female successes were often interpreted differently (e.g. Deaux & Emswiller, 1974; Haccoun & Stacy, 1980; Russell & Rush, 1987). Similar results were also reported in more recent studies using working populations. For example, Silvester, Conway and Fraser (2004) reported that female success was seen as more external, uncontrollable and unstable than male success. The results from studies one and five provided strong support for the presence of barrier one, with female and male leadership potential consistently explained in different ways, with the outcomes afforded to female participants producing a less positive impression.

The second barrier derived from Silvester and Chapman's paper concerned potential differences in how male and female employees explained their own behaviour. Some research evidence indicates that, at least in public, women have traditionally minimised self-efficacy by attributing successful outcomes to others in order to appear more feminine (Eagly, 1987). Silvester and Chapman posited that a woman may therefore be at risk of being perceived as less motivated in an evaluative context than a man who

claims more personal responsibility for their own successes. However, research findings surrounding gender differences in intra-personal attributions are mixed (e.g. Levine, Gillman & Reis, 1982; Crombie, 1983). One possible interpretation offered for the differences between studies is that some are experiments based on artificial tasks in laboratory settings, while others are examinations of explanations for real world events (e.g. McHugh, Frieze & Hanusa, 1982).

The analysis undertaken in this programme of research found little evidence of different attributional styles for male and female employees. The exception to this was that men tended to attribute causes of their behaviour, in successful and unsuccessful situations, to have a broader impact than female employees. Nevertheless, results are generally in line with findings from previous field research such as Heimovics and Herman's (1990) examination of CEOs' explanations in not-for-profit organisations, Silvester's (1997) investigation of attributions made by male and female interview candidates and an exploratory study by Crofts (2003) into the attributions for success given by men and women working in the host organisation's HR department. The implication of these findings is that, contrary to the second proposed barrier of the socio-cognitive model of unfair discrimination, women do generally take personal credit for their own successes.

Overall, only one potential barrier of the socio-cognitive model of unfair discrimination was related to how male and female leadership potential was explained in the host organisation. While male and female employees explained their own potential in similar ways, managers continued to explain leadership potential differently on the basis of the employee's gender.

Extending the socio-cognitive model of unfair discrimination

In addition to examining attributions, this thesis also included analysis to extend the proposed model of unfair discrimination to look at the type of behavioural examples related to descriptions of leadership potential. Specifically, two main questions relating

to the two barriers in the socio-cognitive model were addressed: first, are managers focusing on the same behaviours to describe male and female potential; and secondly, are male and female employees using similar behaviours to describe their own leadership potential? Differences were found such that managers focused on different behaviours to explain male and female potential, while male and female employees used the same behaviours to explain their own performance. Thus, while there was clear evidence of gender stereotyping in perceptions of others' leadership potential (e.g. studies three, four and five), little evidence was found to suggest that males and females explained their own potential differently. Therefore no support was found for Darley and Fazio's (1980) proposition that stereotyping can sometimes become a self-fulfilling prophecy,

Overall, stereotyped beliefs, for example that men would demonstrate leadership potential through 'agentic' means and women through a more 'communal' approach (e.g. Carli & Eagly, 1997; Deaux & Kite, 1993; Heilman, Block & Martell, 1995), were detected throughout this programme of research. These findings are similar to previous reports using versions of the Schein Descriptive Index (e.g. Brenner, Tomkiewicz & Schein, 1989; Martell, Parker, Emrich & Crawford, 1998; Heilman, Block, Martell & Simon., 1989), which have indicated that women are rated less favourably than men in terms of requisite management characteristics.

A recent Catalyst report (2006) has surveyed over 900 managers across Western Europe and the US using a diagnostic-ratio approach similar to that employed in study four. Across all nationalities respondents agreed on the leadership behaviours which most differentiated men and women. For all respondents (male and female), women were perceived as outperforming men most in terms of being supportive of others. For male respondents, men were seen as outperforming women most at problem solving and for female respondents men were seen as outperforming women most at influencing upwards. The Catalyst report therefore concluded that, regardless of respondents' nationality, 'taking care of others' was perceived as the defining quality of female leaders and 'taking charge of people and situations' the defining quality of

male leaders. Clearly there are parallels between the Catalyst results for demonstrations of leadership and the differences in perceptions of how leadership potential is demonstrated by men and women reported in this programme of research. Results from this programme of research add to the Catalyst findings suggesting that it is not only in demonstrations of leadership that men and women are perceived differently, but that even when considering future leadership male and female potential is identified in terms of different behaviours.

Analysis of the behavioural indicators managers used to describe examples of leadership potential suggested that female employees may have to demonstrate skills not only related to being motivated and accountable as do their male counterparts, but also a consideration of others and a sense of teamwork. This relates to observations from Rudman and Glick (2001) that, for a woman to be successful in the long term, she must follow a 'tight rope', balancing a suitable level of competence with sufficient niceness. Similarly, Eagly and Johannesen-Schmidt (2001) reported that female leaders have to avoid threats from being perceived as behaving too communally and thus not meeting the requirements of their leadership role, with the risk of behaving too agentically and thus being perceived as violating the requirements of their gender role.

Researchers (e.g. Eagly & Johnson, 1990; Eagly & Carli, 2003; Alimo-Metcalfe, 1993) have concluded that evidence for actual differences in the leadership behaviour of men and women is limited. Popular perception of what male and female leaders do does not converge with the reality that men and women lead in similar ways. For example, Eagly and Johnson (1990), in a meta-analysis of studies comparing men and women on task-oriented and interpersonal styles and democratic versus autocratic styles found that, in organisational studies, there was no evidence of gender stereotypic styles. Similarly, Alimo-Metcalfe (1993), in a review of previous research investigating management and leadership styles, argues that '*most studies have concluded that there is no greater difference between women and men than between women as a population*' (p 73). However, as Baumgardner, Lord and Maher (1991) have noted, while perceptions may not be reality, they are inevitably used to evaluate and subsequently

distinguish leaders from non-leaders and thus are likely to remain problematic for women.

It is worth noting Lord and Maher's (1991) argument that, at the most senior levels of management, the criteria for success are necessarily more complex and that there is therefore more scope for stereotype-driven evaluation. Specifically, Lord and Maher distinguish between direct (e.g. supervision) and indirect (e.g. influencing organisational culture) types of leadership behaviour, with indirect influences being more typical of higher level leadership. As indirect influences are, by their nature, not very visible, and thus harder to assess, Lord and Maher propose that one would expect judgements of such higher level leadership to be more prone to being guided by automatic, schema-driven processing. In these instances, evaluators may be more likely to rely on stereotypes to guide their decision-making processes.

Moreover, Heilman (2001) states that there is little that can be done on an organisational level to combat the prescriptive effects of stereotypes and that a woman has to be unquestionably competent to be successful as a manager. For example, DeVana (1984, 1987) reviewed a matched cohort of male and female MBAs with continuous work histories and found that men and women experienced differential rates of success. DeVana concluded that women had to prove beyond doubt their ability to cope with assignments at the next level whereas men were presumed capable of handling the next assignment unless they had failed at their current level. Thus it seems that the stereotype of the manager remains firmly masculine and that, while this is the case, there will continue to be major difficulties in attempting to ensure equal recognition for equally competent men and women.

The effect of socialisation

Interestingly, for the majority of findings⁵, there were no differences between the explanations provided by male and female managers. Both explained the behaviour of male and female employees differently, with those afforded to male employees more likely to create a positive impression. Based on observations made by previous researchers (e.g. Heneman *et al.*, 1989; Tucker & Rowe, 1979) that effective out-group performance will be attributed to external and uncontrollable causes, it could be argued that, for all managers, female employees were perceived as members of the out-group.

This suggests that findings may be the result of socialisation at either an organisational or societal level, in which individuals adopt the values and norms of the dominant (i.e. male) group. Calas & Smircich (1990) have suggested that organisational images which utilise patriarchal power and devalue women can be traced to men's dominant position in society. For example, a study investigating how female leaders socially construct leadership (Boucher, 1997) has reported that constructions were based within conceptions of white male leadership and expectations surrounding the family in terms of serving and sacrificing. In addition, research by Moore & Rickel (1980) concluded that, as females became more senior within an organisation, the likelihood of them rejecting '*even the few positively valued traits they earlier endorsed*' (p.32) and adopting a male model of managerial success increased. Such findings led Alban Metcalfe (1985) to note how 'potent' the effect of organisational socialisation can be for women.

Klenke (1996) has argued that organisations tend to reinforce the value system of the dominant gender such that, in institutions which are predominantly shaped by men, there is an emphasis on hierarchy, independence and top-down communication (e.g. Maier, 1999; Marshall, 1993). Organisational socialisation has been defined as the process by which a newcomer acquires the attitudes, behaviour and knowledge needed

⁵: In study four there were some indications of same-sex bias in the diagnostic ratios given by male and female participants.

to participate as an organisational member (Van Maanen & Schein, 1979). Ostroff and Kozlowski (1992) have reported that new employees search for information not only about task-related matters, but also regarding structures and power distributions. The authors further argue that one way that socialisation occurs is through the observations and modelling of the behaviour of others. Thus, as social learning theory suggests (Bandura, 1971), if managers behave in a way which places less value on female employees' contributions, newcomers may see the managers' behaviours as appropriate and adopt them accordingly.

Griffin, Colella and Goparaju (2000) argue that organisations which use more 'institutionalised tactics' for socialisation are more likely to yield compliant employees who accept organisational values. As these tactics include many aspects of the graduate recruitment programme within the host organisation, such as formally orienting newcomers in groups, providing fixed career sequences and offering interpersonal support such as mentors, this may make it more likely that all newcomers, men and women, will adopt the dominant values within the organisation which see women as less likely to demonstrate the qualities to be senior leaders.

In addition, in organisations where the glass ceiling is prevalent, most employees, especially at middle management level, are likely to have a male supervisor. In fields such as general business management, where men outnumber women in both the UK and the US, it is men's perceptions that are likely to be most influential (Catalyst, 2006). Indeed, Alimo-Metcalf (1993) has argued that the beliefs of such 'significant others' as to what motivates women at work will affect the opportunities and support female employees are given. Women are often blamed for their lack of ambition and career advancement (Kerfoot & Knights, 1996) and assumed to be less assertive, ambitious and career orientated than men (Kaufman & Fetters, 1980). Thus, as research such as Green & Mitchell's attribution model of leadership (1979) and Struthers, Colwill and Perry's (1992) investigation into personnel decision making have reported, if female employees are perceived as being less concerned with advancement or career progression, they are less likely to be offered challenging assignments or be selected

for intensive development programmes. Indeed, as Lord and Maher (1991) note, to be a leader one must be perceived as a leader and, in this sense, women may be severely disadvantaged. An example of how this manifests within the host organisation is clearly illustrated in the extract presented below. It is taken from an interview with a UK male manager when he is discussing why a female employee does not have leadership potential:

'I have an example of a female [who is not a leader]. She comes to the office at 9.00 and works very solidly right through the day. She's reliable and she will do her job meticulously. You know if you ask her for information she will get it and it will always be right. The key people in my area do quite a lot of travelling around and you do that with enthusiasm because you know there aren't enough hours during the week to get things done. Because she has kids and she has a life balance that she needs to support, this lady would probably have a problem with that and that's absolutely fine I've never actually had that conversation [whether she would like to travel] with her and she might say if you gave me that opportunity I would do it, but in reality probably not, so I'm sure she's not got the potential.'

Understanding leadership potential

Despite considerable speculation in practitioner magazines there has been very little previous research investigating how organisations identify leadership potential. This had led some researchers to argue that there is a danger of the identification of future talent taking on an almost 'mythical status' (Fulmer & Conger, 2004). Thus, the creation of a leadership potential competency model also has theoretical implications in terms of increasing understanding of what behaviours are indicative of future leadership skills and suggesting that leadership potential can be described in terms of observable behaviours. Table 6.1 (presented in chapter six), shows how the competency model relates to previous taxonomies of leadership behaviours (Yukl, Wall & Lepsinger, 1990) and work performance (Campbell, McCloy, Oppler & Sager, 1993). Whilst overlaps between these models are identified, unique competencies of

Accountability and Managing Career which are not mentioned specifically in either model are also identified. In addition, the exploratory factor analysis suggested that these competencies cluster into three distinct factors of behaviours associated with leadership potential: Global & Dynamic Impact, Project Management and Work & Career Commitment.

One previous attempt to classify leadership potential is Campbell's Leadership Potential Inventory (1991) [CLPI]. The work presented in this thesis goes beyond Campbell's proposed groupings of six orientations of leadership potential in the CLPI. The competency model was devised using a grounded approach to analyse research data and the model then tested using statistical analyses. This is in contrast to the CLPI orientations, which were derived from an '*armchair psychology*' (Campbell, 1990: p 263) approach. A further criticism of the CLPI is, although overall it is claimed to have '*a fairly direct relationship to leadership and creativity*' (Campbell, 1990: p 249) two of the six orientations are scales are 'leadership' and 'creativity' and it not clear how these, and the other orientations, relate overall to leadership potential. Conversely, the leadership potential competency model takes a similar approach to Yukl *at al.*'s (1990) taxonomy of leadership behaviours in that it aims to identify the behaviours a person demonstrates to show they have leadership potential.

9.3. Research Limitations

As with most research, there are several potential limitations to the studies presented in this thesis. They include threats to internal validity, which are primarily related to the use of self-report data, sample size and a need, in the future, to link explanations to real-life decision making processes, along with issues regarding generalisability. These are discussed in the following paragraphs.

The data collected in studies two and four was self-reported. In study two employees reported why they believed they had leadership potential and in study four participants commented on their perceptions of leadership potential and gender. As Allen (1995)

has noted, *'the problems with self-reports are legendary in psychology'* (p 584). What people report may not match reality; their claims may be influenced by social desirability and self-presentational goals, and thus this may have impacted on the findings reported here.

In addition the data collected in studies one, three and five was based on managers' reports of their employees. Reported behaviour by others is also open to distortion. Particularly when researching a sensitive area such as diversity, there is a risk that people may modify their responses so as not to appear gender-biased. However, significant differences in how male and female leadership potential was construed were found suggesting that responses were not unduly affected by demand characteristics. This may have been due to the methodologies selected. The use of critical incident interviews (Chell, 1988) and the coding of spontaneously occurring attributions specifically (Bugental, Johnston, New & Silvester, 1998) have been praised for their utility in investigating sensitive subjects. It is unlikely that most people will be able to modify the types of attributions they make during everyday speech. Indeed, Basow (1992) has argued that examining attributions made to explain others' behaviour can be a particularly effective way of observing prejudice in climates, such as the workplace, where overt sexism is no longer endorsed. As managers were asked to discuss both male and female examples of demonstrating and not demonstrating leadership potential, social desirability may have been reduced; participants were given equal opportunity to make positive comments about men and women.

In addition, the diagnostic-ratio approach used in study four allowed participants to indicate which leadership potential behaviours they believed to be more likely to be effectively demonstrated by men and women. Thus, as participants were able to indicate areas where they also perceived women as 'better' than men they may have been more likely to be honest, believing that their responses showed a 'balanced' view (Glick & Fiske, 1996) of male and female leadership potential.

To try and reduce the potential for eliciting socially desirable responses, interview participants were only told that the researcher was interested in how leadership potential was identified in the organisation, rather than that the research was primarily about gender differences in how male and female potential was identified.

The use of self-report interview data has some additional potential problems. In particular, the data extracted is idiosyncratic and may not reflect 'reality' as perceived by others. The examples participants selected to highlight leadership potential may have been atypical. For instance, it may be that employees avoided discussing highly pressurised situations, which may have been good examples of their own leadership potential, believing they may portray them in a less positive light than if they selected examples where there was only success. However, the administration of the questionnaire in study four which measured perceived importance of each extracted indicator of leadership potential provided some validation that the types of examples given were generally seen as relevant for displaying leadership potential.

Another potential difficulty with interview data is that some participants are not able to provide the level of detail or use the concepts the researcher requires (Barker, Pistrang & Elliot, 2002). In this programme of research, several original interviews were excluded from data sets for this reason. For example, in study one two interviews with male managers could not be included as neither participant was able to identify any female employee whom they believed to have leadership potential. Whilst this in itself is interesting and perhaps indicative of bias, inclusion of these interviews would have prevented complete comparison of an equal number of examples of male and female leadership potential. Similarly, a further three interviews across the programme of research were excluded due to the interviewees, despite considerable prompting, being unable to discuss specific instances and thus provide the level of detail necessary for the analysis. In all other cases participants were able to provide sufficient information, although there was still some variability in the volume produced.

It may be that during the interviews participants behaved differently because they were interacting with a researcher, rather than with other members of the organisation. This possibility was raised in relation to employees in chapter five's discussion section. For example, participants may have felt they could be more open with a researcher under guarantees of confidentiality than if they were in an appraisal or promotion review or even in casual conversation with fellow employees. However, if this is the case, one could perhaps argue that the explanations given were actually more genuine illustrations of their personal sense-making.

A further potential problem with the self-report data was that accounts were retrospective and thus the accuracy of events may be questionable. For example, the differences in behavioural indicators used to describe male and female potential could be indicative of actual differences in behaviour managers had observed or could be the result of managers focusing on different behaviours when evaluating male and female employees. While the results from study two, where men and women explained their own potential in the same way, might lead to speculation that the difference was indeed due to managers' focus, not actual differences in employee behaviour, without behavioural observation, this question cannot be conclusively answered. However, behavioural observation is not without limitations. In practice, once people are aware that they are being observed, it is possible that they will engage in impression management to ensure they come across in a socially desirable way. Nevertheless, within an appraisal context or when making promotion decisions, managers will engage in a retrospective analysis of subordinate past performance and, as such, this study design may give some insight into the sorts of processes involved in such judgements.

Although managers described employees who had previously been awarded the highest appraisal ratings and employee participants were also matched on appraisal ratings, explanations provided in the interviews were not directly related to promotion decisions. This may have impacted on the ecological validity of the findings. Unfortunately it was not possible to gain access to actual decision-making processes during this programme of research due to the highly sensitive nature of such data.

However, since seeing the results of this project the organisation is now keen to undertake further work to examine these processes in real decision-making situations which will enable this possibility to be explored further. A related point is that, due to the cross-sectional nature of the studies presented in this thesis, it was not possible to see whether individuals described as having leadership potential were actually those who went on to be successfully promoted to leadership positions. For example, while more control was attributed to male than female employees, the results did not demonstrate whether participants perceived as having more control over their leadership potential progressed more quickly through their career. It would therefore be interesting to investigate whether a self-fulfilling prophecy is in operation, where those who are perceived as having potential and may then have extra doors opened for them, go on to progress more quickly through the organisation.

Another limitation within this thesis is that, due to the more qualitative nature of studies one, two, three and five, relatively small sample sizes were used. This does not detract from the richness of the data (see Silvester, Anderson & Patterson, 1999); 3705 attributions and 1631 behavioural indicators being extracted in total. However, it is possible that, in some instances, significant results were not detected due to the necessity to create mean scores per participant to enable statistical analyses. For example, in study one, whilst results for the stability of male and female leadership potential were not significantly different, mean scores were different in the predicted direction and it is possible that, with a larger sample size, it would have reached significance. Thus, recruitment of a larger sample may have led to more support for the research hypotheses. This may particularly have been relevant in study five where, although there were trends towards fewer differences in how US managers described male and female behaviour than UK managers, all differences were non-significant.

Using a larger sample size was primarily precluded due to the amount of time necessary to carry out the attributional and behavioural analysis. Additionally, as the interview procedure took around 45 minutes per person, the host organisation was reluctant to provide additional participants. Nevertheless, it is argued that the richness

of data collected compensates for the relatively small sample size and has allowed the processes underpinning differential career progression to be examined in more detail.

A further consideration for this project was that, although both manager and employee perceptions of leadership potential were investigated, manager and employee perspectives for the same incidents of leadership potential were not compared. This would have been useful in terms of examining similarities and differences in perspectives, whilst the circumstances were held constant. Unfortunately, due to the assurances of confidentiality such that managers were not required to name any individuals they discussed, this was not possible in this programme of research. However, assessment of how managers and employees explain the same instances of leadership potential would clearly be an area that would warrant further research.

As well as considering issues of internal validity, the programme of research can be evaluated in terms of threats to its external validity. In this sense, the primary concern is whether the findings can be generalised to other settings and employee populations.

This thesis has looked at how leadership potential is identified and whether this is different for men and women. Thus, in all interview studies, equal numbers of male and female participants were recruited and efforts, such as targeting women's network groups, were undertaken to ensure a gender balance in questionnaire responses. As women are under-represented at management levels in the host organisation and business areas and appraisal ratings also had to be matched for participants, there was no opportunity also to consider other demographics such as ethnicity and in fact the vast majority of participants in all studies were white.

In addition, as the work was all carried out within a single organisation, it may be possible that some findings are organisationally specific. Whether this impacted on the results could only be addressed by replicating the studies in different organisations.

9.4. Practical Implications

There are many practical implications arising from this research project. Although these have been considered in the discussion sections of each study chapter, an overview of these issues is presented below, starting with ways in which the research has already been applied in the host organisation.

As the project has progressed, the researcher has provided regular feedback to key stakeholders in the host organisation including project sponsors and the Learning and Development Team. This has enabled them to apply findings. For instance, examples of how male and female leadership potential has been described have been included in diversity awareness training courses for senior managers. Trainers found this useful as it has enabled them to provide organisation-specific examples of how stereotypes might impact on how managers evaluated their staff.

As the programme of research has neared completion, the utility of the research has increased. The researcher has run a series of 'Educational Sessions' for the Learning and Development Team and HR Business Partners. These sessions have explained the research, key findings and then been used as a forum for discussing implications for the organisation. On the basis of these discussions a business report has been produced for HR Business Partners to share with senior managers, which introduces issues raised by the research and what can be done to counter them.

Feedback from the HR Business Partners indicates that this has been useful. Whilst the idea of unfair discrimination against female employees was not new to managers, previous discussion had been based on anecdotal evidence or studies conducted in other organisations. As the findings presented were based on a scientific approach and were organisation specific they were seen as more credible. Furthermore, because the thesis has sampled a range of business areas, the sample was perceived as broad enough to be representative of the organisation and as not directly blaming particular individuals.

Having descriptions of the leadership potential model at both a factor and competency level has also been beneficial in transferring learning back to the organisation. Being able to describe the three factors as relating to Leading Yourself (Work & Career Commitment), Leading Your Team (Project Management) and Leading the Organisation (Global & Dynamic Impact) has provided a 'top level' message which is easy for managers to remember, whilst the detail in the competencies, has helped them understand what the factors look like in practice. Thus, in the future, the model may also be useful as an educational tool, providing transparency around what sorts of behaviours are expected for someone to be identified as having leadership potential. Indeed, Patterson, Ferguson, Lane *et al.* (2000) have noted that competency models provide a realistic job preview of the skills necessary to be successful and help create a shared understanding of these requirements.

In addition, because the research included a US comparison, senior stakeholders such as the Global Head of Diversity have also been interested in the findings. This is essential because, to have a significant organisational impact and perhaps lead to changes in processes, decisions need to be taken at a global level.

Since the Educational Sessions, the organisation has begun to review its existing promotion criteria for vice president roles against the leadership potential competency model. The purpose of this is to see whether there are any behavioural indicators identified in the leadership potential model which are not currently part of the promotion criteria. They are particularly interested to establish whether any indicators used more frequently to describe female potential are excluded from current criteria which might provide additional explanation regarding the glass ceiling that appears to be operating at entry to this organisational level.

In addition, after seeing the results from the diagnostic ratio questionnaire, members of the host organisation have discussed the possibility of using the questionnaire as a 'temperature check' measure for specific business areas. Discussions have indicated

that members of the Learning and Development Team perceive it as a potentially useful and relatively simple way of gaining an overview as to what are the overall perceptions of leadership potential for a specific group within the organisation and whether these rest on gender stereotypes.

Further practical implications from this programme of research include considering how an organisation arranges its appraisal and development processes. The findings from this research have suggested that, while there are considerable differences in how managers explain male and female potential, men and women are actually describing their own potential in very similar ways. Thus, whilst organisations have traditionally invested heavily in training programmes designed to 'help' women be more confident or effective in describing their accomplishments (e.g. Rosenthal, 1995; Alimo-Metcalf, 1993), these findings suggest that women are already taking credit for their successes. Rather, it may be that resources could be better channelled into raising managers' awareness of the gender stereotypes and biases they hold and how these can impact when they interpret others' behaviour. Indeed, as Operario and Fiske (2001) have argued, *'the most effective means for reducing individual-level stereotyping is by informing people how unconscious stereotyping can occur'* (p 58).

Thus a first step for an organisation could be ensuring that all managers attend diversity training which capitalises on relevant research findings such as the ones from this programme of research and also investigations of how to reduce the impact of unfair bias. For example, Blair & Banaji (1996) have reported that stereotypes respond to personal control: making people aware of their stereotypical thinking and accountable for their actions can be a starting point towards reducing these effects. In fact, laboratory-based research and organisational studies (Pendry & Macrae, 1996; Tetlock, 1992; Powell & Butterfield, 1994) have indicated that holding people accountable for their decisions leads people to make more careful, less stereotypic judgements.

In addition, any training (e.g. diversity or interview training) should not be a one-off event. Managers need constantly to be reminded about the dangers of stereotyping and

their responsibility to make fair decisions based only on relevant criteria (Operario & Fiske, 2001). Thus, as well as making diversity seminars an annual event, consideration of the effects of diversity could be placed at the start of promotion processes. For example, before each promotion review panel begins, a review of the common pitfalls which adversely impact upon fairness, such as making different assumptions to explain male and female performance, or focusing on different aspect of leadership potential when considering male and female candidates due to gender stereotyping, could be included.

Overwhelming work demands can also encourage less thoughtful decision-making processes. Factors such as time pressures, lack of information and competing cognitive demands can result in even the most conscientious individuals relying on stereotypes without being consciously aware of doing so (Fiske, 1989). When managers work in high-pressured environments, they may not be motivated to make attempts to attend to and review evidence fully, or look for additional information, unless specifically requested to do so, as it adds to their cognitive workload (Barnes-Farrell, 2001).

Thus, at an organisational level, interventions such as making the involvement in evaluation or appraisal processes a key objective of managers' performance can help to create a culture where these activities are viewed as critical and worthy of effort and attention. This should start to reduce the potential for individual managers to rush such tasks, and hence engage in the use of cognitive shortcuts such as reliance on stereotypes and existing schemas, which increase the likelihood of unfair discrimination occurring.

A lack of structure in evaluation processes and ambiguity in evaluation criteria allow for the sort of cognitive distortion that characterises judgments made solely or partly on the basis of gender stereotypes (Heilman, 2001). Thus, with more accountable, professional and tightly structured evaluation processes, it should be possible to reduce the influence of stereotype-based decision-making. Appraisal and promotion processes should therefore be designed to ensure they hold managers accountable and require

them to justify their decision-making process in full. A longitudinal study of promotion decision in a US government agency (Powell & Butterfield, 1994) reported that, when procedures were changed such that all promotions were announced publicly (producing undeniable evidence of women's successes), and managers were held accountable by making and keeping detailed records of the entire decision-making process, women applicants were no longer unfairly disadvantaged.

9.5. Future Research

There are several future research directions suggested by the findings presented in this thesis. These reflect areas where results presented in this study could be replicated, where results have produced additional research questions, or as a means of addressing some of the limitations previously discussed.

Two limitations discussed above were that, in this programme of research, actual promotion decisions were not analysed and that it was not known if those who were identified as having leadership potential went on to be successful in the organisation. Thus, two clear future studies within the host organisation can be identified. The first would be to analyse the discussions of actual promotion boards and the content of written appraisal forms to investigate whether the same differences in explanations for male and female performance remained. The attributional dimension definitions and leadership potential indicators developed during this research could provide a framework for classifying the decisions. Secondly, there would be utility in designing a longitudinal study which would rate employees' leadership potential in terms of the identified competencies, and then track their success in subsequent appraisals and promotion competitions. Initially, performance on the competencies could be assessed by attendance at a development centre focusing on the leadership potential competencies, or as a less thorough but also less costly alternative, manager and self ratings on each competency could be used. By doing such research the predictive validity of the leadership potential competency model could be investigated.

Although there were little differences in how male and female employees explained their own potential, there is actually no evidence in this research to refute a suggestion, that male and female employees did in fact behave differently and that managers' responses were just a reflection of reality. Thus, future research to address this possibility could observe the behaviour of men and women identified as having potential and classify their behaviour, again using the leadership potential competency model, to see whether there were differences in performance.

An alternative way of addressing this issue would be to use a modified version of an Attributional Style Questionnaire [ASQ] to examine explanations of male and female leadership potential following a format similar to that used by Silvester *et al.* (2004). By having two versions of a questionnaire which presents vignettes of demonstrations of leadership potential, it is possible to hold the outcomes (i.e. the vignettes) constant but vary the gender of the employee described. For example, if in the first version vignette 'a' describes a male employee and vignette 'b' a female employee, in the second version this is reversed. Perceptions of each attributional dimension are then compared across the versions and any differences in explanations for male and female potential can only be the result of biases in perceptions of men and women and not differences in demonstrated behaviour.

A questionnaire approach would also be useful in beginning to investigate whether the findings are generalisable across other financial service organisations. A questionnaire could include a modified ASQ as described above, plus the diagnostic ratio and exploratory factor analysis [EFA] questions. This would allow the attribution biases and gender stereotyped beliefs about demonstrating the leadership potential indicators to be tested across the industry. Data collected from the EFA questions could then be used to conduct a confirmatory factor analysis.

In addition, the question of generalisability could be considered more broadly by replicating some of this programme of research in different organisational contexts. It would be particularly interesting to conduct similar research in a more traditionally

feminine work environment and where there is an even gender balance in senior positions or a greater proportion of female than male executives. Such an organisation may be found in, for instance, a local authority children's services directorate or a primary care trust.

The investigation of differences in how managers in the UK and US explain leadership potential is clearly an area that would warrant more research. One possible project could include the administration of a modified ASQ examining perceptions of leadership potential to both UK and US managers. Similarly, the administration of a diagnostic-ratio questionnaire (as used in chapter seven) to a US sample would be beneficial in further understanding if and how gender stereotypes for leadership potential differ in the two countries.

It would be interesting to extend the cross-cultural testing of the two barriers proposed by the socio-cognitive model of unfair discrimination, as highlighted in chapter eight's discussion section. A first step would perhaps be to investigate intra-personal attributions in the US to see whether the lack of significant differences between men and women's self-attributions found in the UK was also present in the US. Further studies could then compare inter and intra personal attributions for male and female leadership potential, still within the same organisational or industry context but in more collectivist cultures, such as Japan or China.

The socio-cognitive model of unfair discrimination suggested that bias can occur either as a consequence of ethnocentric attributional biases associated with in-group or out-group status or as a result of different patterns of attributions in diverse cultural groups. Whilst the research presented in this thesis has focused on how these barriers could impact on the differential career progression of men and women, they could be equally applied to help explain difficulties that any minority group may experience in the workplace. Thus, a future research agenda could also be developed around examining the attributions and behavioural examples used to explain the lack of other minority

groups' progression, such as employees from ethnic minority backgrounds or who are registered as disabled, in to senior management roles.

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Appendix 1:

1.1 Email to encourage participation in study one

The firm is sponsoring a two-year research project that will investigate perceptions of leadership potential at *****. There has been relatively little external research concerning the ways in which organisations identify individuals perceived as having leadership potential. However, some research does suggest that being a leader is as much about being perceived as a leader as about behaving in any particular way. We are interested in finding out more about how we perceive leadership at *****.

The first stage of the project will be a series of interviews with VP's across the business and we would like you to be a participant. Each interview will take 20 minutes and will focus on what aspects of an employee's behaviour can be identified as examples of 'leadership potential'. Anna Koczwara from Goldsmiths College in London will contact you directly to arrange a time to meet with you.

This is an important and interesting area for us as it goes to the heart of how we develop, appraise and promote leadership within the organisation.

Thank you in advance for your participation.

1.2. Study one consent form

Perceptions of Leadership Potential: Consent Form

Thank you for agreeing to participate in this research. This purpose of the interview is to examine what aspects of an employee's behaviour are associated with leadership potential. The data will be used to form part of the interviewer's PhD research.

To investigate perceptions of leadership potential, you will be asked to talk about the behaviour of some employees you could identify as demonstrating 'leadership potential' and that are likely to be successful within the bank. You will also be asked to describe the behaviour of some employees who are 'average' and therefore unlikely to make quick progression through the bank. The employees you discuss can be members of staff you currently supervise, or have managed in the past.

All information will be treated confidentiality and it is not necessary to name any individual staff members. No information about you, or anyone discussed, as an individual will be reported. Findings will be discussed in general terms of perceptions of leadership. For the purpose of analysis the interviews will be tape-recorded and then transcribed. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 40 minutes and you are free to stop the interview and withdraw from the research at any point.

If you have any further questions about the research the interviewer is happy to answer them now or at a later point.

I confirm that I have volunteered to participate in this interview and I understand that the information I provide will be made anonymous and treated confidentially. I also give my consent for Anna Koczwara to use the information I provided as part of her PhD research.

Name (Sign).....

(Print).....

Date.....

1.3. Study one demographic information form

Participant Background Information

Gender: Male/Female Year of Birth: _____ Nationality: _____

How would you describe your ethnic origin (please tick)?

White		Indian	
Black Caribbean		Pakistani	
Black African		Bangladeshi	
Black Other (please specify)		Chinese	
Other (please specify)			

How long have you worked at *****?	
How long have you worked in the UK?	
How long have you been in your current position?	

1.4. Study one interview schedule

Thank you for agreeing to participate in this research. This interview is part of a series of interviews, which will form Stage 1 of a two-year research project into perceptions of leadership potential at *****. Specifically, the purpose of the interview is to investigate what aspects of an employee's behaviour you think are associated with leadership potential. As Stage 1 research, these interviews are not intended to provide any conclusive results. Rather, they are concerned with gathering information that can be used to inform and direct the wider project.

I would like you to talk about the behaviour of some employees you could identify as having demonstrated 'leadership potential' and are likely to be successful within the bank and progress to leadership or at VP levels. I would also like you to describe the behaviour of some employees who, whilst good at their jobs, are unlikely to make quick progression through the bank. The employees you discuss can be members of staff you currently supervise, or have managed in the past. However, if you talk about staff you have managed previously, it is important to think back to what they were like when you were managing them, not about their performance now.

All information will be treated confidentiality and it is not necessary to name any individual staff members. No information about you, or anyone discussed, as an individual will be reported. Findings will be presented in general terms of perceptions of leadership. For the purpose of analysis the interviews will be recorded and then transcribed if this is OK with you. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 20 minutes and you are free to stop the interview, or the recording, at any stage and withdraw from the research.

Do you have any questions?

Could you start by thinking about an employee who you could identify as having leadership potential?

- can you tell me a little bit about them in terms of why you would identify them as having 'leadership potential', remember you don't need to identify them by name
- can you think of a specific example of something they did which demonstrated this
- what was their role
- what was the outcome
- why do you think that happened

Could you now think of another employee, this time a (man/woman) who you could also identify as having leadership potential?

- can you tell me a little bit about them in terms of why you would identify them as having 'leadership potential', remember you don't need to identify them by name
- can you think of a specific example of something they did which demonstrated this
- what was their role
- what was the outcome
- why do you think that happened

Thank you, now could you think about an employee who, while good at their job, does not demonstrate 'leadership potential' and, in your opinion, is unlikely to progress to a leadership position within the bank?

- can you tell me a little bit about them in terms of why you would not identify them as having 'leadership potential', remember you don't need to identify them by name
- can you think of a specific example of something they did which demonstrated this
- what was their role
- what was the outcome
- why do you think that happened

Could you now think of another employee, this time a (man/woman) who, while good at their job, did not demonstrate 'leadership potential' and, in your opinion, is unlikely to progress to a leadership position within the bank?

- can you tell me a little bit about them in terms of why you would not identify them as having 'leadership potential', remember you don't need to identify them by name
- can you think of a specific example of something they did which demonstrated this
- what was their role
- what was the outcome
- why do you think that happened

Thank you. That is all I wanted to ask you and it has been really useful. Do you have any questions you want to ask or anything else you would like to add?

Appendix 2:

2.1. Email to encourage participation in study two

The firm is sponsoring a two-year research project that will investigate perceptions of leadership potential at *****. There has been relatively little external research concerning the ways in which organisations identify individuals perceived as having leadership potential. The first stage of this project was a series of interviews with VPs across the business about how they identify leadership in associate level employees.

The next stage of the project will now focus on Associates and investigate how they try to demonstrate their own leadership potential and we would like you to be a participant. Each interview will take 20 minutes and will focus on what aspects of your behaviour can be identified as examples of 'leadership potential'. Anna Koczwara from Goldsmiths College, University of London will contact you directly to arrange a time to meet with you.

This is an important and interesting area for us as it goes to the heart of how we develop, appraise and promote leadership within the organisation.

Thank you in advance for your participation.

2.2. Study two consent form

Perceptions of leadership potential consent form

Thank you for agreeing to participate in this research. This is part of a series of interviews, which will form the second stage of a three-phase research project investigating perceptions of leadership potential at *****. Whilst Stage 1 concentrated on how managers identify leadership potential in associate level employees, Stage 2 will specifically focus on what aspects of their own behaviour associate level employees think are related to demonstrating leadership potential.

During the interview you will be asked to talk about a time when you feel you have demonstrated leadership potential. This could be when you feel you performed in a way or achieved something that you think gave people confidence that you have the potential to lead a team. For comparison you will also be asked to discuss a time when you feel that something did not go as well as it could and where you feel you may have missed an opportunity to show your leadership potential.

It would be useful if you can consider relatively recent examples as it is likely you will be able to discuss these in more detail and with more accuracy.

All information provided will be treated confidentially and it is not necessary to name any individuals. No information about you, or anyone discussed, as an individual will be reported. Findings will be presented in general terms of perceptions of leadership.

For the purpose of analysis the interviews will be recorded and then transcribed. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 15 minutes and you are free to stop the interview, or the recording, at any stage and withdraw from the research. If you have any further questions about the research I would be happy to answer them now or at a later point.

I confirm that I have volunteered to participate in this interview and I understand that the information I provide will be made anonymous and treated confidentially. I also give my consent for Anna Koczwarra to use the information I provided as part of her PhD research

Name (Sign).....

(Print).....

Date.....

2.3. Study two demographic information form

Participant Background Information

Gender: Male/Female Year of Birth: _____ Nationality: _____

How would you describe your ethnic origin (please tick)?

White		Indian	
Black Caribbean		Pakistani	
Black African		Bangladeshi	
Black Other (please specify)		Chinese	
Other (please specify)			

How long have you worked at *****?	
How long have you worked in the UK?	
How long have you been in your current position?	

2.4. Study two interview schedule

Perceptions of Leadership Potential Research Stage 2: Interview Schedule

Thank you for agreeing to participate in this research. This is part of a series of interviews, which will form the second stage of a three-phase research project investigating perceptions of leadership potential at *****. Whilst Stage 1 concentrated on how managers identify leadership potential in associate level employees, Stage 2 will specifically focus on what aspects of their own behaviour associate level employees think are related to demonstrating leadership potential.

During the interview I would like you to talk about a time when you feel you have demonstrated leadership potential. This could be when you feel you performed in a way or achieved something that you think gave people confidence that you have the potential to lead a team. For comparison I would also like you to discuss a time when you feel that something did not go as well as it could and where you feel you may have missed an opportunity to show your leadership potential.

It would be useful if you can consider relatively recent examples as it is likely you will be able to discuss these in more detail and with more accuracy.

All information provided will be treated confidentially and it is not necessary to name any individuals. No information about you, or anyone discussed, as an individual will be reported. Findings will be presented in general terms of perceptions of leadership.

For the purpose of analysis the interviews will be recorded and then transcribed. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 15 minutes and you are free to stop the interview, or the recording, at any stage and withdraw from the research.

Do you have any questions before we begin?

Could you start by describing to me how you think leadership is defined in *****?

- is this specifically at the associate level
- what are the qualities/skills associates have to demonstrate to show they have leadership potential and that they should be progressing quickly to leadership positions within the bank

Can you tell me about a time when you feel you have demonstrated leadership potential?

- what was the situation
- what was your role
- what was the outcome
- why do you think that happened

Now can you think about a time when you feel that something did not go as well as it could have and you may have missed an opportunity to show your leadership potential?

- what was the situation
- what was your role
- what was the outcome
- why do you think that happened

Do you think there are any factors that can make it hard for you to demonstrate your potential at ****?

To finish with if, you had to list three characteristics that you perceive as being most important for demonstrating leadership potential as an associate what would these be?

Thank you, those are all the questions I wanted to ask you , do you have any questions you want to ask or anything else you would like to add?

Your input has been really valuable, so once again thank you for participating in this research.

Appendix three

3.1. Email to encourage participation in study five

The Investment Bank is helping to sponsor a three-year research project that is investigating the perceptions of leadership potential at *****. The first stages of this project have examined perceptions of leadership potential in UK-based staff. The final stage of this project is to undertake a series of interviews with US-based staff to investigate their perceptions of leadership potential and whether there are any differences between the criteria used by US and UK based staff.

The interviews will be conducted by Anna Koczwara, a researcher from Goldsmiths College, University of London, between June 14-28. This research looks at the ways in which organizations identify whether individuals have leadership potential. Specifically, it will investigate the sorts of behaviours junior employees demonstrate which lead more senior (VP level) employees to recognise their potential for future leadership roles.

We would like you to be an interview participant. Each interview will take approximately 20 minutes and will focus on what you perceive leadership potential to be and how you identify this in employees currently working at the Associate level. Please respond by clicking the button below to participate in an interview. ***** will follow up with you to schedule a specific day and time.

All information provided will be treated confidentially and it is not necessary to name any individuals. Findings will be presented in general terms of leadership perceptions only. This is an important and interesting area for us as it goes to the heart of how we develop, appraise and promote leadership within the organization.

Thank you in advance for your participation.

3.2. Study five consent form

Perceptions of leadership potential consent form

Thank you for agreeing to participate in this research. This is part of a series of interviews, which will form the final stage of a three-year project investigating perceptions of leadership potential at *****. Specifically, the purpose of this interview is to investigate what aspects of an employee’s behaviour you think are associated with leadership potential and to gather some of examples of how this might be demonstrated.

During the interview you will be asked to talk about the behaviour of some employees you would identify as having ‘leadership potential’ and think are likely to be successful within the bank, progressing to leadership or VP roles relatively quickly. The employees you discuss should be working at the Associate level and ideally should be members of staff you currently work with. However, if you want to consider employees you no longer work with, it is important to think back to what they were like then and not their current performance.

It would be useful if you can consider relatively recent examples as it is likely you will be able to discuss these in more detail and with more accuracy.

All information provided will be treated confidentially and it is not necessary to name any individuals. No information about you, or anyone discussed, as an individual will be reported. Findings will be presented in general terms of perceptions of leadership.

For the purpose of analysis, with your permission, the interviews will be recorded and then transcribed. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 20 minutes and you are free to stop the interview, or the recording, at any stage and withdraw from the research. If you have any further questions about the research the interviewer will be happy to answer them now or at a later point.

I confirm that I have volunteered to participate in this interview and I understand that the information I provide will be made anonymous and treated confidentially. I also give my consent for Anna Koczwara to use the information I provided as part of her PhD research

Name (Sign).....

(Print).....

Date.....

3.3. Study five demographic information form

Leadership Potential Interviews: Participant Background Information

Gender: Male/Female

Year of Birth:

Nationality:

How would you describe your ethnic origin (please tick)?

White		Asian	
Hispanic		Latin American	
African America		Other (please specify)	

How long have you worked at *****?	
How long have you worked in the US?	
How long have you worked at your current level?	

3.4. Study five interview schedule

Perceptions of Leadership Potential Research: Stage 3 Interview Schedule

Thank you for agreeing to participate in this research. This is part of a series of interviews, which will form the final stage of a three-year project investigating perceptions of leadership potential at *****. Specifically, the purpose of this interview is to investigate what aspects of an employee's behaviour you think are associated with leadership potential and to gather some of examples of how this might be demonstrated.

During the interview I would like you to talk about the behaviour of some employees you would identify as having 'leadership potential' and think are likely to be successful within the bank, progressing to leadership or VP roles relatively quickly. The employees you discuss should be working at the Associate level and ideally should be members of staff you currently work with. However, if you want to consider employees you no longer work with, it is important to think back to what they were like then and not their current performance.

It would be useful if you can consider relatively recent examples as it is likely you will be able to discuss these in more detail and with more accuracy.

All information provided will be treated confidentially and it is not necessary to name any individuals. No information about you, or anyone discussed, as an individual will be reported. Findings will be presented in general terms of perceptions of leadership.

For the purpose of analysis, with your permission, the interviews will be recorded and then transcribed. During transcription any names will be removed from the data and the tapes will then be destroyed. The interview will take around 20 minutes and you are free to stop the interview, or the recording, at any stage and withdraw from the research.

Do you have any questions before we begin?

Could you start by describing to me how you think leadership is defined in *****?

- is this specific to a certain level in the bank?
- what are the qualities/skills Associates have to demonstrate to show they have leadership potential and that they should be progressing quickly to leadership positions within the bank?

Could you start by thinking about an employee who you would identify as having leadership potential?

- why would you identify them as having 'leadership potential'?
- can you think of a specific example of something they did which demonstrated this?
- what was their role?
- what was the outcome?
- why do you think that happened?

Could you now think of another employee, this time a (man/woman) who you would also identify as having leadership potential?

- why would you identify them as having 'leadership potential'?
- can you think of a specific example of something they did which demonstrated this?
- what was their role?
- what was the outcome?
- why do you think that happened?

Finally, what are the three characteristics that you perceive as being most important for an Associate to demonstrate in order to show that they have leadership potential?

Do you have any questions you want to ask or anything else you would like to add?

Thank you for your time.

Appendix 4

Practical issues identified by King (2004) to be considered when carrying out qualitative interviews and steps taken to overcome them:

Issues	Description	Preventative Steps
Starting the interview	Start the interview with easy questions to relax interviewee and help build rapport.	All interviews started with the interviewer introducing themselves and giving a brief project overview. The first interview question was 'can you tell me a bit about your role at the moment?' and was followed up with a request for information about how their team is structured.
Phrasing Questions	Avoid multiple or leading questions and making assumptions.	Open-ended questions were used, which focused on only one area at a time e.g. 'can you tell me about a time he/she/you showed leadership potential?' After this probes such as 'what happened next' or 'how did it happen' were used to extract further information
Ending the Interview	Avoid ending interview on a difficult topic, steer interview towards positive topic and provide an opportunity for further comments.	As a final question interviewees were asked to summarise what they thought the 3 key factors were for showing leadership potential (the penultimate discussion in some studies was failing to show potential). It was then acknowledged that the participant had provided lots of information and they were asked 'is there anything else which you think is important in regard to leadership potential that we have not covered?'

Issues	Description	Preventative Steps
Difficult Interviews		
1) Uncommunicative interviewee	Some interviewees may appear unable or unwilling to give anything more than monosyllabic answers.	All interviews started with the interviewer setting the scene, explaining the interview length and aims. It was also reiterated that participation was voluntary and that confidentiality was assured. Open-phrased questions were used, with participants asked to describe individuals in more general terms first to open up discussion. Where it was still difficult to extract information participants were encouraged with comments such as 'I'm really interested in everything they do which shows they have potential, even things that might seem minor or obvious'.
2) Over-communicative interviewee	Some interviewees may repeatedly indulge in long-winded digressions from the interview topic.	It was apparent that some interviewees had prepared several points that they wanted to raise during the interview, which were not always relevant to the interview purpose. The interviewer allowed them briefly to cover these points and then made comments like 'that's very interesting and it also relates to...' to link back to the key questions. Examples of this included people wanting to talk about more senior leaders in the organisation as oppose to potential in themselves or juniors.
3) High-status interviewee	High status interviewees (such as managers and professionals) are used to being treated with a considerable degree of deference.	The interviewer aimed to be polite and professional at all times, showing respect and understanding for interviewees' responsibilities. For example, it was not unusual to schedule interviews in the evening or for them to be re-scheduled at short-notice. It was explained that the interviewer's perspective was being sought because, as the decision-maker or person demonstrating potential, their input was invaluable. At no time did the interviewer explicitly disagree with the interviewee, but their comments were sometimes challenged with questions such as 'how do you know that?' or 'what is it that the person specifically does which makes you think that?'

Issues	Description	Preventative Steps
4) Emotionally charged subjects	Interviewee becomes visibly upset as a result of questioning.	Due to the research topic this was not a major area of concern. However, there were some times when participants discussed occasions when they had not shown leadership potential which were sensitive. In these instances the interviewer checked that they were happy to continue, gave them time to discuss it thoroughly and then tried to re-focus on more positive aspects by asking them what they had learned from the situation or had done differently since the event.
5) Would-be interviewees	Some interviewees persistently ask the interviewer questions about their own opinions and experiences.	To avoid biasing the interviewee's response, the interviewer stated that they would happily answer any questions at the end of the interview but that it was important to focus on their perspective first.

Appendix 5

5.1. Email to encourage participation in study four

***** is currently sponsoring a three-year project to increase understanding of what is 'leadership potential'. This is being run through the HR Learning and Development team in London is being part sponsored by ****in the US.

Within Learning and Development it is anticipated that the model will be used to help inform future leadership development programs, in conjunction with current competency and skills frameworks such as Rites of Passage.

The first stages of this work have included interviews with over 150 MDs, SVPs, VPs and AVPs to collect information about how they identify future leadership in others and how they have personally demonstrated such potential. This has led to a provisional model of what is 'leadership potential' at *****. The next stage of this project is to canvass a broader range of opinions on the model. To do this a brief survey is being used (see attached).

The survey takes about 10 minutes to complete and can be completed on-line and returned by either the internal or external email addresses above, or it can be printed off and sent through the internal mail to Anna Koczwaro c/o ***, Learning & Development, HR, *****.

A summary of the results will be available to all participants.

As we are trying to get as many responses from a diverse range of employees, your help with this project would be really appreciated. We would be hoping to get at least 30 responses from your group with data collected by mid August. A summary of findings are available for all participants towards the end of September and if you would be interested in a summary of overall findings specifically related to your group can also be made available. However, if you are interested in the latter, please let us know before the form is distributed so that responses can be identified appropriately.

Please do not hesitate to contact Anna or *** if you have any further questions.

5.2. Diagnostic-ratio and exploratory factor analysis questionnaire

Leadership Potential Questionnaire

Thank you for agreeing to complete this survey. The term ‘Leadership Potential’ could be used to refer to anybody who, although they may not currently occupy a leadership role, you think shows the potential to progress to a more senior, leadership role in the future.

Your responses will help in developing a better understanding of what leadership potential is and how it is identified.

Please rate the following indicators in terms of how important you believe them to be for demonstrating leadership potential (please circle/highlight).

1 = not at all important, 6 = of utmost importance

	Leadership Potential Indicator	Importance
1	takes the time to show consideration for individuals in order to build a relationship	1 2 3 4 5 6
2	demonstrates the ability to identify and understand client needs	1 2 3 4 5 6
3	can accommodate different or changing practices and alternative ways of working	1 2 3 4 5 6
4	demonstrates an ability to detect important issues and multi-task, ensuring critical activities prioritised	1 2 3 4 5 6
5	shows a desire to be successful	1 2 3 4 5 6
6	has confidence in self and is not constantly trying to impress others	1 2 3 4 5 6
7	takes action to empower juniors and ensure they are given opportunities to develop and improve	1 2 3 4 5 6
8	demonstrates that work is a high priority in their lives	1 2 3 4 5 6
9	has a ‘can-do’ attitude and demonstrates an upbeat and enthusiastic work style, never focusing on the negatives	1 2 3 4 5 6
10	produces thorough and considered work consistently to high standards	1 2 3 4 5 6
11	creates a sense of urgency to get results and a tenacity to keep going	1 2 3 4 5 6
12	is able to think strategically, see the bigger picture and consider implications of their actions across the whole organisation	1 2 3 4 5 6
13	demonstrates a willingness to get involved with team projects at a hands-on level	1 2 3 4 5 6
14	demonstrates an interest and focus on the task in hand	1 2 3 4 5 6
15	pays attention to and considers others’ points of view	1 2 3 4 5 6

16	understands the political environment operating within the organisation so involves senior management where appropriate	1 2 3 4 5 6
17	demonstrates an ability to explain information in a constructive manner, ensuring relevant parties at all levels are kept informed	1 2 3 4 5 6
18	is able to make an effective business case and demonstrate commercial awareness	1 2 3 4 5 6
19	feels personally responsible for projects and takes actions to ensure delivery	1 2 3 4 5 6
20	is able to take the initiative and work from few instructions without close supervision	1 2 3 4 5 6
21	has an awareness of own development areas and will actively seek out feedback and training opportunities to improve these	1 2 3 4 5 6
22	works collaboratively by sharing information, asking others for help or advice and bringing together the most appropriate people for project work	1 2 3 4 5 6
23	has an ability to build, maintain and utilise a network of contacts throughout the organisation	1 2 3 4 5 6
24	demonstrates an ability to think outside of the box and suggest innovative solutions	1 2 3 4 5 6
25	is honest, not afraid to challenge the status quo and make unpopular decisions where necessary	1 2 3 4 5 6
26	has the ability to persuade others and gain buy-in from senior management, juniors and colleagues outside of line management effectively	1 2 3 4 5 6
27	has a structured approach, considering how to achieve objectives and organise necessary resources	1 2 3 4 5 6
28	identifies appropriate opportunities to demonstrate their potential to management	1 2 3 4 5 6
29	builds professional relationships and takes actions to ensure client expectations are met	1 2 3 4 5 6
30	operates outside the formal organisational hierarchy where appropriate	1 2 3 4 5 6
31	displays tenacity to keep going and a passion for what they do	1 2 3 4 5 6
32	helps others	1 2 3 4 5 6
33	works hard and goes the extra mile to ensure outcomes are achieved	1 2 3 4 5 6
34	does not become embroiled in office politics	1 2 3 4 5 6
35	volunteers for new challenges outside their comfort zone	1 2 3 4 5 6

Although the behaviour groups listed below may all be seen as desirable for good job performance, please rank them (1-8) in terms of their importance specifically for demonstrating leadership potential.

For example you may rank Communication as 1, Problem Solving as 2, Accountability as 3 etc.

1 = most important, 8 = least important

	Description	Rank
Accountability	Takes personal responsibility for project delivery, demonstrating confidence in self and the courage to challenge the status quo and make unpopular decisions where necessary.	
Business & Organisational Awareness	Identifies client needs and displays a commercial awareness. Builds and utilises a network of contacts whilst demonstrating an understanding of the political environment operating within the organisation.	
Communication	Communicates information constructively, gains buy-in from relevant parties and listens to others' points of view.	
Planning & Organising	Structures, plans and prioritises workload ensuring high standards of detail and quality.	
Problem Solving	Demonstrates the flexibility to accommodate different ways of working and the ability to generate solutions that consider possible impact for the whole organisation.	
Managing Career	Demonstrates an ambition to be personally successful at work and actively seeks opportunities to display their potential to management and engage in development activities.	
Motivation & Drive	Has a pro-active 'can-do' approach to work, demonstrating a willingness to take the initiative and the determination to ensure outcomes are achieved.	
Team Relationships	Adopts a collaborative approach to work, participates in team projects, demonstrates an ability to build relationships and ensures junior employees are given development opportunities.	

During the preliminary stages of this project, it appeared that men and women were highlighting different behaviours when they talk about their leadership style. To investigate this further, please complete the following questions.

For each of the items below, please estimate the percentage of male employees that you know and the percentage of female employees that you know who are likely to effectively demonstrate each leadership potential behaviour.

For example you may think that 80% of men and 70% women effectively demonstrate planning & organising.

1. Planning and Organising - Structures, plans and prioritises workload ensuring high standards of detail and quality.

- has a structured approach, considering how to achieve objectives and organise necessary resources
- detects important issues and multi-tasks, ensuring critical activities are prioritised
- produces thorough and considered work consistently to high standards.

% males.....

%females.....

2. Communication - Communicates information constructively, gains buy-in from relevant parties and listens to others' points of view.

- persuades others and gains buy-in from senior management, juniors and colleagues effectively
- pays attention to and considers others' points of view
- explains information in a constructive manner, ensuring all relevant parties are kept informed

% males.....

%females.....

3. Accountability -Takes personal responsibility for project delivery, demonstrating confidence in self and the courage to challenge the status quo and make unpopular decisions where necessary.

- is honest, prepared to be controversial and make difficult decisions
- feels personally responsible for projects and takes actions to ensure delivery
- has confidence in self and is not constantly trying to impress others

% males.....

%females.....

4. Problem Solving - Demonstrates the flexibility to accommodate different ways of working and the ability to generate solutions that consider possible impact for the whole organisation.

- thinks outside of the box and suggest innovative solutions/initiatives
- accommodates different or changing practices, sometimes operating outside the formal organisational hierarchy
- thinks strategically, sees the bigger picture and considers possible impact and implications of their actions across the whole organisation

% males.....

%females.....

5. Business and Organizational Awareness - Identifies client needs and displays a commercial awareness. Builds and utilises a network of contacts whilst demonstrating an understanding of the political environment operating within the organisation.

- builds, maintains and utilises a network of contacts throughout the organisation
- understands client needs, builds professional client relationships and ensures delivery meets client expectations
- makes an effective business case
- involves senior management where appropriate and does not become embroiled in office politics

% males.....

% females.....

6. Team Relationships - Adopts a collaborative approach to work, participates in team projects, demonstrates an ability to build relationships and ensures junior employees are given development opportunities.

- shares information, asks colleagues for help and brings together the most appropriate people for project work
- takes action to empower juniors and ensure they are given opportunities to develop and improve
- takes the time to show consideration for individuals in order to build a relationship
- demonstrates a willingness to get involved with team projects at a hands-on level

% males.....

% females.....

7. Managing Career - Demonstrates an ambition to be personally successful at work and actively seeks opportunities to display their potential to management and engage in development activities.

- aware of own development areas and actively seeks out feedback and training opportunities to improve these
- shows a desire to be successful
- demonstrates that work is a high priority in their lives

% males.....

% females.....

8. Motivation and Drive - Has a pro-active 'can-do' approach to work, demonstrating a willingness to take the initiative and the determination to ensure outcomes are achieved.

- works from few instructions without close supervision; volunteers for new challenges outside their comfort zone
- demonstrates an interest and focus on the task in hand, goes the extra mile to ensure outcomes are achieved
- creates a sense of urgency to get results, displays tenacity to keep going and a passion for what they do
- demonstrates an upbeat and enthusiastic work style, never focusing on the negatives

% males.....

% females.....

So that we can ensure that the survey has been completed by a representative sample please answer the following questions:

Gender		Age		Nationality	
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How would you describe your ethnic origin (please tick)?

White		Indian		Black Caribbean	
Chinese		Bangladesh		Black African	
Other (please specify)		Pakistani		Black Other (please specify)	

How long have you worked at your organisation?	
What is your current role?	
How long have you worked at your current level?	

Thank you for your time. Please now complete the following consent section:

I confirm that you have volunteered to complete this questionnaire and I understand that the information I provide will be made anonymous and kept confidential. I also give my consent for Anna Koczwara to use the information I provided as part of her PhD research.

Name (Sign).....

(Print).....

Date.....

If you would like to receive information about the findings of this survey please provide contact below details (e.g. email address):

Appendix 6

Example indicators for each leadership potential competency and element

Behavioural Competency	Component Elements	Example Indicators (LP & NLP)
Planning & Organising	Planning Prioritising Attention to Detail & Quality	+Organised to-do lists always completed -Can't identify what is important and what can wait +Analysis is always well considered and detail oriented
Communication	Influencing Listening Clear & Effective Communication Style	+Gets buy in from all relevant parties +Listens to their staff -Disorganised communication, talks for 15 minutes without making points clear
Accountability	Courage of Conviction Ownership & Control Self-Belief	+Prepared to tackle unpleasant issues -Did not want to be Country Captain and take ownership of business area -Has poor self-opinion, believes that they are not good at stuff
Problem Solving	Idea Generation Flexibility Global Thinking	+Has creative solutions to legal problems +Adapts to different environments -Blinkered approach – can't see past their immediate responsibility area
Business & Organisational Awareness	Networking Client Focus Commercial & Business Understanding Political Awareness	+When visits an office makes sure they catch up with people +Understands their clients thoroughly -Does not look for commercial solutions +Tactful about other people's positions
Team Relationships	Collaborative Approach Developing Others Empathy & Relationship Building Participation	-Precious about knowledge- unwilling to share +Draws the quieter juniors into meetings -Tramples over people internally to succeed +Is still one of the team – rolls up sleeves and gets stuck in

Managing Career	Willingness to Learn Ambition & Drive Work/Life Balance	<i>+Attends any training available to improve +Thinks of how favourable consequences will be for them - Has other life priorities outside of work</i>
Motivation & Drive	Proactivity Commitment Energy Positive Approach	<i>+Will complete necessary tasks without being prompted by manager -Not happy with financial industry work +Has a tenacity to keep going +Responds to adversity positively</i>

