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**Psychological Empowerment as a Mediating and
Multidimensional Construct: An Empirical
Examination of Key Antecedents and Consequences
Within a Public Health Service Organisation**

Peter Johnston

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Abstract

This study continues the work initiated by Spreitzer (1995a) in operationalising and measuring psychological empowerment and examining the construct in relation to key antecedents and consequences. Psychological empowerment was defined as a gestalt of four dimensions reflecting an active orientation to one's work role. These dimensions are meaning, competence, self-determination and impact. Tested hypotheses concerned the relationship between empowerment and interpersonal trust, supervisor support, peer cohesion, access to resources, access to strategic information, conscientiousness (antecedents), job satisfaction, and affective organisational commitment (consequences). The structural validity of the empowerment scale was investigated, as was the mediating role of psychological empowerment in the proposed model. Partial support was found for the hypotheses relating empowerment to interpersonal trust, supervisor support, access to strategic information, job satisfaction, and affective organisational commitment, and strong support was found for the hypothesis relating empowerment to conscientiousness. No support was found for the hypotheses relating empowerment to peer cohesion and access to resources, and limited support was found for the mediating role of empowerment. A principle components factor analysis supported the four-factor model of psychological empowerment. The results highlight the advantages of adopting a multidimensional approach in the study of psychological empowerment. Implications for organisations, study limitations, and directions for future research are discussed.

Introduction

Empowerment is a complex phenomenon that has been the subject of intensive investigation in a diverse range of literatures (Zimmerman & Rappaport, 1988). Ranging from its involvement in management techniques designed to enhance employee quality of work life (QWL) and organisational effectiveness (e.g., Hughes, 1999; Schipper & Manz, 1992; Story, 1995), its prominence in community psychology research (e.g., Keiffer, 1984; Rappaport, 1981), to its implicit thematic associations within several streams of the social reform movement (e.g., Mercier, 1973; Ruether, 1973; Soloman, 1970), empowerment is evidently a far-reaching idea that has stimulated a great deal of thought, debate, research and activity. Considering the often divergent nature of the utilization of empowerment in different contexts, unraveling a unitary definition and/or application of empowerment is improbable. In fact, the benefits of multiple meanings of the construct, provided such meanings correspond with the particular situation in which it is placed, can be significant (Lin, 1998; Wall & Wall, 1995). For this reason, the proceeding discussion will forward an analysis of empowerment drawn from a broad range of literatures and perspectives. Although the primary intention of this paper is to provide a rich and detailed examination of empowerment in a business environment, an overview of empowerment-related themes outside of this environment is useful in gaining an appreciation of the breadth and depth of the concept. Accordingly, an overview of empowerment outside of the corporate arena is forwarded, followed by an outline of several key participative management theorists and their influential work on empowerment related issues. This is proceeded by a discussion of empowerment in the

context of organisations, and a detailed description of the seminal work of Conger and Konungo (1988) and Thomas and Velthouse (1990) in conceptualising empowerment as an intrapersonal experience. The method, results, discussion, and conclusions follow.

The Social Reform Movement and Empowerment

As the quality of life at work for an individual employee is a function of a combination of various micro and macro organisational factors, the philosophies and ideologies driving organisational management practices are considerably influenced by the broader views and trends representative of the society in which organisations are nested (Robert, Probst, Martocchio, Drasgow, & Lawler, 2000). A comprehensive discussion of empowerment theories and practices must therefore both acknowledge and engage the paramount importance of societal values in organisations. Viewed from a developmental perspective, current leaders in organisations have grown up in a society that has increasingly held values such as liberation and human rights in high esteem (Potterfield, 1999). Such values have created within individuals' schemata perspectives that are representative of these characteristically modern day values. The particular management philosophies and practices adopted by business leaders are thus gleaned not only from, for example, an organisation's history and functional nature, but also from the pervasive influence of wider society on individuals and organisations (Robert et al., 2000). Discussed below, the social reform movement provides a particularly illuminating case of the increasing centrality of empowerment-related ideas and values in western society (Bookman & Morgan, 1988).

Before becoming a prolific concept in the realm of managing organisations, empowerment was a defining term for many key issues surrounding the social reform movement (Alinsky, 1971). To forward a detailed examination of social reform in relation to empowerment would be to depart from the central purpose of this thesis. Thus, this subject area will be addressed briefly, toward the end of providing a simple description of some significant influences. Simon (1994) lists a plethora of movements that have served to influence societal values in which empowerment ideals are readily observable, including existentialism, the American civil rights movement, Marxism and socialism, the disability rights movement, Gandhi's Indian liberation movement, liberation theology, and the gay and lesbian rights movement. These movements each hold in great importance the inherent worth of human beings and the power of any given individual to take personal control of events that affect their lives (Potterfield, 1999). Liberation theology and the civil rights movement in America are useful illustrations of how the central ideas of empowerment can be found embedded in movements that have, historically, played important roles in the development of markedly influential values in present-day society.

Liberation theology arose out of perceptions of class injustice experienced by protestant and catholic theologians, and involves a systematic attempt at identifying and eliminating these injustices in order to improve the lives of the poor and oppressed (Boff & Boff, 1986). Based around the teachings of Jesus Christ, liberation theologians believe that Christians should devote their lives to the service of others, with the ultimate purpose

being to help individuals to seize control of their destiny and to assume their place in the afterlife (Friere & Faundez, 1989).

Boff and Boff (1987) describe some of the major ideas that are pertinent to the present discussion, as follows. Social science techniques are used to examine the condition of the oppressed and how the oppressed came to be. Within this framework includes the assumption that poverty and disadvantage are, historically, the result of human action (i.e., the actions of both the privileged and non-privileged). By illuminating the notion that one's situation is within one's control rather than being subject to deterministic external forces (e.g., the forces of God) (Friere & Faundez, 1989), liberation theology opens up the possibility of changing the unfavourable circumstances of certain groups. By way of collective human action, the poor have the potential to turn their unfavourable life situation into a more favourable one (Friere, 1970). In this respect, liberation theology regards the human being as having an inherent capacity of self, having control of one's destiny, and as being able to take personal responsibility for one's actions and to engage in the active participation in life (Friere & Faundez, 1989).

The civil rights movement in America is also indicative of a general trend towards the importance of empowerment related concepts in society. Organised black liberation activities emerged in the early 1940's in an attempt to procure fair employment practices, and continued through to the 50's and 60's developing into an opposition to the widespread segregation particularly prevalent in the deep south (Simon, 1994). Drawing from the writings of Gandhi and other prominent human rights advocates, Martin Luther

King Jr. believed in the power of everyday people to gain control of their lives and to change the state of oppressive social relations (Soloman, 1976). The principles espoused by the likes of King contributed to the formation of organisations such as the Congress of Racial Inequality (CORE) and the Student Nonviolent Coordinating Committee (SNCC), who's activities included non-violent demonstrations aimed at greater equality for black Americans in the domains of healthcare, education, housing and voting (Garrow, 1989).

Simon (1994) notes that the widespread upheaval stimulated by the civil rights movement in the 50's through to the 70's created a new consciousness in society surrounding empowerment related values and ideals. This is reflected in the black liberation literature released during this period. An excellent example is Barbara Soloman's (1976) book "Black Empowerment", in which she defines empowerment as "a process whereby persons who belong to a stigmatized social category throughout their lives can be assisted to develop and increase skills in the exercise of interpersonal influence and the performance of valued social roles"(p. 6). In order to break free from negative stereotypes and to release themselves from the adverse effects of discrimination, Soloman (1976) believes that black groups and individuals need to form the perception that their position in society is subject to change, that they are responsible individuals accountable for their own actions, and that they are causal agents with the capacity to institute change toward the attainment of desired future goals. Similarly, Carmichael & Hamilton (1967) in their book "Black Power" emphasise the necessity for the black community to exercise a collective communal responsibility in gaining physical and psychological control over

their lives, both economically and politically. Carmichael & Hamilton argue that, in doing so, they are in more of a position to contribute to an ultimate social benefit.

The social reform movements discussed above are but two of a multitude of others that have instilled in our culture the power of individuals and groups to make positive changes by taking control of events that affect their lives, a process that has been labeled as “empowerment” (Soloman, 1976; Zimmerman, 1990a). Potterfield (1999) notes that it is not altogether surprising that business leaders have adopted the term ‘empowerment’ as a descriptor for a broad array of management techniques, due to the early and widespread popularity of the term outside of the business realm. Potterfield makes an important distinction, however, stating that although the term grew from the social action realm and its ideas are deeply enmeshed within our culture, empowerment can embody different meanings depending on whether it is employed in the corporate environment or in social reform. While in the latter sense empowerment “refers to the recognition by an oppressed or marginalized group that they have some degree of power over their circumstances and that they can exercise that power collectively to improve their conditions” (Potterfield, 1999, p. 45), the former generally regards empowerment as the delegation of power by the powerful (e.g., leaders), in the form of increased decision making discretion, to lower levels of the organisation (e.g., to front-line staff) (Bowen & Lawler, 1992; Breeding, 1996; Stewart, 1989).

These contrasting formulations of what it means to be empowered illustrate both the complexity of the construct and the necessity to examine empowerment within a multi-

contextual and multi-level framework (Lin, 1998; Zimmerman, 1995). Constructs that experience as widespread popularity as empowerment, attracting the attention of a wide range of people as well as academics, are likely to be understood differently depending on factors such as group memberships, fields of expertise, and life endeavors (Bartunek, Bradbury, & Boreth, 1997). As this thesis holds as its primary focus constructions of empowerment within a business setting, it is now pertinent to forward a retrospective examination of its conceptual development in this arena.

Early Participative Management Theorists: Laying the Foundations for Modern Concepts of Empowerment

Participative management and related techniques (e.g., employee involvement), the first examples of which can be traced back to the 19th century in the form of industrial democracy (Lichenstein & Howell, 1993), continue to grow in popularity (Spector, 1986). Several authors involved in the organisational studies (e.g., Hardy & Leiba'O'Sullivan, 1998; Lawler 1986, 1992; Potterfield, 1999; Spreitzer, Kizilos, & Nason, 1997) suggest that the fundamental philosophies and associated techniques of participative management-type theories have provided the essential concepts for the prolific empowerment movement we have witnessed decades later. For this reason, the development and formulation of the key ideas of participative management will be examined via a review of seminal works by key management theorists of the mid 20th century. An analysis of the historical development of empowerment will allow a greater insight into the true essence of the term as it is used in the contemporary organisational sciences and in organisations themselves (Potterfield, 1999).

Lawler (1986, 1992) alludes to three key management theorists, namely Rensis Likert (1961), Chris Argyris (1957), and Douglas McGregor (1960), whose writings and research on participative management principles and techniques significantly influenced the impetus for a movement away from traditionally managed, highly bureaucratic organisations. Mary Follet's (1949, cited in Boone & Bowen, 1987) early work on the essential qualities needed for effective leadership was also greatly influential in popularising participative management in later years. The central drive of these arguments was that traditional, bureaucratic management practises failed to recognise the important role that morale can play in the workplace, potentially leading to poor productivity and low quality services and products. Historically and in the present day, participatory approaches advocate that in management granting workers more involvement in the workplace, largely in the form of increased work-related decision making discretion, morale would improve leading to enhanced job performance and, ultimately, greater organisational effectiveness and bottom-line results (e.g., Cotton, 1993; Miller & Monge, 1986; Wagner, 1994).

Likert's (1961) research distinguishing between "low performance" and "high performance" companies provided a concrete illustration of the potential for participative management practises. With performance being measured through factors such as productivity, withdrawal behaviours (i.e., absenteeism and turnover), the motivation and satisfaction of workers, and material waste, Likert characterised the management practises of the low performance cluster of companies as being highly traditional. So as to stimulate a greater understanding of the business environment from which Likert's

(1961), Argyris's (1957), McGregor's (1960) and Follet's (1949, cited in Boone & Bowen, 1987) concerns and subsequent original thinking emerged, what is commonly meant by the phrase 'traditional organisation' is addressed below.

In considering the characteristics of the individual job within a traditional organisation, it is pertinent to pay particular attention to the work of Frederick Taylor and his prominent role in influencing the management and work practises of the early to mid 20th century (Vecchio, Hearn, & Southey, 1998). Drawing on his training and experience as an engineer at Midvale Steel Company (Tossi, Rizzo, & Carroll, 1994) and his research in industry, Taylor became the leading figure of scientific management. Applying time-and-motion research methods, together with piece-rate pay schemes, scientific management was responsible for marked gains in productivity and efficiency (Riggio, 1996). This approach required the breaking down of work into its component parts, the analysis of these elements in isolation to examine the most efficient method of performance, and the training of workers to carry out these activities at a pre-determined and highly prescribed level of proficiency (Taylor, 1911).

A highly hierarchical organisational structure is required for such a process to be proficient, with management responsible for planning, analysing tasks, making all decisions of any significance, and monitoring and improving work procedures. The frontline supervisor's role is to ensure strict adherence to these prescriptions through the close and continuous monitoring of employees, while the lower-level employee's (i.e., the 'worker's') role is to carry out these specialised, rigidly prescribed tasks passively

and unquestioningly (Kanigel, 1997). Due to its advancement in the early half of the 20th century, scientific management has made a deep impression on how many companies are organised, a trend that remains evident in the present day (Reynolds, 1997). Max Weber, a German economist, political scientist, and sociologist of the late 19th century to early 20th century, admired bureaucracy as a method of organising business (Boone & Bowen, 1987). A pertinent example of the form of organisation required to administrate scientific management, his concept of bureaucracy incorporates impersonal rules, hierarchical design, and the division of management/worker operations as core concepts (Tosi, 1984). Resulting from the advocacy of bureaucracy and scientific management principles by organisational theorists such as Max Weber and Frederick Taylor, key features of a traditionally managed organisation are the widespread acceptance of authoritarian principles and policies, a highly hierarchical structure, and a command-and-control style of management.

Such features, as Likert (1961) argues, no longer provide for optimal functioning in the face of the threats associated with looming global competition, for example, low-cost labour. Likert goes on to state that effectiveness beyond that which traditional management practises allow is required to compete with global competitors. Even continuous refinements in authoritarian firms would not provide the required gains in efficiency to remain competitive. Also, western society at large in the 50's and 60's was becoming increasingly concerned with issues such as the freedom and liberation of minority groups, self-initiative and individualism. These new values ran in stark contrast to the values inherent in the highly constraining workplace of the times. The fact that

more and more workers were gaining educational qualifications magnified such discrepancies.

The primary objective of Likert's (1967) research was to identify distinctive management styles and to associate these styles with varying levels of performance. Based on extensive survey research of employee's perceptions of their supervisors, he established his System 1 to 4 progressive index of leadership styles. System 1, otherwise labelled as exploitative authoritarian, supervisors manage by force and control and allow little or no opportunity for employee participation in decision-making. At the other end of the index, System 4, otherwise known as participative, supervisors encourage group participation in setting goals and decision making to enable the joint achievement of high performance. The major distinction here is that the former, authoritative management styles tend to be job-centred (as in Taylorist thinking) while the latter, participative styles tend to be employee-centred, focussing on effective employee relationships and general versus micro-management of work activities. Likert posits that employee-centred participative styles allow for a greater sense of autonomy and meaning experienced by workers, resulting in enhanced well-being and morale, ultimately leading to gains in productivity and profit (Likert, 1967).

Argyris (1957), rather than focussing on leadership styles as Likert (1961, 1967) does, prefers to consider the human condition at work in relation to their healthy emotional and mental development as a critical concern in organisational life. Set against the passivity of infancy, in which our healthy development is wholly in the hands of caregivers, our

adult lives are characterised by an inherent desire to gain control of our lives. More specifically, adults value facing and overcoming challenges to gain intrinsic rewards, the result of which is greater feelings of self-worth and the perception that one occupies an interdependent, rather than a dependent, role in their relationships with peers. So, according to Argyris, healthy people seek out autonomy, strive to exercise control over their behaviours and consequences, and attempt to understand a given circumstance or phenomenon at its most complete and fundamental level.

Generally, these propositions about human functioning regard individuals as being both proactive and capable. However, they run in stark contrast to the way traditional organisations function. Firstly, control mechanisms were uncompromising and rigid, and relationships were unidirectional (Johnson, 1992). This mode of operating precludes the development of quality, mutually respectful relationships in an organisation, particularly between different hierarchical levels, rendering employees dominated and necessarily submissive. Secondly, in line with the principles of scientific management, each component of a work activity becomes discrete and specialised (Taylor, 1911), resulting in disjointed, narrowly defined duties for lower-echelon employees. Unable to readily perceive their repetitive, mundane endeavours as contributing to a meaningful whole, unable to fulfil desires for autonomy and control, the primary needs of the mature adult remain unfulfilled. The consequences, as Argyris (1957) states, are a resentful workforce low in morale, leading in turn to intentional adverse behaviours (e.g., damaging machinery, theft), and decreased productivity and product quality.

Argyris (1957) suggests that possible improvements in the state of the frustrated worker could be brought about by both changes in the job-role and changes in the general operating environment. Job enlargement, that is, the expansion of a job to increase the variation and the number of tasks performed by an individual (Vecchio et al, 1998), grants workers the opportunity to utilise a greater range of abilities on the job. A more participative environment, created by bestowing upon workers more control, authority, and decision making discretion in areas such as setting productivity goals and defining operating policies, would alleviate many of the frustrations experienced by employees in a more traditional work environment. These early theories of participation are reinforced and strengthened in Argyris's later works (e.g., Argyris, 1965; Argyris & Schon, 1978).

The notion of single and double loop learning, discussed in the book 'Organisation Learning: A Theory of Action Perspective' (Argyris & Schon, 1967), is a noteworthy contribution to the field of participative management. Single loop learning is the product of a defensive, controlling and uncommunicative management style, and is self-perpetuating because one is unable or unwilling to take into account information from other sources. The upshot is an endless cycle of conformity. Double loop learning, on the other hand, requires that managers encourage open discussion, incorporate information from others to make important decisions, and grant subordinates greater choice in the performance of work activities. Argyris and Schon argue that learning from others, resulting from more participative management techniques, is critical in the identification of the need for, and the instigation of, strategic organisational change, potentially leading to greater organisational effectiveness.

McGregor (1960), similar to Likert (1961) and Argyris (1957), criticised the hierarchical and control-oriented traditional organisation. Paramount to this critique was his contention of the assumptions about human nature inherent in traditional management approaches. Coined Theory X, this mode of management thinking assumes that people are generally lazy, immature, irresponsible, need strict direction, and would choose not to work if given the opportunity. The polar opposite of Theory X, Theory Y assumes that individuals gain psychological fulfilment from work and have an intrinsic desire for meaning and responsibility in their work, and for a degree of control over work-related decisions.

Theory Y assumptions are manifest in the upper levels of McGregor's series of 'human wants'. Ranging from basic physiological needs (e.g., protection from physical harm in the work place), to social needs (e.g., acceptance by others, belonging to a group), placed above each of these are people's 'egoistic needs', which refer to factors such as autonomy, competence, achievement, self-esteem, and status in relation to one's peers. The pinnacle of McGregor's human wants is the desire for fulfilling one's maximum potential. Individuals' egoistic needs and desires for self-fulfilment, comprising the key thinking behind Theory Y, are frustrated by traditional management philosophies.

McGregor contends that by adopting command-and-control strategies in dealing with employees, as a function of Theory X reasoning, the potential of individuals can never be fully realised. Workers become frustrated and dissatisfied, impairing quality and productivity. McGregor perceived that the principle way for organisations to allow for

the greater development and psychological fulfilment of workers is to commit them greater levels of decision-making discretion and authority.

The participative principles advocated by these early scholars and the fundamental themes witnessed in business empowerment practises share many key elements (Lawler, 1986, 1992). The call by scholars such as Likert, Argyris and McGregor for a more participative working environment, for the devolution of decision-making discretion, and for more varied and meaningful work activities are propositions readily observable in more recent works on employee empowerment (e.g., Block, 1990; Burke, 1986; Humphrey, 1991; Stewart, 1989). Mary Follett (1949, cited in Boone & Bowen, 1987) foresaw the increased utilisation of participative leadership evident in the applied and academic realms decades later (Beyer, 1987, cited in Boone & Bowen, 1987). A proponent of facilitative rather than dominating leadership styles, the potential for individuals operating in lower-levels of the hierarchy to provide valuable information to individuals operating in higher levels of the hierarchy, and of the increased control for lower-level employees in work activities, Follett was seminal in her empowerment-related thinking. However, whilst keeping in mind the influential work of these early scholars, many developments have occurred in the field since. As will be illustrated later, the study of empowerment has emerged as a central construct of enquiry in the organisational studies literature, particularly over the last decade, resulting in a remarkable growth in the body of knowledge on empowerment. Thus, as a subject that has undergone vigorous formulation and reformulation over the years (Potterfield, 1999),

it is now appropriate to explicate what empowerment means in a contemporary organisational context.

Empowerment in the Contemporary Business Environment

That the current business environment is best characterized by its ever-changing and turbulent nature is a common theme in the management literature (e.g., Carnall, 1995; Drucker, 1980; Fay, 1995; Harris, 1997; Kanter, Stein, & Jick, 1992). If organisations and its employees are to excel into the increasingly competitive world of work, the necessity to effectively adapt to these changes is critical (Kanter et al, 1992). However, the attributes of adaptability and flexibility have often proven elusive (Kotter, 1996). It is often the case that in organisations attempting to reinvent themselves according to the demands of the new business environment, the commitment invested by individuals in existing structures, hierarchies, human resource systems and reporting relationships is too powerful a force (Lawler, 1995). Indeed, it is possible that organisations originating in this new environment have a greater chance of creating the competitive edge needed for success (Lawler, 1992). Numerous companies, ranging from small and inconspicuous to large and multi-national, have responded to new challenges of, for example, mergers, acquisitions, technological change, global competition and downsizing, by instituting empowerment related programs (Lin, 1998; Ripley & Ripley, 1992).

Thomas and Velthouse (1990) suggest that one reason for the mass appeal of empowerment is due to its resurgence at a time when traditional paradigms of management are being challenged. Within an unstable and unpredictable business

environment (Taffinder, 1998), the traditional, mechanistic bureaucracy is no longer considered as the singular ideal method of organizing (Muchinsky, 1997). Operating in a volatile market coupled with the challenges of constantly changing technology, the key strengths of a bureaucracy, specifically, efficiency and reliability (Tossi et al, 1994), no longer provide the means for strategic effectiveness and the ability for organisations to achieve competitive advantage (Suutari, 1993; Lester, Piore, & Malek, 1998).

Accordingly, businesses are discarding traditional methods and adopting new forms of management and organisation, manifested in a move toward, for example, flatter structures (e.g., team-based organisations) (Mohrman, Cohen, & Mohrman, 1995) and the promotion of participative management styles that encourage risk-taking, commitment, and innovation (e.g., Kanter, 1983). In this respect, empowerment is identified as a critical and necessary challenge for organisations in order to successfully undergo such frame-breaking change (Bowen & Lawler, 1992).

Some have hailed the 1990's as the "empowerment era" (Hardy & Leiba'O'Sullivan, 1998, p. 452) due to the marked involvement of employee empowerment initiatives in organisation's attempts at enhancing both employee quality of work life and improvements in the bottom line (Ford & Fottler, 1995; Liden and Tewksbury, 1995).

Some of America's largest companies have implemented empowerment programs, including General Motors, Xerox, American Express, IBM, PepsiCo, Wal-Mart, and Hewlett-Packard (Bowen & Lawler, 1992; Kizilos, 1990). It was found by a recent survey by the Center For Effective Organisations at the University of Southern California that 68 percent of Fortune 1,000 companies utilise empowerment-related programs in one

form or another (Dumont, 1994, cited in Potterfield, 1999). However, empowerment programs are not free of criticism, as they often fall short of the expectations of managers and employees (e.g., Brown, 1992; Eccles, 1997; Goodwin, 1999; Parker, 1992).

One reason for such criticisms is a lack of a shared understanding of what empowerment really means between employees, managers, academics and practitioners (Hughes, 1999; Spreitzer, 1997). Dobbs (1993) and Randolph (1995) plausibly suggest that many people discuss empowerment without understanding its essential nature. Reflecting on this state of affairs, Zimmerman (1990a) calls empowerment an enigma. In addition, despite the extensive attention empowerment has experienced in the organisational sciences literature (e.g., Baird, 1994; Conger, 1989; Kirkman & Rosen, 1999; Nixon, 1994; Walsh, Bartunek, & Lacey, 1998; Wellis, Byham, & Wilson, 1991), there is yet no widely agreed-on definition (Gagne, Senecal, & Koestner, 1997; Spreitzer, 1995b). Some level of consistency in definition is required if a popular construct like empowerment is to be useful and meaningful to academics and practitioners operating in the business environment (Spreitzer, 1997). For example, academic researchers have been in disagreement in attempting to elucidate the effects of participation on productivity (Wagner, 1994), but much of this incongruence is the result of divergent conceptualizations of participation across different studies and management groups (Ledford & Lawler, 1994).

Spreitzer (1997) emphasises the importance of a shared common understanding of empowerment in maximizing the ideally reciprocal nature of the relationship between

theory and practice: experience and knowledge derived from one must inform the other, and vice versa. Only then will a valid and useful knowledge base regarding empowerment be built. Similarly, Quinn & Spreitzer (1997) note that the development of a common understanding of empowerment between different groups will likely contribute to its increased acceptance and success as a management intervention and organisational process. To develop a greater understanding of the true nature of the construct, the proceeding discussion attempts to identify and integrate the various perspectives represented.

Conger & Konungo (1988), in distilling the literature on empowerment, extracted two distinct perspectives representative of the management and psychology literatures, respectively: The *relational* perspective and the *motivational* perspective. The relational perspective is named because of its primary concern with the *relative* power of one individual over another, and the motivational perspective is named due to its focus on the intrinsic *motivational* experiences of an individual (Conger & Konungo, 1988). The elementary constructs of power and control, implicit within the notion of empowerment (Spreitzer, 1997), are treated in different ways depending on which orientation of empowerment one adheres to (Conger & Konungo, 1988). However, as will be discussed later, each perspective contributes substantial value to our understanding of empowerment in organisations (Quinn & Spreitzer, 1997).

Empowerment as the Relative Power Between Individuals

The essence of the relational orientation to the construct of empowerment is embodied in the definition provided by the Collins Concise Dictionary and Thesaurus, where to “empower” is “to give (someone) the power or authority to do something” (Gilmour, 1998, p. 301). Evidenced primarily in the social influence and management literature (Potterfield, 1999), power is a concept used to describe the relative perceived power or control that an individual or group has over another individual or group (Conger & Konungo, 1988; Pfeffer, 1981). Synonymous with social exchange theory (Emerson, 1962), power relations in the present sense are reflected in the independence and/or interdependence of individuals (Conger & Konungo, 1988). The relevance of power in a relationship emerges when an individual’s or group’s performance depends not only on their own actions but also on the actions and/or responses of others (Thibault & Kelley, 1959). Accordingly, the power of one over the other is determined by gauging the net dependence of one over the other (Pfeffer, 1981). Simply stated, “if Actor A depends more on Actor B than B depends on A, then B has power over A” (Conger & Konungo, 1988, p. 472).

Applying this construction to organisations, Pfeffer (1982) states that one way individuals derive their power over or in organisations is to provide some resource or performance that is held by the organisation as valuable. For example, the ability of leaders in inspiring their followers through mission statements and company visions is almost universally regarded as valuable to organisations (Blanchard, 1996; Fairholm, 1994;

Katzenbach, 1996). According to the above framework, leaders who are adept in inspiring followers have *power over/in* an organisation because the organisation is *dependent* on the leader's capacity to do so. A case in point, Salancick and Pfeffer (1974), conducting research in a university setting, found that the number of contracts and financial assistance grants obtained were related to the extent of power one holds in a given department.

There are numerous potential sources of power that an individual may hold over others at the interpersonal level (Conger & Konungo, 1988). Depending on an individual's legitimate authority in an organisation, which often dictates the extent of one's control of valued resources, one's primary bases of power are commonly identified as being expert power (knowledge and experience held by the individual), referent power (one's personal characteristics, e.g., charismatic individuals attract people to identify with them), reward power (e.g., control of pay and promotion), coercive power (control of the sanctioning of behaviour), and position power (the formal position one holds in an organisation) (Carnall, 1995; Tossi et al, 1994). Note that this last power base is essentially the same as the aforementioned "legitimate authority", which often serves to influence the potency and extent of one's other power bases. For this reason, it is often perceived as the most crucial source for power and control (Carnall, 1995; Conger & Konungo, 1988). Finally, one can hold normative power over others, which is similar to reward power except that it involves the control of symbolic rewards (e.g., verbal praise) rather than the control of material rewards (Bacharach & Lawler, 1980).

Fundamental to these theories is the assumption that an individual in an organisation who holds more power than another individual is more likely to succeed in gaining desired outcomes, while the individual who comparatively lacks power is more likely to have their desired outcomes prevented by those with power (Conger & Konungo, 1988). These notions of power, control, and dependence led to the generation of a body of research concerned with power sources and identifying the different factors that lead to dependence (Pfeffer, 1981; Salancick & Pfeffer, 1974). Strategies for the reduction of the dependencies of less powerful individuals on more powerful individuals were subsequently formulated (Kotter, 1977; Pettigrew, 1972; Pfeffer, 1981). Conger and Konungo (1988) note that, in an organisational context, power is interpreted as the “possession of formal authority or control over organisational resources” (p. 473). In sum, the relational perspective of empowerment in organisations is seen as the giving of power, often in the form of formal authority and decision-making discretion, by members of higher hierarchical levels to members of lower hierarchical levels (Hardy & Leiba’O’Sullivan, 1997). This is also widely referred to as *delegation* (Conger & Konungo, 1988).

A review of the more recent management literature tells us that this is clearly the most prevalent orientation taken in discussing empowerment in organisations (Hardy & Leiba’O’Sullivan, 1997). Literary examples focusing on the release of power, in its various forms, from the top of the organisation to lower levels abound (e.g., Bowen & Lawler, 1992; Frey, 1993; Johnson, 1992; Pickard, 1993). Also, definitions of empowerment as a relational construct are a common feature in the management

literature. For example, Ripley and Ripley (1992) write “empowerment is the vesting of decision making or approval authority to employees where, traditionally, such authority was managerial prerogative” (p. 23). Similarly, Breeding (1996) writes “Empowerment is defined as the giving of official authority or legal power” (p. 16). Wallace (1993) states that a critical factor in the process of implementing empowerment is that management are “told to share decision making with their employees” (p. 12). Finally, Curtin (1998) writes “What empowerment actually means is that.... people are allowed to make decisions about their work” (p. 5).

Perhaps the popularity of this conceptualization of empowerment lies in its apparent simplicity: the process whereby power is shared by a manager with his or her subordinate is straightforward and intuitively, on the surface at least, ‘makes sense’. However, as a result of the widespread preoccupation with the relational approach, empowerment is often simply seen as a set of related participative management techniques designed to reduce the dependencies of lower-echelon employees (Spreitzer, 1997), rather than as an inherently valuable construct in itself (Conger & Konungo, 1988). Examples of such participative management techniques are management by objectives (MBO) (Cooper & Locke, 2000), suggestion involvement, quality circles, self-directed work teams, and job enrichment (Cotton, 1996). Unfortunately, regarding empowerment as a set of management practices tells us little of the empowering experience from the point of view of the individual employee. Noting this, Conger & Konungo (1988) question whether the sharing of formal authority and resources is sufficient for creating an empowered individual, and whether the conditions necessary for, and the consequences of,

participation and resource sharing are the same as those for empowerment from an individual perspective. They argue that in identifying the underlying psychological mechanisms of empowerment, and its causes and consequences, a valuable contribution towards our understanding of the specific nature of empowerment as an individual experience will be made (Conger & Konungo, 1988). Conger and Konungo label this stream of empowerment-related research the *motivational* approach.

Empowerment as an Intrinsic Motivational Experience

In contrast to the majority of the management literature, the psychology literature considers power and control as key elements in influencing a given individual's expectancy and/or motivational belief-states (Conger & Konungo, 1988). The recognition that the construct of control has great importance in our understanding of psychological functioning is widely agreed (Skinner, 1996). From relatively early on in the development of the psychological construct of control theorists saw humans as having an intrinsic motivation to control their environment (e.g., Argyris, 1957; McGregor, 1960; White, 1959). McClelland (1975) writes of individuals' need for power, where power is manifested in an internal desire to control and influence others. Numerous strains of research include the internal urge for individuals to attempt to control their environment and to cope or gain control over life events as central foci (Terry & Jimmieson, 1999). Examples include research involving learned helplessness (Rappaport, 1987), locus of control (Nowicki & Strickland, 1973), and powerlessness (Parenti, 1978). Individuals' power needs are satisfied when they perceive they have sufficient personal resources to cope with the challenges presented by events, the environment, and interpersonal

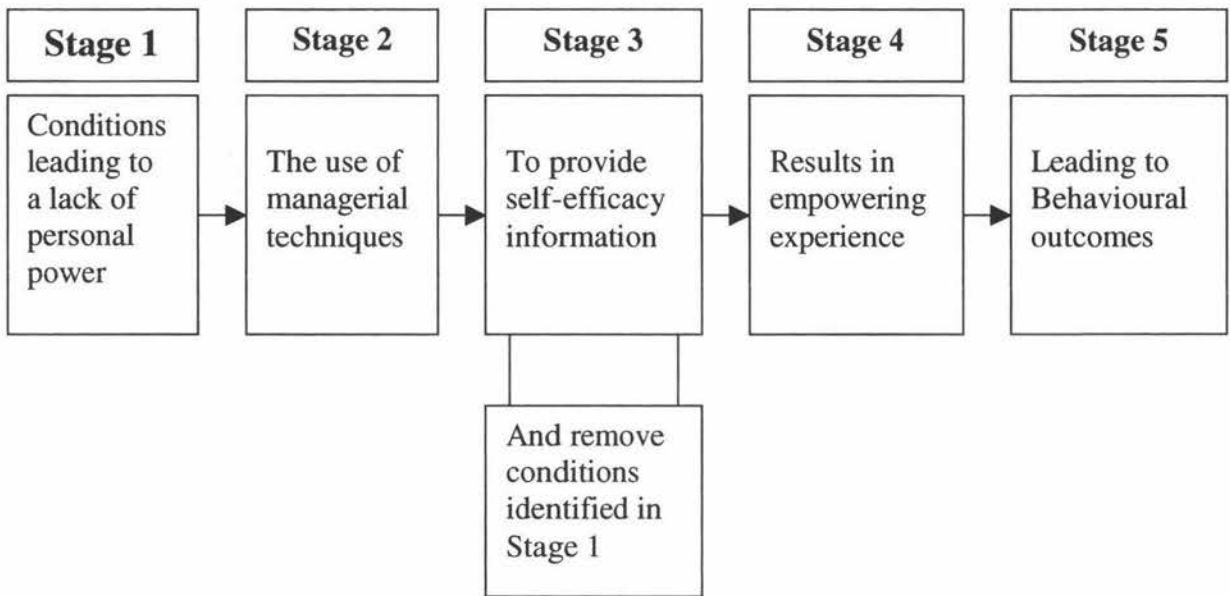
relationships, and are frustrated when they perceive their personal resources are insufficient to meet these challenges (Conger & Konungo, 1988).

The most pertinent example to this discussion of the motivational notion of the need for power and control is encapsulated in research concerning an individual's intrinsic desire for self-efficacy (Bandura, 1986; Gecas, 1989). Self-efficacy, also referred to as agency beliefs, refers to the "*conviction that one can successfully execute the behaviour required to produce an outcome*" (Bandura, 1989, cited in Spreitzer, 1997, p. 40, added emphasis). Under this formulation, an individual's primary source from which to draw power exists within their motivational disposition (Conger & Konungo, 1988). This concept is similar to White's (1959) "effectance motivation" and Harter's (1978) "competence motivation". Placing this notion of self-efficacy in an organisational context, managerial techniques that serve to enhance one's sense of self-efficacy will make them feel more powerful (Conger & Konungo, 1988). In this respect, McClelland's (1975) idea of empowerment as an enabling process is particularly illuminating. To *enable* is to facilitate the conditions necessary for enhanced self-efficacy, resulting in an increased motivation for effective task performance. Following this general proposition, Conger & Konungo (1988) define empowerment as "a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness and through their removal by both formal organisational practices and informal techniques of providing self-efficacy information" (p. 474). This process is outlined in more detail below.

Crucial to the process of developing an empowered workforce is to identify organisational conditions that cultivate a sense of powerlessness within individuals. The information derived from this diagnosis can be used to configure and implement strategies aimed at removing these sub-optimal conditions. However, this is not always viable, as certain factors necessary for basic organisational functioning may be instrumental in fostering powerlessness (e.g., automated machinery). Thus, rather than attempting to remove limiting external conditions, steps can be made to institute methods designed to directly provide individuals with efficacy information. Five distinct stages comprise the empowerment process: stage one is identifying factors that lead to powerlessness, stage two is the use of managerial techniques, stage three is the provision of self-efficacy information to employees by a) using techniques such as verbal persuasion and b) removing the conditions identified in stage one, employees experience empowerment at stage four, and positive behavioural effects are observable at stage five. See Figure 1.

Conditions leading to powerlessness. Conger and Konungo (1988) categorize four major contextual factors that may have an affect on the level of self-efficacy of individuals. Organisational factors such as restructuring or reengineering can upset work processes and challenge 'the way things are done' (Carnall, 1995). For example, in the shift to a team-based environment, new reporting relationships and altered lines of authority and communication instigate a shift from institutionalised bureaucracy to an open-systems model, within which the concept of hierarchy is no longer as salient a concern

Figure 1. The Empowerment Process, adapted from Conger and Konungo (1988).



(Mohrman et al, 1995). As a result, an individual experiences uncertainty and ambiguity in work activities, not sure precisely of their role within the newly formed team or of the role of leadership and authority in a team environment (Wageman, 1997). These feelings of uncertainty can lead to a sense of anxiety and powerlessness over the new work environment, and in effect, the lowering of one's personal self-efficacy. Conger and Konungo (1988) cite other examples such as start-up ventures, increased competition, and an impersonal bureaucratic climate that might also contribute to the lowering of individuals' feelings of powerlessness.

Management Practices. Practices aimed at enhancing employee's personal self-efficacy can be viewed as both informal and formal. Considering this, a potentially broad array of techniques could be utilised. For example, the implementation of quality circles, a

participative method where employees meet periodically to discuss quality, productivity and other related issues (Steel & Shane, 1986), might constitute a formal strategy for empowering subordinates (although their effectiveness is questionable, see Marks, 1986). Quality circles might not work, however, if management do not accept the practice as a legitimate way of gathering valuable information from employees, and hence do not implement suggestions for improvement (Cotton, 1996). A wider outlook must be taken, requiring a change in supervisory attitudes from command-and-control to high-involvement, reflecting a more informal and unstructured approach to intervention. In this example, informal practices are needed to support the introduction of more formal techniques. For example, for an employee to feel self-efficacious, quality circles may partly achieve this goal, but management must actively support the initiative and encourage employees if this effect is to be maximized. Numerous other management practices are suggested, such as open communication systems and decentralized resource structures (at the organisational level), and setting inspirational goals and providing opportunities for participation (at the leadership level) (Conger & Konungo, 1988).

Sources of Self-Efficacy Information. The provision of self-efficacy information is crucial to the empowerment process. Bandura (1986) states that verbal persuasion, vicarious experience, enactive attainment, and an emotional arousal state are four sources of self-efficacy. Verbal persuasion, more specifically, the positive feedback and encouragement of both peers and management, are suggested to empower employees (Quinn & Spreitzer, 1997) by drawing one's emphasis away from personal weaknesses in a difficult or challenging situation (Bandura, 1986). Vicarious experience is the experience one can

gain by observing desired behaviours performed by others (Conger & Konungo, 1988). For example, members can function more effectively in a team if they communicate openly and supportively (Stevens & Campion, 1994). Attending a training program that involves observing peers or managers communicating in such a way is likely to enhance one's feelings of self-efficacy in being able to behave in this manner. An implication for managers in a work environment is to maintain an awareness of one's behaviour and how it might influence others. Experiences of mastery and successful task performance in one's job are referred to as enactive attainment. For example, the setting of realistic, attainable goals in challenging projects can set up chances for employees to experience success and gain new skills, resulting in greater feelings of personal competence and empowerment (Conger & Konungo, 1988). Finally, attention must be paid to an individual's emotional state in assessments of personal competence. Negative emotional arousal such as anxiety, fear, and depression will lead to lower feelings of self-efficacy, and can be minimized or buffered through a work climate characterized by trust and support (Nielson, 1986).

Empowering experience. Conger and Konungo (1988) state that everybody has an intrinsic need to exercise control over events and relationships and to cope with situational demands, and that any relative differences in this need can be explained by the different levels of motivation within individuals. Expectancy theory (Vroom, 1964), postulates two factors that determine an individual's task motivation: a) that their effort will lead to the desired performance and b) that this performance will lead to a desired outcome. Bandura (1986) calls these factors the self-efficacy expectation and the

outcome expectation, respectively. Importantly, the present notion of self-efficacy is embodied only in the former factor, not in the latter. That is, regardless of the outcome of one's behaviour, an individual can still experience empowerment. For example, when a new product is released into the market and yields only fifty percent of expected revenue, management can still provide efficacy information by praising and encouraging the product development and/or sales team/s with an outlook to the future (e.g., "keep up the hard work and hopefully we'll see the results next time").

Behavioural Consequences of Empowerment. Bandura (1977) writes, "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (pp. 193-194). For example, in the context of organisational change employees face novel and challenging situations which require determination and effort to overcome (Conger, Spreitzer, & Lawler, 1999). Difficult goals will be more attainable if they are attempted by empowered employees, confident that they can succeed at a given task, and assured that if they fail they will not be reprimanded but rather encouraged and supported in their efforts.

This notion of empowerment as a process occurring within an individual's motivational belief-states, rather than as an objective group of management tools or interventions, signified an important step in the potential for developing an empirically valid, pragmatically useful knowledge base on empowerment. Viewing empowerment as a psychological mechanism paved the road for rich theoretical work and subsequent empirical exploration in later years (e.g., Liden, Wayne, & Sparrow, 2000; Spreitzer,

Kizilos, & Nason, 1997). From the standpoint of both academics and practitioners, the possibility of being able to tap into one's personal feelings of empowerment through self-report questionnaires is readily apparent. The positive ramifications of such a possibility for heightening our understanding of the true nature of the construct stretch far and wide, providing rigorous empirical standards in the quest for validation are upheld. Being able to measure feelings of empowerment opens up the possibility of gauging the effects of, for example, different management techniques, supervisory styles, work unit climates and organisational structures. Also, valuable insights can be gained into the specific effects of empowerment, manifested in, for example, positive behavioural and attitudinal outcomes.

Whilst acknowledging the seminal work of Conger and Konungo (1988) in releasing the empowerment from the constraints of it being considered simply as a set of participatory management tools, Thomas and Velthouse (1990) develop and build on this idea by formulating a more complex model of the empowerment process. Set out in the following section is a discussion of their heavily influential ““Interpretive” model of intrinsic task motivation” (Thomas & Velthouse, 1990, p. 666).

Cognitive Elements of Empowerment

Thomas and Velthouse (1990) recognize the multiple ways in which empowerment, or “to give power to” (p. 667), can be defined. Rather than viewing power in its legal sense, to *authorize*, in a *relational* sense, or in the *enabling* sense outlined by Conger and Konungo (1988), Thomas and Velthouse opt to use the term *energy* to best capture their utilisation of power and empowerment. Accordingly, *to empower* means *to energize*. In

line with this notion of empowerment is recent work on leadership, where the ability for leaders to sell a vision and create enthusiasm and energy amongst their followers to make this vision a reality (e.g., Katzenbach, 1996) is identified as critical (Denison, Hooijberg, & Quinn, 1995). It is suggested that leadership characterized by monitoring and micro-managing is likely to disempower subordinates, as they are limited in their opportunities to deviate from the status quo and exercise innovative behaviour (Spreitzer, de Janaz, & Quinn, 1999). Examples of organisations that, to a greater or lesser degree, relax traditional controls and reap the benefits of a committed and energized workforce are well represented in the business literature (e.g., Bartlett & Ghoshal, 1997; Block, 1987; McLoughlin, Badham & Couchman, 1999).

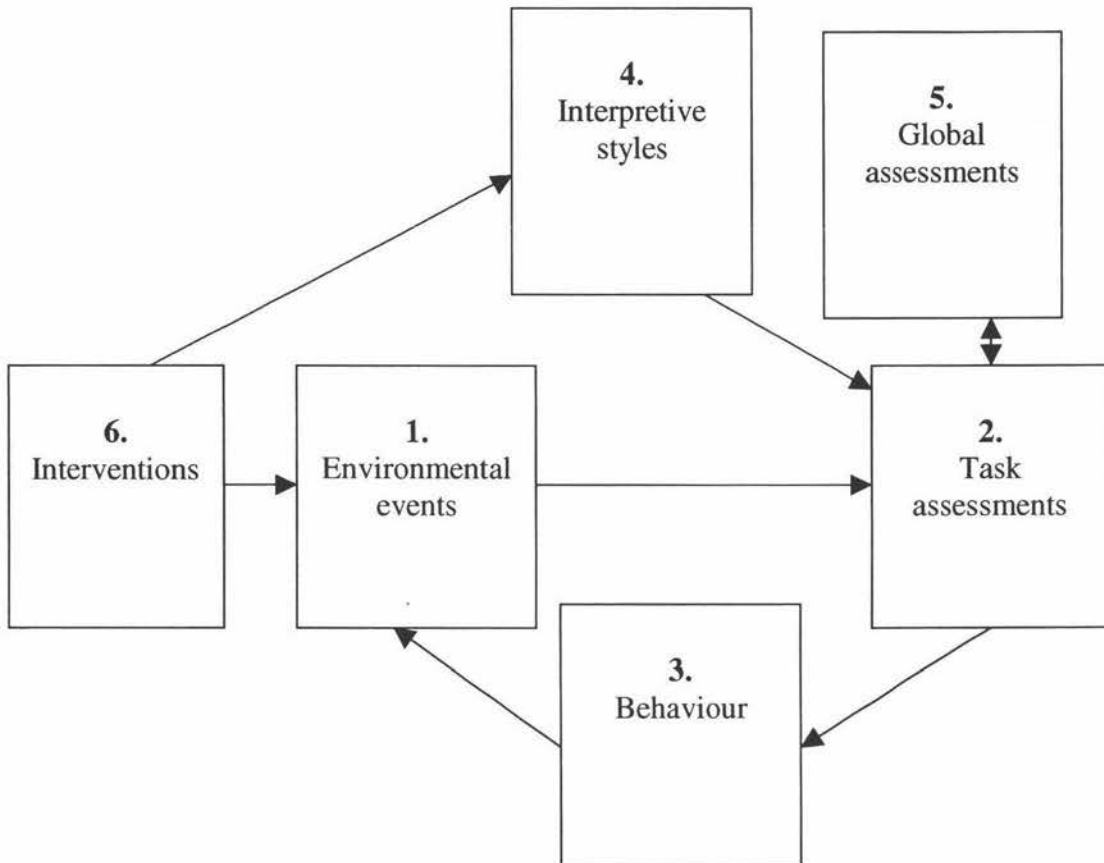
According to Thomas and Velthouse (1990), the promotion of freeing employees from the limitations of micro-management is symptomatic of a wider shift emphasizing the “pull” of the task rather than the “push” of management (Berlew, 1986, cited in Thomas and Velthouse, 1990). Parallel to theories and research on job design (e.g., Hackman & Oldham, 1980), activities at work do not merely have instrumental value, but have the potential for instilling in workers a sense of personal significance (Bennis & Nanus, 1985), identity (Byham, 1988) and value in the task itself (Locke, 1968). This reasoning led to the pivotal role of *intrinsic task motivation* in the empowerment process model, defined as “those generic cognitions by an individual, pertaining directly to the task, that produce motivation and satisfaction” (Thomas & Velthouse, 1990, p. 668). These cognitions, called *task assessments*, exist within the individual, relate to the task rather than to contextual factors surrounding the task (e.g., work unit structure), and are taken to

be the major cause of satisfaction and motivation. In the present sense, a *task* is taken to comprise of both activities and a purpose.

An important assumption in Thomas & Velthouse's model is the form of soft constructionism adopted. The usual approach taken in many organisational behavioural cognitive models is to assume that individual's cognitions are about an objective, verifiable reality. Thus, in these approaches, the extent to which these cognitions, or perceptions, are accurate with respect to external situational characteristics determine how they are evaluated. Thus, perceptions judged to be departures from objective reality are viewed as dysfunctional errors. In contrast, although objective situational characteristics are acknowledged, the present model takes into account the fact that "individual's judgments and behaviour regarding tasks also are shaped by cognitions that go beyond verifiable reality" (Thomas & Velthouse, 1990, p. 669). Individuals *interpret* objective events according to internal cognitive processes, serving to provide additional meaning to individual's experiences beyond that provided by external reality. Three such interpretive processes are identified as pertinent to the empowerment model: attribution, envisioning, and evaluating. These are discussed in more detail later.

The model proposed by Thomas and Velthouse (1990), focusing on intrapersonal cognitive processes, is set out in Figure 2. Before describing the individual factors comprising the model in isolation, it is first useful to consider the mechanical workings of the model as a whole. The essential part of the model is the cycle of environmental

Figure 2. Cognitive Model of Empowerment, adapted from Thomas and Velthouse (1990).



events, task assessments, and behaviour (see the loop made up of elements 1, 2, and 3 in Figure 2). Environmental events send information to individuals about both the consequences of their previous task behaviour and the conditions they can expect to experience in future task behaviour. This information is considered to influence and shape one's task assessments, (the different factors of which are discussed in later section), which, in turn, serve to affect one's task behaviour. One's behaviour in a given situation impacts on environmental events, and so the cycle continues. As Figure 2 indicates, other elements are included in the model that feed into this process. Two

additional intrapersonal elements are included (elements 4 and 5), accounting for the model's assumption that people's constructions of reality (i.e., their *task assessments*, element 2) are influenced by the way people interpret events. Finally, two types of interventions (element 6) are identified as potential methods for improving the empowerment process: altering environmental events (thus indirectly influencing one's task assessments) and changing people's interpretive styles. The particulars of each component are set out below.

Environmental events. As mentioned above, environmental events provide information to individuals regarding the consequences of past behaviour and what one can expect regarding the conditions for future behaviour. This information can be provided by peers, subordinates, and superiors at work, in the context of, for example, performance appraisals, training programs and meetings (See Conger and Konungo, 1988, for further examples). A key point to note in consideration of this element is that, to have a motivational affect on an individual, objective outcomes of events must be given personal significance through interpretive processes.

Task assessments. Individuals make assessments or judgments in order to make events surrounding specific tasks personally meaningful and significant. Four such assessments are said to be especially applicable to the outlined model, labeled "cognitive components of intrinsic motivation" (Thomas & Velthouse, 1990, p. 671). These are: meaningfulness, competence, self-determination, and impact. Each task assessment includes both expectancy and reinforcement dynamics. For example, competence involves the

expectation that one's efforts will lead to a desired level of performance. Also, however, competence can act as a reward that individuals give themselves during the undertaking of an activity, serving as an intrinsic reinforcement energizing and sustaining task behaviour. As these cognitive components have become the cornerstone of more recent empirical research on empowerment (e.g., Koberg, Boss, Senjem, & Goodman, 1999; Liden et al, 2000; Spreitzer, 1995a, 1995b, 1996), the following provides a thorough description of each, supported by examples found in the empowerment literature.

Meaningfulness (commonly know as *meaning*)

A sense of meaning involves a level of congruence between a task and one's values, attitudes, and behaviours (Brief & Nord, 1990). Meaning is found in an activity if this activity is judged as being significant within one's value system (Hackman & Oldham, 1980). If there is no sense of personal meaning in work activities then one may become uninvolved and passionless (Kahn, 1990). On the other hand, a sense of meaning can create within individuals feelings of purpose and energy toward their work (Spreitzer, 1997). Ultimately, meaning encompasses how much an individual *cares* about a task (Thomas & Velthouse, 1990). There are many examples of the meaning dimension in the literature on empowerment. For example, empowered individuals feel a sense of personal significance resulting from their involvement in work activities (Manz & Sims, 1989). A state of empowerment leads to the investment of psychic energy in an activity (Boyte & Reisman, 1986) and to an experience of personal connectedness (Zimmerman, 1990b).

Competence

Competence is analogous to Bandura's (1977) notion of self-efficacy (See the discussion of self-efficacy in the earlier review of Conger and Konungo's (1988) empowerment process model). Competence is developed over time through the attainment of various cognitive, physical, and social skills (Bandura, 1986) and refers to one's belief in their ability to perform a given task (Gist & Mitchell, 1992). According to Bandura (1977), high self-efficacy (i.e., competence) results in increased effort and persistence in the face of challenges. As evidenced in the empowerment literature, empowered individuals believe they can perform successfully in work activities (Gist, 1987) and that they have the requisite skills and other personal resources to enable effective performance (Spreitzer, 1997).

Choice (otherwise known as *self-determination*)

While the competence dimension reflects a sense of *mastery* over one's behaviour, *choice* reflects the extent to which one perceives their behaviour is *self-determined* (Spreitzer, 1997). "To be self-determining means to experience a sense of choice in initiating and regulating one's own actions"(Deci, Connell, & Ryan, 1989, p. 580). Choice has strong connections to feelings of autonomy at work (Gecas, 1989; Staw, 1986). A sense of choice may be achieved when individuals see themselves as the origins in determining their activities rather than passive recipients (DeCharms, 1968). In the empowerment

literature, empowered individuals see themselves as independent and innovative (McLeod, 1986) and as initiators rather than followers (Thomas & Velthouse, 1990).

Impact

This dimension can be seen as the opposite of “learned helplessness” (Martinko & Gardner, 1982), and is the extent to which one perceives they can influence important outcomes (e.g., strategic or administrative) in their organisation (Ashforth, 1989). Spreitzer (1997) points out that, where choice concerns control over one’s work behaviours, impact concerns the notion of personal control over organisational outcomes. Within the empowerment literature, as with the other dimensions, implicit linkages between a sense of impact and empowerment are common. Empowered individuals are actively involved in strategic dialogue in organisations (Westley, 1990) and do not see the outcomes of their actions as being dictated by external forces (Manz & Sims, 1989). As a result, empowered people see themselves as key players in challenging the existing mind-sets (Ryan, 1971) and as the initiators of organisational change (Kanter, 1986).

Global assessments. Fundamentally, globalised assessments carry the same meaning as task assessments, except that, rather than being localized within a singular task and time-period, they are generalized across tasks and over time. Thomas and Velthouse (1990) note that global assessments are used in filling in the gaps when faced with new and/or unfamiliar situations. Thomas and Velthouse posit that, generally, individuals with high global assessments, compared to those with low global assessments, will tend to be optimistic rather than pessimistic in novel situations. Viewed in this light, global

assessments can be thought of as dispositional characteristics of an individual. These characteristics are not permanent, however, as they are subject to change as a function of an individual's cumulative experiences with the environment and the accompanying revised patterns of task assessments.

Interpretive styles. Both global and task assessments are influenced by combinations of an individual's interpretive styles. The inclusion of interpretive styles enables the present model to provide some insight as to how individuals contribute to, or detract from, their own sense of empowerment (Thomas & Velthouse, 1990). The styles of attribution, evaluating and envisioning are identified as critical in this process. *Attribution* refers to the way in which people tend to account for success or failure. Greater feelings of empowerment are said to develop within people who attribute causes for failure as being external (i.e., due to factors other than personal shortcomings), transient (i.e., factors that are likely to change over time) and specific (e.g., factors limited to a specific day or task). Empowerment is enhanced in people who attribute causes for success as being internal (i.e., personal strengths), stable (i.e., factors that will remain relatively unchanged), and global (e.g., consistent over time and across tasks).

Envisioning refers to the manner in which one visualizes future events. Simply, in order to maximize one's chances of the development of the experience of empowerment, one should create mental images of success and avoid mental images of failure. Thus, people who anticipate the positive rather than the negative will likely experience an increase in their task assessments, and, thus, empowerment. Finally, *evaluation* refers to the

standards by which one evaluates success or failure. A standard such as “I must succeed one hundred percent of the time” is likely to be unrealistic, and any failure to do so would be seen, according to this standard, as a failure. Thus, Thomas and Velthouse posit that individuals who adopt less absolutist and more realistic standards are likely experience a greater level of empowerment.

Interventions. Interventions aimed at increasing task assessments involve both efforts to change environmental events and efforts to change people’s interpretations of those events. Thomas and Velthouse (1990) note that the scope of empowerment-related interventions with the purpose of impacting on the environment is potentially very broad, ranging from specific interventions such as gainsharing plans (Cotton, 1996) to more general, far-reaching plans such as self-directed work teams (Orsburn & Moran, 1990). Interventions aimed at changing how people interpret environmental events are more limited in scope, and would involve some form of self-awareness training, whereby individuals would be made aware of their own attributing, evaluating and envisioning styles and the consequences of these styles for how one construes reality. Research indicates that individual’s styles can be altered if they are taught to constantly monitor ongoing interpretations and outcomes (e.g., Ellis, 1980, cited in Thomas & Velthouse, 1990). For this reason, Thomas and Velthouse conclude that such interventions aimed at increasing task assessments appear feasible.

The development of these conceptual models of empowerment, first by Conger and Konungo (1988) and then by Thomas and Velthouse (1990), had major implications for

future theorizing and empirical research in the area. Separating out the potential causes (e.g., participative management practices) and effects (e.g., increased task persistence) of empowerment from the actual individual experience of empowerment cleared the path for research examining the effectiveness of numerous organisational, job-specific, and interpersonal factors in their facilitation of an empowered environment (e.g., Kirkman & Rosen, 1999; Spreitzer, 1995a, 1996). More specific to the model set out by Thomas and Velthouse, the proposed “task assessments”, first adopted by Spreitzer (1995a) as direct measurements of psychological empowerment, have proven to withstand rigorous empirical enquiry. Drawing the meaning items from Tyman (1988), the self-determination items from Hackman and Oldham’s (1980) measure of autonomy, the impact items from Ashforth’s (1989) measure of helplessness, and adapting the competence items from Jone’s (1986) self-efficacy scale, Spreitzer’s work on the measurement of psychological empowerment (Spreitzer, 1995a) in the workplace sparked a strong and ongoing interest in the organisational studies literature.

Numerous studies demonstrate evidence for the robustness of the four-factor model of empowerment, showing that there are four distinct dimensions of empowerment and that each of these dimensions contributes to an overall gestalt of psychological empowerment (Gagne et al, 1997; Spreitzer, 1995a, 1996). Significant relationships have been found between psychological empowerment and various antecedents, including social structural characteristics (e.g., sociopolitical support) (Spreitzer, 1996), perceived job characteristics (Gagne et al, 1997), culture (Spreitzer, 1995b), interpersonal relationships (Liden et al, 2000), and group effectiveness (Koberg et al, 1999). Also, significant

relationships have been found between psychological empowerment and both attitudinal (e.g., work satisfaction) (Liden et al, 2000) and behavioural (e.g., innovation) (Spreitzer, 1995b) outcomes.

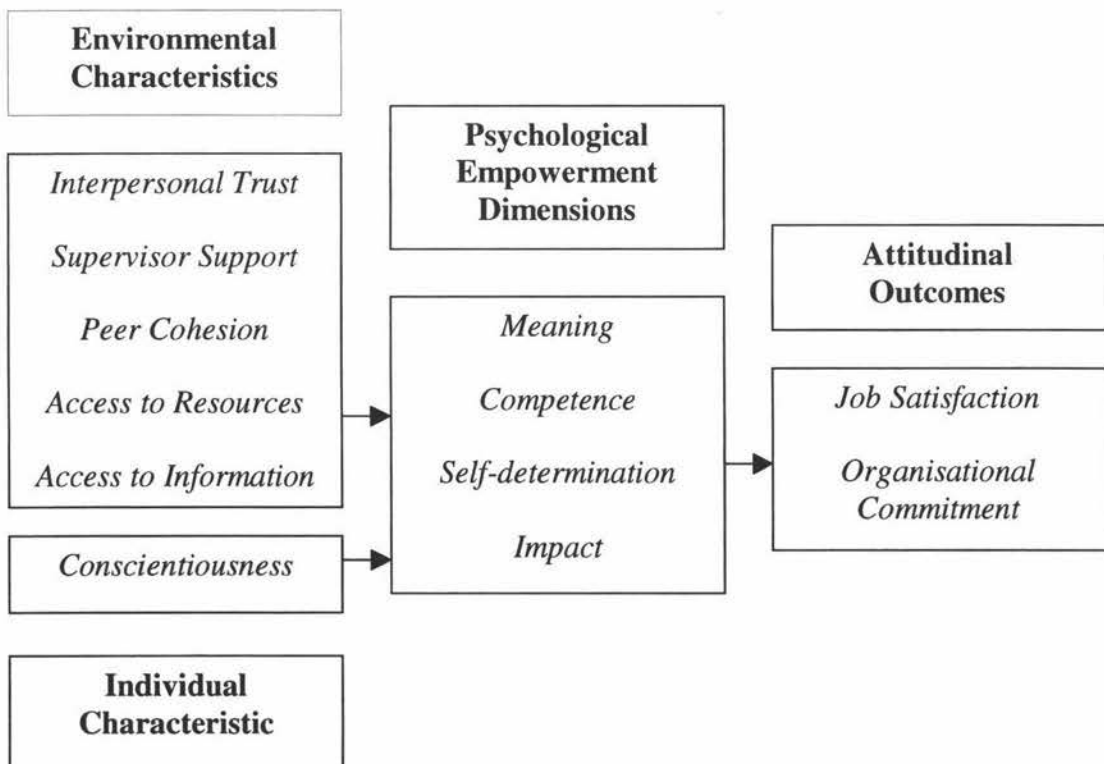
Following this line of research, the present study adopts the following definition of psychological empowerment put forward by Spreitzer (1995a, p. 1444): “Psychological empowerment is defined as a motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact. Together, these cognitions reflect an active, rather than a passive, orientation to a work role.” Spreitzer lists several assumptions critical in this notion of psychological empowerment. First, empowerment should be considered as a continuous construct: rather than being either *empowered* or *not empowered*, people are rather *more* or *less* empowered. Second, psychological empowerment is not a stable personality trait applicable across situations: it is subject to change over time and to the influence of a specific work context (Thomas & Velthouse, 1990). Third, psychological empowerment is specific to the work domain and is not considered to be applicable to life endeavors and roles outside of work.

So, using this general framework, the foregoing discussion outlines the particular model to be tested.

Hypotheses

Figure 3 depicts the proposed network of relationships between variables. Variables posited to be antecedents to psychological empowerment include social structural variables (organisational trust, access to information, access to resources, peer cohesion, and supervisory support) and an individual characteristic variable (conscientiousness). Variables posited to be consequences of psychological empowerment are affective commitment (Meyer & Allen, 1997) and job satisfaction.

Figure 3. Model of Psychological Empowerment.



Below I present the specific hypotheses to be addressed relating to both the antecedents and consequences of psychological empowerment and the proposed structural nature of the four-factor empowerment model. Figure 4, at the end of this section, presents a summary of the hypotheses.

Properties of the Multifaceted Approach to Empowerment

The structural validity of empowerment will be examined through the analysis of the convergent and discriminant validity among the four empowerment dimensions. There are two different meanings of the terms convergent and discriminant validity. Presently, these terms involve establishing the structural validity of the multifaceted nature of psychological empowerment, while in the 'measures' section the use of these terms regards the nature and strengths of relationships between certain measures/constructs and other, theoretically related measures/constructs (each of these processes contributes to the construct validity of variable). Establishing discriminant validity is critical for any multidimensional construct. Criteria for discriminant validity require that, although dimensions should be related, they should reflect distinct elements. If such a distinction is not found, then there is the possibility that two or more dimensions could be measuring the same concept, rendering these separate elements invalid. Convergent validity requires that each dimension contributes to a super-ordinate construct. If this is not established, then there is the implication that the dimension does not measure what it purports to measure.

Hypothesis 1: *The four dimensions of empowerment will measure four distinct elements.*

Hypothesis 2: *Each dimension will contribute to an overall construct of empowerment.*

Trust and Empowerment

Theorists in the fields of psychology, management and sociology generally agree that trust is a critical factor in the facilitation of effective relationships (Barker & Camarata, 1998; Herriot, Hirsch & Reilly, 1998). Extracting the central conceptual themes from a wide range of literature on trust, Mayer, Davis, & Shoorman (1995) defined trust as “a willingness of a party to be involved in the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party” (p. 712). This definition suggests that an individual’s expectation that others will cooperate or perform in line with this individual’s interests because of externally imposed incentives (e.g., material rewards) is not considered a situation of trust (Battacharya, Devinney, & Pillutla, 1998). Rather, an individual is more willing to be vulnerable and behave in a benevolent manner if, for example, they believe the other individual to be competent, dependable, likely to act with integrity (in the present and in the future), and to care for his or her interests (Dirks, 1999).

In reviewing the empirical research on trust, Dirks (1999) found only a limited number of measures incorporating all of these aspects. However, he suggests that trust measures tapping into an individual's beliefs in the extent to which the other party or group is competent, dependable, and caring for his or her interests is acceptably representative of the range of empirical research. With this in mind, the present study employs the Cook & Wall (1980, p. 40) "Interpersonal trust at work" scale, which incorporates these three aspects (see 'measures').

Different theoretical orientations have led researchers to adopt different approaches to the study of trust (Clarke & Payne, 1997). For example, personality theorists have examined trust as a personality trait (Rotter, 1971), experimental psychologists have investigated trust as overt behaviour in laboratory settings (Riker, 1974), and economists view the cognitive calculating of the costs and benefits of situations as being central to the notion of trust (Battacharya, Devinney, & Pillutla, 1998). The present research focus, however, views trust from an individual's perception of the qualities of other individuals or groups to be trusted. This approach is the most useful for analyzing levels of trust in an organisational context, and as a consequence it is one that has been frequently utilised in the organisational sciences (e.g., Butler, 1983; Scott, 1983).

It has been suggested that in an era of downsizing, mergers and acquisitions, and diminishing job security, trust among organisational members has reached an all-time low (Caudron, 1996). High levels of trust in organisations has been identified as crucial to developing empowered employees, who feel they have the personal resources to cope

with and overcome organisational challenges (Crosling, 1995). However, the relationship between organisational trust and intrapersonal empowerment has rarely been theoretically or empirically investigated. Thus, the proposed relationships between trust and empowerment is outlined below.

Organisations are continuously searching for new ways to promote cooperation and positive working relationships between employees and between/among the groups to which they belong (Kramer & Tyler, 1996). Jones and George (1998) state that, with this end in mind, organisations are de-layering, initiating self-managed teams, and instigating participative management values and principles in the name of employee empowerment. However, empowering group processes and management techniques are not likely to lead to empowerment, cooperation, improved relationships and, ultimately, increased organisational effectiveness if trust does not exist in the organisation (Jones & George, 1998). More specifically, only in conditions of trust will individuals be truly empowered (Blanchard, 1996; Crosling, 1995). Only when unconditional trust between managers and employees exists will managers be willing to relinquish control and allow employees greater discretion in their job, creating a sense of self-determination (Spreitzer & Mishra, 1999; Whitener, Brodt, Korsgaard, & Werner, 1998). In an empowering process, people must not simply play passive roles, control must be handed to those actually doing the work (Johnson, 1992), and employees will only see this gesture as legitimate if they trust the intentions of management (Schindler & Thomas, 1993). Trust will be crucial in the business world of the future, as it is easier to trust people than to control, regulate and inspect them (MacDonald, 1998).

Within a work-unit, an individual who perceives that she cannot depend on other members (i.e., she does not trust other members), will perceive her performance as being unrelated to the group's performance, and so will feel that her efforts are futile (Dirks, 1999). In this sense, she will experience a sense of helplessness, that her efforts are having no impact in her work unit. In conditions of distrust, employees are prone to feelings of anxiety and fear in their relations with others whilst involved in jobs requiring cooperation and coordination (Battacharya, Devinney, & Pillutla, 1998; Dirks, 1999). As a result, employees will be less likely to experience a sense of confidence in their capacities, their fear serves as a barrier to personal feelings of competence (Ryan & Oestreich, 1998; Whitener et al., 1998).

People functioning in trusting, reciprocal relationships are left feeling empowered, free to operate in personally meaningful ways producing outcomes valuable to the organisation (Culbert & McDonough, 1993), creating within the employee a sense of impact (i.e., "I am making a difference") and meaning. Organisations functioning with cultures valuing openness and trust create opportunities for employees to engage in learning and growth, contributing to a sense of personal mastery (competence) (Barker & Camarata, 1998). Trust motivates and brings out the best in people, leading to increased feelings of competence on the job (Crosling, 1995). Organisational members need to trust each other if both management and employees are going to be willing to work for the good of the organisation as a whole, rather than pursuing self-interests (Kramer, 1999). Thus, trust is a necessary condition for empowerment – if empowerment is to truly develop,

management must trust employees to work for the good of the company (Spreitzer & Mishra, 1999).

Hypothesis 3: *Interpersonal trust will be positively related to psychological empowerment.*

Supervisor Support and Empowerment

The actions of management and supervisors are commonly described as being a central aspect in the facilitation of an empowering environment (e.g., Liden et al, 2000; Walsh, Bartunek, & Lacey, 1998). Bandura (1977) considered the giving of emotional support, encouragement and positive persuasion as critical for providing empowering information to others. Providing emotional support through informal 'up sessions' (e.g., up-lifting speeches devoted to confidence building) motivates staff and enhances their feelings of competence and personal meaning at work (Conger, 1989). Personal encouragement from a leader-figure can act as a powerful reward, instilling feelings of personal power within individuals (Kanter, 1979). Encouraging leadership practices such as positive reinforcement are important in creating an effective and empowering environment (Quinn & Spreitzer, 1997).

Randolph (1995) emphasises the necessity for leaders to provide guidance, encouragement and support to help employees through the difficulty of transforming to an empowered workplace. Empowering managers show confidence in employees and allow them significant autonomy (self-determination) (Lin, 1998). Showing visible and

legitimate support for employee's ideas and suggestions sends a signal that they are valued, important members of the organisation, contributing to the organisation's success (impact) (Quinn & Spreitzer, 1997). If employee's ideas are not seriously considered, they may become disillusioned with the empowerment process (Cotton, 1996). Indeed, a lack of managerial support breeds employee perceptions that they are not valued by the organisation, leading to diminished feelings of competence (Langfried, 2000).

Conversely, a high level of managerial support enhances feelings of competence and informs employees that they are allowed to and encouraged to seek autonomy (self-determination) in their work (Langfried, 2000). Quality supervisor-subordinate relationships, of which supportive supervisor behaviour is a crucial factor (Liden, Sparrow, & Wayne, 1997), creates the conditions necessary for the personal growth of individuals (Cogliser & Schriesheim, 2000) enhancing general feelings of competence. Additionally, quality supervisor-subordinate relationships instigates the creation of similar value structures between individuals (Cogliser & Schriesheim, 2000), enabling employees to find increased meaning in their task activities. Walton (1985) suggests organisational support is an important means for dissipating patterns of domination in organisations.

Hypothesis 4: *Supervisor support will be positively related to psychological empowerment.*

Peer Cohesion and Empowerment

Over the years, the construct of cohesion has been the subject of rigorous debate surrounding issues of definition, operationalisation, and measurement (Keyton, 1992). Generally, however, the cohesiveness of group can be considered as the extent to which 'strong ties' exist (Granovetter, 1973) or the extent to which members feel attracted to their group and compelled to stay in it (Holt, 1990). It should be noted that, although most of the research on cohesion has been conducted at the group level (Mullen and Copper, 1994), the present study is concerned with cohesiveness on a more general, organisation-wide level. This is not to say that the effects of cohesion are not generalisable to wider networks of individuals. Indeed, it is expected that many of the qualities associated with cohesive groups (e.g., cooperation, coordination, positive relationships, concern for others) extend to a cohesive work environment in general. This is evident in the definition of co-worker cohesion posited by Moos (1994): "how much employees are friendly and supportive of one another" (p. 1). This is the orientation taken in the foregoing discussion on cohesion in relation to empowerment.

Liden et al (2000) found that relations with co-workers effects perceptions of psychological empowerment. Co-workers have been found to have such powerful effects on each other that their support and assistance buffer the negative effects of unmet expectations (Major, Kozlowski, Chao, & Gardner, 1995), creating a level of fit in the relationship between an individual's values and attitudes and those of a work role (meaning). The improved coordination and operations resulting from a high level of peer cohesion causes individuals to experience more intrinsic value in the performance of a

task (meaning) (Mullen & Copper, 1994). Individuals in cohesive environments are more likely to engage in prosocial behaviours (George & Bettenhausen, 1990), defined as behaviours performed with the aim of promoting the welfare of other organisational members (Brief, 1998). For example, members of cohesive work units will be more willing to share their knowledge and skills to assist one another in the successful completion of work tasks, facilitating a sense within individuals that they will be able to perform tasks proficiently and with confidence (competence). The finding that highly cohesive groups experience higher positive mood states than less cohesive groups (Gross, 1954), suggests that the conditions for creating individual's sense of competence will be further enhanced, as negative mood states (e.g., anxiety) have been found to limit the development of personal feelings of self-efficacy (Bandura, 1986).

Highly cohesive groups are more likely to be granted more decision-making discretion by management (Langfred, 2000), potentially leading to individual's experiencing a sense of personal control in the larger work division (impact). The feeling of 'oneness' associated with cohesive networks of individuals creates a shared social identification (Ashforth & Mael, 1989) instilling within individuals a sense of meaning in achieving super-ordinate goals (Hecksher & Donnellon, 1994). Employees who rely less on key power-holding individuals and instead develop quality relationships with a wide range of peers are less dependent on these key individuals for obtaining important resources, as reciprocal peer relationships are an alternative source for such resources (Liden et al, 1997). As a result, the traditional supervisor-subordinate dependence relationship is less salient, allowing for a greater sense of self-determination in one's work. Individuals in a supportive and

friendly environment form strong social networks within the organisation (Ibarra, 1993), enhancing feelings of personal empowerment (Crozier, 1964).

Hypothesis 5: *Peer cohesion will be positively related to psychological empowerment.*

Access to resources and empowerment

Resources can include the space and materials needed to accomplish tasks, for example, supplies, equipment, work space, tools (Zander, 1994), time, and funds (Spreitzer, 1995b). Yeatts & Hyten (1998) found that empowered work teams receiving the necessary resources performed higher than those not receiving the necessary resources, stimulating feelings of competence in group members. Resources allow individuals to show enterprise and take initiative (Kieffer, 1984), and enhance individual's sense of control (impact) and self-efficacy (competence) over environmental challenges (Gist & Mitchell, 1992). Conversely, limited access to organisational resources leads to dependency and a lack of perceived personal power (Spreitzer, 1996).

Employees' sense of self-determination is enhanced when individuals have a voice in resource-allocation issues throughout the organisation (Nonaka, 1988). Conger (1989) argues that a highly centralized resource-allocation system renders resources relatively inaccessible to front-line employees, leading to a state of powerlessness. Providing the necessary resources can be viewed as a key lever for an empowered culture (Lin, 1998).

Hypothesis 6: *Access to resources will be positively related to psychological empowerment.*

Access to Strategic Information and Empowerment

In this sense, strategic information includes information on the future direction of the organisation and top management's business strategy (Lawler, 1992). Such information might be gleaned from vision and/or mission statements (Fairholm, 1994), personal communication (via conversations, email), newsletters, and annual review statements. To create an empowering environment, organisations need to make information more available to all levels and divisions of the company (Kanter, 1989). Information on an organisation's strategy creates among its constituents a sense of purpose and meaning (Conger & Konungo, 1988).

An empowered workforce needs the sense of direction provided by vision statements to allow them to channel their energy toward strategically aligned goals (Hardy & Leiba'O'Sullivan, 1989). Culbert and McDonough (1993) emphasise the free-flow of information so that individuals can confidently exercise personal choice (self-determination) in how to go about their work. Randolph (1995) argues that information is the critical variable in initiating the empowerment process. He discusses an organisation in which management were reluctant to share information about strategy and market strength. Only when management released this information did employees develop a sense of ownership and begin to act as stakeholders in the organisation. Similarly, Quinn and Spreitzer (1997) see the sharing of strategic information as crucial in enabling

employees to find a sense of meaning and self-determination in their work. Easy access to strategic information helps individuals anchor their efforts toward long-term organisational viability (Lin, 1998), creating within employee's a sense that they are impacting on the success of the organisation.

Hypothesis 7: *Access to strategic information will be positively related to psychological empowerment.*

Conscientiousness and Empowerment

A central assumption within the study of personality is that broad, enduring traits influence individual's responses to environmental settings via their shaping of individual's values and predilections (Judge & Cable, 1997). MacKinnon (1944, cited in Hogan, Hogan, & Roberts, 1996) posited that personality refers to factors within individuals that explain their behaviour. These factors can be categorized into two broad areas. First, temperaments are genetic dispositions that act to influence one's actions. The second major factor is a person's interpersonal characteristics as observable in social situations. These interpersonal characteristics have become the major focus of personality research, largely because people are social beings and it is through interpersonal interaction that personality is chiefly expressed (Hogan et al, 1996). Furthermore, Hogan et al state that interpersonal characteristics are fundamentally the same as one's reputation. As an individual's reputation is constructed by previous behaviour, and as previous behaviour is the best predictor of future behaviour, this perspective is pragmatically important.

Indeed, Tupes and Christal (1961, cited in Barrick & Mount, 1991), in an attempt to categorize observer ratings of individual's personality traits in social situations into a general taxonomy, discovered that personality factors can be organised into separate but distinguishable factors: surgency, emotional stability, agreeableness, dependability, and culture. Extending this work, Borgatta (1964) found strong evidence for the five factors across five different methods of data collection, indicating that personality factors can be extrapolated from, for example, self-report questionnaires in addition to observer ratings. Norman (1963) was influential in his renaming of the five factors - extraversion, emotional stability, agreeableness, conscientiousness, and culture – terms that have remained relatively consistent in the personality literature. These have subsequently been referred to as the 'Big Five' factors of personality (Salgado, 1997). There is a widespread consensus among psychologists that the Big Five are, particularly in a practical sense, useful for understanding human personality in the workplace (Goodstein & Lanyon, 1999).

Langston and Sykes (1997) point out that while our understanding of 'what' personality is continues to grow and constitutes a substantial body of knowledge, we yet understand little of the 'how it works' side of personality. Some theorists, for example, Mischel and Shoda (1995), emphasise a social-cognitive approach to personality, positing that individuals draw on past experiences in similar situations, creating situational-specific beliefs, and then use these beliefs to rigorously evaluate how to act in the situation at hand. Within this framework is the assumption that people make careful and sensitive

evaluations with the overall objective of maximizing their outcomes in a given situation. However, although this situation-specific emphasis affords valuable insights into our understanding of how personality works, theorists have challenged the notion that the human mind is constantly engaged in situational calculations (Langston & Sykes, 1997). The notion that humans tend not to utilise all of the information available to them (Paton & Wilson, 2001), manifested in research on heuristics (Nisbett & Ross, 1980), indicates that perhaps the social-cognitive approach over-emphasises situational specificity (Langston & Sykes, 1997). Drawing on research showing evidence for the cross-situational consistency of behaviour, Langston and Sykes (1997, p. 145) suggest that “A person’s unique and situationally specific cognitions may determine more of his or her behaviour, but individual differences in such generalized belief units may determine that portion of behaviour that corresponds to individual differences along the Big Five trait dimensions”.

Adopting this position, the present study focuses on one factor in particular, conscientiousness, due to its demonstrated relationships with important work-related outcomes (McNaus & Kelly, 1999) and its potential for, conceptually speaking, accounting for individual differences in psychological empowerment. Also called conscience (John, 1989), or will to achieve (Digman, 1990), conscientiousness reflects the extent to which one is achievement-striving, hard-working, persevering (achievement aspects), responsible, dependable, careful, thorough, planful, and organised (dependability aspects) (Barrick & Mount, 1991). Thus, some theorists suggest that the two major facets of conscientiousness are achievement and dependability (e.g., Barrick &

Mount, 1991). However, Costa and McRae (1992) elect to divide the construct into 6 facets: competence, order, dutifulness, achievement striving, self-discipline, and deliberation. Regardless of the specific factor structure of the conscientiousness trait, the central themes of achievement orientation and dependability are evident.

To the best of the researchers knowledge, no previous studies have explicitly investigated the relationship between the Big Five conscientiousness trait and psychological empowerment. For this reason, the present study is exploratory in its examination of conscientiousness in relation to empowerment, both theoretically and empirically. The basic proposition is that conscientious individuals are predisposed to experience greater feelings of psychological empowerment in a given situation compared to less conscientious individuals. Referring back to the work of Thomas and Velthouse (1990), the place of the conscientiousness trait within the present model of empowerment most closely resembles the three styles of 'interpreting' set out in their 'empowerment process model', but with one major difference. Where conscientiousness represents a set of relatively stable patterns of beliefs and values over time and across situations (Raymark, Schmitt, & Guion, 1997), people's interpretive styles are subject to change through, for example, self-awareness training (Thomas & Velthouse, 1990). Aside from this distinction, both conscientiousness and interpretive styles serve to influence how individuals perceive themselves in relation to the environment.

The conscientiousness trait has recently attained prominence in the field of personnel selection (Widiger & Trull, 1997) due largely to its demonstrated value in predicting both

task and contextual performance at work (Hogan et al, 1996). Task performance is defined as behaviours that are officially recognized as part of the job and that directly contribute to the chief operations of the organisation, and contextual performance is defined as behaviours that reinforce the wider environment in which the job and core operations are nested (Borman & Motowidlo, 1993). Thus, conscientious individuals are likely to experience a sense of competence in the tasks they perform, contributing to a greater sense of empowerment. This sense of competence is illuminated in times of change and disruption, when conscientious individuals strive to learn and improve in order to overcome new challenges (Behling, 1998). More significantly, however, is the tendency for conscientious individuals to perform above and beyond official role expectations (i.e., contextual performance). This indicates that such individuals perceive their position in the organisation as being more than merely instrumental, or a 'cog in the machine'. Rather, they are likely view their work as personally significant and as part of their self-identity, contributing to a sense of meaning. Moreover, they perceive their actions as having a significant impact on the wider work unit, evidenced in their extra efforts in not only the proximal job tasks but also in their support and assistance invested in co-workers (Hough, 1998). Finally, conscientious individuals are likely to seek out opportunities for personal achievement and to persevere in these efforts (Behling, 1998). The salience of one's personal achievements will be optimized to the extent that one exercises self-expression and experiences a sense of self-determination, or choice, in relation to one's work role.

Langston and Sykes (1997) conducted research relating conscientiousness to certain beliefs that people hold about the world. They proposed that a combination of efficacy, outcome, and value beliefs underlying personality traits may determine some generalized cross-situational behaviour consistencies. Specifically, they found empirical evidence relating conscientiousness with general beliefs of being in control (impact). Additionally, conscientious people tend to believe that they are personally responsible for their actions, a feeling that 'If I don't do it, it won't get done'. This belief is likely to lead to conscientious individuals performing tasks with a sense of personal responsibility and self-determination.

In sum, conscientiousness is expected to lead to greater feelings of psychological empowerment.

Hypothesis 8: *Conscientiousness will be positively related to psychological empowerment.*

Empowerment and Job Satisfaction

Locke (1976) defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"(p. 1300). Similarly, Cranny, Smith, and Stone (1992) define job satisfaction as "an affective reaction to a job, the results from the incumbents comparison of actual outcomes with those that are desired (p. 1). Implicit within these definitions are that both affective and cognitive components are involved in perceptions of job satisfaction (Brief, 1998). Research on the effects of job

performance on key job and organisational outcomes has yielded mixed results. First, in the specific domain of task performance, or performance in activities that are part of the formal job requirements, reviews based on numerous studies have found that job satisfaction explains about 3% of the variance in performance (e.g., Iaffaldano & Muchinsky, 1985). It is important to note, however, that the studies reviewed were highly variable in their conclusions (Brief, 1998). That is, some found relatively high levels of explained variance in task performance, some relatively low. These findings have led to theorists to suggest that such weak explanatory power is due to the flawed measurement of job satisfaction and task performance, rather than being due to a weak relationship in reality (e.g., Fisher, 1980; Spector, 1996).

Aside from the empirical findings, it seems intuitively sound that satisfaction leads to performance. Brief (1998) illustrates this notion in extending the level of analysis from the job to that of the organisation, and states “organisations with more satisfied workers perform better than organisations whose workers are less satisfied”(p. 43). Brief believes that due to the lack of agreement in the literature of what precisely constitutes a performing organisation, this is presently very difficult to measure. However, Ostroff (1992, cited in Brief, 1998) conducted one of the few studies of job satisfaction-performance relationship at the organisational level, and concluded that there is a significant positive relationship between the two.

The research focusing on the job satisfaction-contextual performance relationship is somewhat more conclusive. It appears that, generally, more satisfied workers tend to

engage in behaviours that support the core operations of the organisation, but that are not in the formally prescribed job description (Organ & Ryan, 1995). Additionally, job satisfaction has been found to be associated with lower levels of employee withdrawal behaviours (e.g., turnover and absenteeism) (Lawler, 1995). Thus, overall, it appears that employee satisfaction is an important and desirable objective for organisations.

From conception, the major concern of the quality of work life movement, within which employee empowerment played a key role, was the enhancement of employee satisfaction and general well-being in work organisations (e.g., Blau & Alba, 1982). An important condition for the facilitation of work satisfaction is the extent to which one finds work personally meaningful (Herzberg, 1966). A sense of meaning in relation to an individual's work activities results in increased motivation and satisfaction (Bennis & Nanus, 1985). Locke (1976) posited that if one's personal values are not fulfilled at work (i.e., a lack of meaning) then one is not likely to become satisfied with their work.

Research demonstrates a significant positive relationship between meaning and work satisfaction (Thomas & Tymon, 1994; Gorn & Konungo, 1980). Thomas & Tymon (1994) found that feelings of meaning at work enhanced job satisfaction. Learned helplessness, the converse of impact, has positive associations with anxiety and depression (Martinko & Gardner, 1982), factors likely to act as barriers to work satisfaction. Warr (1987) proposes that the opportunity for personal control is a pivotal factor in the development of well-being at work. Employees who perceive that they have a limited voice and insignificant influence in organisations (i.e., a lack of impact) tend to experience dissatisfaction at work (Ashforth, 1990).

Gist (1987) argues that self-efficacy enhances intrinsic interest in a given activity, resulting from satisfaction of prior successes in that activity. Spreitzer et al (1997) found competence to be positively related to job satisfaction. Perceptions of empowerment can increase the value and pleasure derived by individuals (Koberg et al, 1999). The fulfillment of individual's needs for self-determination at work results in a greater sense of positive affect (Parker, 1993), and a sense of autonomy at work enhances feelings of satisfaction through increased intrinsic motivation (Deci & Ryan, 1985). Kirkman and Rosen (1999) found that more psychologically empowered work teams experienced higher levels of work satisfaction relative to less empowered teams.

Hypothesis 9: *Psychological empowerment will be positively related to job satisfaction.*

Affective Organisational Commitment and Empowerment

According to Meyer and Allen (1991), "affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organisation.

Employees with a strong affective commitment continue employment with the organisation because they want to do so" (p. 67). Similar notions of commitment as an affective state are evident in the literature. For example, Mowday, Porter and Steers (1982) view commitment as the relative potency of an employee's involvement in and identification with an organisation. Meyer and Allen (1997) emphasise the importance of an affectively committed employee to a given organisation due to its intuitively sound

conceptual links with turnover, absenteeism, job performance and contextual performance.

On the whole, the research surrounding commitment and its behavioural outcomes supports their emphasis. Specifically, affective commitment has demonstrated reasonably strong negative correlations with both actual turnover and intention to leave the organisation (Tett & Meyer, 1993). The turnover of valuable employees is a critical concern for organisations due to the inevitable costs of selecting and training new personnel (O'Malley, 2000). Matthieu and Zajac (1990), in their review of studies involving mainly affective commitment, found a negative association between absenteeism and commitment. Positive relationships are reported between affective commitment and task performance in numerous studies, utilizing both self-report measures of performance (e.g., Sager & Johnston, 1989) and external job performance measures (e.g., Mayer & Shoorman, 1992). Additionally, positive relationships between affective commitment and contextual performance have also been found (e.g., Pearce, 1993). Considering the evidence, it seems that it is indeed beneficial for organisations to have committed employees who want to stay and expend their efforts toward organisational goals.

Liden et al (2000) suggest that empowerment creates a sense of commitment in employees through reciprocation. That is, employees appreciate the efforts organisations make in creating a culture of trust, participation, and providing opportunities for

innovation and initiative. They also appreciate their enhanced feelings of meaning, impact, self-determination and competence derived from such conditions, and so reciprocate by becoming more committed to the organisation (Kraimer, Seibert, & Liden, 1999). Spector (1986) reported a negative relationship between perceived control at work and intention to quit (which is conceptually and empirically related to affective commitment), and Koberg et al. (1999) found a negative relationship between psychological empowerment and intention to quit. Cordery, Mueller, & Smith (1991) found that membership in an empowered work team created greater feelings of commitment to the organisation than membership in a traditional hierarchy.

Hypothesis 10: *Psychological empowerment will be positively related to affective organisational commitment.*

The Mediating Role of Empowerment

Due to the input-process-output nature of the empowerment model to be examined, the hypothesized relationships combine to form an overall mediation model. To recap, an individual's perceptions of trust, peer cohesion, supervisor support, access to resources, access to the information, and level of conscientiousness are posited to influence one's perceived level of psychological empowerment. Psychological empowerment is said to be the extent to which one experiences a sense of meaning, competence, self-determination and impact in one's job. In turn, psychological empowerment is posited to affect individual's perceptions of their satisfaction with work and commitment to the job.

Hypothesis 11: Psychological empowerment will mediate the relationships between the antecedent variables (interpersonal trust, peer cohesion, supervisor support, access to resources, access to information and conscientiousness) and the outcome variables (affective commitment, job satisfaction).

Figure 4. Summary of Hypotheses.

1. The four dimensions of empowerment will measure four distinct elements
2. Each dimension will contribute to an overall construct of empowerment
3. Interpersonal trust will be positively related to psychological empowerment
4. Supervisor support will be positively related to psychological empowerment
5. Peer cohesion will be positively related to psychological empowerment
6. Access to resources will be positively related to psychological empowerment
7. Access to strategic information will be positively related to psychological empowerment
8. Conscientiousness will be positively related to psychological empowerment
9. Psychological empowerment will be positively related to job satisfaction
10. Psychological empowerment will be positively related to affective organisational commitment
11. Psychological empowerment will mediate the relationships between the antecedent variables (interpersonal trust, peer cohesion, supervisor support, access to resources, access to information and conscientiousness) and the outcome variables (affective commitment, job satisfaction)

Focus of Empowerment in Testing the Hypotheses

It is important to note that hypotheses 3 to 11 will focus on both the four dimensions of empowerment, as well as the overall construct. This is in recognition of the valuable information gained in studies measuring differential relationships of each dimension of empowerment with hypothesized variables (e.g., Gagne et al, 1997) and the information gained from measuring empowerment as a unitary factor (Speitzer, 1996). Indeed, Spreitzer et al (1997) suggest that the sole use of a unitary definition in the study of the nomological network of empowerment is inadequate, because each dimension is likely to be affected by different antecedents and to differentially affect various outcomes. Thus, the statistical procedures adopted in testing the hypotheses will take full advantage of the utility of the multidimensional empowerment construct.

Method

Participants

Participants were 228 employees working within several divisions of a large health services organisation. All participants were employed in the same general geographical location and primarily represented lower hierarchical levels of the organisation. The initial response rate was 35% (248), but after dropping respondents for whom there was missing data (the method of case-wise deletion was used to deal with missing data) this was reduced to 33% (228). The mean age of participants was 43.3 years, ranging from 17 years to 66 years, and 3.3% of respondents opted not to disclose their age. Age range distributions are set out in Table 1.

Table 1. Age Range Distributions

Age Range (years)	Percentage
17-30	21.2%
30-40	17.3%
40-50	31.6%
50-66	29.9%
Missing	3.3%

This appears to be an evenly dispersed representation of the working adult population. The sample comprised of 85.7 % (195) women and 14.3% (33) men. Twenty four percent of participants indicated a high school education as being the highest level of education achieved, 43.3% indicated having attained a diploma or certificate as their

highest level of education, and 31.1% indicated having attained a degree or greater. Just over 1% chose not to indicate their highest level of education.

The sample comprised of a wide range of occupations including both administrative staff and non-medical support staff. Due to confidentiality agreements between the researcher and participants, specific occupational titles cannot be discussed. Some job positions are the only ones of their kind within the sample, and the identification of respondents is a possibility. With reference to the New Zealand Standard Classification of Occupations (Statistics New Zealand, 1995), occupations were categorized into four major divisions, each consisting of several subdivisions. The largest occupational division was termed “clerks” (49.2% of participants), accounting for all types of jobs within which administrative duties are the key responsibilities. More specifically, “the main tasks involve the recording, organizing, storing, and retrieving of information, computing numerical, financial and statistical data, and undertaking client-oriented clerical duties in relation to travel arrangements, money-handling, business information and appointments (Statistics New Zealand, 1995, p. 96). Examples of these positions includes secretaries, filing clerks, and mail clerks.

The next division was termed “technicians”, and comprised 9.2% of the sample. Examples include engineers and medical technicians. Deciding upon overall titles for the two remaining divisions was impossible because of the wide array of participant’s job positions. With this in mind, the next major division included positions falling within the major, sub-major, and minor group classifications of: life science and health

professionals, associate professionals, teaching professionals, other associate professionals, and other professionals (Statistics New Zealand, 1995). This division comprised 37% of the sample. Examples include radiologists and physiotherapists. The fourth and final division was made up of three major groupings: trades, elementary occupations, and service and sales. Accounting for 3.8% of participant's occupations, examples include electricians and security staff. Just less than 1% of participants failed to specify their occupations.

It is recognized that even within each of these occupational classifications, particularly within the last two discussed, there are a diverse range of positions. Also, meaningful comparisons between these four groupings, from a statistical analysis perspective, are improbable due to the small sample size of two of the four groupings. For this reason, the occupational groupings will not be used in the statistical analyses. Rather, the classifications are used in the immediate sense for descriptive purposes only, illustrating the diverse range of non-managerial occupational positions held by participants.

Research Design

The present study employs quantitative methodology and a cross-sectional research design to gauge participant's perceptions of the variables of interest. An important property inherent to cross-sectional research is that it will not be able to assess cause-and-effect relationships between variables. Insights will be gained as to the nature and strength of the relationships, but a longitudinal design would be necessary in order to examine the true direction of impact of these relationships, for example, to examine

whether empowerment causes satisfaction or whether satisfaction causes empowerment. Thus, within the present research project, theory is used to drive postulations of cause and effect.

Data Collection Procedures

Seven hundred questionnaires were sent to potential participants through the internal mail system in the organisation. Participants were instructed to return the completed questionnaires, in the pre-paid envelopes provided, to the address of the researcher's university departmental office. Complete confidentiality and anonymity was assured, and respondents were advised of their rights in participating in the study. Specifically, these were: the right not to participate in the study, the right to withdraw from the study at any time, and the right to decline to answer any particular questions. Once all of the survey data had been entered, all questionnaires were destroyed. For the duration of the research project the researcher had sole access to the individual questionnaires. The data collection process spanned a time period of approximately three months.

Measures

For the empowerment, trust, access to resources, access to strategic information, conscientiousness, work satisfaction, and affective commitment scales, respondents indicated the extent to which they agreed with each statement on a 7-point scale ranging from 1 (disagree strongly) to 7 (agree strongly). After adjusting for reverse scoring, higher scores indicated a higher level on each variable measured. For the peer cohesion and supervisor support scales, participants responded either yes (coded 2) or no (coded

1). Again, higher scores indicated a higher level on each variable. All internal reliability estimates were measured using Cronbach's alpha.

Empowerment

Psychological empowerment was measured using Spreitzer's (1995a) 12-item empowerment scale. This scale contains three items for each of the four empowerment dimensions. Sample items include 'The work I do is very important to me' (meaning), 'I have mastered the skills necessary for my job' (competence), 'I can decide on my own about how to go about doing my work' (self-determination), and 'My impact on what happens in my department is large' (impact). Each of the four dimensions was combined to form an overall empowerment construct. Both the overall construct and the separate dimensions of empowerment were used in the statistical analyses. Adequate alpha internal reliability estimates for each of the scales (i.e., $\alpha > .70$) have been found in several studies (e.g., Spreitzer et al, 1997; Spreitzer, 1995b, 1996) based on a set of demographically diverse sample populations.

A previous study provides evidence for the temporal stability of these scales after assessing test-retest reliability over a five-month period (Spreitzer, 1995a). Also, initial evidence has been found in support of the structural validity of the four-factor model. It has been found that each factor represents a distinct dimension of empowerment, and that each factor contributes to the overall construct of empowerment, a conclusion reached on the basis of two separate studies involving four organisations (Kraimer et al, 1999;

Spreitzer, 1995a). The significant positive relationship found between empowerment and a global measure of self-efficacy provides evidence for the convergent validity of the scale (Spreitzer, 1995a), and the negative relationship found between empowerment and job-related strain (Spreitzer et al, 1997) provides evidence for discriminant validity. Finally, many studies bear on the construct validity of the psychological empowerment measure, revealing, on the whole, expected hypothesized relationships with other work-related variables (e.g., Kirkman & Rosen, 1999; Koberg, Boss, Senjem, & Goodman, 1999).

Organisational Trust

The level of trust in the organisation is to be measured using the *interpersonal trust at work* scale developed by Cook and Wall (1980). This scale measures trust along a four-fold classification structure, the four factors being a) faith in management, b) confidence in management, c) faith in peers, and d) confidence in peers. Example items are 'Management is sincere in its attempts to meet the workers point of view' (faith in management), 'Management at work seems to do an efficient job' (confidence in management), 'I can trust the people I work with to lend me a hand if I needed it' (faith in peers), and 'I have full confidence in the skills of my workmates' (confidence in peers). For the purposes of the present study, each scale was combined to provide an overall measure of organisational trust.

An initial validation study found the measure to be stable over a period of 5 months, yielding a relatively strong significant correlation of scores between time 1 and time 2 ($r=.60, p<.001$) (Cook & Wall, 1980). Positive associations were found between the interpersonal trust at work scale and job satisfaction and organisational commitment, and a negative correlation was found between trust and anxiety, lending support for the construct validity of the scale (Cook & Wall, 1980). This same study yielded an adequate alpha internal reliability estimate for the overall measure of trust in two independent samples (sample 1, $\alpha =.85$; sample 2, $\alpha =.80$), and involved a sample of primarily male blue-collar workers. Considering the present study involves mostly female employees, it will be interesting to see if these psychometric properties will generalize beyond the male population.

Peer Cohesion and Supervisor Support

To measure the level of perceived peer cohesion and supervisor support, two subscales were taken directly from the short form (form s) of the Work Environment Scale (WES): peer cohesion and supervisor support (Insel & Moos, 1974). The Work Environment Scale has chiefly been used in assessing the social climate of work groups and health-care settings, and is reported to be suitable for a wide range of employees and organisational environments (Moses, 1992). Due to the lack of comparable social climate measures, convergent and discriminant validity information for this measure is sparse. However, the multitude of studies revealing significant associations between WES social climate and

psychological well-being (e.g., Wetzel & Redmond, 1980) affirms the robust construct validity of the measure (Moses, 1992).

Both peer cohesion and supervisor support have demonstrated adequate alpha coefficients ($\alpha > .80$) in a study involving a sample of public service employees in New Zealand (Stephens & Long, 1999). The first subscale, peer cohesion, has demonstrated robust temporal stability over time periods ranging from 1 month to 1 year, as reported by Moos (1994). An example item from the peer cohesion scale is 'The atmosphere is somewhat impersonal'. The supervisor support scale has also demonstrated temporal stability over time (Moos, 1994). An example item is 'Management usually give full credit to ideas contributed by employees'.

Access to Strategic Information and Access to Resources

These scales are taken from Spreitzer's (1995b) wider set of social structural measures. Example items include 'I have access to the strategic information I need to do my job well' (access to information), and 'I have access to the resources I need to do my job well' (access to resources). A previous study employing these scales yielded acceptable coefficient alpha's for both access to resources ($\alpha = .87$) and access to information ($\alpha = .85$) (Spreitzer, 1995b). A confirmatory factor analysis of the social structural items reported by Spreitzer (1995a) indicates that these scales are distinct from one another, suggesting that each will potentially contribute unique information to the model. A positive relationship between each of these scales and socio-political support

demonstrates convergent validity (Spreitzer, 1995b). However, being recently-developed measures, further validity information is not available.

Conscientiousness

Eighteen items were selected from Costa and McCrae's (1992) 48-item 'Conscientiousness' scale, one of the five factors assessed in the NEO PI-R, to be used in the present study. Items were selected a) on the basis of face validity and applicability to the present study, and b) to equally represent each of the 6 subscales of the original measure of conscientiousness. The 6 subscales are *competence* (sample item: 'I am efficient and effective at my work'), *order* (sample item: 'I am not a very methodical person'), *dutifulness* (sample item: 'When I make a commitment, I can always be counted on to follow through'), *achievement striving* (sample item: 'I strive to achieve all I can'), *self-discipline* (sample item: 'I have a lot of self-discipline'), and *deliberation* (sample item: 'I think things through before coming to a decision').

Each sub factor in the revised scale was made up of 3 items. An example of an item from the original measure not included in the revised scale is "I'm something of a 'workaholic'" (Costa and McCrae, 1992, p. 73). This item has been suggested to tap into maladaptive aspects of conscientiousness, and has strong associations with the DSM-IV diagnostic criteria for obsessive-compulsive personality disorder (Widiger & Trull, 1997). As the identification of maladaptive personality traits is not the objective of this

study, this item was not included. Thus, the revised scale consists of items judged to be representative of the original scale and most suitable to the present study.

Adequate alpha reliability coefficients (i.e., $\alpha > .70$) for the original conscientiousness scale have been reported based on studies in many different geographical areas (e.g., Europe and America), and involving a demographically diverse range of adult population samples (Costa & McCrae, 1992). Both Salgado (1997) (in the European community) and De Fruyt and Mervielde (1997) (in a Flemish sample) have found evidence for the cross-cultural replicability of the five-factor model.

Hogan et al (1993) refer to personality as being analogous to seasonal climate differences - broad patterns should be observable and it should be relatively consistent over time.

Test-retest reliability should therefore yield acceptably high stability coefficients

(Muchinsky (1997) suggests test-retest coefficients over .70 to be acceptable).

Importantly, then, evidence shows that the NEO PI-R 'conscientiousness' scale scores for individuals remain relatively stable throughout one's adult life. Specifically, Bell (1993) reports mean stability coefficients of .68 - .83 over 6 years for the five factors, and Costa & McCrae (1992) report an overall mean between-factor correlation of .83 over a 6 year period.

Job Satisfaction

Job satisfaction was measured using Camman, Fichman, Jenkins, and Klesh's (1983) three-item scale. A sample item is 'If I had to decide all over again whether to take the job I have, I would take it without hesitation'. Studies by Cleghorn (2000) (in New Zealand) and Saks and Ashforth (1997) (in Canada) each yielded acceptable alpha internal reliability estimates ($\alpha = .85$ and $\alpha = .93$, respectively) for the scale. Saks and Ashforth (1997) found evidence for the scale's temporal stability. Each of these studies were based on demographically diverse samples.

Affective Organisational Commitment

The 8-item Meyer & Allen (1997) measure was used to gauge affective commitment to the organisation. Sample items include 'I really feel as if this organisation's problems are my own' and 'I do not feel emotionally attached to this organisation'. In summing the extensive validation research carried out on their scales, Meyer and Allen cite the median alpha coefficient for affective commitment as .85 (this is based on 40 independent coefficient estimates based on large and diverse samples). For example, Liden et al (2000) found strong evidence for the acceptable internal reliability of the affective organisational commitment scale ($\alpha = .90$). Acceptable test-retest reliability of the scale has also been demonstrated across a time period of 7 weeks (Blau, Paul, & John, 1993). Finally, numerous investigations have demonstrated associations with other conceptually related and conceptually unrelated constructs, in the hypothesized directions, attesting to

the emerging construct validity of the Meyer and Allen organisational commitment measures (Allen & Meyer, 1996).

Demographic Measures

Age, gender, and education were included as control variables in the statistical analyses due to their possible associations with the factors in the model. Previous research on psychological empowerment has found evidence that females receive less sociopolitical support than males, and that older workers receive less resources and information than younger workers due to their increasingly stagnant hierarchical position in the organisation (Spreitzer, 1996). Conversely, it is possible that older workers may form part of a comparatively wider support network than younger workers, allowing them greater access to resources and information. Research has also found a positive relationship between level of education and empowerment in a sample of middle managers (Spreitzer, 1996). However, as in the present study, higher-educated individuals holding low-level positions may see themselves as less empowered relative to lower-educated individuals, due to the perceived lack of opportunities to exercise choice within an, in objective terms at least, unchallenging and narrowly defined job role. Although numerous previous studies on psychological empowerment do not control for demographic variation (e.g., Gagne et al, 1997; Kirkman & Rosen, 1999; Spreitzer, 1995a), age, gender, and education are included in the present model in recognition of the importance of drawing on theory and past research to measure variables that could conceptually serve as confounds (Mitchell, 1985).

Analyses

Descriptive statistics and correlations between scales were generated. To confirm the multi-dimensional nature of the empowerment construct (hypotheses 1 and 2), a principal components factor analysis was performed on the empowerment scale items.

To test for the mediating role of psychological empowerment (hypothesis 11), a series of regression analyses were conducted. Baron and Kenny (1986) describe how to test for mediation:

“...one should estimate the three following regression equations: first, regressing the mediator on the independent variable; second, regressing the dependent variable on the independent variable; and third, regressing the dependent variable on both the independent variable and the mediator... These three regression equations provide the tests of the linkages of the mediational model. To establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled (p. 1177)”.

Integrating this process into the present model, the independent variables are interpersonal trust, access to information, access to resources, peer cohesion, supervisor support, and conscientiousness. The mediating variables are the four dimensions of psychological empowerment (meaning, competence, self-determination, and impact) and the overall empowerment construct. The dependent variables are affective organisational commitment and job satisfaction. All demographic control variables were included in the regression analyses. Step one, above, will enable the testing of hypotheses 3 to 8, and step three will enable the testing of hypotheses 9 and 10.

Results

The statistical analyses were based on 228 observations. This sample size was more than acceptable in terms of the statistical power of the study, and easily exceeds the general guideline of 20 observations per variable for factor analysis. All analyses were carried out using 'SPSS' (version eight) statistical software. All analyses were conducted using the .05 level of significance except where indicated (†), and all reported R^2 values have been adjusted for overestimation bias. Beta values (β) are reported in order to make cross-scale comparisons possible.

Preliminary Analyses

Several diagnostics were run to ensure that the key assumptions for descriptive and inferential statistics were upheld. A bell-shaped standardized residual histogram and the presence of only a few cases of outliers outside of the normal range (i.e., -3 to +3) suggested that the assumption of multivariate normality was generally supported. A scatterplot of the residuals against the predicted Y scores was generated to test for the key assumptions of linearity and homoscedasticity. No patterning of any significance was observable, satisfying these assumptions. Finally, as the Durban-Watson Statistic for each data set was relatively close to two, it appears that the data collection sequence did not in any way unduly affect the residuals. Thus, the independence of error assumption was also met.

Descriptive Statistics

The means, standard deviations, and internal reliability estimates for each of the scales and demographic variables (means and standard deviations only) are reported in Table 2. All internal reliability estimates were calculated using Cronbach's alpha coefficient. Each scale exhibits acceptable levels of internal reliability, equaling or surpassing the minimum cut-off value suggested by Nunally (1978) of .70. Thus, each scale appears to be tapping into fairly homogeneous content. These alpha coefficients are similar to those attained in previous studies using the same scales (see 'measures' section). Overall, participants report relatively high levels of psychological empowerment ($M = 5.70$). This value is similar to that obtained from a sample of middle managers from several organisations ($M = 5.65$) (Spreitzer, 1995b), and from a sample of non-managerial employees from a single organisation ($M = 5.39$) (Liden et al, 2000).

Relative to the other three dimensions of empowerment, participant's perceptions of impact were low ($M = 4.17$). Overall perceptions of the hypothesised antecedents of empowerment are all positive, with the one exception of supervisor support ($M = 1.46$: keeping in mind that both supervisor support and peer cohesion are measured on a scale of 1 – 2, rather than the 1 – 7 scale used to measure the other variables). Interestingly, aggregated perceptions of job satisfaction were positive and quite high, while aggregated perceptions of affective commitment were just negative. Age, yielding a standard deviation of 11.98, indicated the widest spread of all of the variables in the model.

Table 2. Descriptive Statistics ^{ab}

Variable (number of items)	<i>M</i>	<i>SD</i>	α
Gender	1.86	0.35	n/a
Age	43.26	11.98	n/a
Education	2.07	0.75	n/a
Empowerment			
Empowerment (overall) (12)	5.70	0.81	.83
Meaning (3)	6.20	1.00	.77
Competence (3)	6.46	0.62	.80
Self-determination (3)	5.95	1.08	.82
Impact (3)	4.17	1.80	.87
Antecedents			
Interpersonal trust (12)	4.89	1.04	.86
Supervisor support (4)	1.46	0.36	.71
Peer cohesion (4)	1.60	0.30	.70
Access to resources (3)	4.54	1.52	.83
Access to information (3)	4.63	1.31	.70
Conscientiousness (18)	5.83	0.65	.79
Consequences			
Job Satisfaction (3)	5.26	1.42	.82
Affective Commitment (8)	3.88	1.13	.75

^a Means (*M*), standard deviations (*SD*), and Cronbach's alpha internal consistency coefficients (α) reported.

^b n/a = not available

Factor Structure of Psychological Empowerment

A principle components factor analysis was conducted to test the structural validity of the psychological empowerment scale (hypotheses 1 and 2). The resulting scree plot revealed the four-factor structure of empowerment. A varimax normalised rotation confirmed the multidimensional nature of empowerment, with each item loading significantly and exclusively on its appropriate factor (Table 3). Ranging from .71 to .90, these loadings are similar in magnitude to those reported by Gagne et al (1997). Thus, support for hypothesis 1 is demonstrated. Clearly, the four dimensions of empowerment measure four distinct elements: meaning, competence, self-determination, and impact.

Furthermore, as observable in Table 3, the subscales are all significantly correlated with

one another ($p < .05$), with correlations ranging from .13 to .42. This indicates that the four dimensions share some common variance, lending support to hypothesis 2, that each dimension contributes to an overall construct of empowerment. Thus, these findings provide support for the convergent and discriminant validity of the empowerment dimensions, and in doing so contribute to the structural and construct validity of the psychological empowerment measure.

Table 3. Factor Loadings From the Principle Components Analysis of the Empowerment Items

Items	Factor loadings			
	Factor 1	Factor 2	Factor 3	Factor 4
<i>Meaning</i>				
The work I do is meaningful	.20	.12	.02	.71 ^a
My job activities are personally meaningful to me	.16	.02	.22	.84 ^a
The work I do is very important to me	.14	.01	.09	.85 ^a
<i>Competence</i>				
I am confident about my ability to do my job	.03	.83 ^a	.07	.15
I have mastered the skills necessary for my job	.07	.82 ^a	.12	-.07
I am self-assured about my capability to perform my work	.06	.85 ^a	.22	.02
<i>Self-determination</i>				
I can decide on my own how to go about doing my work	.12	.34	.86 ^a	.06
I have significant autonomy in determining how I do my job	.13	.11	.89 ^a	.06
I have considerable opportunity for independence and freedom in how I do my job	.23	.07	.78 ^a	.12
<i>Impact</i>				
I have a great deal of control over what happens in my department	.83 ^a	-.05	.21	.12
My impact on what happens in my department is large	.84 ^a	.12	.13	.19
I have significant influence over what happens in my department	.90 ^a	.04	.16	.20

^a Item loadings defining each factor

Bivariate Correlation Analysis

Pearson correlations for all the variables in the framework appear in Table 4. As mentioned above, and as expected, the empowerment dimensions were significantly correlated with one another, with none of these correlations being particularly large in magnitude, and each exhibited reliable positive covariation with the overall empowerment construct. Gender, age, and education each correlate significantly with one or some of the empowerment dimensions, antecedents and consequences, reinforcing the decision to include the demographic variables in the regression analyses. Overall psychological empowerment is significantly correlated with all of the antecedents and outcomes, in the expected direction. Three of the four empowerment dimensions, meaning, self-determination, and impact, are significantly correlated with each of the antecedents and consequences (except with the singular exception of the insignificant impact-conscientiousness relationship). Also of note are the significant correlations between the antecedent variables and the outcome variables (bar conscientiousness). Thus, at this stage it appears that the independent variables as well as the empowerment variables might be important in explaining the variance in work outcomes.

Surprisingly, the competence dimension of empowerment exhibits no significant correlations with four of the six hypothesised antecedents to empowerment. Additionally, of these two significant correlations, the competence-supervisor support relationship is in the opposite direction to that proposed. Generally, however, it appears that there are

Table 4. Pearson Correlations Between Scales ^a

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Gender	-															
2 Age	-.08	-														
3 Education	.02	-.38	-													
Empowerment																
4 Empowerment (overall)	.02	.17	-.13	-												
5 Meaning	.10	.14	.04	.67	-											
6 Competence	.17	.27	-.25	.42	.13	-										
7 Self-determination	.02	.13	-.16	.73	.32	.35	-									
8 Impact	-.09	.06	-.06	.85	.42	.13	.42	-								
Antecedents																
9 Interpersonal trust	.08	-.05	-.03	.34	.33	-.07	.22	.32	-							
10 Supervisor support	.09	-.11	-.01	.26	.21	-.14	.17	.29	.58	-						
11 Peer cohesion	.12	-.12	-.02	.18	.15	.03	.16	.13	.45	.39	-					
12 Access to resources	-.03	-.03	-.17	.33	.26	.08	.22	.29	.55	.38	.26	-				
13 Access to information	.10	-.02	-.10	.33	.26	.08	.17	.33	.56	.42	.24	.60	-			
14 Conscientiousness	.27	.04	.02	.23	.22	.47	.16	.03	.08	-.04	.10	.11	.16	-		
Consequences																
15 Job Satisfaction	.10	.06	-.12	.48	.53	.08	.30	.37	.55	.37	.28	.53	.43	.05	-	
16 Affective Commitment	.07	.17	-.19	.38	.31	.04	.26	.35	.45	.38	.28	.46	.43	.09	.54	-

^a $r > .12$ is significant at .05; $r > .16$ is significant at .01

relationships between the empowerment dimensions and its hypothesised antecedents and consequences worthy of further examination. Thus, initial support for hypotheses 3 to 10 is found. The simple correlations indeed show positive associations between the posited antecedents and empowerment. However, this initial support is tentative, as the strongest relations between variables in the framework are among the independent variables of interpersonal trust, supervisor support, access to information, and access to resources, ranging from the access to information-peer cohesion relationship ($r = .24, p < .01$) to the access to information-access to resources relationship ($r = .60, p < .01$). Of particular note are the relatively strong and positive significant correlations of the interpersonal trust variable with supervisor support, peer cohesion, access to resources, and access to information, ranging from .45 to .58. Considering these interrelations among the independent variables, it is likely that the standardised partial coefficient (β) will illustrate a different picture than that suggested by the simple correlations.

Although multicollinearity (very high correlations among variables) is purported to be not particularly problematic until correlations exceed 0.75 (Ashforth & Tsui, 1992), to be sure that the multiple regression analyses would yield accurate values of significance for the beta weights, diagnostics for the possible effects of multicollinearity were carried out. Toward this end, the Variance Inflation Factors (VIF) and measures of tolerance were generated. Myers (1990) states that VIF values above 10 point to the potential for bias resulting from multicollinearity. As all of the VIF values were below 2, it appeared that multicollinearity would not unduly affect the results. The measures of tolerance, all well

over 0.1, also indicated that multicollinearity would likely have no significant impact on the results, supporting this conclusion.

Multiple Regression Analyses

Following Baron and Kenny's (1986) procedure for examining the mediating role of variable/s, first the mediator variables (overall empowerment, meaning, competence, self-determination, and impact) were regressed on the independent variables (trust, supervisor support, peer cohesion, access to resources, access to information, and conscientiousness). The first requirement for mediation is that the independent variable/s should be significantly related to the mediating variable/s. As there are five possible mediating variables to be assessed (i.e., the four dimensions and the overall construct), five separate regression analyses were conducted for the first stage of analysis. The results for the analyses involving the meaning and competence dimensions are presented in Table 5. The results for the analyses involving the self-determination and impact dimension appear in Table 6. As these regression analyses also enabled the testing of hypotheses 3 to 8, the results of each will be discussed in turn.

At this stage it is important to note the specific approach taken in testing the hypotheses. Many of the hypotheses are exploratory in nature, that is, a priori hypotheses regarding the differential relations between the antecedent/outcome variables and each dimension of empowerment have not been explicitly specified. Rather, general relationships have been postulated, for example, 'psychological empowerment is positively related to job

satisfaction'. As well as testing for the effect of the overall gestalt of empowerment on job satisfaction, the effects of each empowerment dimension of satisfaction will also be examined. Thus, evidence that, for example, *only* self-determination impacts on satisfaction, will be taken as providing partial support for the hypothesised empowerment-job satisfaction relationship. Finally, as the demographic variables are included in their regression equations in the same capacity as the independent variables, they are usually not specifically referred to as 'demographic variables', but are included in the overall set of 'independent variables'.

First, regressing the overall empowerment construct on the independent variables reinforced earlier postulations regarding the possible confounding relationships among the independent variables. Age ($\beta = .18$) and conscientiousness ($\beta = .20$) were the only significant predictors of psychological empowerment. Together, age and conscientiousness explain approximately 20% of the variance in empowerment, indicating that approximately 80% of the variance in empowerment is unaccounted for by the present hypothesised independent and demographic variables. Thus, support is demonstrated for hypothesis 8, that conscientiousness is positively related to psychological empowerment. Additionally, older workers appear to experience higher levels of psychological empowerment. Support was not found for hypotheses 3 to 7. At this point, it appears that interpersonal trust, supervisor support, peer cohesion, access to resources, and access to information are not significant predictors of psychological empowerment within the present sample. Interestingly, conscientiousness was the only independent variable showing no correlations with the other independent variables,

except for a small relationship with access to information ($r = .16$). Coupled with the lack of significant beta weights yielded in the above regression analysis, further exploration into the confounding effects of the correlations among the independent variables was warranted.

To this end, a set of hierarchical regressions was conducted with empowerment as the dependent variable. Entering supervisor support and peer cohesion at step one, peer cohesion was the only variable demonstrating significant impact on empowerment. Entering access to resources and information at step two, the contributions of peer cohesion and supervisor support became insignificant, with access to information and access to resources each having a significant effect on empowerment. Entering trust into the final step of the hierarchical regression, none of the variables in the equation impacted significantly. It indeed looks as if the relations among the independent variables are confounding their individual effects on empowerment in the regression analyses. Acknowledging this, prior to conducting the remaining analyses, an attempt was made to explore the possibility of the creation of one or more second-order factors from a combination of the independent variables.

Conceptually, it seemed realistic that the trust in management factor could be tapping into similar elements as those measured by supervisor support, as each involves participant's perceptions of their supervisors or managers. Similarly, it seemed plausible that trust in peers could be tapping into similar elements as peer cohesion, as each involves participant's perceptions of their immediate co-workers. These two basic categories were

perceived as the only two conceptually plausible groupings that could be extrapolated from the set of independent variables. Even though access to strategic information and access to resources may seem similar at face value, and they were quite highly correlated ($r = .60$), it is the position of the researcher that they are conceptually distinct constructs. Strategic information, as can be observed in the questionnaire items (see 'appendix'), gauges the extent to which respondents 'understand the strategies and goals of the organisation'. In contrast, access to resources asks the extent to which they 'can obtain the resources to support new ideas and improvement in my unit'. These are clearly, theoretically and conceptually, distinct areas of enquiry. Drawing on the findings of a confirmatory factor analysis, Spreitzer (1995a) reported that access to resources and access to strategic information are statistically distinct. To investigate this, a principle components analysis was performed on the 6 items, yielding two separate factors, one defined by the access to information items, and one defined by the access to resources items. Thus, the two scales are acceptably conceptually and statistically distinct from one another, so they were employed as two separate predictor variables in the regression analyses.

A principle components factor analysis revealed that the suggested 'perceptions of managers' and 'perceptions of peers' groupings could not be defended statistically. Four components were extracted from the trust, peer cohesion, and supervisor support scale items. Three of the supervisor support and all of the faith in management subscale items loaded significantly onto the first factor. The trust in peers items loaded exclusively and significantly onto the second factor. All of the supervisor support items and three of the

peer cohesion items loaded onto the third factor, while three of the peer cohesion items loaded onto a fourth factor. The double loadings of the supervisor support items, generally equal in magnitude across the two factors, indicated that their proposed grouping with the trust in management items was not justifiable. As peer cohesion failed to load onto the factor defined by the trust in peers scale items, this possibility was also ruled out. The factor structure also negated the possibility of any other statistically meaningful groupings. Thus, the remaining regression analyses were performed using the original framework of independent variables: interpersonal trust, supervisor support, peer cohesion, access to resources, access to information, and conscientiousness.

The results of the second analysis, regressing the meaning dimension on the independent variables, are presented in Table 5. Similar to the findings of the previous regression analysis, both age and conscientiousness positively impacted on the meaning empowerment dimension, exhibiting beta weights of similar magnitude (.21 and .18, respectively). Also, however, both trust and education were found to significantly and positively impact on the meaning dimension. Thus, partial support for hypothesis 3, that interpersonal trust is positively related to empowerment, is demonstrated. These results suggest that older, more educated individuals, perceiving greater levels of interpersonal trust and exhibiting higher levels of conscientiousness, tend to experience more meaning in their task activities.

Table 5. Mediators (Meaning and Competence) Regressed on Independent Variables

Variable	<i>F</i>	<i>R</i> ²	β
Mediator: meaning	5.9 ^c	.16	
Control variables			
Gender			.04
Age			.21 ^b
Education			.14 ^a
Independent variables			
Trust			.20 ^a
Supervisor support			.06
Peer Cohesion			-.01
Access to resources			.12
Access to information			.03
Conscientiousness			.18 ^b
Mediator: competence	11.54 ^c	.30	
Control variables			
Gender			.09
Age			.18 ^b
Education			-.16 ^b
Independent variables			
Trust			-.16 [†]
Supervisor support			-.10
Peer Cohesion			.07
Access to resources			.07
Access to information			.07
Conscientiousness			.41 ^c

[†]*p* < .057, ^a*p* < .05, ^b*p* < .01, ^c*p* < .001

Regressing the competence dimension on the independent variables yielded some similar results relative to the previous regression analysis. The impact of age and conscientiousness on competence was significant and in the positive direction. The beta weight for conscientiousness (.41) is an interesting finding, as it is more than twice as large in magnitude than for any of the other empowerment dimensions. Surprisingly, both trust ($\beta = -.16$) and education ($\beta = -.16$) were shown to have a negative impact on competence. It appears that individuals with a higher level of education experience lower levels of perceived competence. Although small in magnitude, the direction of the beta weight for trust suggests that higher levels of trust lead to lower levels of perceived competence. This finding reinforces conclusions made in previous studies that different

contextual variables can differentially affect the four dimensions of empowerment (e.g., Liden et al, 2000), and provides partial evidence against the proposition that perceptions of trust positively impact on psychological empowerment (hypothesis 3), serving to counteract the earlier evidence in support of this proposition.

Conscientiousness was the only predictor variable exerting a reliable effect on the self-determination dimension of empowerment, explaining only 8% of variance (Table 6). Both supervisor support ($\beta = .16$) and access to strategic information ($\beta = .17$) were found to have significant effects on impact, together explaining only a small amount (14%) of variance, lending partial support for hypotheses 4 and 7. Specifically, it appears that higher levels of supervisor support and access to information lead to higher perceived levels of the impact dimension of psychological empowerment.

In sum, there are several key points to be made after examination of the testing of the first step in mediation and in assessing hypotheses 3 to 8. Firstly, due to the small amount of explained variance in the overall empowerment construct and in each of the empowerment dimensions, the present model illustrates a marked lack of goodness of fit in terms of trying to map variables onto the constructs of interest, psychological empowerment. Secondly, all of the significant hypothesised relationships found between the independent variables and psychological empowerment (including each empowerment dimension) are eligible for further testing in step two of Baron and Kenny's (1980) three-step procedure. Thus, peer cohesion and access to resources

Table 6. Mediators (Self-determination and Impact) Regressed on Independent Variables

Variable	<i>F</i>	<i>R</i> ²	<i>β</i>
Mediator: self-determination	3.18 ^b	.08	
Control variables			
Gender			-.02
Age			.11
Education			-.11
Independent variables			
Trust			.09
Supervisor support			.08
Peer Cohesion			.04
Access to resources			.11
Access to information			-.02
Conscientiousness			.14 ^a
Mediator: impact	5.02 ^c	.14	
Control variables			
Gender			-.12
Age			.08
Education			.01
Independent variables			
Trust			.10
Supervisor support			.16 ^a
Peer Cohesion			-.01
Access to resources			.08
Access to information			.17 ^a
Conscientiousness			.04

^a*p* < .05, ^b*p* < .01, ^c*p* < .001

will not be considered as possible constituents in subsequent mediation analyses, and no support is found for their proposed relationships to empowerment (hypotheses 5 and 6). Consistent support was found for hypothesis 8, with conscientiousness significantly impacting on the gestalt of empowerment, meaning, competence, and self-determination, all in the expected positive direction. Partial support was found for hypotheses 4 and 6, that is, supervisor support and access to information each demonstrate a significant effect on the impact dimension of empowerment. The trust-empowerment hypothesis received mixed support, due to its positive impact on meaning and the counteracting effect of its negative impact on competence. However, the beta weight of .20 on meaning qualified interpersonal trust to be considered for further tests of mediation. Although not explicitly

hypothesised, as age and education showed significant effects on multiple dimensions of empowerment (meaning and competence), and age had an effect on overall empowerment, these were also considered in subsequent testing for mediation.

To test for the second step of mediation, the dependent variables were regressed on the independent variables (Table 7). Satisfying the second requirement of mediation, the beta weight for trust was significant with job satisfaction as the dependent variable, and the beta weight for age was significant with affective commitment as the dependent variable.

Table 7. Regression Analysis of Dependent Variables on Independent Variables

Variable	Job Satisfaction			Affective Commitment		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Control Variables						
Gender	.34	.95	.10	.15	.19	.05
Age	.01	.01	.11	.02	.01	.21 ^a
Education	.09	.11	.01	-.05	.09	-.03
Independent Variables						
Trust	.48	.11	.34 ^b	.14	.09	.13
Supervisor support	.04	.26	.01	.38	.22	.12
Peer cohesion	.15	.29	.03	.37	.24	.10
Access to resources	.29	.07	.31 ^b	.19	.06	.25 ^a
Access to information	.04	.08	.04	.11	.06	.13
Conscientiousness	-.10	.13	-.04	.02	.11	.01
Adjusted <i>R</i> ²	.38			.33		
<i>F</i>	16.68 ^b			13.40 ^b		

^a $p < .01$, ^b $p > .001$

Accordingly, the two variables age and trust were considered in the final stage in testing for mediation. A finding of note in this analysis is the significant positive impact of access to resources on both job satisfaction ($\beta = .31$) and organisational commitment ($\beta =$

.25). Clearly, interesting relationships are evident aside from those hypothesised.

The dependent variables were regressed on the mediating variables, with the independent variables included in the equation, to test the third stage of mediation (Table 8). First, with the demographic and independent variables controlled for, meaning demonstrated a highly significant, moderate positive effect on job satisfaction ($\beta = .37$), lending partial support to hypothesis 9.

Table 8. Regression Analysis of Dependent Variables on Mediating Variables (With Independent Variables Included)

Variable	Job satisfaction			Affective commitment		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Control variables						
Gender	.35	.20	.09	.22	.19	.07
Age	.02	.01	.02	.01	.01	.20 ^b
Education	-.07	.10	-.04	-.07	.09	-.05
Independent variables						
Trust	.38	.10	.28 ^c	.09	.09	.08
Supervisor support	-.06	.24	-.02	.26	.22	.09
Peer cohesion	.14	.26	.03	.39	.24	.10
Access to resources	.24	.06	.26 ^c	.17	.05	.24 ^b
Access to information	.01	.07	.02	.09	.06	.12
Conscientiousness	-.29	.13	-.13	.05	.12	.03
Mediating variables						
Meaning	.52	.08	.37 ^c	.05	.07	.05
Competence	.06	.14	.03	-.18	.13	-.09
Self-determination	.04	.07	.04	.06	.07	.06
Impact	.03	.05	.04	.08	.04	.14 ^a
Adjusted <i>R</i> ²	.51			.35		
<i>F</i>	18.96 ^c			10.38 ^c		

^a $p < .05$, ^b $p < .01$, ^c $p < .001$

Furthermore, the significant and positive beta weight for impact with affective commitment as the dependent variable provided partial support for hypothesis 10, that psychological empowerment is positively related to affective organisational commitment.

The beta weight for trust, with job satisfaction as the dependent variable, remained significant after entering the empowerment dimensions into the equation, ruling this pathway out for complete mediation. However, as the beta weight for trust is less in the third step ($\beta = .28$) (i.e., regressing the mediating variables on the dependent variables, with the mediating variables included) than in the second step ($\beta = .34$) (i.e., regressing the dependent variables on the independent variables), then evidence is found for the partial mediation pathway of trust→meaning→job satisfaction. The beta weight for age remained significant with the empowerment dimensions in the equation, again ruling out any possibility of complete mediation. As impact had no significant effect on commitment in the third step, any partial evidence for the age→impact→commitment pathway was not present.

To investigate the possibility of the mediating effect of overall empowerment on the relationship between age and commitment, and to further examine the validity of hypotheses 9 and 10, the dependent variables were regressed on the mediating variable (overall empowerment), with the independent variables in the equation. The beta weight for age in this equation was the same than that for the previous equation (.21), ruling out evidence for the partial mediation pathway of age→empowerment→commitment. The overall empowerment construct impacted significantly and positively on affective commitment ($\beta = .16$) when entered with the independent variables in the equation, with

the complete, all-in model accounting for 35% of variance. However, as the beta weight for impact (.14) is almost equal to that of the overall empowerment construct, it appears that this one dimension is accounting for the majority of variance. The overall construct of empowerment demonstrated a significant effect on job satisfaction ($\beta = .30$), with the complete predictive model (i.e., empowerment, independent variables, and demographics) explaining approximately 50% of the variance in satisfaction. However, in light of the sizeable impact of meaning on job satisfaction ($\beta = .37$), it is clear that this dimension is the major contributor to the outcome of satisfaction. For this reason, partial support is found for hypotheses 9, that empowerment is positively related to job satisfaction. Thus, it appears that people who experience higher levels of psychological empowerment are likely to be more satisfied in their work (through feelings of meaning) and to harbour greater feelings of affective commitment toward their organisation (through feelings of impact).

Discussion

For the purpose of further discussion, several key points can be extracted from the above findings. Support was found for the structural validity of psychological empowerment (hypotheses 1 and 2). Evidence for one partial mediation pathway was found: trust→meaning→job satisfaction, providing limited support for hypothesis 11. Robust support was demonstrated for hypothesis 8, that conscientiousness is positively related to psychological empowerment, and partial support was found for hypotheses 9 and 10. It appears that meaning was the sole predictor of job satisfaction, and impact was the sole predictor of affective commitment. Overall, a moderate amount of variance was explained in job satisfaction and affective organisational commitment by the total set of demographic variables, independent variables, and empowerment variables. Partial support was found for hypotheses 3, 4, and 7. Specifically, trust was positively related to the meaning dimension and negatively related to competence, and supervisor support and access to strategic information were positively related to impact. No support was found for hypotheses 5 and 6, that peer cohesion and access to resources would be related to empowerment. Overall, the hypothesised variables explained only a small amount of variance in empowerment.

Other interesting relationships were evident aside from those initially proposed. The direct effects of some of the independent variables on each work outcome highlights the limited mediating role of empowerment in the present model. Trust and access to

resources impacted significantly on job satisfaction, and age and access to resources impacted significantly on affective commitment. The effect of age on overall empowerment and the effects of both age and education on meaning and competence are interesting findings, particularly considering the consistent demonstrated relationships between conscientiousness and psychological empowerment. In the present model, it appears that both individual characteristics and contextual characteristics are important in determining levels of empowerment. The proceeding discussion further explores these issues, and outlines their implications for organisations.

Confirming the more complex notion of empowerment proposed by Thomas and Velthouse (1990), whom extended the construct beyond the unitary dimension of self-efficacy (Conger & Konungo, 1988) to incorporate feelings of meaning, self-determination, and impact, the present study found evidence for a four dimensional factor structure, with each dimension combining to form an overall gestalt of psychological empowerment. Furthermore, each subscale yielded acceptable alpha internal reliability coefficients. This study contributes to the mounting evidence for the structural validity of Thomas and Velthouse's (1990) model, and adds further credence to the measure by replicating its psychometric properties in a different geographical location (i.e., New Zealand), and in a non-managerial, primarily female sample. The majority of published empirical studies utilizing the measure have been in the United States (e.g., Spreitzer, 1995a, 1995b), but it has also been used in Canada (e.g., Gagne et al, 1997) and the Netherlands (Janssen & Shuiling, 1998), each of these studies reporting the validity of the

multidimensional operationalisation of psychological empowerment. All in all, it appears that the cross-cultural generalisability of the construct is emerging.

The findings of this study indicate that the utility of the measure is evident not only in primarily male, managerial populations (e.g., Spreitzer et al, 1997), but also in a non-managerial, primarily female population. Statistics indicating that an increasing number of women are entering the workforce as traditional gender-roles are disseminated (Barner, 1996) exacerbates the necessity to ensure the applicability of the measure to females as well as males. The suggestion that patterns of male domination exist in organisations due to the over-representation of females in lower-levels of the hierarchy (Koberg et al, 1999) amplifies this necessity. Although it is suggested that empowerment is particularly relevant to individuals in managerial roles due to the inherent ambiguity and challenge of the position (Spreitzer et al, 1997), the present findings illustrate that empowerment is equally important to individuals holding non-managerial positions. Previous research involving non-managerial populations supports this conclusion (Kramer et al, 1999), indicating that empowerment is indeed a crucial concern for lower-echelon employees in relation to their social-structural work environment, the roles they play in the wider organisation, and their perceived quality of work life.

Establishing a common understanding and operationalisation of psychological empowerment is critical in insuring the continued and valid knowledge growth of the area. A pertinent example is in the field of personnel selection in relation to the study of personality. Until fairly recently, evidence for the criterion-related validity of personality

traits, that is, evidence that specific personality traits predict important work-related outcomes, was scarce and inconsistent (Furnham, 1992). For example, numerous reviews of personality instruments reported little to no validity for predicting work-related performance (e.g., Guion & Gottier, 1965). This led human resources practitioners and personality researchers to question the utility of the use of personality instruments in personnel selection (Salgado, 1997). More recent reviews, however, reported stronger and more consistent evidence for the criterion-related validity of personality in personnel selection (e.g., Barrick & Mount, 1991). The major reason stated for these encouraging findings was that, where previous reviews were based on the results of studies utilizing a multitude of different instruments, with each instrument measuring a diversity of traits inconsistent in their conceptualization and labeling (Furnham, 1992), the more recent reviews utilised the emerging five-factor model as a framework for integrating and organizing this diversity (e.g., Widiger & Trull, 1997). Resulting from the general consensus among researchers that there are five robust factors which serve to meaningfully and thoroughly classify the numerous possible personality traits (Digman, 1990), productive work began in identifying which specific outcomes are related to which of the five personality factors. In a similar manner, the emergence and widespread acceptance of the four-factor model of psychological empowerment will contribute to an increased understanding of its specific antecedents and consequences.

A surprising finding was that peer cohesion was not a significant predictor of perceptions of meaning, competence, self-determination and impact. As previously mentioned, it is evident that the correlations among the contextual-specific independent variables served

to suppress the effect of peer cohesion (and these other independent variables) on the empowerment dimensions. As the peer cohesion measure appeared to be tapping into similar content areas as supervisor support, access to resources/strategic information and interpersonal trust, it would perhaps be beneficial in future research to utilise a more encompassing measure incorporating all or some of these elements. It is important to note, however, that if one were to adopt this approach the specificity of prediction would be lost, in that one would not be able to gauge the separate effects of each of these environmental characteristics on the empowerment dimensions.

An example of a study adopting more encompassing measures in examining their relations to empowerment was conducted by Liden et al (2000). The chief environmental variables posited to be positively related to psychological empowerment were Team Member Exchange (TMX) and Leader Member Exchange (LMX). Team member exchange generally refers to the quality of relationships among team members (Seers, 1989), and LMX refers to the quality of relationships between the leader and subordinates (Liden & Graen, 1980) (although thorough discussions of LMX and TMX are decidedly more complex, these definitions are considered adequate for the present purposes). Such relationships are characterized by elements such as emotional support, information, material resources, and/or physical or mental effort exchanged between parties (Liden et al, 1997). These are evidently very general measures, and comprise many factors included in the model examined in the present study. Liden et al (2000) reported significant relationships between LMX and empowerment, but not between TMX and empowerment. In this case, the use of a broader, more inclusive measure of co-worker

relationships also yielded non-significant findings. Two further points relevant to the present discussion can be made from the outline of the above study. First, even if TMX was significantly related to the empowerment dimensions, no information could be gleaned as to which specific relationship characteristics accounted for the associations. For example, whether the finding was due to emotional support, the exchange of resources, or both. Second, as no significant relationship was found between TMX and empowerment, coupled with the non-significant findings of the present study, one could conclude that positive co-worker relationships are not important contributing factors to the experience of psychological empowerment.

However, various lines of reasoning should be considered before drawing firm conclusions regarding the insignificant relationship between peer cohesion and empowerment. First, it is possible that failing to take into account group-level phenomena is clouding the true effect of peer cohesion on empowerment. The pooling of data rather than the investigation of possible group level differences in cohesion and empowerment levels may have led to the non-significant findings. Thus, analyzing cohesion and empowerment at the group level of analysis is an avenue for future research. It seems plausible that the enhanced functioning resulting from a cohesive group could lead to a greater *collective* sense of empowerment. This concern is inherent in work on collective efficacy, within which the criticality of group level phenomena is evident (Maddux, 1999).

Second, perhaps the work units to which the participants belonged were not characterized by the high level of interdependence required for the effects of cohesion to become apparent (Cratty, 1989). Mullen and Copper (1994) argue that cohesiveness is a figurative “lubricant” that curtails the negative effect of the human “grit” in the system (p. 213). Perhaps the primarily administrative positions held by participants in this study were independent enough not to be particularly adversely impacted by the human “grit” in the work unit, rendering cohesiveness a relatively minor issue.

A third possibility is that a high level of cohesiveness could lead to greater feelings of group empowerment, while simultaneously leading to lower levels of individual empowerment. Research shows that membership in cohesive groups can lead to lower feelings of personal control, due to the group exerting pressure on individuals to conform to group norms (Festinger, Back, Schachter, Kelley, & Thibaut, 1952). Thus, it is possible that individuals become involved in group membership and efforts to conform to group norms to the detriment of personal feelings of empowerment. On the whole, it is clear that further research on the effects of peer cohesion on empowerment, integrating these factors into research design considerations, is necessary before precise conclusions can be drawn.

Access to resources, rather than being related to psychological empowerment, was found to directly contribute to feelings of satisfaction at work and to a sense of emotional attachment to the organisation. Again, access to resources was moderately correlated with access to information, interpersonal trust, supervisor support and peer cohesion, serving

to confound its impact on psychological empowerment dimensions. Similarly, Spreitzer (1996), in attempting to explain the non-significant effect of resource availability on empowerment, stated that its effect was suppressed due its moderate correlation with sociopolitical support. A comparable situation was reported in a previous study (Spreitzer, 1995b), where again access to resources was not a significant predictor of empowerment. Spreitzer (1996) suggested that further testing needed to be done before drawing firm conclusions regarding the effect of resource availability on empowerment, independent of other conceptually related antecedents (e.g., access to information, sociopolitical support). As it is conceivable that employees without formal education in business or management-related courses may be unsure exactly what is meant by the term 'resources', future questionnaires employing the scale could describe this explicitly at the outset. This procedure would serve to separate out the concepts of, for example, resource availability and information availability, to ensure that respondents are clear on the differences between the two.

The notion of what precisely is meant by the term "resources" is indeed unclear in the literature. Carnall (1995) uses the phrase "control of resources" in reference to the control of almost any area of organisational functioning (p. 129). On this macro-organisational scale, resources can also mean 'human' resources. Prahalad (1997) uses the phrase "re-deployment of resources" to refer to the establishing of offshore subsidiary companies (p. 160). Thus, in the context of research focusing on intrapersonal empowerment, an attempt must be made to elucidate which types of resources are relevant and most salient to the individual employee in carrying out his or her work role. Although empirical

research in the area of resource availability is scarce, one study was found that is particularly illustrative of the measurement and operationalisation problems in this area. As proposed, Gilbert (2000) reported a significant positive relationship between resource availability and empowerment. However, the definition of resources in this study was extremely broad. More specifically, resources was defined as “tools, equipment, materials, supplies, working conditions, actions of coworkers, leader behaviour, mentorism, organisational policies, rules, procedures, information, time, and pay.....Inclusion in the bonus system, access to high-status conferences, and a host of other benefits” (p. 176). The value of this definition of resources is questionable, as it is said to mean almost any aspect of the organisation, tangible or intangible. It is probable that a more specific definition of resources is required in order for the concept to be meaningful and relevant to respondents. For example, the definition used in the present study is “the space and materials needed to accomplish tasks, for example, supplies, equipment, work space, tools (Zander, 1994), time, and funds (Spreitzer, 1995b)”. Providing such a specification would aid participants in understanding accurately what resources are and how they differentiate from other seemingly related ideas.

Keeping in mind the possible divergent understanding of the concept among participants, individuals who perceived that they had greater resource availability reported higher levels of job satisfaction and emotional attachment to the organisation. This finding is perhaps not altogether surprising, as the provision of adequate resources to employees is often promoted as a means of gaining a more satisfied and committed workforce (Lin, 1998). Intuitively, it seems reasonable that individuals whom receive adequate materials,

time, equipment and other important resources, should feel happier and experience positive affect toward the organisation. For example, Peters, O'Conner, and Rudolph, (1980) found that individuals perceiving a lack of adequate resources (e.g., poor quality tools and equipment) reported feelings of negative affect in their job. Pelchette (1993) found that resource availability was positively related to perceived career success. Feelings of success in one's career could potentially spill over to feelings of positive affect in one's work role. A key to attracting and retaining employees, aside from monetary incentives, is to provide them with the appropriate resources that serve to keep them satisfied and motivated to perform for the organisation (Harris, 2000). In order to instill within employees positive feelings of self-worth in times of change, organisations must make the acquisition of needed resources a simple and straight-forward process (Newstrom, Gardner, & Pierce, 1999).

It is possible that employees experience increased affective attachment to their organisation through a process of reciprocation. The norm of reciprocity can be defined as the obligation to reciprocate the receipt of a gift, either material and/or non-material (Gouldner, 1960). Thus, employees who received adequate resources feel a sense of obligation toward the organisation, and reciprocate the 'gift' of resources through increased feelings of emotional attachment to the organisation. Viewed from a slightly different perspective, it may be that employees are simply grateful to the organisation for making their jobs manageable through ease of resource attainment, and they consequently develop a sense of fondness toward the company. The provision of adequate resources could be perceived by the employee as an indicator of organisational support. Such

perceptions have demonstrated strong and consistent links with the development of affective commitment to the organisation (Guzzo, Noonan, & Elron, 1994; Shore & Wayne, 1993). The provision of resources, for example, emergency supplies and food, by an employing organisation to its employees in the wake of Hurricane Andrew in 1992, led to the development of sustained increases in affective commitment to the organisation (Shanchez, Korban, & Viscarra, 1995). Thus, while in the present study resource availability was not found to be important in contributing to the psychological empowerment of employees, it was found to be important in contributing to employee's satisfaction at work and their emotional attachment to the organisation. For these reasons, organisations should facilitate a work environment that supports the open sharing and distribution of resources throughout all levels of the organisation. Resource availability could be enhanced through the development and promotion of clear-cut policies aimed at making, for example, materials, staff support, funds, and equipment readily available contingent on the various requirements of different departments and work-units.

Levels of interpersonal trust at work was found to positively effect individual's perceptions of job satisfaction and meaning at work, but was found to negatively effect perceptions of task-related competence. The latter finding is surprising, and runs against the hypothesized direction of impact. It seems counterintuitive that a work environment in which people have faith and confidence in each other should lead to diminished feelings of personal efficacy in their work activities. However, looking deeper into the issue reveals at least two possible reasons for this finding. The first surrounds the 'faith' element of the concept of trust. It is possible that the level of faith in the organisation is

causing individuals to become excessively reliant on other parties, leading to a decreased sense of personally responsibility and effort. This may result in a diminished sense of competence as perceptions of personal success, independent from the efforts of others, declines. This effect may be heightened due to the associated lack of personal praise and acknowledgement from peers and management.

The second possible reason for this finding involves the increase in help-seeking behaviour suggested to occur in a trusting organisational environment (Jones & George, 1998). If an individual perceives favourable conditions of trust, he or she may be more inclined to ask for assistance from others in sorting out difficulties that may arise. It is possible, however, that other parties might construe this help-seeking behaviour as a sign of weakness, as an indication of that individual's dependence on others in order to perform tasks. These parties may make it known, either implicitly or explicitly, that they are not accepting of this individual's apparent inadequacies and lack of independence, potentially resulting in decreased feelings of personal competence. Thus, an environment which simultaneously values trust but also places great importance on independent performance may diminish feelings of personal competence in individuals who elicit help-seeking behaviour. Future research would need to address the issues of trust, competence, and the perceived value of independent versus dependent relationships to unravel these possible patterns.

As expected, interpersonal trust contributed to feelings of psychological empowerment through its effect on individual's perceived meaning at work. Additionally, trust was

found to significantly effect job satisfaction. Moreover, the meaning dimension of empowerment was found to partially mediate this relationship. Baron and Kenny (1986) note that, because most fields of psychology examine phenomena with multiple causes, a realistic goal in testing for mediation is to find a significant decrease in the beta weight of the independent variable from step two to step three, rather than the elimination of the effect of the independent variable in step three altogether. Thus, it indeed appears that in this instance, the meaning dimension of empowerment, to a certain extent, explains how interpersonal trust takes on internal psychological significance, in the form of increased feelings of job satisfaction.

The finding that the effect of a trusting environment on individual's perceptions of job satisfaction is heightened by the impact of experienced meaning is the only evidence for a mediating effect within the present study. Considering the multiple implications inherent within this mediating relationship, namely, that trust is directly related to job satisfaction, that trust is directly related to meaning, and that the relationship between trust and satisfaction is partially explained by the meaning dimension of psychological empowerment, each of these issues are discussed in turn (the direct effect of meaning on job satisfaction is discussed later).

It is perhaps not surprising that trust demonstrated significant relationships with the affectively charged constructs of satisfaction and meaning, as the psychological experience of trust is said to consist of strong emotional elements (Fridja, 1988). Moods and emotions provide signals to individuals regarding their fluctuating experiences of

trust with other parties and in different situations (Schwartz & Clore, 1988). As the meaning dimension of empowerment gauges participant's affective concerns more so than the dimensions of competence, self-determination and impact, its relationship with trust in the absence of the other empowerment dimensions is perhaps a logical finding. Themes in the literature generally support this emphasis. For example, conditions of mutual trust engender a common sense of identity among employees (Battacharya et al, 1998), facilitating an increased sense of identification of employees in their work activities (Hackman & Oldham, 1980). A trusting environment reduces perceptions of randomness between perceptions and outcomes (Battacharya et al, 1998), instilling within employees a greater sense of meaning in relation to their own performance contributions. Mishra and Spreitzer (1998) discuss how trusting relationships buffer the possible negative effects of survivor's responses to downsizing. In this respect, trusting relationships reduce the likelihood of individuals becoming estranged from the organisation, serving to maintain their sense of meaning at work (Spreitzer, 1997). The congruity of objectives and shared values in a trusting culture (Schindler & Thomas, 1993) creates the conditions necessary for employees to find a greater identification and involvement in their work (Jones & George, 1998). Higher levels of interpersonal trust results in greater feelings of affiliation and identification with, and therefore meaning in, an individual's work and the wider organisation (Shockley-Zalabak, Ellis, & Winograd, 2000).

Literature suggesting and demonstrating the effects of a trusting organisational environment on intrapersonal levels of job satisfaction is abundant. Numerous studies

have reported positive relationships between trust, the enhanced communication properties of a trusting environment, and overall measures of job satisfaction (e.g., Goldhaber, Yates, Porter, & Lesniak, 1978; Money, Shockley-Zalabak, & Cesaria, 1997). Cook and Wall (1980) found a direct positive relationship between interpersonal trust and job satisfaction. Flaherty & Pappas (2000) discuss how salesperson's perceptions of trust in the salesperson-sales manager relationship positively influenced perceived levels of job satisfaction. Theorists propose that many of the positive effects of trust result from the increased communication and cooperation of organisational members (Barker & Camarata, 1998). Thus, the findings of this study contribute to a growing body of literature exhibiting the consistent finding that a trusting organisational environment contributes to the psychological well-being and satisfaction of its members. Additionally, as apparent from the mediating relationship found, organisations must create the conditions necessary for individuals to experience a sense of meaning in their work activities for this effect to be maximized. Additionally, organisations need to promote the importance of interdependent, reciprocal work relationships to curb the possible feelings of inadequacy and decreased self-efficacy experienced by individuals exhibiting help-seeking behaviour. The traditional, individualized notion of work needs to be relinquished to make way for a more co-operative and group-oriented environment, in which the true potential for unconditional trusting relationships can be realised.

Results of this study demonstrate the positive effects that supervisors, through supportive and encouraging behaviours, can have on employees' sense of impact in the organisation. Rather than having an effect on individual's experiences of meaning, self-determination

and impact, supervisor support served to engender within employees the sense that they are making a difference in the wider organisational environment. The aforementioned finding by Liden et al (2000) that TMX was related to the impact dimension of empowerment is an illustration of this general effect. However, little is known as to which aspect of leader-member relations accounts for this relationship. For example, it could be due either to the level of perceived emotional support or to the level of resources provided by the leader, or to both. Similarly, Spreitzer (1996) found socio-political support to be related to the overall construct of empowerment, but did not conduct an analysis at the dimensional level. Thus, the present study pinpoints the more specific supervisor support-impact relationship.

Theoretical and empirical examples in the literature whereby the behaviour of leaders and/or managers is said to have an effect on how subordinates perceive themselves as having an impact on the organisation are common. Newstrom et al (1999) suggest that respectful and supportive managerial styles can create within individuals enhanced perceptions that they are contributing to organisational success. By eliciting ideas from employees about how to make improvements in their work unit, supervisors can make employees feel valuable about their contributions (Newstrom et al, 1999). Newstrom et al further state that supervisors can endorse employees' feelings of worth in the organisation by offering praise when they perform well, and by offering constructive criticism when performance is below standard. Employees who are guided and facilitated by a supportive leader are likely to take initiative and seek out ways to influence the attainment of work unit goals above and beyond formal job requirements (Campbell,

2000). Corsun and Enz (1999) found that supportive work relationships enhanced employee perceptions of influence among service workers, and Seigall & Gardner (2000) reported a significant positive relationship between facilitative supervisor-subordinate communication and the impact dimension of psychological empowerment. Considering the above evidence together with the findings of the present study, it appears that managers who provide support, encouragement, and are respectful to employees, as well as being receptive to employees' ideas, are likely to enhance perceptions of impact among organisational members. For this reason, organisations could make fuller use of various selection methods identifying, for example, potential manager's facilitative and/or relational skills, in combination with more traditional selection methods. In the case of existing managers or supervisors, training programs could be provided by the organisation targeting the development of supportive and encouraging management practices, such as the provision of symbolic rewards (e.g., medals, trophies) to recognize the efforts of subordinates, and the provision of regular, constructive feedback on successes as well as failures.

Reinforcing the findings of previous studies (e.g., Kirkman & Rosen, 1999; Spreitzer, 1995a, 1996), access to strategic information was found to increase perceptions of psychological empowerment, although the present study found that this effect was solely directed towards the impact dimension. Even though the differential effects of access to strategic information on the four empowerment dimensions was not assessed in these earlier studies, it is possible that impact may have been the dominant factor considering the strong conceptual links between the two, as will be discussed. The present findings

extend the importance of strategic information beyond the commercially oriented private sector (within which these previous studies were based) into a public service organisation. It could be suggested that statements of strategic intent are not as important in tapping the energy of a workforce in a public service organisation, but the findings of this study indicate that this is not necessarily the case.

Various management theorists and researchers put forward sound arguments that serve to underpin the finding that perceptions of access to strategic information have an effect on employees' sense of impact in their work role. Bass (1985) provides a particularly vivid example of this in his discussion of the transformational leadership model. Central to the transformational leadership framework is the communication to employees of a futuristic vision, appealing to and engaging employees' fundamental principles and desires. This process leads to the development of a shared vision, resulting in the adoption by employees of the organisation's values and goals and an intrinsic drive to fulfill them. Perceived roles in the organisation become increasingly salient and personally important, enhancing employees' sense that they are making a difference in the goal-attainment of their work units and in the success of the wider organisation. McKenna (1992) supports this assertion, adding that the communication and promotion of vision statements sends a message to employees that they are invited to take whatever steps necessary to uphold these ideals. According to McKenna, this leads to the positive personal development of employees because they perceive they have the flexibility and support to pursue their own initiatives in line with over-arching organisational goals. Holding employees responsible for their results and providing regular feedback in relation to specific job-

related outcomes illuminate their perceived impact on work-unit functioning and performance.

This general argument is supported in numerous studies reporting that the communication of strategic intent, in the form of an inspirational and meaningful vision or mission statement, is crucial in the implementation of various empowerment initiatives (e.g., Bowen, 1997; Halder, 1994). For this reason, it is crucial for vision statements to be communicated and understood at all levels of the organisation (Walmsley, 1999). In the words of Nido (1999), if employees are to become “intelligent action takers”, they must identify with and embrace the corporate mission (p. 4). Thus, access to strategic information indeed seems to be an important factor in developing a proactive workforce harbouring a sense that they have an impact on work outcomes. Organisations could utilise a wide range of mediums to communicate business strategies and goals more effectively. Email and employee-accessible websites could potentially be very effective means for facilitating the increased understanding of the organisation’s vision, in addition to departmental notice board postings, informative pamphlets, and increased contact and communications between senior management, management, and front-line staff.

The finding that age, education and conscientiousness were, taken together, significant predictors of three of the four empowerment dimensions indicates that, in the present study, individual characteristics are indeed important in their effects on intrapersonal empowerment. Although the emphasis has been on contextual factors in relation to empowerment in the majority of research in the area (e.g., Kraimer et al, 1999; Seigall &

Gardner, 2000), emerging research is beginning to recognise the central role of individual characteristics in contributing to feelings of psychological empowerment (e.g., Koberg et al, 1999). Bandura (1989) points out the critical function of individual factors in their interplay with the environment and behavioural outcomes. Thomas and Velthouse's (1990) seminal cognitive model of empowerment included people's interpretive styles and global task assessments as important components. Considering this, the finding that conscientiousness positively affects people's experiences of meaning, competence, self-determination and overall empowerment is particularly noteworthy. This indicates that, in a given situation, more conscientious individuals are more likely to experience greater psychological empowerment relative to less conscientious individuals. First, the findings involving age, education, job satisfaction and affective commitment are discussed, and their implications for organisations. A discussion of the implications of the demonstrated association between conscientiousness and psychological empowerment for organisations will follow.

The results indicate that older workers relative to younger workers are more likely to experience a sense of overall psychological empowerment, dominated by the meaning and competence dimensions, in their work role, and are more likely to develop greater feelings of emotional attachment to the organisation. It is possible that older employees, as a result of ongoing exposure to the values and norms of the organisation, have assimilated these into their own value system, resulting in an enhanced sense of meaning in one's job. Conversely, younger employees may experience a lack of fit between their beliefs and attitudes and those of their new work environment, and fail to perceive

personal significance in their jobs. Additionally, perhaps older employees have been socialized to invest more of their personal identity into their work and organisation, whereas younger employees hold a clearer distinction between their individual identity and that of the organisation. A rational explanation for the finding that older workers perceive themselves to be more efficacious in their ability to perform tasks is that it is due to their accumulated knowledge, skills and abilities, coupled with their repeated experiences of success as well as their increased opportunities over the years to observe the successful task behaviour of others. Younger workers may be struggling to cope with new ideas and procedures, leading to feelings of anxiety and self-perceptions of inadequacy.

These results are significant in light of recent trends suggesting the emergence of negative attitudes of organisations toward older workers (Holly, 2000). Hodge (2000) stresses the necessity for organisations to recognize the increasing number of older workers entering the workforce and comprising society as a whole, and states that the skills and experience of older workers should be seen as valuable by prospective employers. The finding of the present study that older workers feel more competent and experience a greater sense of meaning in their work lends support to this view. Further impetus is afforded to this perspective by the finding that older workers are more likely to experience a heightened level of affective commitment to the organisation.

A possible explanation for this latter finding is that older workers operate under a “socially responsible norm of benevolence that embodies a prosocial moral orientation

and a belief in the moral imperative of helping others without regard to future personal benefit”, while younger workers operate under a “norm of reciprocity that is transactional and requires a fair exchange in return for assistance”(Wagner & Rush, 2000, p. 381).

Simply put, older workers may be more likely to feel a sense of obligation and commitment to the organisation relative to younger workers given the same organisational environment. The above discussion and the results of this study indicates that organisations would be well-advised to acknowledge the value of older employees and adjust selection, promotion, and/or redundancy policies accordingly, as they are more likely to experience a sense of psychological empowerment and to feel affectively committed to their organisation.

An interesting finding was that higher levels of education were associated with enhanced perceptions of meaning but *diminished* perceptions of competence. Although these findings do not appear to be in accordance with one another, there is at least one, albeit tentative, plausible explanation. It may be the case that individuals achieving higher levels of education have been socialized, through their involvement in academic institutions, towards feeling that work is more than purely an undertaking instrumental in the accumulation of monetary gains. Rather, it is an opportunity to find meaning in one’s life and to make a valuable contribution to society. In turn, this is likely to lead to enhanced feelings of identification with, and psychological involvement in, one’s work activities. These same socialization experiences in academic institutions could, however, lead to the development of higher intrinsic performance expectations and standards. Thus, within a work context, higher educated individuals may find it difficult to satisfy

these high expectations, resulting in decreased feelings of competence relative to less educated individuals, who perhaps do not strive to attain such high standards.

Although not stated explicitly, evidence in the literature generally supports the finding that education contributes to a sense of meaning at work. For example, Konstantin (2000) discusses how continuing education, particularly in the area of information technology, can aid employees in identifying and connecting with a modern, technological work environment. An increase in job-related knowledge through education leads to the internalization of the core goals and principles of the job, resulting in an enhanced level of meaningful engagement in one's work activities (Landuyt, 2000). However, as more educated individuals may simultaneously experience decreased feelings of competence, these findings suggest that in order for individuals to experience the full advantages of having an education in a work role, organisations need to provide visible rewards and recognition to those who might perceive that they are not performing to acceptable levels. Providing recognition to those holding high intrinsic performance standards could serve to instill within employees greater feelings of personal achievement and confidence, and, thus, a greater sense of competence in one's work.

The overall construct of empowerment was found to positively impact on both job satisfaction and affective commitment. Examining the differential effects of each empowerment dimension revealed that meaning was the only significant contributor to

job satisfaction, and impact was the only significant contributor to affective commitment. This underscores the importance of analysing psychological empowerment at the multidimensional level, as, rather than erroneously discussing these findings using overall empowerment as the major focus, one is enabled to discuss these findings in light of the more specific meaning-job satisfaction, impact-affective commitment relationships.

The results of this study suggest that employees who see themselves as having a greater impact on the performance of their work unit and the wider work environment experience higher levels of emotional attachment to the organisation. Previous studies have reported similar findings. For example, Koberg et al (1999) found that increased levels of psychological empowerment were positively associated with a decreased propensity to leave the organisation. Intentions to leave has been shown to be significantly and positively related to affective commitment (e.g., Tett & Meyer, 1993). Kirkman and Rosen (1999) found that more psychologically empowered teams reported greater levels of commitment to their organisation, and Wiley (1999) found that individual's perceived locus of control (similar to impact, but on a global, rather than task-specific level) in a health service environment was important in determining levels of commitment to the organisation. Equivalent to the present findings, Kraimer et al (1999) found that impact was the only dimension of empowerment to be significantly related to organisational commitment. Thus, it appears that impact may indeed be the dominant factor in determining levels of commitment to the organisation.

Research focusing on affective commitment to the organisation is generally indicative of this effect. Various management styles, techniques and methods of organizing have been identified as key factors in developing a sense of affective commitment within employees. For example, job enlargement is a method of increasing the scope of tasks that an individual performs in his or her job, and can be achieved by merging several related operations (Mullins, 1996). This method could conceptually lead to incumbents feeling an amplified influence in the work environment, through greater involvement in a wider range of functions. Significantly, job scope has been found to have positive associations with affective commitment (Mathieu & Zajac, 1990). Other methods or management styles that could plausibly lead to an enhanced sense of impact within individuals include an increased participation in decision making and the granting of greater latitude in relation to one's activities. Although the latter is more closely related to self-determination or autonomy (e.g., Bell & Staw, 1989), each could potentially lead to an increase in employee's perceived personal control over the work environment. The finding that affective commitment has been positively related to both participation in decision making (Rhodes & Steers, 1981) and job latitude (Gregerson & Black, 1992) is again particularly significant to the present discussion.

Cappelli (1999) discusses the advantages a committed workforce affords organisations in an era of downsizing, less job security, and the change in the psychological contract from one of employee dependence to one marked by mutual responsibility and self-dependence. Cappelli goes on to state that it is common for organisations to cut back on

investments in training due to the perceived and real threat of losing valuable employees to competition. Additionally, the rise of contingent work has led to a workforce holding distinctly looser emotional and obligatory ties to their employing organisations. Thus, according to Cappelli, a key to effective management in these conditions is to allow greater control and discretion toward the aim of an empowered environment, generating loyalty and commitment within employees. Organisations should therefore create the conditions necessary for individuals to experience an increased sense of impact in their work environment. Some possible methods of achieving this include allowing greater decision making discretion to employees, and increasing the scope of individual work roles to encompass a greater variety of operations. As derived from the findings of the present study, supportive supervisor behaviours and the provision of strategic information are inductive of enhanced feelings of impact, and thus should be afforded particular attention.

Of the four empowerment dimensions, a sense of meaning was the sole significant contributor to creating a sense of job satisfaction in the present sample. Thus, when individuals feel that their job activities “count” in their personal value system (Hackman & Oldham, 1980), and they feel a sense of attachment in their job rather than a sense of estrangement (Seeman, 1967), they are more likely to experience feelings of satisfaction at work. The relationship between experienced meaning and satisfaction in one’s job is implicit in early theoretical work on job satisfaction. For example, Vroom (1964) saw job satisfaction as the extent to which an individual is provided with positively valued

outcomes. Locke (1976) saw job satisfaction as a reflection of the degree to which the workplace provided individuals with what they desire or value. Hackman and Oldham's (1980) advocacy for organisations to provide employees with more personally meaningful work activities was in aid of making jobs more intrinsically satisfying and motivating. It is clear, then, that the psychological constructs of meaning and job satisfaction are each heavily value-laden, and thus are closely related conceptually.

This conceptual relationship is reflected previous studies examining the relationship between empowerment and job satisfaction. Spreitzer et al (1997) found that meaning was the most powerful predictor of job satisfaction of the four dimensions, and reported this effect in two independent samples. Both Kirkman and Rosen (1999) and Koberg et al (1999) found a positive association between psychological empowerment and job satisfaction, although, with regard to the present discussion, these findings must be interpreted with caution as the specific effect of the meaning dimension in these studies was not examined. In addition to the empirical work, numerous accounts in the management literature are also connotative of the relationship between meaningfulness at work and feelings of job satisfaction. Brink (2000) states that organisations that realise the necessity of aligning businesses needs with those of employees, and who acknowledge and support employees' internal desires to make meaningful contributions, will reap the benefits of a satisfied workforce. Brown (2000) reports how greater levels of participation in decision making by employees, enabling a greater personal connectedness to their work, leads to diminished job stress and enhanced job satisfaction.

All in all, experiencing meaning in one's work activities is important for the development of job satisfaction. The findings of the present study support this assertion. The significance of this for organisations is more fully realised when one considers the potentially positive benefits of satisfaction in increasing job performance and decreasing employee withdrawal behaviours (e.g., turnover and absenteeism) (Lawler, 1995).

Although the relationship between satisfaction and performance is not well established, and in fact it may be that the more significant effect is that of performance leading to satisfaction (Brief, 1998), studies show that satisfaction is positively associated with lower levels of absenteeism (George, 1989), lower turnover (Ross & Zander, 1957), and pro-social behaviour (Puffer, 1987). As previously mentioned in the section outlining the hypotheses, several studies have demonstrated a significant positive association between job satisfaction and contextual behaviours (Brief, 1998). Thus, in facilitating an environment in which employees can experience a sense of meaning, and thus feelings of job satisfaction, organisations can potentially enjoy the benefits of increased task and contextual performance, and lower rates of turnover and absenteeism. Several methods could be adopted by organisations in efforts to enhance employee's experiences of meaning at work. Realistic job previews in recruitment and selection procedures allow prospective employees to get a sense of whether their values and desires are likely to fit those of the employing organisation. Hackman and Oldham (1980) describe how directly altering aspects of one's work activities, for example, the implementation of job enrichment initiatives, can lead to an increased sense of meaning. As the findings of the present study reveal, the creation of a trusting work environment also can contribute to

greater feelings of meaning. These are all possible areas for organisations to consider in fashioning a meaningful work environment.

As expected, conscientiousness was a significant predictor of overall psychological empowerment, explaining variance in three of the four empowerment dimensions: meaning, competence and self-determination. Impact was not related to conscientiousness in the present study. Thus, individuals who are persevering, hardworking, achievement-striving, dependable, thorough, and organised, experience greater levels of meaning, competence, and self-determination in their work activities. There are two major implications of this finding for organisations. First, if organisations are prepared to acknowledge and accept the accumulating evidence of the numerous advantages of a psychologically empowered workforce, the possibility of gaining a workforce who are predisposed to experience feelings of empowerment is encouraging indeed. Considering the findings of the present study indicating that conscientious individuals are more likely to be empowered in a given environment, the use of measures of conscientiousness in personnel selection is afforded greater impetus. The second implication involves a comparison between Thomas and Velthouse's (1990) individual characteristic elements of their cognitive model of empowerment (i.e., interpretations and global task assessments) and the conscientiousness personality trait. Although the properties of each hold subtle differences, they also share some similar properties that are particularly relevant to the present discussion. These issues are explore further below.

In addition to the findings relating psychological empowerment to both job satisfaction and affective organisational commitment, and their subsequent benefits to organisations, previous empirical studies have related empowerment to other similarly important outcomes. For example, Liden et al (2000) reported a significant positive relationship between empowerment and supervisor ratings of subordinate job performance, and Gagne et al (1997) reported a significant relationship between empowerment and intrinsic motivation. Spreitzer (1995a) found a significant positive relationship between empowerment and both innovative behaviour and subordinate perceptions of managerial effectiveness, and Koberg et al (1999) reported that teams experiencing greater levels of empowerment were more productive relative to teams experiencing lower levels of empowerment. Kirkman and Rosen (1999) found a positive association between team empowerment and objective ratings of customer service quality. Finally, Spreitzer et al (1997) found positive relations between psychological empowerment and decreased work-related strain. Considering this evidence, it appears that in addition to being important in instilling feelings of satisfaction and commitment, empowerment is also important in enhancing job performance and effectiveness, diminishing perceptions of strain, and contributing to intrinsic motivation at work. Thus, identifying attributes within individuals that may predispose them to be psychologically empowered in a work environment is a vital undertaking: hence the significance of the conscientiousness-empowerment relationship.

The key point is that as well as being shown to demonstrate criterion-related validity in predicting both task and contextual performance (Hogan et al, 1996), the present findings

show conscientiousness to predict the meaning, competence, and self-determination aspects of psychological empowerment. As described above, these are in turn related to numerous important work-related outcomes. This reinforces the use of measures of conscientiousness, in partnership with other selection tools (e.g., assessment centers, cognitive ability tests, work samples, structured interviews), in differentiating between job applicants in personnel selection. Thus, organisations recognizing the benefits of both task and contextual performance, a psychologically empowered workforce, and the demonstrated outcomes of empowerment, would be well-advised to utilise a measure of conscientiousness in their selection procedure.

Referring back to Thomas and Velthouse's (1990) work, it is evident that the conscientiousness trait could potentially play a similar role to the individual characteristics described in their cognitive model of empowerment. For example, global task assessments "are viewed as shaping a person's current task assessments deductively (i.e., as applications of general beliefs to specific instances) when situational cues are ambiguous" (p. 679). Additionally, people's "interpretive styles will increase the amount of explained variance in task assessments (and, thus, in intrinsic task motivation) when added to existing models of job redesign, charismatic leadership, and so forth" (p. 679). In a similar manner, conscientiousness could 'fill in the gaps' left by situational characteristics in explaining task assessments. Thus, in situations perceived by individuals as ambiguous, conscientiousness could potentially serve as an internal guiding mechanism through which individuals shape their task assessments. A central theme in personality research supporting this assertion is that traits are said to have more

influence in weaker versus stronger situations, serving to guide people's behaviour in relatively unstructured environments (Furnham, 1992).

The second important parallel drawn between Thomas and Velthouse's (1990) individual characteristics in shaping task assessments and the conscientious personality trait is that, as will be illustrated, each are potentially susceptible to a certain amount of change over time. According to Thomas and Velthouse, global assessments can be modified through ongoing and consistent changes in intrapersonal empowerment over time and across situations, which can be achieved by the "alignment of organisational processes and structures to consistently enhance individual's task assessments" (p. 679). Likewise, they propose that people's interpretations can potentially be changed through "cognitive behaviour modification techniques" (p. 679). While acknowledging the evidence for the stability of the conscientiousness personality trait over extended periods of time (Raymark et al, 1997), the present argument posits that conscientiousness could potentially be open to incremental changes given the appropriate conditions. Several unique studies concerning the temporal stability of personality indicate that this is in fact a possibility. For example, Kohn and Schooler (1982) reported evidence that over a time of 10 years, people's experiences relating to several different job dimensions had an effect on various personality traits, including self-directed orientation and ideational flexibility. Similarly, Inwald (1988) found that the degree of autonomy encountered in a work environment led to changes in individual's generalized people-oriented values over a period of five years. A particularly illuminating study was conducted by Howard and Bray (1988), who found that, over a period of 20 years, achievement orientation (similar

to the conscientiousness trait) increased markedly. They reported consistent patterns indicating that individual's attitudes and experiences at work served to influence various factors of personality, and, in turn, personality factors served to influence individual's attitudes and perceptions of their experiences. Thus, given the appropriate conditions over time, the possibility for conscientiousness to affect task assessments, task assessments to affect work attitudes, and work attitudes in turn to affect conscientiousness, and so on, is apparent.

There is some indication in the personality literature of how certain environments may be more inductive of affecting change in conscientious-related personality traits relative to other environments. For example, Furnham (1992) describes how training courses can foster generalized achievement motivation in adults. Effective training methods include teaching participants to observe and model those with a high achievement orientation, to provide self-insight to participants on their personal levels of achievement orientation, and to teach participants alternative methods of cognitively appraising their environment. In this manner, organisations could implement training programs in an effort to increase employee's levels of conscientiousness, serving to indirectly affect psychological empowerment, in addition to instigating methods directly aimed at empowering their workers, such as job enrichment and enlargement, self-managed work teams, and providing access to strategic information. On the whole, it appears that conscientiousness is an important concern in relation to both psychological empowerment and important work-related outcomes.

Managing for Psychological Empowerment

Aside from the implications for organisations outlined throughout the above discussion, numerous additional management techniques and interventions have been suggested as a means to increase empowering cognitions. Spreitzer (1996) notes that the span of control of managers and subordinates, organisational climate, and the design of work are all critical areas for intervention. Koberg et al (1999) suggest that remuneration systems that give employees a stake in the organisation, skill-based pay, and training and mentoring programs are all mechanisms that can potentially increase feelings of empowerment. Gagne et al (1997) advocate the modification of specific job characteristics to increase psychological empowerment, such as skill variety, task identity, autonomy support and job feedback. Thomas & Velthouse (1990) propose several areas for intervention, including reward systems, job design, delegation, and leadership. Self-directed work teams are often advocated as an effective means for empowering employees (e.g., Schaffer & Thomson, 1992). These examples highlight the fact that there are a multitude of different methods that could possibly lead to a more psychologically empowered workforce, and that empowerment is likely to remain a key concern for organisations in the years to come.

Contributions, Limitations and Directions for Future Research

It is evident that numerous interesting and thought-provoking relationships have emerged from the results of the present study. To the best of the researcher's knowledge, this study was the first to examine conscientiousness, and the specific constructs of peer cohesion,

interpersonal trust, and supervisor support in relation to psychological empowerment, representing a significant contribution to the theoretical advancement of psychological empowerment. A significant contribution was also made to the literature by examining multiple antecedents and consequences of psychological empowerment in a single research setting. Additionally, this study was unique in that it simultaneously examined empowerment at both the overall construct level and at the dimensional level. This procedure has not been reported in previous research in the field, and revealed that examining empowerment at the multidimensional level provides the most complete and useful information in explaining relationships between empowerment and various antecedents and consequences.

An important point to note, however, is that the meaning and impact dimensions of psychological empowerment dominated many of the significant relationships found. Specifically, of the hypothesised relationships, competence was positively related only to conscientiousness, and negatively related to trust, the latter finding in opposition to that posited. Self-determination was significantly positively related only to conscientiousness. For this reason, future research needs to investigate further the effects of different environmental and individual characteristics on the empowerment dimensions, and also to explore a wider range of possible outcomes. It is possible that self-determination and competence may be more closely related to performance-related outcomes, and that, as the present study indicates, impact and meaning are more closely related to attitudinal outcomes. Furthermore, perhaps studies examining more direct environmental interventions, such as job enrichment or a move to self-managed work teams, will

provide greater insights into how people's experiences of self-determination and competence might develop.

Interestingly, the present study found only weak support for the mediating role of psychological empowerment. One reason for this is that perhaps the model was too complex to examine using simple regression. It is feasible that path analytical techniques may have proved to be more powerful in detecting the true relationships between variables. It is also possible, however, that other constructs might play the role of mediating between external events and behavioural and attitudinal outcomes. However, this should be further examined before dismissing this property of empowerment, as both Gagne et al (1997) and Liden et al (2000) found some support for empowerment mediating the relationships between various hypothesized antecedent and outcome variables.

A major limitation of this study is the cross-sectional research design. As previously noted, such a design cannot determine cause-and-effect relationships. While deriving cause-and-effect relationships from prior theory, empirical work, and logical reasoning is informative, longitudinal designs would need to be incorporated into the study of psychological empowerment to properly measure potential cause-and-effect relationships. More sophisticated statistical analytical techniques should also be utilised in examining future complex models of empowerment such as the one adopted in the present study. The LISREL range of statistical tools would be useful in this respect, which provides the means to conduct Structural Equation Modeling (SEM) procedures such as path analysis.

The measurement issues outlined above highlight the need to further explore the psychometric properties of variables hypothesised to be related to empowerment.

Although one would expect, for example, social-structural characteristics to be somewhat related, it becomes problematic when these interrelations cloud their true effects on the dependent variable of interest. Thus, future work needs to look into the possibility of developing and validating more distinct measures without losing their intended meaning and specificity of prediction. Also, the independent variables explained only a limited amount of variance in psychological empowerment. It is clear, then, that numerous other factors, for example, job design, person-organisation fit, and organisational structure need to be examined in relation to empowerment. Other relevant outcomes of empowerment to explore aside from those in the present model include absenteeism, turnover, customer satisfaction, and innovation.

Another limitation of the present study is the possibility of response bias unduly affecting the results. This is of particular concern in this study, as it is feasible that those more motivated and empowered at work will be more likely to complete and return a questionnaire on empowerment, serving to inflate estimates of empowerment and positive attitudes in general. This is likely to remain an unresolved issue for some time to come, as ethical considerations require such research projects to be voluntary, and this property brings with it the probability that some individuals will be unwilling to participate. A partial solution would be to promote the importance and potentially positive outcomes of the study to prospective participants, in an attempt to increase the

response rate and to persuade both employees holding negative attitudes to their work experiences as well as those holding positive attitudes to participate. This would result in a more representative sample of the population, and minimize the adverse effects of response bias.

It could be suggested that a limitation of the present study is the sole use of self-report measures in gauging participant's attitudes. However, considering the central role that personal perception plays within the notion of psychological empowerment (Thomas & Velthouse, 1990), self-report measures are likely to remain the major method of data collection in this field. The utility of different methods of data collection will more likely be realised in examining various antecedents and outcomes of empowerment. For example, objective productivity and sales data, as well as peer, subordinate, and superior ratings of effectiveness, could serve as powerful indicators of job performance. The unobtrusive observation of work environments could be particularly insightful in gauging holistic impressions of empowerment in relation to issues surrounding interpersonal interaction and group processes. These methods should be adopted for future research in order to provide a richer and fuller depiction of psychological empowerment in the workplace.

A fruitful direction for future research is in examining the effects of specific interventions aimed to increase the empowerment of employees. While a plethora of literature publicizes the benefits of empowerment programs, rigorous scientific enquiry has yet had little involvement in substantiating this publicity. Another promising avenue is in

extending research from the individual level of analysis to the group and organisational level of analysis. For example, a recognized limitation of the present study is that group-specific effects were possibly clouding the true effects of peer cohesion on psychological empowerment. In gauging the collective levels of empowerment and cohesion in specific groups, and comparing these levels with those exhibited in other groups, interesting results may emerge relating to cross-departmental or inter-group differences. A comparison of levels of individual empowerment with collective group-level empowerment and collective organisational empowerment would further unravel the effects of the wider environment on individuals, and the effects of individuals on the wider environment. Gauging measures of, for example, satisfaction, effectiveness, and commitment at the organisational and group levels of the analysis would also be beneficial in this respect.

Finally, future research should continue the validation of psychological empowerment and its nomological net in different cultures and in different demographical samples. Robert et al (2000) emphasise that while employee empowerment is largely valued and relevant in western society, certain regions in the east may not share the same attitudes. The present study was valuable in that it generalized the importance of empowerment into the realm of a non-managerial, mostly female sample in a public service organisation. Future research needs to continue this focus in addition to the steady stream of current research utilising primarily male, managerial employees working in the private sector. Sustained work on validity generalization will further explicate the relevance of

empowerment, and the relevance of antecedents and consequences in relation to empowerment, in different geographical locations and in different populations.

Conclusion

In summary, the findings of this study underscore the necessity to examine psychological empowerment at the multidimensional level. Examining empowerment at the unidimensional level was revealed as inadequate in providing the most informative account of its posited relations with key variables. Confirming the soundness of this approach, a principal components analysis revealed the four distinct factors of meaning, competence, self-determination and impact. Additionally, bivariate correlational analysis illustrated that each of these dimensions were statistically related. These findings reinforced previous reports of the structural validity of Spreitzer's (1995a) Psychological Empowerment Scale.

Perhaps the most significant finding was that individuals exhibiting higher levels of conscientiousness were more likely to experience heightened cognitions of meaning, competence, and self-determination relative to less conscientious individuals. The implications for organisations are two-fold. First, considering the empirically demonstrated benefits of psychological empowerment, the use of measures of conscientiousness as a selection tool for predicting valuable criteria other than just task and contextual performance is apparent. Second, drawing on longitudinal research on personality, it is evident that personality can be affected by attitudes and experiences over

time. Thus, it is possible that through interventions designed to enhance cognitions of psychological empowerment, positive attitudes are potentially formed, which in turn might serve to gradually shape levels of conscientiousness, and so the feedback loop continues. In addition, organisations can attempt to directly influence levels of conscientiousness through the use of training courses employing self-awareness and modeling teaching methods, among others.

On the whole, the environmental antecedent variables were found to be fairly limited predictors of psychological empowerment, and insubstantial evidence was found for the mediating role of empowerment. However, some interesting relationships emerged regarding both expected and unexpected relationships. Levels of interpersonal trust, supervisor support, and access to information differentially influenced aspects of psychological empowerment, as did both age and education. The meaning dimension of empowerment was found to partially mediate the relationship between interpersonal trust and job satisfaction. Peer cohesion was unrelated to the four dimensions of empowerment. Age and access to resources were important in determining levels of commitment to the organisation, and trust and access to resources were important in determining levels of job satisfaction. These findings reinforce Liden et al's (2000) assertion that focusing solely on empowerment in relation to key outcomes is inadequate. Also, it is clear that individual characteristics as well as empowerment cognitions are important in determining both job satisfaction and affective organisational commitment.

Several implications for organisations were derived from the results of this study, in addition to those already noted involving conscientiousness. Organisations need to distribute and communicate important strategic information throughout all levels of the hierarchy, and to select and train for supportive supervisory behaviours, in order to contribute to employee's feelings that they are making valuable contributions through their work efforts. Organisations need to develop a culture of trust in order to enhance feelings of satisfaction and meaning at work, and to reinforce the positive effects of trust by simultaneously promoting the values of reciprocity and interdependence. Additionally, by making the attainment of resources by individuals and departments an easy and straightforward process, organisations can facilitate a more satisfied and committed workforce.

The development of the concept of empowerment, from its roots in the social reform movement, its implicit associations within the works of seminal participative management theorists, to its conceptualisation as an intrapersonal psychological experience by Conger and Kanungo (1988) and Thomas and Velthouse (1990), has led to an emerging body of research focusing on the empirical enquiry of the construct. As such, empowerment is gradually being drawn out of the mystical "black box" of management (Spreitzer, 1995b), and is now exposed to rigorous investigation, to which this study contributes. The research undertaken to date has, taken as a whole, shown psychological empowerment to be a crucial concern for organisations striving to excel into the increasingly competitive world of work, and for individuals striving to find a

sense of meaning, competence, self-determination and impact in an uncertain and ever-changing work environment.

References

- Alinsky, S.D. (1971). *Rules for radicals: A pragmatic primer for realistic radicals*. New York: Vintage Books.
- Allen, N.J., & Meyer, J.P. (1996). Affective, continuance, and normative commitment to the organisation: An examination of construct validity. *Journal of Vocational Behaviour, 49*, 252-276.
- Argyris, C., & Schon, D.A. (1978). *Organisation learning: A theory of action perspective*. Workingham: Addison-Wesley.
- Argyris, C. (1957). *Personality and organisation*. New York: HarperCollins.
- Argyris, C. (1965). *Organisation and innovation*. Toronto: Irwin.
- Ashforth, B.E. (1990). The organisationally induced helplessness syndrome: A preliminary model. *Canadian Journal of Administrative Sciences, 7*, 30-36.
- Ashforth, B.E. (1989). The experience of powerlessness in organisations. *Organisational Behaviour and Human Decision Processes, 43*, 207-242.
- Ashforth, B.E., & Mael, F. (1989). Social identity theory and the organisation. *Academy of Management Review, 14* (1), 20-39.
- Ashforth, S.J., & Tsui, A.S. (1992). Self-regulation for managerial effectiveness: the role of active feedback-seeking. *Academy of Management Journal, 34*, 251-280.
- Bacharach, S.B. & Lawler, E.J. (1980). *Power and politics in organisations*. San Francisco: Jossey-Bass.
- Baird, S. (1994). Self-empowerment: Your first step toward excellence. *Journal for Quality and Participation, 17* (7), 40-44.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review, 84* (2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive view*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 18*, 281-296.

- Barker, R.T., & Camarata, M.R. (1998). The role of communication in creating and maintaining a learning organisation: Preconditions, indicators, and disciplines. *The Journal of Business Communication*, 35 (4), 443-467.
- Barner, R. (1996). The new millennium workplace: Seven changes that will challenge managers and workers. *The Futurist*, 30 (2), 14-23.
- Barrick, M.R., & Mount, M.K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bartlett, C.A., & Ghoshal, S. (1997). *The individualized corporation*. New York: Harper Business.
- Bartunek, J.M., Bradbury, H., & Boreth, C. (1997). Attending to difference: A social interpretivist approach to empowerment. *Research in Organisational Change and Development*, 10, 63-103.
- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Battacharya, R., Devinney, T.M., & Pillutla, M.M. (1998). A formal model of trust based on outcomes. *Academy of Management Review*, 23 (3), 459-472.
- Behling, O. (1998). Employee selection: Will intelligence and personality do the job? *Academy of Management Executive*, 12, 77-86.
- Bell, R.C. (1993). Measure for measure: a review of personality tests. *International Review of Professional Issues in Selection and Assessment*, 1, 89-134.
- Bell, N.E., & Staw, B.M. (1989). People as sculptors versus sculpture: the roles of personality and personal control in organisations. In M.B. Arthur, D.T. Hall, & B.S. Lawrence (Eds.), *Handbook of career theory*. New York: Cambridge University Press.
- Bennis, W., & Nanus, B. (1985). *Leaders*. New York: Harper & Row.
- Berlew, D.E. (1986). Managing human energy: Pushing versus pulling. In S. Srivasta (Ed.) *Executive power* (pp. 33-50). San Francisco: Jossey-Bass.
- Blanchard, K. (1996). *Empowerment Takes More Than a Minute*. San Francisco: Berrett-Koehler Publishers.
- Blau, G., Paul, A., and John, N. (1993). On developing a general index of work commitment. *Journal of Vocational Behaviour*, 42, 298-314.

- Blau, J.R. & Alba, R.D. (1982). Empowering nets of participation. *Administrative Science Quarterly*, 27, 363-379.
- Block, P. (1987). *The empowered manager*. San Francisco: Jossey-Bass.
- Block, P. (1990). How to be the new kind of manager. *Working Woman*, 15(7), 51-56.
- Boff, L., & Boff, C. (1987). *Liberation theology: An introduction*. San Francisco: Harper and Row.
- Bookman, A. & Morgan, S. (1988). *Women and the politics of empowerment*. Philadelphia: Temple University Press.
- Boone, L.E. & Bowen, D.D. (1987). *The great writings in management and organisational behaviour*. New York: McGraw-Hill.
- Borgatta, E.F. (1964). The structure of personality characteristics. *Behavioural Science*, 12, 8-17.
- Borman, W.C., & Motowildo, S.J. (1993). Expanding the criterion space to include elements of contextual performance. In N. Schmitt, W.C. Borman & Associates, *Personnel selection in organisations* (pp. 79-98). San Francisco, CA: Jossey-Bass.
- Bowen, D. & Lawler, E.E. (1992). The empowerment of service workers: What, why, how and when. *Sloan Management Review*, Spring, 31-32.
- Bowen, J.J. (1997). If you want to advance, then try a retreat. *Financial Planning*, 27 (11), 195-196.
- Boyte, H.C., & Reissman, F. (1986). *The new populism: The politics of empowerment*. Philadelphia: Temple University Press.
- Breeding, D.C. (1996). Worker empowerment: A useful tool for effective safety management. *Occupational Health and Safety*, 65 (9), 16-17.
- Brief, A.P. (1998). *Attitudes in and around organisations*. Thousand Oaks, CA: Sage.
- Brief, A.P., & Nord, W.R. (1990). *Meanings of occupational work*. Lexington, MA: Lexington Books.
- Brink, T. (2000). Harmonising business needs with staff needs. *Accountancy SA*, July, 22-26.
- Brown, D. (1992). Why participative management won't work here. *Management Review*, 81 (6), 42-46.

- Brown, J.H. (2000). Benchmarking HRM practices in healthy work organisations. *American Business Review*, 18 (2), 50-61.
- Burke, W.W. (1986). Leadership as empowering others. In S. Srivasta, and Associates (Eds.), *Executive Power*. San Francisco: Jossey-Bass.
- Butler, J.K. (1983). Reciprocity of trust between professionals and their secretaries. *Psychological Reports*, 53, 411-416.
- Byham, W.C. (1988) *Zapp! The lightning of empowerment*. New York: Harmony Books.
- Camman, C., Fichman, M., Jenkins, G.D., Jr, & Klesh, J.R. (1983). Assessing the attitudes and perceptions of organisational members. In S.E. Seashore, E.E. Lawler, P.H. Mirvis, & C. Cammann (Eds.), *Assessing organisational change: A guide to methods, measures, and practices* (pp. 71-138). New York: Wiley.
- Campbell, D.J. (2000). The proactive employee: Managing workplace initiative. *The Academy of Management Executive*, 14 (3), 52-66.
- Cappelli, P. (1999). The new deal at work: Managing the market-driven workforce. *The Academy of Management Executive*, 13 (2), 93-94.
- Carmichael, S. & Hamilton, C.V. (1967). *Black power: The politics of liberation in America*. New York: Random House.
- Carnall, C.A. (1995). *Managing change in organisations*. London: Prentice-Hall.
- Caudron, S. (1996). Rebuilding employee trust. *Training and Development Journal*, 58 (8), 19-21.
- Clark, M.C., & Payne, R.L. (1997). The nature and structure of worker's trust in management. *Journal of Organisational Behaviour*, 18, 205-224.
- Cleghorn, M. (2000). *Person-organisation fit: The development and initial validation of a person-organisation fit scale and its relationship with job satisfaction, absenteeism, job performance, and turnover*. Unpublished Dissertation, Canterbury University.
- Cogliser, C.C., & Schriesheim, C.A. (2000). Exploring work unit context and leader-member exchange: a multi-level perspective. *Journal of Organisational Behaviour*, 21, 487-511.
- Cogliser, C.C., & Schriesheim, C.A. (2000). Exploring work unit context and leader-member exchange: a multi-level perspective. *Journal of Organisational Behaviour*, 21, 487-511.

- Conger, J.A. (1989). Leadership: The art of empowering others. *The Academy of Management Executive*, 11 (1), 17-24.
- Conger, J.A., & Konungo, R. (1988). The empowerment process; Integrating theory and practice. *Academy of management Review*, 13, 471-482.
- Conger, J.A., Spreitzer, G.M., & Lawler, E.E., III (Eds.) (1999). The leader's change handbook: An essential guide to setting direction and taking action. San Francisco: Jossey-Bass.
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organisational commitment and personal need non-fulfillment. *Journal of Occupational Psychology*, 53, 39-52.
- Cooper, C.L. & Locke, E.A (2000). *Industrial and organisational psychology*. Oxford: Blackwell Publishers Ltd.
- Corsun, D.L., & Enz, C.A. (1999). Predicting psychological empowerment among service workers: The effect of support-based relationships. *Human Relations*, 52 (2), 205-224.
- Costa, P.T., Jr., & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cotton, J.L. (1993). *Employee involvement: Methods for improving performance and work attitudes*. Newbury Park: Sage.
- Cotton, J.L. (1996). Employee Involvement. *International Review of Industrial and Organisational Psychology*, 11, 219-242.
- Cranny, C.J., Smith, P.C., & Stone, E.F. (1992). *Job satisfaction: How people feel about their jobs and how it effects their performance*. New York: Lexington.
- Cratty, B.J. (1989). *Psychology in contemporary sport* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Crosling, R., (1995). Trust-the elusive factor. In *Empowering people: Training and leadership for quality*. Conference Proceedings, Covey Leadership Centre.
- Crozier, M. (1964). *The bureaucratic phenomenon*. Chicago: University of Chicago.
- Curtin, L.L. (1998). The aimlessly empowered. *Nursing Management*, 29 (2), 5-6.

- De Fruyt, F., Mervielde, I. (1997). The five-factor model of personality and Holland's REASEC interest types. *Personality and Individual Differences*, 23, 87-103.
- DeCharms, R. (1968). Personal causation and perceived control. In L.C. Perlmutter & R.A. Monty (Eds.), *Choice and perceived control*. Hillsdale, NJ: Erlbaum.
- Deci, E., & Ryan, R. (1985). The support of autonomy and control of behaviour. *Journal of Personality and Social Psychology*, 53, 1024-1037.
- Deci, E.L., Connell, J.P., & Ryan, R.M. (1989). Self-determination in a work organisation. *Journal of Applied Psychology*, 74, 580-590.
- Denison, D.R., Hooijberg, R., & Quinn, R.E. (1995). Paradox and performance: Toward a theory of behavioural complexity in managerial leadership. *Organisation science*, 6, 524-539.
- Digman, J.M. (1990). Personality structure: The emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440.
- Dirks, K.T. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology*, 84 (3), 445-455.
- Dobbs, J. (1993). The empowerment environment. *Training and Development*, 47 (2), 55.
- Drucker, P.F. (1980). *Managing in turbulent times*. Jordan Hill, Oxford: Butterworth-Heinemann Ltd.
- Eccles, T. (1997). *Succeeding with change*. London: McGraw-Hill.
- Ellis, A., (1980). An overview of the clinical theory of rational-emotive therapy. In R. Grieger and J. Boyd (Eds.), *Rational-emotive therapy* (pp. 1-31). New York: Van Nostrand Reinhold.
- Emerson, R.M. (1962). Power-dependence relations. *American Sociological Review*, 27, 31-41.
- Fairholm, G.W. (1994). *Leadership and the culture of trust*. Westport, CD: Praeger Publishers.
- Fay, C. (1995). The changing nature of work. In H. Richer & C. Fay (Eds.), *The performance imperative*. San Francisco: Jossey-Bass Publishers.
- Festinger, L., Back, W., Schachter, S., Kelley, H.H., & Thibaut, J.W. (1952). *Theory and experiment in social communication*. Ann Arbor, MI: Edward Brothers.

- Fisher, C.D. (1980). On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review*, 5, 607-612.
- Flaherty, K.E., & Pappas, J.M. (2000). The role of trust in salesperson-sales manager relationships. *The Journal of Personal Selling & Sales Management*, 20 (4), 271-278.
- Ford, R.C. & Fottler, M.D. (1995). Empowerment: A matter of degree. *Academy of Management Executive*, 9 (3), 21-31.
- Frey, R. (1993). Empowerment or else. *Harvard Business Review*, 80-94.
- Friere, P. (1970). *Pedagogy of the oppressed*. New York: The Seabury Press.
- Friere, P., & Faundez, A. (1989). *Learning to question: A pedagogy of liberation*. New York: The Continuum Publishing Company.
- Fridja, N.H. (1988). The laws of emotion. *American Psychologist*, 43, 349-358.
- Furnham, A. (1992). *Personality at work: The role of individual differences in the workplace*. London: Routledge.
- Gagne, M., Senecal, C.B., & Koestner, R. (1997). Proximal job characteristics, feelings of empowerment, and intrinsic motivation: A multidimensional model. *Journal of Applied Social Psychology*, 27 (14), 1222-1240.
- Garrow, D. (Ed.). *We shall overcome: The civil rights movement in the United States in the 1950s and 1960s*. Brooklyn, NY: Carlson.
- Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology*, 15, 291-316.
- George, J.M. (1989). Mood and absence. *Journal of Applied Psychology*, 74, 317-324.
- George, J.M., & Bettenhausen, K. (1990). Understanding prosocial behaviour, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology*, 75, 698-709.
- Gilbert, J.A. (2000). An empirical examination of resources in a diverse environment. *Public Personnel Management*, 29 (2), 175-184.
- Gilmour, L. (Ed.) (1998). *Collins concise dictionary and thesaurus*. London: HarperCollins Publishers.
- Gist, M. (1987). Self-efficacy: Implications for organisational behaviour and human resource management. *Academy of Management Review*, 12, 472-485.

- Gist, M., & Mitchell, T.N. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183-211.
- Goldhaber, G., Yates, M., Porter, D., & Lesniak, R. (1978). Organisational communication: State of the art. *Human Communication Research*, 5, 76-96.
- Goodstein, L.D., & Lanyon, R.I. (1999). Applications of personality assessment to the workplace: A review. *Journal of Business and Psychology*, 13, 291-322.
- Goodwin, B. (1999). Empowerment in a government agency. In W.F Davies and J.J. Quinn (Eds.), *Ethics and empowerment* (pp. 300-326). Indiana: Ichor Business Books.
- Gorn, G.J., & Konungo, R.N. (1980). Job involvement and motivation: Are intrinsically motivated managers more job involved? *Organisational Behaviour and Human Performance*, 26, 265-277.
- Gouldner, A.W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-177.
- Gross, E. (1954). Primary functions of the small group. *American Journal of Sociology*, 60, 24-30.
- Guion, R., & Gottier, R. (1965). Validity of personality measures in personnel selection. *Personnel Psychology*, 18, 135-165.
- Guzzo, R.A., Noonan, K.A., & Elron, E. (1994). Human resources practices as communications and the psychological contract. *Human Resource Management*, 33, 447-462.
- Hackman, J., & Oldham, G. (1980). *Work redesign*. Reading, MS: Addison-Wesley.
- Halder, R.B. (1994). Making the reality match the image. *Managing Service Quality*, 4 (1), 31-35.
- Hardy, C., & Leiba-O'Sullivan, S. (1998). The power behind empowerment: Implications for research and practice. *Human Relations*, 51(4), 450-483.
- Harris, J. (2000). Employee satisfaction requires new strategies. *National Real Estate Investor*, 42 (6), 50-56.
- Harris, N.H. (1997). *Change and the modern business*. London: Macmillan Press Ltd.
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 21, 34-64.

- Hecksher, C., & Donnellon, A. (1994). *The post-bureaucratic organisation*. Thousand Oaks, CA: Sage.
- Herriot, P., Hirsh, W., & Reilly, P. (1998). *Trust and transition: managing today's employment relationship*. Chichester: John Wiley & Sons.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland: World Publishing.
- Hodge, M. (2000). UK Government: Recruitment consultancies win first awards of excellence for age awareness. *M2 Presswire*, 8-13.
- Hogan R., Hogan J., & Roberts, B.W., (1996). Personality measurement and employment decisions. *American Psychologist*, 51, 469-477.
- Holly, A.S. (2000). They're not older, they're better. *Quality*, 39 (1), 80-86.
- Holt, D.H. (1990). *Management: Principles and practices*. Englewood Cliffs, NJ: Prentice Hall.
- Hough, L.M. (1998). Personality at work: issues and evidence. In M.D. Hakel (Ed.), *Beyond multiple choice: Evaluating alternatives to traditional testing for selection* (pp.131-166). Mahwah: NJ. Lawrence Erlbaum.
- Howard, A., & Bray, D. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford Press.
- Hughes, J.M.C. (1999). Beyond rhetoric: A typology of empowerment strategies found within one organisation. In W.F Davies and J.J. Quinn (Eds.), *Ethics and empowerment* (pp. 197-235). Indiana: Ichor Business Books.
- Humphrey, J.W. (1991). A time of 10, 000 leaders. *Executive Excellence*, 8 (6), 17-18.
- Iaffaldano, M.T., & Muchinski, P.M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, 97, 251-273.
- Ibarra, H. (1993). Network centrality, power, and innovation involvement: Determinants of technical and administrative roles. *Academy of Management Review*, 36, 471-501.
- Insel, P.M., & Moos, R.H. (1974). The social environment. In P.M. Insel & R.H. Moos (Eds.), *Health and the social environment*. Massachusetts: Lexington Books. Intro refs 1st paragraph.
- Inwald, R. (1988). Five-year follow-up study of departmental terminators as predicted by 16 pre-employment psychological indicators. *Journal of Applied Psychology*, 73, 1-8.

- Janssen, O., & Schuiling, M. (1998). Organisational citizenship behaviours: A matter of intrinsic work motivation. *Nederlands Tijdschrift voor de Psychologie en Haar Grensgebieden*, 53(2), 64-75.
- John, O.P. (1989). Towards a taxonomy of personality descriptors. In D.M. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions*. New York: Springer-Verlag.
- Johnson, H.T. (1992). *Relevance regained: from top-down control to bottom-up empowerment*. New York: The Free Press.
- Jones, G.R., & George, J.M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23 (3), 473-512.
- Judge, T.A., & Cable, D.M. (1997). Applicant personality, organisational culture, and organisational attraction. *Personnel Psychology*, 50, 359-394.
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724.
- Kanigel, R. (1997). *The One Best Way: Frederick Taylor and the Enigma of Efficiency*. London: John Wiley.
- Kanter, R.M. (1979). Power failure in management circuits. *Harvard Business Review*, July-August, 65-75.
- Kanter, R.M. (1983). *The change masters*. New York: Simon & Schuster.
- Kanter, R.M. (1986). Empowering people to act on ideas. *Executive excellence*, February, pp. 5-6.
- Kanter, R.M. (1989). The new managerial work. *Harvard Business Review*, 66, 85-92.
- Kanter, R.M., Stein, B.A., & Jick, T.D. (1992). *The challenge of organisational change: How companies experience it and leaders guide it*. New York: The Free Press.
- Katzenbach, J.R. (1996). *Real change leaders*. New York: Times Business.
- Keiffer, C. (1984). Citizen empowerment: A developmental perspective. *Prevention in Human Services*, 3, 9-36.
- Keyton, J. (1992). Comment on Evans & Dion: still more on group cohesion. *Small Group Research*, 23 (2), 237-241.

- Kieffer, C.H. (1984). Citizen empowerment: a developmental perspective. *Prevention in Human Services*, 3, 9-36.
- Kirkman, B.L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team-empowerment. *Academy of Management Journal*, 42 (1), 58-74.
- Kizilos, P. (1990). Crazy about empowerment? *Training*, 27 (12), 47-56.
- Koebler, C.S., Boss, R.W., Senjem, J.S., & Goodman, E.A. (1999). Antecedents and outcomes of empowerment. *Group & Organisation Management*, 24 (1), 71-91.
- Kohn, M., & Schooler, C. (1982). Job conditions and personality: A longitudinal assessment of their reciprocal effects. *American Journal of Sociology*, 87, 1257-1286.
- Konstantin, R. (2000). European staff feel the effects of e-commerce: Retraining programs grow in response to shortage of tech-savvy workers. *Wall Street Journal*, June 7, B6A.
- Kotter, J.P. (1977). Power, dependence, and effective management. *Harvard Business Review*, 55 (4), 125-136.
- Kotter, J.P. (1996). Empowering employees for broad-based action. In J.P. Kotter (Ed.) *Leading Change* (pp. 101-115). Boston: Harvard Business School.
- Kraimer, M.L., Seibert, S.E., & Leiden, R.C. (1999). Psychological empowerment as a multidimensional construct: A construct validity test. *Educational and Psychological Measurement*, 59, 127-142.
- Kramer, R.M. (1999). Trust and distrust in organisations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569-598.
- Kramer, R.M., & Tyler, T.R. (Eds.) (1996). *Trust in organisations*. Thousand Oaks, CA: Sage.
- Landuyt, N.G. (2000). Employee perceptions of organisational quality and learned helplessness in higher education. *Dissertation Abstracts International*, 60 (9-A), 32-89.
- Langfred, C.W. (2000). The paradox of self-management: individual and group autonomy in work groups. *Journal of Organisational Behaviour*, 21, 563-585.

- Langston, C.A., & Sykes, W. (1997). Beliefs and the big five: cognitive bases of broad individual differences in personality. *Journal of Research in Personality, 31*, 141-195.
- Lawler, E.E. (1986). *High involvement management*. San Francisco: Jossey-Bass.
- Lawler, E.E. (1992). *The ultimate advantage: Creating the high-involvement organisation*. San Francisco: Jossey-Bass.
- Lawler, E.E. (1995). Organisational effectiveness: New realities and challenges. In H. Richer & C. Fay (Eds.), *The performance imperative*. San Francisco: Jossey-Bass Publishers.
- Ledford, G.E., & Lawler, E.E. (1994). Research on employee participation: Beating a dead horse? Dialogue in the *Academy of Management Review, 19*, 633-636.
- Lester, R.K., Piore, M.J., & Malek, K.M. (1998). Interpretive management: What general managers can learn from design. *Harvard Business Review, March-April*, 86-97.
- Lichtenstein, N., & Howell, J.H. (1993). *Industrial democracy in America*. Cambridge: Cambridge University Press.
- Liden, R.C., & Graen, G. (1980). Generalisability of the vertical dyad linkage model of leadership. *Academy of Management Journal, 23*, 451-465.
- Liden, R.C., & Tewksbury, T.W. (1995). Empowerment and work teams. In G.R. Ferris, S.D. Rosen, & D.T. Barnum (Eds.), *Handbook of human resources management* (pp. 386-403). Oxford, England: Blackwell.
- Liden, R.C., Sparrow, R.T., & Wayne, S.J. (1997). Leader-member exchange theory: the past and potential for the future. *Research in Personnel and Human Resources Management, 15*, 47-119.
- Liden, R.C., Wayne, S.J., & Sparrow, R.T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology, 85* (3), 407-416.
- Likert, R. (1961). *New Patterns of Management*. New York: McGraw-Hill.
- Likert, R. (1967). *The Human Organisation: Its Management and Value*. New York: McGraw-Hill.
- Lin, C.Y. (1998). The essence of empowerment: A conceptual model and a case illustration. *Journal of Applied Management Studies, 7* (2), 223-238.

- Locke, E.A. (1968). Toward a theory of task motivation and incentives. *Organisational Behaviour and Human Performance*, 3, 157-189.
- Locke, E.A. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), *The handbook of industrial and organisational psychology*. Chicago: Rand McNally College Publishing.
- MacDonald, J. (1998). *Calling a halt to mindless change: A plea for commonsense management*. New York: Amacom.
- MacKinnon, G.W. (1944). The structure of personality. In J. McVicker Hunt (Ed.), *Personality and the behaviour disorders* (Vol. 1, pp. 3-48). New York: Ronald Press.
- Maddux, J.E. (1999). The collective construction of collective efficacy: Comment on Paskevich, Brawley, Dorsch, and Widmeyer (1999). *Group Dynamics*, 3(3), 223-226.
- Major, D.A., Kozlowski, S.W., Chao, G.T., & Gardner, P.D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects of the role development factors. *Journal of Applied Psychology*, 80, 418-431.
- Manz, C.C., & Sims, H. (1989). *Super-leadership: Teaching others to lead themselves*. New York: Prentice-Hall.
- Marks, M.L. (1986). The question of quality circles. *Psychology Today*, 20, 36-46.
- Martinko, M.J. & Gardner, W.L. (1982). Learned helplessness: An alternative explanation for performance deficits. *Academy of Management Review*, 7, 195-204.
- Matthieu, J.E., & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organisational commitment. *Psychological Bulletin*, 108, 171-194.
- Mayer, R.C., & Shoorman, F.D. (1992). Predicting participation and production outcomes through a two-dimensional model of organisational commitment. *Academy of Management Journal*, 35, 671-684.
- Mayer, R.C., Davis, J.H., & Shoorman, F.D. (1995). An integrative model of organisational trust. *Academy of Management Review*, 20, 709-734.
- McClelland, D.C. (1975). *Power: The inner experience*. New York: Irvington Press.

- McCleod, J.S. (1986). Self-empowerment training programs for employees. *Employment Relations Today*, 13, 33-36.
- McGregor, D. (1960). *The Human Side of Enterprise*. New York: McGraw-Hill.
- McKenna, J.F. (1992). Coach Lets His Team Play the Game. *Industry Week*, 241 (9), 12-16.
- McLaughlan, I., Badham, R., & Couchman, P. (1999). Empowerment and teams: Ethics and the implementation of socio-technical systems. In J.J. Quinn & P.W.F. Davies (Eds.), *Ethics and empowerment*. Indiana: Ichor Business Books.
- McNaus, M.A., & Kelly, M.L. (1999). Personality measures and biodata: Evidence predicting their incremental predictive value in the life insurance industry. *Personnel Psychology*, 52, 137-148.
- Mercier, F. (1973). Dear Ms Jelichich. *Broadsheet Magazine*, 3 (7), 12-14.
- Meyer, J.P., & Allen, N.J. (1991). A three-component conception of organisational commitment. *Human resource management review*, 1, 61-89.
- Meyer, J.P., & Allen, N.J. (1997). *Commitment in the workplace*. Thousand Oaks, CA: Sage.
- Miller, K.I. & Monge, P.R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29, 272-253.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualising situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246-268.
- Mishra, A.K., & Speitzer, G.M. (1998). Explaining how survivors respond to downsizing: The role of trust, empowerment, justice, and work redesign. *Academy of Management Review*, 23 (3), 567-588.
- Mitchell, T.R. (1985). An evaluation of the validity of correlational research in organisations. *Academy of Management Review*, 10, 192-205.
- Mohrman, S.A., Cohen, S.G., & Mohrman, A.M., Jr. (1995). *Designing team-based organisations*. San Francisco: Jossey-Bass.
- Money, D. D., Shockley-Zalabak, P., & Cesaria, R. (1997). Organisational communication and culture: A study of 10 Italian high technology companies. *The Journal of Business Communication*, 34, 253-268.

- Moos, R.H. (1994). *Work environment scale manual* (3rd edition). Palo Alto, CA: Consulting Psychologists Press.
- Moses, J.A. (1992). Work Environment Scale. In D.J. Keyser & R.C. Sweetland (Eds.), *Test Critiques, Volume 9* (pp. 828-843). Texas: Pro-ed.
- Mowday, R.T., Porter, L.W., & Steers, R. (1982). *Organisational linkages: The psychology of commitment, absenteeism, and turnover*. San Diego, CA: Academic Press.
- Muchinsky, P.M. (1997). *Psychology applied to work*. Pacific Grove, C.A: Brookes/Cole Publishing Company.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: an integration. *Psychological Bulletin*, 115 (2), 210-227.
- Mullins, L.J. (1996). *Management and organisational behaviour* (4th ed.). London: Pitman.
- Myers, R.H. (1990). *Classical and modern regression with applications* (2nd ed.) Boston: PWS-Kent.
- Newstrom, J., Gardner, D., & Pierce, J. (1999). A neglected supervisory role: Building self-esteem at work. *Supervision*, 60 (2), 9-12.
- Nido, Q. (1999). Action takers. *Executive Excellence*, 16 (10), 4-11
- Nielson, E. (1986). Empowerment strategies: Balancing authority and responsibility. In S. Srivasta (Ed.), *Executive Power* (pp. 78-110). San Francisco: Jossey-Bass.
- Nisbett, R.E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs: Prentice Hall.
- Nixon, B. (1994). Facilitating empowerment in organisations. *Leadership and Organisational Development Journal*, 15 (4), 3-11.
- Nonaka, I. (1988). Toward middle-up-down management: Accelerating information creation. *Sloan Management Review*, 29 (3), 9-18.
- Norman, W.T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer-nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66, 574-583.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). San Francisco: Jossey-Bass.

- Nowicki, S., & Strickland, B. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology, 40*, 148-154.
- Organ, D.W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organisational citizenship behaviour. *Personnel Psychology, 48*, 775-802.
- Orsburn, J.D., & Moran, L. (1990). *The new self-directed work teams*. New York: McGraw-Hill.
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organisational-level analysis. *Journal of Applied Psychology, 77*, 963-974.
- Parenti, M. (1978). *Power and the powerless*. New York: St. Martin's Press.
- Parker, L. (1993). When to fix it and when to leave: Relationships among perceived control, self-efficacy, dissent, and exit. *Journal of Applied Psychology, 78*, 949-959.
- Parker, M. (1992). Industrial relations myth and shop floor reality: The "team concept" in the auto industry. In N. Lichtenstein & J.H. Howell (Eds.), *Industrial democracy in America*. Cambridge: Cambridge University Press.
- Paton, D. and Wilson, F. (2001) Managerial perceptions of competition in knitwear producers. *Journal of Managerial Psychology* (in press).
- Pearce, J.L. (1993). Toward an organisational behaviour of contract laborers: Their psychological involvement and effects on employee co-workers. *Academy of Management Journal, 36*, 1082-1096.
- Pelchette, J.X. (1993). Subjective career success: The influence of individual difference, family, and organisational variables. *Journal of Vocational Behaviour, 43*, 198-208.
- Peters, L.H., O'Connor, E.J., & Rudolf, C.J. (1980). The behavioural and affective consequences of performance-relevant situational variables. *Organisational Behaviour and Human Performance, 25*, 79-96.
- Pettigrew, A.M. (1972). Information control as a power source. *Sociology, 6*, 187-204.
- Pfeffer, J. (1981). *Power in organisations*. Marshfield, MA: Pitman.
- Pfeffer, J. (1982). *Organisations and organisational theory*. Marshfiels, MA: Pitman.
- Pickard, J. (1993). The real meaning of empowerment. *Personnel Management, 25* (11), 28-34.

- Potterfield, T.A. (1999). *The business of employee empowerment: Democracy and ideology in the workplace*. Westport, CT: Quorum Books.
- Prahalad, C.K. (1997). The work of new age managers in the emerging competitive landscape. In F. Hesselbein, M. Goldsmith, M, and Beckard, R. (1997), *The organisation of the future*. San Francisco: Jossey-Bass
- Quinn, R. & Spreitzer, G.M (1997). The road to empowerment: Seven questions every leader should consider. *Organisational Dynamics*, 37-49.
- Randolph, W.A. (1995). Navigating the journey to empowerment. *Organisational Dynamics*, 23 (4), 19-32.
- Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology*, 9, 1-25.
- Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory of community psychology. *American Journal of Community Psychology*, 15, 121-148.
- Raymark, P.H., Schmit, M.J., & Guion, R.M. (1997). Identifying potentially useful personality constructs for employee selection. *Personnel Psychology*, 50, 723-736.
- Reynolds, L. (1997). *The Trust Effect: Creating the High Trust High Performance Organisation*. London: Nicholas Brealey Publishing.
- Riggio, R.E. (1996). *Introduction to Industrial/Organisational Psychology*. New York, NY: HarperCollins.
- Riker, W.H. (1974). The nature of trust. In J.T. Tedeschi (Ed.), *Perspectives on social power* (pp. 53-81). Chicago: Aldine.
- Ripley, R.E. & Ripley, M.J. (1992). Empowerment, the cornerstone of quality: Empowering management in innovative organisations in the 1990's. *Management Decision*, 30 (4), 20-43.
- Robert, C., Probst, T.M., Martocchio, J.J., Drasgow, F., & Lawler, J.J. (2000). Empowerment and continuous improvement in the United States, Mexico, Poland, and India: Predicting fit on the basis of the dimensions of power distance and individualism. *Journal of Applied Psychology*, 85 (5), 643-658.
- Ross, I.E., & Zander, A.F. (1957). Need satisfaction and employee turnover. *Personnel Psychology*, 10, 327-338.

- Rotter, J.B. (1971). Generalised expectancies for interpersonal trust. *American Psychologist*, 26, 443-452.
- Ruether, R.R. (1973). *Liberation theology: Human hope confronts christian history and American power*. New York: Paulist Press.
- Ryan, K.D., & Oestreich, D.K. (1998). *Driving the fear out of the workplace: creating the high-trust, high performance organisation* (2nd Ed.). San Francisco: Jossey-Bass.
- Ryan, W. (1971). *Blaming the victim*. New York: Random House.
- Saks, A.M., & Ashforth, B.E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology*, 50, 395-426.
- Salancick, G.R. & Pfeffer, J. (1977). The bases and uses of power in organisational decision making: The case of a university. *Administrative Science Quarterly*, 19, 453-461.
- Salgado, J.F. (1997). The five factor model of personality and job performance. *Journal of Applied Psychology*, 82, 30-46.
- Sanchez, V.I., Korbin, W.P., & Viscarra, D.M. (1995). Corporate support in the aftermath of a natural disaster: Effects on employee strains. *Academy of Management Journal*, 38, 504-521.
- Schaffer, R.H. & Thomson, H.A. (1992). Successful change programs begin with results. *Harvard Business Review*, 80-89.
- Schindler, P.L., & Thomas, C.C. (1993). The structure of interpersonal trust in the workplace. *Psychological Reports*, 73, 563-573.
- Schipper, F. & Manz, C.C. (1992). Employee self-management without formally designated teams: An alternative road to empowerment. *Organisational Dynamics*, 20 (3), 48-61.
- Schwartz, N., & Clore, G.L. (1988). How do I feel about it? The informative function of affective states. In K. Fiedler & Forgas (Eds.), *Affect, cognition and social behaviour* (pp. 44-62).
- Scott, D. (1983). Trust differences between men and women in superior-subordinate relationships. *Group & Organisation Studies*, 8, 319-336.
- Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organisational Behaviour and Human Decision Processes*, 43, 118-135.

- Seigall, M., & Gardner, S. (2000). Contextual factors of psychological empowerment. *Personnel Review*, 29 (5-6), 703-722.
- Shockley-Zalabak, P., Ellis, K., & Winograd, G. (2000). Organisational trust: What it means, why it matters. *Organisation Development Journal*, 18 (4), 35-48.
- Shore, L.M., & Wayne, S.J. (1993). Commitment and employee behaviour: Comparison of affective and continuance commitment with perceived organisational support. *Journal of Applied Psychology*, 78, 774-780.
- Simon, B. (1994). *The empowerment tradition in American social work*. New York: Columbia University Press.
- Skinner, E.A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, 71, 549-570.
- Soloman, B. (1976). *Black empowerment*. New York: Columbia University Press.
- Spector, P.E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39 (11), 1005-1016.
- Spreitzer, G.M. (1995a). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38, 5, 1442-1465.
- Spreitzer, G.M. (1995b). An empirical test of a comprehensive model of intrapersonal empowerment in the workplace. *American Journal of Community Psychology*, 23, 5, 601-629.
- Spreitzer, G.M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39, 2, 483-504.
- Spreitzer, G.M. (1997). Toward a common ground in defining empowerment. *Research in Organisational Change and Development*, 10, 31-62.
- Spreitzer, G.M., de Janaz, S.C., & Quinn, R.E. (1999). Empowered to lead: the role of psychological empowerment in leadership. *Journal of Organisational Behaviour*, 20, 511-526.
- Spreitzer, G.M., & Mishra, A.K. (1999). Giving up control without losing control: Trust and its substitutes' effects on managers involving employees in decision making. *Group & Organisation Management*, 24 (2), 155-187.
- Spreitzer, G.M., Kizilos, M.A., & Nason, S.W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management*, 23 (5), 679-704.

- Statistics New Zealand (1995). *New Zealand standard classification of occupations*. Wellington: Statistics New Zealand.
- Staw, B.M. (1986). Beyond the control graph: Steps toward a model of perceived control in organisations. In R.N. Stern & S. McCarthy (Eds.) *The organisational practice of democracy*. New York: John Wiley & Sons.
- Steel, R.P., & Shane, G.S. (1986). Evaluation research on quality circles: Technical and analytical implications. *Human Relations*, 39, 449-468.
- Stephens, C., & Long, N. (1999). Posttraumatic Stress Disorder in the New Zealand Police: The moderating role of social support following traumatic stress. *Anxiety, Stress, and Coping*, 12, 247-264.
- Stevens, M.J., & Campion, M.A. (1994). The knowledge, skill, and ability requirements for teamwork: Implications for human resource management. *Journal of Management*, 20, 503-530.
- Stewart, T.A. (1989). New ways to exercise power. *Fortune*, 6 November, 48-53.
- Story, M.R. (1995). The secrets of successful empowerment. *National Productivity Review*, Summer, 1995.
- Suutari, R. (1993). The case for strategic thinking. *Cost & Management*, 67 (5), 17-21.
- Taffinder, P. (1998). *Big change: A route-map for corporate transformation*. New York: John Wiley & Sons, Inc.
- Taylor, F.W. (1911). *The principles of scientific management*. New York, NY: Norton.
- Terry, D.J., & Jimmieson, N.L. (1999). Work control and employee well-being: A decade review. *International Review of Industrial and Organisational Psychology*, 14, 95-145.
- Tett, R.P., & Meyer, J.P. (1993). Job satisfaction, organisational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293.
- Thibalt, J.W. & Kelley, H.H. (1959). *The social psychology of groups*. New York: Wiley.
- Thomas, K.W., & Tymon, W. (1994). Does empowerment always work: Understanding the role of intrinsic motivation and interpretation. *Journal of Management Systems*, 6 (3), 84-99.

- Thomas, K.W., & Velthouse, B.A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic motivation. *Academy of Management Review*, 15, 666-681.
- Tosi, H. (1984). *Theories of organisation*. New York: John Wiley.
- Tossi, H.L., Rizzo, J.R., & Carroll, S.J. (1994). *Managing organisational behaviour* (3rd ed.). Cambridge, Massachusetts: Blackwell Publishers.
- Tupes, E.C., & Christal, R.E. (1961). Recurrent personality factors based on trait ratings (ASD-TR-61-97). *Lackland Air Force Base, TX: Aeronautical Systems Division, Personnel Laboratory*.
- Tymon, W.G., Jr. (1988). *An empirical investigation of a cognitive model of empowerment*. Unpublished doctoral dissertation: Temple University, Philadelphia.
- Vecchio, R.P, Hearn, G., & Southey, G. (1996). *Organisational Behaviour* (2nd Ed.). Marrickville, NSW: Harcourt & Brace Company.
- Vroom, V. (1964). *Work and motivation*. New York: John Wiley.
- Wageman, R. (1997). Critical success factors for creating superb self-managing teams. *Organisational Dynamics, Summer*, 49-61.
- Wagner, J.A., III (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of Management Review*, 19, 312-330.
- Wagner, S.L., & Rush, M.C. (2000). Altruistic organisational citizenship behaviour: Context, disposition, and age. *The Journal of Social Psychology*, 140 (3), 379-391.
- Wall, S.J. & Wall, S.R. (1995). The evolution (not the death) of strategy. *Organisation Dynamics*, 24 (2), 7-19.
- Wallace, G.W. (1993). Empowerment is work, not magic. *Journal for Quality and Participation*, 16 (5), 10-14.
- Walmsley, H (1999). A suitable ploy. *People Management*, 5 (7), 48-50.
- Walsh, K., Bartunek, J.M., & Lacey, C.A. (1998). A relational approach to empowerment. *Trends in Organisational Behaviour*, 5, 103-126.
- Walton, R. (1985). From control to commitment in the workplace. *Harvard Business Review*, 63(2), 77-84.

- Warr, P.B. (1987). *Work, unemployment, and mental health*. Oxford: Clarendon.
- Wellis, R.S., Byham, W., & Wilson, J. (1991). *Empowered teams: Creating self-directed work groups that improve quality, productivity, and participation*. San Francisco: Jossey-Bass.
- Wetzell, F. (1990). Middle managers and strategy: Microdynamics of inclusion. *Strategic Management Journal*, *11*, 337-352.
- Westsell, J., & Redmond, F. (1990). A person-environmental study of depression. *Social Service Review*, *54*, 363-375.
- White, R.W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, *66*, 297-333.
- Whitener, E.M., Brodt, S.E., Korsgaard, M.A., & Werner, J.M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behaviour. *Academy of Management Review*, *23* (3), 513-530.
- Widiger, T.A., & Trull, T.J. (1997). Assessment of the five-factor model of personality. *Journal of Personality Assessment*, *68* (2), 228-250.
- Wiley, D.M. (1999). Impact of locus of control and empowerment on organisational commitment. *Sciences & Engineering*, *60*(4-B), 31-43.
- Yeatts, D.E., & Hyten, C. (1998). *High-performing self-managed work teams: A comparison of theory*. Thousand Oaks, CA: Sage.
- Zander, A. (1994). *Making groups effective* (2nd ed.). San Francisco: Jossey-Bass.
- Zimmerman, M.A. (1990a). Taking aim on empowerment research: On the distinction between individual and psychological conceptions. *American Journal of Community Psychology*, *18*, 169-177.
- Zimmerman, M.A. (1990b). Toward a theory of learned hopefulness: A structural model analysis of participation and empowerment. *Journal of Research in Personality*, *24*, 71-86.
- Zimmerman, M.A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, *23*, 581-599.
- Zimmerman, M.A., & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology*, *16* (5).

Appendix

Correspondence

(HR Manager name here),

Hi, Peter Johnston here, you may remember me (association and name of contact described here). You may recall that I am undertaking my masters thesis in Industrial/Organisational Psychology and that I am eager to carry out my research at (organisation name here). I have almost finished compiling my survey for distribution, so I would like to meet with you, if possible, some time early next week.

The survey consists of a range of questions relating to both the work environment and the individual, based around the broad concept of psychological empowerment. Employees who are requested to complete the survey will be informed that:

- They have the right not to participate in the study
- They have the right to withdraw from the study at any time
- They have the right to decline to answer any particular questions

All responses will be anonymous and confidential. Participating in the study will entail completing the questionnaire and returning it in a pre-paid envelope to a PO box at Massey University, Albany. The Organisation as a whole as well as each participant will have access to the final research report. Results will be reported in summative form only.

I will be looking at gaining access to approximately 700 non-managerial staff who may be willing to participate.

I look forward to meeting with you to discuss the project in greater detail soon. Thanks for your time,

Sincerely,

Peter Johnston.

Survey of the Work Environment and Work-Related Attitudes

Please answer all four sections, and try to answer each question. The questions in the first three sections are work-related, while the fourth section contains questions relating to some demographic variables. Remember, there are no right or wrong answers to any of these questions. The questions are devised to gain an insight into your personal views only; you do not need to be an “expert” to complete this questionnaire.

Section 1.

At (organisation name here) (Circle either Yes (Y) or No (N));

- | | | | |
|---|--|---|---|
| 1 Management usually give full credit to ideas contributed by employees | | Y | N |
| 2 The atmosphere is somewhat impersonal | | Y | N |
| 3 Management tend to look down on their employees | | Y | N |
| 4 Employees rarely socialize with co-workers after work | | Y | N |
| 5 People take a personal interest in each other | | Y | N |
| 6 Management usually compliment an employee who does something well | | Y | N |
| 7 People go out of their way to help a new employee feel comfortable | | Y | N |
| 8 Management tend to discourage criticisms from employees | | Y | N |

Section 2.

Please respond to questions 9-26 using the scale below to describe yourselves as accurately as possible (circle one)

- | | Disagree
Strongly | Disagree
Moderately | Disagree
Slightly | Neutral | Agree
Slightly | Agree
Moderately | Agree
Strongly |
|---|----------------------|------------------------|----------------------|---------|-------------------|---------------------|-------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 I try to perform all the tasks assigned to me conscientiously | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 Sometimes I'm not as dependable or reliable as I should be | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 I keep myself informed and usually make intelligent decisions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 I am not a very methodical person | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 I have a clear set of goals and work toward them in an orderly fashion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14 I waste a lot of time before settling down to work | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15 I am a productive person who always gets the job done | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16 I often come into situations without being fully prepared | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

17	I never seem to be able to get organised	1	2	3	4	5	6	7
18	When I make a commitment, I can always be counted on to follow through	1	2	3	4	5	6	7
19	I work hard to accomplish my goals	1	2	3	4	5	6	7
20	I strive to achieve all I can	1	2	3	4	5	6	7
21	I am efficient and effective at my work	1	2	3	4	5	6	7
22	I would rather keep my options open than plan everything in advance	1	2	3	4	5	6	7
23	I have a lot of self-discipline	1	2	3	4	5	6	7
24	I think things through before coming to a decision	1	2	3	4	5	6	7
25	I always consider the consequences before taking action	1	2	3	4	5	6	7
26	I rarely make hasty decisions	1	2	3	4	5	6	7

Section 3.

Please respond to questions 27-67 using the scale below to reflect your views about work at (organisation name here) (circle one)

	Disagree Strongly	Disagree Moderately	Disagree Slightly	Neutral	Agree Slightly	Agree Moderately	Agree Strongly	
	1	2	3	4	5	6	7	
27	Management is sincere in its attempts to meet the workers point of view	1	2	3	4	5	6	7
28	I can trust the people I work with to lend me a hand if I needed it	1	2	3	4	5	6	7
29	Management can be trusted to make sensible decisions for the organisation's future	1	2	3	4	5	6	7
30	I have full confidence in the skills of my workmates	1	2	3	4	5	6	7
31	Our management would be quite prepared to gain advantage by deceiving the workers	1	2	3	4	5	6	7
32	I can rely on other workers not to make my job more difficult by careless work	1	2	3	4	5	6	7
33	If I got into difficulties at work I know my workmates would try and help me out	1	2	3	4	5	6	7

34	I feel quite confident that (organisation name) will always try to treat me fairly	1	2	3	4	5	6	7
35	Most of my fellow workers would get on with their work even if supervisors were not around	1	2	3	4	5	6	7
36	(Organisation name) has a poor future unless it can attract better managers	1	2	3	4	5	6	7
37	Most of my workmates can be relied upon to do as they say they will do	1	2	3	4	5	6	7
38	Management at work seems to do an efficient job	1	2	3	4	5	6	7
39	I have access to the strategic information I need to do my job well	1	2	3	4	5	6	7
40	I can obtain the resources to support new ideas and improvement in my unit	1	2	3	4	5	6	7
41	I understand the strategies and goals of the organisation	1	2	3	4	5	6	7
42	I have access to the resources I need to do my job well	1	2	3	4	5	6	7
43	I understand top management's vision of the organisation	1	2	3	4	5	6	7
44	When I need additional resources to do my job, I can usually get them	1	2	3	4	5	6	7
45	The work I do is meaningful	1	2	3	4	5	6	7
46	I have a great deal of control over what happens in my department	1	2	3	4	5	6	7
47	My job activities are personally meaningful to me	1	2	3	4	5	6	7
48	I am confident about my ability to do my job	1	2	3	4	5	6	7
49	I can decide on my own how to go about doing my work	1	2	3	4	5	6	7
50	I have mastered the skills necessary for my job	1	2	3	4	5	6	7
51	I have significant autonomy in determining how I do my job	1	2	3	4	5	6	7
52	I am self-assured about my capability to perform my work	1	2	3	4	5	6	7
53	I have considerable opportunity for independence and freedom in how I do my job	1	2	3	4	5	6	7
54	My impact on what happens in my department is large	1	2	3	4	5	6	7
55	The work I do is very important to me	1	2	3	4	5	6	7
56	I have significant influence over what happens in my department	1	2	3	4	5	6	7
57	I would be very happy to spend the rest of my career in this organisation	1	2	3	4	5	6	7
58	If I had to decide all over again whether to take the job I have, I would take it without hesitation	1	2	3	4	5	6	7
59	I really feel as if this organisation's problems are my own	1	2	3	4	5	6	7

60	I enjoy discussing my organisation with people outside it	1	2	3	4	5	6	7
61	I do not feel a strong sense of belonging to my organisation	1	2	3	4	5	6	7
62	If a good friend was interested in doing the same kind of work I do, I would strongly recommend taking the same job I have	1	2	3	4	5	6	7
63	I do not feel like "part of the family" at my organisation	1	2	3	4	5	6	7
64	This organisation has a great deal of personal meaning for me	1	2	3	4	5	6	7
65	Generally, I am satisfied with my job	1	2	3	4	5	6	7
66	I do not feel emotionally attached to this organisation	1	2	3	4	5	6	7
67	I think I could easily become as attached to another organisation as I am to this one	1	2	3	4	5	6	7

Section 4.

1. What gender are you? Male Female
2. What age are you? _____ Years
3. What is your occupation? _____
4. What is the highest level of education you have achieved? (circle one)
 - a. High school
 - b. Diploma or certificate
 - c. Degree

End of survey
Thank you for your time

Please return the survey in the freepost envelope provided as soon as possible

Items Organised by Scale

Note: * these items are reverse scored

Supervisor Support

Management usually gives full credit to ideas contributed by employees
Management tends to look down on their employees*
Management usually compliment an employee who does something well
Management tends to discourage criticisms from employees*

Peer Cohesion

The atmosphere is somewhat impersonal*
Employees rarely socialize with co-workers after work*
People take a personal interest in each other
People go out of their way to help a new employee feel comfortable

Conscientiousness

I try to perform all the tasks assigned to me conscientiously
Sometimes I'm not as dependable or reliable as I should be*
I keep myself informed and usually make intelligent decisions
I am not a very methodical person*
I have a clear set of goals and work toward them in an orderly fashion
I waste a lot of time before settling down to work*
I am a productive person who always gets the job done
I often come into situations without being fully prepared*
I never seem to be able to get organised*
When I make a commitment, I can always be counted on to follow through
I work hard to accomplish my goals
I strive to achieve all I can
I am efficient and effective at my work
I would rather keep my options open than plan everything in advance
I have a lot of self-discipline
I think things through before coming to a decision
I always consider the consequences before taking action
I rarely make hasty decisions

Interpersonal Trust

Faith in intentions of management

Management is sincere in its attempts to meet the workers point of view
Our management would be quite prepared to gain advantage by deceiving the workers*
I feel quite confident that (organisation name) will always try to treat me fairly

Confidence in actions of management

Management can be trusted to make sensible decisions for the organisation's future
(Organisation name) has a poor future unless it can attract better managers*
Management at work seems to do an efficient job

Faith in intentions of peers

Most of my workmates can be relied upon to do as they say they will do
I can trust the people I work with to lend me a hand if I needed it
If I got into difficulties at work I know my workmates would try and help me out

Confidence in actions of peers

Most of my fellow workers would get on with their work even if supervisors were not around
I can rely on other workers not to make my job more difficult by careless work
I have full confidence in the skills of my workmates

Access to Information

I have access to the strategic information I need to do my job well
I understand the strategies and goals of the organisation
I understand top management's vision of the organisation

Access to Resources

I can obtain the resources to support new ideas and improvement in my unit

I have access to the resources I need to do my job well

When I need additional resources to do my job, I can usually get them

Empowerment

Meaning

The work I do is meaningful

My job activities are personally meaningful to me

The work I do is very important to me

Competence

I am self-assured about my capability to perform my work

I am confident about my ability to do my job

I have mastered the skills necessary for my job

Self-determination

I have significant autonomy in determining how I do my job

I can decide on my own how to go about doing my work

I have considerable opportunity for independence and freedom in how I do my job

Impact

I have a great deal of control over what happens in my department

My impact on what happens in my department is large

I have significant influence over what happens in my department

Affective Organisational Commitment

I would be very happy to spend the rest of my career in this organisation
I really feel as if this organisation's problems are my own
I enjoy discussing my organisation with people outside it
I do not feel a strong sense of belonging to my organisation*
I do not feel like "part of the family" at my organisation*
This organisation has a great deal of personal meaning for me
I do not feel emotionally attached to this organisation*
I think I could easily become as attached to another organisation as I am to this one*

Job Satisfaction

If I had to decide all over again whether to take the job I have, I would take it without hesitation
If a good friend was interested in doing the same kind of work I do, I would strongly recommend taking the same job I have
Generally, I am satisfied with my job