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## Explaining managers' participation in career-focused learning and development

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# **Explaining Managers' Participation in Career-Focused Learning and Development**

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## **Abstract**

This purpose of this study is to understand and explain the relationships between managers' participation in career-focused learning and development (CFLD) and a multiplicity of individual, dispositional, organisational, and environmental factors. The contemporary career highlights the role of managers as active agents of their own careers. Managers are expected to be more career self-directed and to take ownership for investment in their career competencies. Managers are increasingly expected to have developed a complex set of personal and employability skills. CFLD is defined as formal voluntary programs of learning and development which contribute to the enhancement of generic competencies that have portability to different contexts. These competencies have value in facilitating the career progression of individuals. The study develops a model which suggests a three-level (micro-, meso- and macro-levels) framework to allow for a layered understanding of influences on participation in CFLD.

The study testing the CFLD model was conducted with 375 managers in Ireland in 2006 and 2007. The study findings reveal that participation of managers in CFLD is complex and multi-faceted. The research suggests that individual dispositions, knowledge, attitudes and beliefs are particularly important in explaining participation in CFLD. The findings propose that motivation to learn, understanding of development needs, career exploration and planning, and the climate for development are highly significant.

The study makes a significant contribution to both the literature on participation in learning and development and managerial careers by advancing our understanding of the concept of career-focused learning and development. In addition, the research has combined a detailed theoretical research design with rigorous statistical analysis with a view to highlighting practical implications for organisations and individuals.

The study findings have important implications for both individuals and organisations. For organisations the following questions arise: Should they provide CFLD opportunities to their managers? Should the manager bear the cost of CFLD? For individuals these questions arise: to what extent can the contemporary career be planned given the complexity of the environment and how do managers make decisions concerning the competencies that are valued in the labour market?

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## Declaration

This thesis is entirely my own work and has not been submitted to any other University or Higher Education Institution or for any other academic award.

Where the work of others has been reported, it has been fully acknowledged and referenced.

A handwritten signature in cursive script that reads "Ronan Carbery". The signature is written in a dark ink and includes a stylized flourish at the end of the name.

Ronan Carbery

# Chapter 1. Introduction and Research Objectives

## 1.1 Introduction

The notion and context of careers has changed significantly over time. Prior to the 1980s, protectionist and full employment policies of many countries provided considerable career security with lifetime employment with one employer frequently the norm. Subsequently, careers have been challenged by economic and organisational restructuring, increased competition, globalisation, and the growth in information and communications technology. The influence of the aforementioned phenomena on careers include a move from relational to transactional psychological contracts, a shifting focus from specific to generic competencies, a changing locus of responsibility for learning and development, the decline of organisational careers, and the growth of new career concepts.

There exists a lacuna in our understanding of contemporary managerial careers and, more specifically, participation by managers in learning and development for the purposes of career development. The goal of widening participation in learning of low skilled and excluded groups has potentially overshadowed current managerial research into patterns of learning and development (McCracken and Winterton, 2003). Models of participation in learning and development activities similarly treat employees as homogeneous groups with little or no distinction between employee groups (cf. Hertz and Williams, 2009). The nature of managerial work in gathering and processing large and often intricate pieces of information so that effective decisions can be made in a timely manner is markedly distinctive to warrant specific research into managerial participation in learning and development. Managerial work is complex and ambiguous (Ashford and Tsui, 1991), and this ambiguity is amplified as managers progress through an organisational hierarchy (Jaques, 1961). Many factors contribute to this complexity and ambiguity, including the variety of roles relevant to a manager's job (Mintzberg, 1973), the existence of multiple stakeholders in the manager's social structure (Salancik *et al.*, 1975; Tsui,

1984) and the tendency to rely on subjective judgements when assessing managerial performance (Ashford and Tsui, 1991).

Current career literature suggests that the 'old deal' on careers is redundant (Arthur *et al.*, 1999). This refers to the old-style relational psychological contract, based on terms of reciprocity between an individual and an organisation where hard work, loyalty and commitment were implicitly guaranteed in return for job security and continuous career progression (Hiltrop, 1995). The old deal has been replaced by contemporary career concepts with varying labels. This broad rubric includes career orientations such as boundaryless, protean, authentic, portfolio and kaleidoscope careers. One commonality shared by these concepts is that of self-directedness. The career is directed by the individual rather than the organisation. It is likely to involve a number of shifts in employment, between organisations, industries and, perhaps, cultures. While no longer providing employment security, if managed correctly, it can result in increased marketability in the labour market, skill development, personal growth, flexibility and improved work/life balance (Reitman and Schneer, 2003). Peiperl and Arthur (2000) term this as employability security replacing employment security. The more recent emergence of employability perspectives of the employment relationship in the HRD literature highlights the need for managers to be more proactive in managing their careers. Definitions of an employable manager focus on issues such as the development of generic competencies that are portable and transferable from one organisation to another. A manager with high employability will continually invest in training and development, engage in self-initiated learning activities and move jobs more frequently within, and between, organisations (Carbery *et al.*, 2003).

The emergence of these new career orientations has important implications for managers' participation in learning and development. The competencies required to engage in self-directed career management are different from those required in employment conditions characterised by the 'old deal' (Allred *et al.*, 1996) and include cross-functional and international competencies, collaborative leadership skills, self-management skills, personal competencies such as flexibility, integrity and trustworthiness, and the ability to

manage oneself as well as manage others. These skills and competencies are predominantly generic, portable attributes that can be applied across a variety of contexts, industries and organisations. Training within organisations is often characterised by task-specific learning and is difficult to apply beyond the job or organisational context. As a result of this move toward enhancing human capital, the traditional notions of training as periodic organisational interventions that are intended to enhance specific job-relevant knowledge and skills have been increasingly blended into a broader notion of ongoing, continuous development of employees (Baldwin and Magjuka, 1997). The ability to engage in self-directed career management strategies also necessitates the need for the manager to take responsibility for his/her own learning and development that focuses on their wider career goals.

## **1.2 Research Question**

The overarching research question posed by this study is: **What factors explain managers' participation in career-focused learning and development?**

Within this broad question this study investigates the following sub-questions:

1. What contextual issues influence participation in career-focused learning and development?
2. What impact do individual dispositions, knowledge, attitudes and beliefs have on participation in career-focused learning and development?
3. How do individual human capital characteristics influence participation in career-focused learning and development?
4. What do the findings tell us overall about managers' participation in career-focused learning and development?

This chapter sets out the overall purpose and rationale for the research. A definition of career-focused learning and development is offered. The theoretical context and work and organisational context surrounding the nature of contemporary managerial careers are presented. A rationale for studying managers within a Human Resource Development

(HRD) framework is subsequently offered. Finally, the structure of the thesis is presented with a brief outline of each subsequent chapter.

### ***1.3 Rationale for Research***

Research on participation in learning and development has attracted academic, professional, organisational as well as public attention. Academics are interested in explaining why managers participate in development activities whereas managers and organisations focus on the benefits derived from such participation. Public bodies and policy makers are concerned that a sufficient stock of managerial skill is available to support economic growth and expansion of firms. These stakeholders have, in many cases, divergent perspectives on the value of participation in career-focused learning and development activities.

In knowledge-intensive economies, lifetime employment is not guaranteed and individuals need to be resigned to career change at least once in a career. A lack of job security thus places the onus on the individual to take control of his/her future employability. Individuals need to take responsibility for their own personal development, take ownership of their own employability and view their career in terms of wider employability across industries and sectors (O'Donoghue and Maguire, 2005).

Managers are increasingly studied in the context of learning and career (New, 1996; Hall and Moss, 1998; Feldman, 2002). They are expected to initiate career-focused learning and development in the absence of organisational guidance. The managerial career is progressively more market-based and specialisation is considered to be a negative. Leonard-Barton (1992), for example, suggests that there is a risk of becoming trapped in 'core rigidities' by over investing in core competencies relevant to the organisation but not to the marketplace. Managers need to participate in a variety of learning situations which provide them with both behavioural and cognitive complexity (Karaevli and Hall, 2006). It is critical for the career-focused manager to be a fast and adaptive learner (Hall,

2002) as well as a strong performer. Managers are also expected to utilise self-directed career management strategies on a continual basis (McCall and Hollenbeck, 2007).

An important defining characteristic of managers is that of managerial self-efficacy. Managerial roles involve gathering large and often complex amounts of information so that effective decisions can be made. Chen and Bliese (2002) suggest that individuals high on managerial self-efficacy are more able to remain task-, rather than self-, focused, and efficient but creative in their decision making processes in the face of organisational setbacks. Managers whose efficacy beliefs are strengthened by their performance tend to set increasingly challenging goals for themselves and are able to use creative thinking processes to achieve them. Managers' self-efficacy with respect to technical, human relations and conceptual managerial tasks are related to the success of managers as determined by promotions, increased responsibility and salary (Chen and Bliese, 2002).

Theory building needs to recognise more fully the interplay between the individual and context. Poell and van den Krogt (2003) highlight that individual characteristics interact with, and are influenced by, organisational context. Existing models place a strong emphasis on the power of individual agency. Individual agency is important in the context of participation by managers in career-focused learning and development; however there is also a need to explain the role of specific contextual influences in shaping the behaviour of managers. Managers are increasingly conceptualised as active agents who both construct and are constrained by context (Inkson, 2007). As active agents they are expected to be confident, motivated and self-directed to participate in career-focused learning and development (Teagarden, 2007). Carbery and Garavan (2009) highlight the importance of the individual as active agent of his/her development. The notion of self-direction brings with it significant responsibilities. Managers will find themselves becoming less competitive unless they are open minded and make choices for learning that reflect their personal values and career trajectories.

The concepts of individual agency and context are equally relevant to understanding the contemporary career of a manager. The nature of managerial careers has changed

fundamentally. Traditionally it was associated with long-term employment with a single employer and movement through a sequence of increasingly challenging jobs within a hierarchy. O'Mahoney and Bechky (2006) suggest that the post-industrial or post-bureaucratic workplace has changed our thinking about careers and the number of managers seeking the traditional career has declined. Managers increasingly have to consider the external labour market when they make decisions about their career and development. Kanter (1989) suggests that managers who are focused on their value in the external labour market are concerned with both employability and coherence. Higgins (2001) suggests that managers construct their employability by "developing multiple competencies through on-the-job learning, formal development, and by connecting to social and professional networks". Research suggests that managers' learning and development must be coherent and they must engage in learning experiences that enhance the appearance of continuity. Coherence is largely determined by the external labour market. Zuckermann *et al.* (2003) highlight that coherence in the development of skills results in more career opportunities in the external labour market and increased earnings.

#### **1.4 Defining Career-Focused Learning and Development**

In operationalising a conceptualisation of career-focused learning and development (CFLD), the literature on the myriad of definitions of learning, training, and development was examined. The concept of CFLD is not particularly well defined in the extant research. Many definitions of learning, training and development exist. Learning itself implies the attainment of knowledge, understanding or skills. It is a cognitive and skills-based process that has affective outcomes (Kraiger *et al.*, 1993). Garafano and Salas (2005) suggest that learning is a somewhat static concept as evidenced by terms such as 'lifelong learning' and 'continuous learning'. They argue that if learning was viewed as a dynamic and ongoing process then these concepts would be redundant.

Researchers have identified how the concept of development differs from the notion of training. Training is defined as a planned effort by an organisation to facilitate the

learning of specific knowledge or skill that individuals require in order to carry out a current job or role (Goldstein, 1993). Reynolds (2004) suggests that it tends to be instructor-led and content driven whereas the objectives of development are not necessarily tied to a specific job. London (1989) defines development as consisting of courses, workshops and assignments that impact upon personal and professional growth. Opportunities for development tend to place less emphasis on skills and behaviours for a specific position or job and more importance on requisite skills for long-term personal effectiveness and employability, while simultaneously contributing to the organisations' ability to remain competitive by providing high value-added goods and services (Noe *et al.*, 1997). Development implies an ongoing process of growth more so than learning and training and therefore provides a more rigorous understanding of the motivational processes that underpin the choice to participate in development activities (Garofano and Salas, 2005). It is also common for individuals to be tasked with the challenge of taking it upon themselves to actively pursue activities that will help them to continuously learn and self-develop (Antonacopoulou, 2000; Hamblett and Holden, 2000).

Definitions of career development in the context of HRD are useful in helping us to determine the focus and content of career-focused learning and development (Egan *et al.*, 2006). Definitions by Cummings and Worley (2005), Boudreaux (2001) and Sampson *et al.* (1998), for example, suggest that career-focused learning and development activities focus on the individual manager, facilitate the alignment of the manager's subjective and objective career, facilitate the acquisition of competencies designed to seek new career opportunities and emphasise the need for ongoing development planning and action towards personal, work and life goals. The term career-focused learning and development as used in this research denotes development from learning activities that are undertaken to enhance employment related skills and competencies by capturing the ongoing nature of employability driven career management. It significantly differs from lifelong learning which is more focused on learning undertaken in civic, social and employment contexts and which is not necessarily related to a manager's career (European Commission, 2002).

Table 1.1 provides a summary of this understanding of career-focused learning and development.

**Table 1.1 Understanding Career-Focused Learning and Development**

<p><b>Focus of Learning and Development</b></p>	<ul style="list-style-type: none"> <li>• Focus on growth in self-efficacy to pursue particular career options or trajectories.</li> <li>• Development of skills that port easily from one context to another.</li> </ul>
<p><b>Learning and Development Activities</b></p>	<ul style="list-style-type: none"> <li>• Participation in voluntary rather than mandatory learning activities.</li> <li>• Emphasis on development and learning activities to assert control over a career.</li> <li>• Emphasis on individual initiative and responsibility for learning.</li> <li>• Use of special projects, assignments and stretch work.</li> <li>• Use of formal interventions that focus on career planning, career insight and career development.</li> <li>• Self-managed learning activities such as guided reading, enhancing self-awareness and job market search activities.</li> <li>• Experience with multiple employers and roles to accumulate portable skills.</li> </ul>
<p><b>Learning and Development Outcomes</b></p>	<ul style="list-style-type: none"> <li>• Confidence to make transitions that lead to career success.</li> <li>• Acquisition of both depth and breadth in portable competencies.</li> <li>• Increased willingness to make non-obvious career moves.</li> <li>• Greater physical and psychological mobility in careers.</li> </ul>

Based on ideas presented by Boudreaux (2001); Cummings and Worley (2005); Garofano and Salas (2005); Noe *et al.* (1997); Sampson *et al.* (1998).

### **1.5 Defining Participation in Career-Focused Learning and Development**

In order to define the concept of participation it is necessary to distinguish between intention to participate, actual engagement, and actual participation.

Hurtz and Williams (2009) argue that intent to participate is the immediate precursor to a decision to participate in development activities. The major determinants of intention to

participate are attitudes about participation, perceived subjective norms regarding participating, and perceived behavioral control over participating. Dimensions of intention to participate include work centrality, job involvement, conscientiousness, and learning goal orientation as antecedents of attitudes toward future development, as well as reactions to past activities and the perceived supportiveness of the work environment. Hurtz and Williams (2009) suggest that intention can be operationalised by desire, felt responsibility and self-prediction. Desire is the individual's perception that he or she wants to participate in future development activities; felt responsibility refers to the feeling that he or she is obligated to participate in future development activities; and self-prediction is the expectation that he or she will participate in future employee development activities.

Woo *et al.* (2008) define actual engagement as the level of behavioral involvement in developmental activities that participants exhibit. Elements of engagement include: the degree to which participants are engaged in the activity such as participant involvement in the session, asking questions, and voluntary goal setting; the elicitation of engagement behaviors such as offering feedback in the middle of an exercise, giving participants an opportunity to react behaviorally; and the documentation of specific behavioral outcomes such as the participants' goal attainment and participation in additional learning and development activities.

Actual participation can be conceptualised in terms of participation in voluntary or mandatory formal learning and development activities. Carbery and Garavan (2010) suggest that actual participation means formal commitment which includes enrolling and participating in organisationally provided formal learning and development programmes. For a wider population of cohorts that encompasses individuals at all levels of employment, it may be necessary to examine whether participation is voluntary or mandatory, however it is argued that managers are more likely to be intrinsically motivated to participate in voluntary formal learning and development activities.

## ***1.6 Theoretical and Workplace Contextual Issues***

The context within which careers take place is in constant flux, meaning that the nature of careers also changes over time. As noted in Section 1.1, a number of contemporary career concepts come to the fore as viable career orientations. Within HRD, the construct of career represents the engagement of the individual with the organisation. From this perspective, career plays a part in organisational reward and control systems, and career management is a bilateral arrangement with organisations and individuals both exerting some level of control over careers. This section provides an overview of various theoretical and workplace issues relevant to the study of CFLD.

### **1.6.1 The Theoretical Context**

Underpinning the conceptual understanding of CFLD are two theoretical bases that provide a framework in which to rationalise the decision to participate in CFLD activities.

Firstly, human capital theory focuses on understanding how various human capital characteristics of the manager explain participation in CFLD. The basic premise of human capital theory is that a manager with greater levels of human capital is more productive and will have a greater number of career options. Acquisition of human capital takes place through education, learning and development. Human capital theory looks at the rewards of investment in learning and development activities and assumes that managers own their own human capital and are free to use it as they wish. They may also have to incur the costs of investing in generic competencies because firms may only be interested in investing in firm-specific competencies (Mincer, 1974). Human capital theory advocates that managers should broaden their skills base, invest time and energy in their personal development; focus on flexibility, adaptability and individual employability; engage in self-assessment and reflection; and focus on competencies with high portability (Benson, 2006).

Human capital theory also recognises that there are only limited situations where an employer will find it useful to pay for general training. According to human capital theory, situations where a firm would pay for general training occur when there is more certainty of a positive return to the firm because employees are likely to remain long enough for the firm to earn a positive return on the training costs. An example where employers will feel confident that trained employees will be retained is when the employer is a monopsonist (Becker, 1962). Monopsonist employers are the dominate employer in a labour market which makes it less likely that an employee is able to quit for a better job due to a scarcity of opportunity not controlled by the monopsonist firm.

Secondly, agency theory is increasingly valuable in explaining participation in learning and the management of career-focused learning and development. Alvarez (2000) argues that individuals are increasingly the owners and agents of their learning and career trajectories. They are capable of enacting their professional lives and learning. Concepts such as motivation, self-efficacy, instrumentability and self-regulation, among others depict individuals as perceiving and experiencing themselves as 'causal agents of their environment'. Marshall (1989) suggests that an agency perspective expresses independence through self assertion and control over the environment. Agency asserts itself in focused, direct action to control and/or alter learning processes or outcomes.

Agency theory does however recognise that, given discretion on the direction and degree of investment in human capital, it is likely that the organisation as the principal will promote firm-specific human capital over more generic human capital. It postulates that self-interest or opportunistic behaviour will occur where one particular individual has control over the other. Low principal control over the agent and high information asymmetry in favour of the agent gives the agent more discretion in terms of investment in learning and development. This raises important issues for the manager who wishes to assert control over the relationship. Important characteristics in this respect include self self-efficacy, motivation to learn, concern with skill portability and the nature of the psychological contract.

## **1.6.2 The Work and Organisational Context**

At the midpoint of the previous century a managerial career held particular appeal. The career path promised to managers in large organisations was typically an unimpeded, upwardly mobile progression on a corporate ladder that would provide security and financial rewards (Hall and Moss, 1998). In return, the organisation expected a productive, satisfied and loyal management team. For consecutive decades this system prevailed. The myriad environmental factors (cf. increased global competition, mergers and takeovers, relocations to low cost economies, growth in ICT) of the 1980s and 1990s significantly impacted organisations to the extent that they responded by downsizing and restructuring (Uchitelle and Kleinfeld, 1996). Numerous managers were made redundant in an attempt to streamline and reduce costs (Reitman and Schneer, 2003). The implicit promise of job security in return for organisational commitment was reneged upon. What had once been the promised managerial career path could no longer be guaranteed. This has important implications for the nature of managerial work; how psychological contracts between managers and organisations have evolved; how the locus of responsibility for learning has shifted; the move from employment to employability; and self-directedness of managers.

### **1.6.2.1 The Changing Nature of Managerial Work**

The effect of restructuring has made organisations increasingly boundaryless, both internally and externally, and has given rise to boundaryless careers (Arthur and Rousseau, 1996). The boundaryless career highlights a trajectory with infinite possibilities. The boundaryless career concept widens our perspective toward a multitude of possible career outcomes, both within and across organisations. Boundaryless careers can involve physical change of employers or encompass careers that draw validation and marketability from outside the present employer (e.g. academics); careers that are sustained by external networks; or careers that rely on information from outside (e.g. financial broker). Careers can also be described as boundaryless when individuals base career choices on internal standards such as personal or family. The boundaryless career perspective acknowledges the subjective construction of career situations regardless of

structural constraints and that learning can take place through extra-organisational networks, personal-family boundaries and these subjective interpretations made by the manager.

The boundaryless career concept challenges the traditionally held orthodoxy that large, bureaucratic organisations hold significant influence over the individual's career. Employment is less a result of loyalty to one organisation than of employability in terms of the marketability of skills and knowledge of the individual in the external labour market. Indeed, Handy (1998) observes that lifetime employment with one organisation represents "bad economics and bad morals" (p. 89).

From a boundaryless career perspective, career development must strengthen individuals' self-direction and adaptability within a more transactional employment context. Self-direction and adaptability are primarily determined by an individual's ability to engage in beneficial exchanges. Therefore, career mobility and employability can be improved through the development of relevant competencies and social networks.

The boundaryless career has significant implications for the manner in which organisations manage the development of their workforce. It implies a shift from managing "human capital" to managing relationships in ways that allow organisations to respond flexibly to market changes. The dilution of bureaucratic and cultural mechanisms of control and coordination can be offset by encouraging participation in project and occupational communities beyond the boundaries of the organisation. This enables learning and knowledge sharing, and fosters individuals' capacity to respond with resilience to job, career, and life changes.

### **1.6.2.2 Revised Psychological Contracts**

Herriot and Pemberton (1997) suggest that a career is essentially a series of psychological contracts between the organisation and the individual, in which each has implicit expectations of, and obligations to, the other. The psychological contract is useful in

explaining the increased focus on career-focused learning and development. Changes in organisations as a result of globalisation and advancements in technology have led to a revised notion of the traditional career contract, resulting in a decrease in employers' commitment and willingness to retain individuals (Robinson and Rousseau, 1994). The decline in collectivist and legalistic approaches to the management of employment relationships and the rise in different types of working arrangements as organisations respond to increased uncertainty, deregulation and volatility in the economy, and assorted pressures arising from globalisation have resulted in increasingly diverse employment relationships that give rise to considerable ambiguity as to the nature of what is expected to be exchanged in the employee-employer relationship. Organisations are now adopting greater flexibility in terms of business risks to employees through the introduction of share ownership, profit sharing and profit-related pay schemes and differentiate between core and peripheral employees. Employees are simultaneously seeking individualised opportunities that fit their career and work-family relationships and therefore expect greater flexibility on the part of their employer to provide opportunities for the achievement of these goals.

Transactional employment contracts have given rise to 'i-deals' (Rousseau, 1995) – idiosyncratic deals that individuals negotiate with their employer regarding terms that mutually benefit both parties. They are voluntary, personalised agreements of a non-standardised nature that vary in scope from a single feature to the entire employment relationship. The market power of individuals and/or the value the employer places on them enables employees to engage in individualised bargaining. When the work offered is neither highly standardised nor easily monitored or where it is scarce, individuals are in a position to exert considerable bargaining power. This level of power allows the individual to decide when, how, and for whom to be productive.

Job security is being replaced with security based on the individual's value in the marketplace. While individuals may no longer have a job with the same organisation, they will maintain employment with an organisation for the duration of their working

career. This lack of job security places an onus on managers to take control of future employability and adopt independent and assertive career behaviours.

### **1.6.2.3 Locus of Responsibility for Learning**

A common theme in the study of contemporary managerial careers is that of the need for managers to display what Martin and Butler (2000) term 'career resilience' and participate in the management of their careers by taking responsibility for their learning (Thomson *et al.*, 2001). Managers are of most value to their organisations when they are actively participating in ongoing learning and development, and when this development is proactive or self-motivated (Han and Williams, 2005). Taking responsibility for learning is critical for managers "as a means to keep their knowledge and skills current in the midst of a continuing, and expanding explosion of knowledge, information and ideas" (Rothwell, 2002, p. 7)

Hall and Moss (1998) propose the protean career concept to capture this career orientation. They suggest that development is continuous, self-directed, relational, and found in work challenges. More broadly, it describes a career that is driven by the individual and not by the organisation (Hall, 1976). The central tenet of the protean career is that it is a reflection and manifestation of the individual career actor. An individual with a protean career places self-fulfilment and psychological success above concerns and norms that would have their source outside of the individual. Psychological success is considered to be subjective success based on the person's own goals rather than objective measures of success that may be defined externally, e.g. salary or promotions.

A significant dimension of the protean career is that of self-directed career management. The protean career emphasises a self-directed approach to learning and the idea that a career is driven by personal values. It envisages that learning is a mindset rather than a set of activities. The mindset emphasises freedom, self-direction and the making of

choices in respect of learning which are based on one's personal values. It may in extreme cases represent a sense of calling to learning.

While the boundaryless career concept crosses many different "boundaries" that are more negotiable than before, its primary characteristic is that it plays out across multiple organisational boundaries. This implies that a protean career is more obvious and functional in such a setting. Career development practices that allow individuals to increase their identity awareness, adaptability, and reflection skills will enhance their protean attitudes and identity. Hall and Mirvis (1998) conceive the protean career as a series of learning cycles. A significant barrier to self-development in terms of the protean career is the inability to go beyond adaptation to career challenges and step back to reflect upon career identity, career assumptions and working definitions of success. Research suggests that such 'double-loop' reflection on both identity and adaptability is relatively uncommon and therefore represents a key target for the focus of career development (Argyris and Schön, 1978). As double-loop learning is unnatural for many individuals, particularly in areas such as identity and values, this is an area that may require outside intervention to motivate many people to address it.

Similar to the protean career in terms of individual responsibility for career and learning is the authentic career. An authentic career concept emphasises the need to be truthful to one's self (Peterson, 1997) and to others by ensuring congruence between what one feels and what one demonstrates in public behaviour about one's competence. For example, Tedeschi (1980) suggests that an authentic individual "is one who takes responsibility for freely chosen actions that represent some internal standards – of self, potentialities and principles" (p. 7). This suggests that the authenticity seeking manager is willing to take the initiative and be responsible for his/her learning. The manager is able to achieve congruence between the private and public domains of one's self.

The extent to which managers have control over their own learning and personal development is dependent on their role and their level within the organisation. In this context, the more scope managers have to learn, the more opportunity they in turn will

have to drive learning and development which focuses on self and career. Accordingly, it can be expected that managers at middle and senior levels have the scope to participate in self-directed career-focused learning and development on an ongoing basis (Bosley *et al.*, 2006).

#### **1.6.2.4 The Focus on Employability**

Fugate *et al.* (2004) identify a shift in career objectives from employment to employability. As skill requirements change, managers must also change. They must develop new skills that can be transferred across multiple boundaries. Education can no longer be considered a once-off process to prepare an individual for the workplace, it must be regarded as an ongoing process of development to meet continually changing demands and maintain employability (Inkson, 2007).

The growth of options other than full-time permanent employment with one employer has led to the development of what Handy (1989) calls portfolio careers. It views work as an overall portfolio rather than a linear experience where individuals use diverse skill sets in multiple types of organisations and/or industries. It requires the individual to balance a portfolio of different and changing opportunities and envisages that individuals build careers around a collection of portable skills and interests. It places a strong emphasis on self-management. The relatively small amount of literature on this career concept suggests that it is pursued by professionals and managers rather than operative and semi-skilled employees (Mallon, 1998). However, Mallon (1998) also finds that a manager's decision to embrace a portfolio career was due to organisational push rather than the initial attractiveness of the work.

#### **1.6.2.5 Self-Directedness of Managers**

De Waele *et al.* (1993) suggest that self-directed managers understand their value system and develop personal competencies; they benefit from self-management opportunities; they are better prepared to manage and direct others; they are less dependent on the organisation and less susceptible to manipulation; they believe that their own learning

depends on their own doing and take control of their learning; they prepare for the future through professional training or by learning new skills; and they do not wait for the organisation to provide opportunities for development, rather they take charge of the process themselves.

One of the goals of learning is the requirement to develop managers who are capable of learning where learning is viewed as a continuous learning process. Key to this aim is the perception of the manager as a self-directed learner capable of assessing his own learning needs and taking the necessary steps to address those needs either independently or with the assistance of the prevailing vocational and education system or other available sources (Knapper and Copley, 2000). Spreitzer *et al.* (1997) finds evidence that those who proactively seek formal and informal opportunities to learn more about themselves, their work environment, their organisation and their external environment, reported more significant learning outcomes. Curiosity (an emotional state that stimulates information and knowledge seeking) and enjoyment of novelty and new challenges suggest a propensity to break with the status quo and engage in CFLD.

London (2002) suggests that self-directed individuals understand their capabilities in relation to changes in the demands of the business and use feedback to revise their self-concept and change behaviours accordingly. Self-direction is most likely to be found in Western cultures which emphasise the individual over the common good. Protean and boundaryless careers, in particular, have been seen as predominantly Western or Anglo-Saxon concepts due to the preoccupation with the individual. These concepts may not have applicability in non-Western cultures where collectivism is considered the predominant cultural norm.

These theoretical and workplace issues are posited to be relevant to the study of managers' participation in CFLD. They will be explored in more detail and situated within a managerial context in Chapter 2.

## **1.7 Thesis Structure and Chapter Outline**

The second chapter outlines in detail the relevant variables affecting participation in career-focused learning and development as identified in the literature. A conceptual model to explain manager participation in CFLD is proposed based on the preceding theoretical evidence presented. A number of research propositions are also suggested.

Chapter three describes the research methodology. The research question and sub-questions are operationalised and a theoretical justification for the quantitative methodology is outlined. The data collection, sampling design and fieldwork is described, followed by a description of the research instrument. The methodological limitations are presented with an overview of how the data was prepared for analysis.

Chapter four presents the data analysis with an overview of the data analysis techniques utilised. A summary of the response rate and human capital characteristics is provided, followed by a factor analysis of the scale items used in the study, including the reliability and validity of the scale items. Descriptive data relating to the remaining variables is presented with a correlation analysis of all variables. The results of the structural equation modelling are described with an analysis of how well the data fits the model described in Chapter 2.

Chapter five discusses the findings from the empirical investigation and identifies the level of support for each of the research propositions. The contribution of the research to existing knowledge is offered, followed by the research and practice implications. The limitations of the study are described and areas for future research proposed.

## **Chapter 2. Literature Review**

### ***2.1 Introduction***

This chapter reviews the literature as it pertains to the theoretical and research contexts relevant to the study. A number of areas will be engaged with, including the changing nature of managerial careers and alternative careers models, contemporary career concepts and their implications for CFLD, constraints on managerial careers, and specific individual and organisational level perspectives relevant to understanding participation in CFLD.

The current state of the literature on participation in learning and development for career benefits will be examined. Drawing upon the literature from career theory, adult learning and development, career adjustment and human resource development, a theoretical framework is subsequently proposed to understand and explain the participation of managers in CFLD. A theory building approach was adopted to enhance existing conceptualisations of learning and development for career benefits. The psychological and learning and development literature was categorised into two distinct areas: that relating specifically to managers and that to individuals in general. The European workplace literature tends to focus on contextual and work content issues whereas the US literature is strongly positivistic and focuses on the predictors of individual learning. This literature base provides useful insights on the variables of interest in this research. The US-based literature dominates a great deal of literature in workplace participation in learning and development and a significant proportion of the literature in this research is drawn from this field. As a corollary of this, a lack of cross-cultural research in participation in CFLD is also evident. Certain constructs such as autonomy are rooted in Western culture and do not necessarily travel well across cultural boundaries. The literature may reflect a predominant bias towards managers in US and European countries.

The dominant research designs found in the literature reveal that the decision to participate results from an interplay between individuals within organisations and social structures (Wang and Wang, 2004). These designs, while useful, have a number of weaknesses which need to be addressed in future theory building. They sometimes do not sufficiently distinguish between mandatory and voluntary participation (Wang and Wang, 2004). Models which explain voluntary participation need to address concepts such as autonomy, career exploration and planning and self-efficacy. Aspects of context such as the extent and types of CFLD opportunities would appear to be a particularly relevant variable to include in a model which focuses on managers. The extent of these opportunities tends to be overlooked in existing models.

In order to address the question of what factors explain managers' participation in CFLD, it is important to first understand the changing nature of careers and how contemporary career constructs influence career development. The second section of this chapter seeks to understand the self-directedness of managers and why they participate in CFLD by presenting a number of individual and organisational theoretical perspectives that attempt to explain participation in terms of career theory, adult learning and development theory, and HRD theory. The third section of the chapter outlines key concepts and variables that explain participation in CFLD and builds a framework to explain why managers choose to participate in CFLD.

## ***2.2 The Changing Nature of Managerial Careers and Alternative Career Models***

In order to understand contemporary managerial careers it is first necessary to examine how concepts of careers have changed over the last several years. The traditionally held definition of career as defined by Wilensky (1961, p.523) in structural terms is "a succession of related jobs arranged in a hierarchy of prestige through which people move in ordered (more or less predictable) sequence". The work of Arthur and Rousseau (1996) has significantly influenced current career thinking and they define the 'new' career as "the unfolding sequence of a person's work experiences over time" (p.4). The

distinction between the two paradigms lies in the emphasis that Arthur and Rousseau place on the individual and the subjective interpretation of what constitutes a career can only be answered by the individual. While the original conceptualisation of career relies on hierarchies that exist outside the individual in a spatial dimension to provide structure, current thinking emphasises the individual travelling through time. Traditionally, careers were expected to unfold and evolve within the context of one or two employers and were conceptualised to progress in lockstep, linear career stages (Super, 1957; Levinson, 1978). Success was defined by the organisation and measured in subjective terms such as promotions and salary (Hall, 1996). This traditional conceptualisation of careers dominated empirical research on careers and career development (Feldman, 1989; Sullivan, 1999).

A number of conceptualisations of career have emerged in the past decade or so which have influenced career theory and research and have subsequently become part of the new career vocabulary. These new concepts have emerged from the reduction in traditional mechanisms for career structure and success due to the flattening of organisational hierarchies (Littler *et al.*, 2003) and the influence of external labour markets over the employment landscape (Cappelli, 1999). As society attempts to develop flexibility in its work arrangements, individuals frequently depart from traditional careers paths and seek alternative routes for career success.

In particular, two career concepts have dominated the thinking of academics and career practitioners in recent debates (Briscoe and Hall, 2006). Boundaryless and protean careers have enjoyed considerable recognition as widely accepted metaphors of career conceptualisations. Cappelli (1999) suggests that this recognition is testament to the appropriateness and timeliness of these metaphors to describe the prevailing economic and employment relationships that are characterised by greater mobility, diminished loyalty and a degree of uncertainty. Authentic, kaleidoscope, portfolio and off-ramps careers have also been postulated as being relevant to contemporary managerial careers. They all propose alternative ways of thinking about the contemporary career. Each of these career concepts will be looked at in turn.

### **2.2.1 Boundaryless Careers**

The concept of the boundaryless career diverges away from the traditional notion of careers sustained within one physical organisation. It widens our perspective of careers to incorporate a range of possible careers both within and across organisations, without being determined by the prevailing career system of one employer (Tams and Arthur, 2006). Arthur and Rousseau (1996) describe boundaryless careers as the opposite of “organisational careers” (p.5) that play out in a single organisational setting. As the employment landscape becomes less stable and less structured, normal career boundaries and structures become more permeable, enticing individuals to become more willing to cross them. They are not tied to a sole employer, nor represented by an orderly sequence of hierarchical upwards movement and are characterised by less vertical coordination and stability. Boundaryless careers can exist in a variety of forms. The term most often refers to movements across physical boundaries of separate organisations. It can also be used to describe when individuals voluntarily choose or are forced to leave an organisation, ending career advancement therein. The emphasis placed on careers that play out beyond a single employer has been interpreted as involving interfirm, physical mobility (Arthur and Rousseau, 1996). The inclination or preference towards physically crossing organisational boundaries suggests that individuals with a high threshold for employment mobility will be comfortable with a career that unfolds across several employers.

Boundaryless careers are not confined to physical change of employment, however. The notion also applies to movement across psychological boundaries and includes careers that draw validation and marketability from outside of the present employer, for example, in the case of highly skilled professionals, consultants and academics; or for careers that are sustained by external networks (Arthur and Rousseau, 1996). The complexity of modern career landscapes, allied with the myriad of factors that influence career decisions, make it difficult to capture different types of boundaryless career mobility. Sullivan and Arthur (2006) suggest that psychological and physical mobility are not

mutually exclusive and that boundaryless careers can be conceptualised by the degree of mobility exhibited by the individual along physical and psychological continua.

Arthur *et al.* (2005) conducted an 11-year review of 80 articles on career success and found that few studies attempted to conceptualise career success in a manner that could add to our understanding of boundaryless careers. Just over one-third of the articles recognised a degree of two-way interdependence between objective and subjective career success, while fewer articles attempted to conceptualise or operationalise the influence of either inter-organisational mobility or extra-organisational support on career success. This suggests that researchers have predominantly emphasised physical mobility across boundaries over psychological mobility and its correlation to physical mobility.

A boundaryless career mindset necessitates the navigation of “the changing work landscape by enacting a career characterized by different levels of physical and psychological movement” (Sullivan and Arthur, 2006, p.9). Psychological boundarylessness in this context suggests that individuals will vary in the extent of their attitudes towards initiating and pursuing work-related relationships across organisational boundaries. It does not necessarily imply physical or employment mobility and suggests that individuals with a propensity for boundaryless attitudes towards working relationships across organisational boundaries are comfortable with creating and sustaining relationships beyond organisational boundaries (Briscoe *et al.*, 2006).

Boundaryless careers have particular relevance to organisations that operate in unpredictable, opportunistic markets that are characterised by discontinuous change. Individuals are exposed to a high degree of employment uncertainty because employers seek to pass on this uncertainty from external markets with a revised psychological contract that offers employability in terms of the marketability of skills and competencies in the external market instead of the promise of long-term employment (Arthur and Rousseau, 1996). Rousseau and Wade-Benzoni (1994) posit that individuals continuously evaluate how well their employers are meeting their stated and implied contractual obligations, along with the perceived availability of alternative employment

opportunities in the external labour market. Therefore, individuals may have multiple careers and multiple job movements during their lifetime (Sullivan and Arthur, 2006). Sommerlund and Boutaiba (2007) caution against the rejection of traditionally held notions of career over widespread embrace of the boundaryless career concept, suggesting that modern career thinking may defer to romanticised notions of an individual's quest to find their inner selves. They posit that both perspectives on careers are co-constitutive and are highly dependent on vocation. Gunz *et al.* (2002) suggest that all careers have boundaries of one form or another and that as one boundary is crossed, e.g. organisational boundaries, another acts as a more restrictive constraint, e.g. occupational boundaries. Inkson (2007) suggests that a focus on boundaryless careers advocates the marginalisation of a large section of the workforce, namely those working in low-skilled jobs and those at the relatively lower end of the organisational hierarchy. While they may be notionally mobile, they are significantly likely to be hindered by structural constraints. As Pringle and Mallon (2003) note, the boundaryless career may be a narrower career type than initially envisaged and may only have specific relevance for those individuals whose skills and competencies are in high demand and arguably operate at managerial levels.

Managers seek to manage their own careers by taking advantage of opportunities to maximise their success (Eby *et al.*, 2003; Judge *et al.*, 1994). From a boundaryless career perspective, career development requires the strengthening of self-direction and adaptability within a more transactional employment relationship. Self-direction and adaptability are primarily determined through the development of particular competencies and social networks (Bandura, 2001). The aforementioned skills include the understanding of job-related skills and career-related knowledge and provide the confidence necessary to master current and future jobs, as well as the understanding of career-relevant networks, based on which they can generate knowledge, learn, and develop a reputation. An understanding of career competencies allows managers to evaluate which of the skills, competencies or networks can facilitate mobility in the future and identify which skills may become obsolete.

The theory of relative standing (Frank, 1985) may also be useful in understanding managerial boundaryless careers. This economic-based theory suggests that managers consider new employment opportunities based on their perception of their relative standing in the organisation in terms of compensation and rank compared to other individuals within the same organisation or similar individuals within the same industry. Reference groups at managerial levels tend to be extended beyond the current organisation as managers are generally a minority group within their own place of employment. Managers may seek to redress any perceived imbalance in their relative standing by considering career moves.

The relatively few empirical studies of boundaryless careers at a managerial level have concentrated primarily on physical movements of individuals across organisational boundaries. Sullivan and Arthur (2006) suggest that this is unsurprising and offer two reasons for the emphasis on physical mobility. First is the perception that boundaryless careers only encompass transitions between jobs, employers and industries. Researchers have been less interested in psychological mobility and how individuals may perceive boundaryless futures regardless of structural constraints. The second reason they offer is more pragmatic: it may be easier for researchers to operationalise boundaryless careers in terms of physical mobility rather than measure perceptions regarding psychological mobility.

Cherame *et al.* (2007) conducted a longitudinal analysis of executive managers from a boundaryless career perspective, using extrinsic rewards such as pay and rewards as determinants of career success. They found that these individuals sought to maximise their extrinsic rewards in managing their careers. A perceived decline in organisational health also increased the likelihood of physical changes in employment. The authors posit that career movements act as a useful strategy for executive managers to proactively manage their careers by changing employers in order to realise higher levels of salary, bonus and status.

Internally, boundaryless careers promise adaptability, the development of career identities that are aligned with personal values, and the attainment of subjective criteria of career success. Externally, boundaryless careers necessitate attention to the marketability of skills and competencies, social networks, and to the institutional factors that facilitate and constrain mobility.

### **2.2.2 Protean Careers**

While the boundaryless career emphasises the seemingly infinite possibilities that careers afford and how the recognition and utilisation of these opportunities leads to success (Arthur *et al.*, 1999), the protean career offers a self-directed approach to career that is driven by the values of the individual (Briscoe and Hall, 2002). It focuses on achieving career success through self-directed vocational behaviour and centres on the psychological success resulting from individual career management, as opposed to career development by the organisation (Hall, 1976; 2002). Derived from a mythical Greek sea creature, Proteus, who could change shape at will, the literal interpretation of protean indicates something that is versatile, variable and capable of taking many forms.

In an early study of managerial careers, Hall (1976) noted the tendency of organisations to take control of managers' careers for them. He suggested the protean career concept as a contrast and espoused the belief that it "is one in which the person, not the organisation is managing. It consists of all the person's varied work experiences in education, training, work in several organisations, changes in occupational field, etc" (p.201).

Hall (2002) suggests that the protean career is driven by the individual rather than the organisation, based upon individually defined goals such as satisfaction, achievement and work-life balance, encompassing the whole life space, and being directed by psychological success rather than objective measures of success such as monetary rewards, power, and position within the organisation. Briscoe and Hall (2006) posit that a protean career orientation represents a self-directed perspective for an individual to evaluate their career and provide a guide to action. A corollary of this suggests that it is

similar to an attitude in that it has a cognitive component (a set of beliefs about the career), an affective component (beliefs as to what constitutes a 'good' or 'bad' career for the individual), and a behavioural element (a predisposition to react in certain ways). The protean career is therefore a mindset about career, an attitude towards career that reflects autonomy, self-direction and making choices based on personal values. A particularly strong form of protean career orientation occurs when the individual's attitude towards their career reflects a sense of calling in their work or an awareness of purpose that gives deep meaning to the career (Hall and Chandler, 2004).

Under the 'new' transactional psychological contract, the protean career actor moves quickly to improvise new ways of working, taking for themselves the empowerment it confers upon the individual (Inkson, 2002). The challenge with an individual practicing infinite self-direction and adaptability in their career is that while they may become skilled at adapting to change, they may also lose a sense of overall direction. The protean career can therefore act as a compass in providing direction (Hall, 2002). The compass is derived from the person's sense of identity: understanding who they are and knowing their values, needs, goals and interests. It moves beyond simply adaptability, it also requires self-knowledge and self-identity. Other driving forces include the notion of the 'free agent' as advocated by Cappelli (1999), the presumed response of the person where the organisation is not investing in education and training. Higgins (2001) indicates how relational influences such as career networking, a form of mentoring, are serving as key resources for protean workers (Hall, 2004).

In tracking the nature of protean career changes, Mintz (2003) identifies a high degree of individualisation and personality measures like extroversion, openness to new experiences, agreeableness and conscientiousness. The most significant variable appeared to be 'openness to new experiences' and this is consistent with the idea of the protean careerist as one who is a continual learner, open to new possibilities and viewing the career as a series of learning cycles (Hall and Mirvis, 1995).

Shepard's (1984) 'path with a heart' posits the need for the individual to find their unique genius, specific talents that can be developed and utilised. Hall and Moss (1998) suggest matching the 'path with a heart' with the intensity of a calling. This propels the individual to realise their protean nature particularly when the organisation is facilitating adaptability and self-awareness. Significantly, a protean career actor could independently select traditional career contexts and simultaneously value some of its symbols of success.

Hall (2004) identified two metacompetencies that help individuals become more protean. These are adaptability and identity (or self-awareness). Identity awareness and understanding are pivotal to the values-driven nature of career in having a secure personal base in which to foster career success and from which to interact with the changing external conditions. Adaptability involves the capacity to change career and work behaviours in a way that allows the individual to succeed in a number of contexts with the need for externally-driven career development. The capacity on the part of the individual for reflection is central to the ability to drive these two metacompetencies. The greater the ability to harness these attributes, the greater the likelihood of promoting protean attitudes and identity.

There exists some debate as to the distinction between protean and boundaryless careers. While there is some degree of overlap, they can be viewed as independent but related constructs (Briscoe *et al.*, 2002). For example, an individual may display protean attitudes and make autonomous, inner-directed choices, yet dislike cross-boundary collaboration. Alternatively, a boundaryless mindset may be embraced but the individual may rely on one employer to develop and foster their career.

Briscoe and Hall (2006) define the protean career as one in which an individual is values driven and self-directed. Values driven refers to the extent to which internal values, rather than organisational values for example, provide the guidance and means for measurement of success for the individual's career. Self-direction in this context of personal career management relates to the ability to adapt to performance and learning

demands. Thus, individuals who hold protean career attitudes are intent on using their own values to guide their career and take an independent role in managing their vocational behaviour (Briscoe *et al.*, 2006). Individuals who do not hold protean attitudes are more likely to make use of externally developed standards, and seek external direction and assistance in behavioural career management as opposed to being proactive and independent. While it is possible that the protean career actor exhibits mobility and a learning orientation, Briscoe *et al.* (2006) posit that mobility and learning are correlates of a protean career rather than inherent components of it. Garavan *et al.* (2006) suggest that managers are more likely to adopt both the mindset and behaviors associated with the protean career concept.

### **2.2.3 Authentic Careers**

The authentic career concept (Baker and Aldrich, 1996; Ibarra, 1999; Svejenova, 2005) provides a framework for understanding experimentation with various career paths to achieve congruence with self-identity and patterns of boundaryless careers. In this context, authenticity is conceptualised as the individual acting upon their own authority, being truthful to themselves, achieving balance between communication and emotions and using these ‘true-to-self’ strategies to achieve meaningful careers on the basis of authenticity.

From a philosophical perspective, the underlying principle of authenticity is freedom of action and to exert control (Tedeschi, 1986). The emphasis on power, authority and self-action is also related to responsibility (Tedeschi, 1986) and suggests the concept of authenticity as agency. An authentic individual is one who makes choices coherent with the past (Bovens, 1999) or with a visualised future about who they would like to become (Ibarra, 1999) and seeks to integrate the current self with the earlier self. Weick (1996) highlights that such continuity is important to the career for learning and adaptation purposes. Being truthful to one’s self in authentic terms relates to the notion of consistency between expressions of self that are communicated publicly about one’s character and what one feels in private.

Studies about careers and success have generally focused on the external perspective. Progress, for example, is usually examined using objective measures, such as income and job title (Kotter, 1982). An individual's own assessment of his/her success may be strongly influenced by subjective internal career concepts (Van Maanen & Schein, 1977). Some researchers have argued that it is imperative to study those concepts and employees' subjective assessment of career success in order to better understand not only individual perceptions but their impact on career outcomes (Schein, 1980).

In career terms, this perspective posits that an authentic career-oriented individual is one willing to take the initiative and responsibility for their career and able to achieve consistency between past and current, and private and public expressions of self (Svejenova, 2005). Baker and Aldrich (1996), for example, have considered authenticity as shaping the parameters of boundaryless careers. Ibarra (1999) has found authenticity as a (true-to-self) strategy for the adaptation to new roles in career transitions. Authenticity is also implicitly present in Boyatzis and Kolb's (2000) representation of the development mode of an individual's adaptation and growth. While these studies have acknowledged the importance of authenticity for careers, they have not specified the process by which authenticity-driven careers are shaped over time.

Svejenova (2005) utilises a four-stage model to suggest that a career can be shaped through authenticity work. The four elements that comprise the model denote authenticity work with a different emphasis: exploration, focus, independence and professionalism. They are embedded in a structural context that enables or constrains authenticity work. The resolution of the constraints pushes the career forward. In the Exploration stage authenticity is manifested in exploration of a range of roles or possible selves (Ibarra, 1999). By trying out different forms of expression the individual is able to experience, compare, and identify those that are the most satisfactory for the expression of his or her vision and talent. During the Focus stage the individual focuses on a particular role identity and embarks on its in-depth exploration by developing a signature style. Leonard-Barton (1995) defines a signature skill as "an ability by which a person prefers

to identify himself or herself professionally. This signature evokes the idiosyncratic nature of the skill – a personally defining characteristic, as much a part of someone’s identity as the way the individual signs his or her name” (p. 62).

In the case of a manager, a signature suggests distinctiveness, which is one of the elements of “authenticity” (Peterson, 1997). Professionals are found to enjoy the privileges of a collective identity (Rao *et al.*, 2003), such as legitimacy and the ability to claim valuable resources. In this respect, a role identity is a resource in itself (Alvarez *et al.*, 2005; Baker and Faulkner, 1991; Callero, 1994). The third stage, Independence, argues that members of a particular profession value not only collective identity but also individual autonomy (Rao *et al.*, 2003). In the quest for autonomy “. . . insiders with expertise can attack existing logics and social identities because these inhibit autonomy, creativity, and freedom, and they can proffer new logics and identities on the grounds that these expand individual autonomy and, by implication, enlarge professional control” (Rao *et al.*, 2003, p. 805). White (1992) argued that “every identity continually seeks control to maintain itself and in that struggle breaks, as well as establishes, ties with other such identities” (p. 67). Managing a company, department or team is one of the mechanisms that individuals use to enhance their control over the aesthetic and economic aspects of their projects (Alvarez *et al.*, 2005; Svejenova, 2002). Gaining control, however, is not sufficient if a manager seeks recognition and wants to play the politics of status in a field. Fine (1996) suggested that “the rhetoric of professionalism is a status marker” (p. 96) is a way of “aligning one’s work with an elite status” (p. 97). At the stage of Professionalism, the final stage, authenticity work is directed at the mastery of work and the way in which the individual communicates and engages with the relevant audiences. One major challenge at this stage is to enhance experimentation and reinvention, whilst at the same time keeping consistency of authenticity work. Enhancing skills and competencies, exploring new areas and opening up what has become a narrow, focused professional identity can help bring about the necessary renewal.

## **2.2.4 Kaleidoscope Careers**

Mainiero and Sullivan (2006) offer another perspective on current careers with the kaleidoscope career concept. Similar to boundaryless and protean careers, a kaleidoscope career is created and evolved on the individual's own terms, defined by their own values, life choices and parameters, rather than by the organisation. As an individual's life changes and evolves, their career path may adjust to these changes rather than surrendering control and allowing an organisation to dictate time and energy demands imposed by work. This particular concept is predominantly female-oriented in focus. Individuals amend, adjust and modify this kaleidoscope or career pattern, by rotating the various aspects of their lives to arrange roles and relationships in new ways.

Analogous to the mechanics of a kaleidoscope, where the movement of one part causes another part to move, changing patterns as new arrangements fall into place, individuals shift the patterns of their careers by changing different aspects of their lives to realign roles and relationships. Mainiero and Sullivan's (2006) longitudinal study of over 3000 individuals suggests that individuals continually evaluate the choices and options available to them through this kaleidoscopic lens to determine the most beneficial fit between a myriad of relationships, work constraints and opportunities. Making a new decision regarding career path affects the outcome of the kaleidoscopic career pattern.

Building on Peterson's authentic career concept, Mainiero and Sullivan (2006) posit that the kaleidoscope career model incorporates a sense of authenticity in terms of being genuine and allowing personal and work behaviours to be closely aligned with personal values. They suggest that individuals also strive for challenging work that facilitates career advancement and increases self-worth, and that a need for balance exists with regard to work, relationships and personal concerns.

Mainiero and Sullivan (2006) found that men and women tend to follow different career patterns. They identified the Beta Kaleidoscope Career Pattern as more typical of women. It is characterised by a focus on challenge in early career, with balance becoming more important in mid career, and authenticity becoming the primary focus in late career. Men,

on the other hand, more often follow the Alpha Kaleidoscope Career Pattern in which the focus moves from challenge in early career, to authenticity in mid career, to balance in late career.

In order to adjust career pattern, there is a need for managers to be informed as to the range of CFLD opportunities that are available for them and their suitability at different stages of career. This requires an understanding of how CFLD is relevant at different career stages. It also suggests that participation in CFLD may be fragmented due to changes in values depending on the career stage of the manager.

### **2.2.5 Portfolio Careers**

The growth of employment options other than full-time employment with a single employer (e.g. consultancy work, temporary work, contract work, project-based work, and self-employment) has led to individuals pursuing what Handy (1989) terms portfolio careers. Rather than pursuing a single full-time job, the individual balances a portfolio of different and changing employment opportunities. The portfolio career concept envisages that individuals build careers around a collection of skills and interests and places a strong emphasis on self-management. The relatively small amount of literature on this career concept suggests that it is pursued by professionals and managers rather than operative and semi-skilled employees (Mallon, 1998). Schein (1996) presents the suggestion that one consequence of globalisation is the emergence of constantly changing organisations offering temporary employment opportunities and portfolio careers.

Portfolio-centred career development is based on a very different set of assumptions regarding the nature of careers and of the relationship between the organisation and the employee (Templer and Cawsey, 1999). Instead of entering a sequence of hierarchically arranged positions, employees are hired to accomplish specific tasks and become contract employees with portfolio careers. Under portfolio-centred career development, the contract output is identified, the matching portfolio of skills needed to complete the contract is specified, individuals with those skills are located in the HR information

system, the contract is offered and then managed. This shift of focus requires a parallel shift in career development roles and activities. The shift in assumptions requires a different emphasis in the traditional roles and responsibilities of HRD in the organisation. At the risk of oversimplification it can be seen that career development professionals will need to recognise some significant differences in the organisational and individual needs of different types of organisations and employees.

Because employees are a long-term investment, success in these areas leads to longer-term effectiveness for the organisation. Under portfolio-centred HRD, these functions take on some very different aspects as the primary focus of career development is on the definition of core competences and on clarifying which employee groups would be considered “core” (Handy, 1989). Serious consideration would be given to determining what aspects of the firm’s activities could be contracted out or dealt with on a contract basis.

Instead of dealing with the pattern of positions in the organisation, portfolio career development concentrates on understanding the skill requirements needed to accomplish the contract. Rather than identifying the best individuals with long-term potentials, it focuses on locating individuals with the precise skill sets needed for accomplishing that task or contract. Instead of developing progressive development programs such as second level training and management training, career development decreases the focus on learning and development and shifts those resources into identifying individuals with needed skill sets. Learning and development becomes the individual’s responsibility. Orientation activities change from a socialisation focus, providing new long-term employees with an understanding of the organisation’s culture and expectations, to a specific focus on contract and performance definition. This includes an introduction to specific individuals and policies needed for the accomplishment of the contract. Performance management and career planning activities become short-term in orientation.

### **2.2.6 Off-Ramp Careers**

A predominantly gender-specific career concept has emerged in recent years in response to the “male competitive model” of careers (Hewlett, 2007, p.13). Hewlett (2007) presents the idea of off-ramp careers that provide an arc of career flexibility that allows women to “ramp-down” and subsequently “ramp-up” without losing career traction. Based on the premise that over 60% of women managers have nonlinear careers (Hewlett, 2007, p.29), by taking off-ramps and diverse career paths it makes it difficult for women to engage in the continuous, cumulative employment that is deemed to be necessary for success within predominantly male-oriented competitive career models. The end result being that a vast number of talented female managers either leave their careers or remain on the sidelines.

Hewlett (2007) posits that the male competitive model of careers evolved to meet the needs of middle-class white males in the 1950s and 1960s when access to well paid jobs was primarily limited to this demographic group. It was predicated on a traditional division of labour between men and women, with men acting as primary earners and women playing the role of wife, mother and homemaker (Shelton, 1996). This career model is characterised by a strong preference for full-time, continuous, lockstep, linear employment history; an emphasis on being physically present in an office for up to ten hours a day; an assumption that professionals are motivated by money; and a belief that the steepest gradient of a career curve occurs in one’s thirties – the individual either achieves objective career success in this period or doesn’t at all, there are no second chances.

Whilst broadly suitable for men, this career path presents numerous difficulties for women to the extent that most women cannot or choose not to attempt to pursue it (Gilligan, 1982, p.149). A preference for a continuous employment history penalises women who need to take time out of their careers. Furthermore, the notion that career success is achieved in the thirties occurs at the ages when child-bearing and child-rearing demands are likely to be most pertinent and can be particularly time-consuming. A framework that indicates the need for individuals’ careers to take off in their thirties is

largely incompatible from a work life balance perspective for most women. Hewlett (2007, p.29) finds that thirty-seven percent of women managers take what she terms an 'off-ramp' at some point in their careers, i.e. voluntarily leaving their job for a short period of time, and another thirty percent take a 'scenic route', e.g. working reduced hours, working from home, flexible working arrangements.

The difficulty women face is when deciding to return to employment be it for financial, sense of identity or satisfaction reasons. Data suggests that only forty percent of professional women return to full-time employment after an off-ramp pause in career, with a quarter engaging in part-time work, while women at managerial levels finding it particularly difficult to return at the same level citing suspicion that either their skills are outdated or that they no longer have the required commitment deemed necessary for the job (Hewlett, 2007). Facilitating ease of access in returning to careers has led to organisations introducing a variety of career flexibility and flexible working arrangements in terms of reduced-hour options, flexible working times, job sharing, telecommuting, and seasonal flexibility. This implies a fundamental reimagining of when, where and how work is carried out (Hewlett and Luce, 2005). Jobs are being delineated and delayed, duties being shared and work teams being deployed in ways that allow responsibilities to be handed off seamlessly. This allows high-value professionals and managers to carry out work in clearly delineated portions of time. Indeed, rather than label such working initiatives as women-specific accommodations, organisations are beginning to position these arrangements as key business strategy in the hope of attracting and retaining talented individuals.

The concept of off-ramping is not the sole preserve of women however. While almost a quarter of men in professional careers voluntarily leave their jobs at some stage, they do so for markedly different reasons to women. Men cite switching careers and undergoing additional training and development as the most important factors in taking a break in career path, whereas women name childcare and family responsibilities as the determining factors (Hewlett, 2007). This suggests that off-ramping from a male

managerial perspective is concerned with strategic repositioning of the career rather than family-related concerns.

Table 2.1 presents a summary of these contemporary career constructs and their implications for CFLD.

**Table 2.1 Contemporary Career Concepts and Their Implications for Career-Focused Learning and Development**

<b>Career Concept</b>	<b>Characteristics</b>	<b>Prescriptions for Career-Focused Learning and Development</b>
<b>Boundaryless</b>	<ul style="list-style-type: none"> <li>• Career consists of infinite trajectories and possibilities.</li> <li>• Career is not tied to a single organisation.</li> <li>• Career is not an orderly sequence of jobs.</li> <li>• Career focuses on opportunities across organisational boundaries.</li> <li>• Career represents a subjective interpretation by the career actor.</li> <li>• Career transcends physical, psychological and subjective boundaries.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on developing flexibility and adaptability through learning activities.</li> <li>• Development of a manager’s ability to learn from experience is a priority.</li> <li>• Career focused learning emphasises a capacity to handle complex, unforeseen situations.</li> <li>• Organisations may not always provide career-focused learning opportunities.</li> <li>• The development of awareness of self is one of the most important priorities of career-focused learning and development.</li> </ul>
<b>Protean</b>	<ul style="list-style-type: none"> <li>• Career focuses on the subjective perspective of the individual career actor.</li> <li>• Career is driven by the person, not the organisation.</li> <li>• The career actor defines individual goals and these goals encompass the whole life-space.</li> <li>• Career is driven by psychological success rather than objective success.</li> <li>• The protean career has both a cognitive and behavioural component.</li> <li>• It is a mindset about a career; an attitude towards a career.</li> </ul>	<ul style="list-style-type: none"> <li>• Learning helps the manager to make internal change and become confident in making these changes.</li> <li>• Managers need to understand their development needs and values.</li> <li>• Managers need to be able to combine cognitive and affective skills to promote effective learning.</li> <li>• Career-focused learning can enhance the emotional competence of managers.</li> </ul>
<b>Authentic</b>	<ul style="list-style-type: none"> <li>• Individuals have ownership of their careers.</li> <li>• Individuals can enact their careers in different ways.</li> <li>• Individuals adopt ‘true-to-self’ strategies in the adoption of career roles.</li> <li>• Individuals search for ways of integrating the present the previous self.</li> <li>• Individuals seek to be truthful to themselves.</li> <li>• Individuals adopt and grow and are shaped by context.</li> <li>• Individuals explore a range or roles and identify which is most satisfactory as an expression of talents.</li> <li>• Managers’ careers are embedded structurally and historically.</li> </ul>	<ul style="list-style-type: none"> <li>• Individuals have ownership of career-focused learning and development. They cannot expect the organisation to provide these learning opportunities.</li> <li>• Career-focused learning and development should focus on the total person – past and present; work and non-work life.</li> <li>• Career-focused learning and development is contextualised and is shaped by the individuals’ prior development behaviour.</li> <li>• Decisions about learning and development are linked to career exploration and planning activities. This link is complex and multi-level in nature.</li> </ul>

<b>Kaleidoscope</b>	<ul style="list-style-type: none"> <li>• Career is created on the individual’s own terms.</li> <li>• Career path adjusts to changes in values, life choices and parameters.</li> <li>• Individuals modify career pattern by rotating the various aspects of their lives to arrange roles and relationships in new ways.</li> <li>• Individuals evaluate the choices and options available to them to determine the most beneficial fit.</li> </ul>	<ul style="list-style-type: none"> <li>• Need for managers to be informed as to the range of CFLD opportunities that are available for them.</li> <li>• Requires an understanding of how CFLD is relevant at different career stages.</li> <li>• Participation in CFLD may be fragmented due to changes in values.</li> </ul>
<b>Portfolio</b>	<ul style="list-style-type: none"> <li>• Individuals build career around a collection of skills and interests.</li> <li>• Multiple part-time jobs worked with a number of different employers.</li> <li>• Multiple jobs and employers within one or more professions.</li> <li>• Dominant theme is one of self-management and self-direction.</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis on development and learning activities to assert control over one’s career.</li> <li>• Experience with multiple employers and roles to accumulate portable skills.</li> <li>• Acquisition of both depth and breadth in portable competencies.</li> <li>• Increased willingness to make non-obvious career moves.</li> <li>• Greater physical and psychological mobility in careers.</li> </ul>
<b>Off-Ramp</b>	<ul style="list-style-type: none"> <li>• Career is nonlinear.</li> <li>• Difficult for women to engage in continuous, cumulative, lockstep employment.</li> <li>• Need for career flexibility and flexible working arrangements.</li> <li>• Off-ramping from a male managerial perspective is concerned with strategic repositioning of the career.</li> <li>• Female managers off-ramp for more family-related concerns.</li> </ul>	<ul style="list-style-type: none"> <li>• Learning and development activities must focus on competencies that can be applied in a range of contexts on a medium- to long-term basis.</li> <li>• Development of long-lasting skills that can be utilised after a career interruption is a priority.</li> <li>• Job-specific competencies may be transient and prove difficult to sell when ‘on-ramping’.</li> <li>• Individual may have to carry the investment in CFLD.</li> </ul>

Based on ideas presented by Arthur and Rousseau (1996); Briscoe and Hall (2002); Craig and Kimberly (2002); Hall (2002); Handy (1989); Hewlett (2007); Mainiero and Sullivan (2006); and Svejenova (2005).

### **2.2.7 Constraints on Managerial Careers**

Despite the reorientation of labour markets towards flexibility and marketability of skills, the reality of contemporary careers such as the boundaryless career is neither unhindered by social structure nor exclusively regulated by market ideologies. There are a number of factors that act as constraints on managerial careers that need to be considered.

Careers are structurally embedded within social networks, institutional environments, and communities. In cultural industries, access to social networks provides continuity and access to skills in situations where production is characterised by short-term funding of project-based organisations (e.g. advertising). The quality of specific social relations in these circumstances, rather than individual skills and competencies, shapes the production of products and services. Managers therefore will rely strongly on informal networks of friends, family, agencies, and other parties to develop a reputation and alleviate the potential insecurity of free-lance employment. In other occupations the nature of collaborative relationships may be less specific. Industries such as the Information and Communications Technology (ICT) sector are strongly influenced by the codification of a clearly defined set of skills and knowledge where individuals benefit from access to diverse networks that enable them to update their skills and knowledge. In these instances, informal social networks can become platforms for the exchange of socially embedded knowledge and competencies.

A host of other contextual factors also act as career constraints, including institutional frameworks and the macroeconomic environment. Similarly, enactments of careers tend to be influenced by the socially shared meaning, values and preferences of ethnic groups, countries and communities. Cultural values may have a pervasive influence on careers based on obligations to family that determine aspirations and values and thereby constrain how managers think about their careers.

Career derailment is posited to be any interruption or disruption in an individual's career path. Shipper and Dillard Jr. (2000) suggest that self-awareness separates managers who

experience career derailment from successful managers who otherwise do not derail. Goleman (1998) argues that self-awareness is a prerequisite for managerial success. Lombardo and McCauley (1988) found a lack of self-awareness in derailed individuals and in the over-controlling tendencies, insensitivity, and abrasiveness of the derailers studied by Kaplan *et al.* (1985) and Lombardo *et al.* (1987). A lack of self-awareness was also evident in executives who derailed because they were too assertive (Kovach, 1986). Self-awareness has been posited and tested in the literature on management development with a lack of self-awareness seen as overestimating one's managerial skills. Ashford (1989) hypothesised that under-estimators of their own skills may be more likely to alter their behaviour and improve than those who are over-estimators. Those who under-estimate their skills and competencies are argued to be more effective managers than over-estimators (Atwater and Yammarino, 1992; Church, 1997; Van Velsor *et al.*, 1993). Successful managers inflate their self-ratings less than unsuccessful managers (Bass and Yammarino, 1991). Therefore, a lack of self-awareness could lead a manager to derailment.

Hammonds *et al.* (1997) suggest that career derailment is also a concern of those who are using, or considering using, a flexible work schedule. Specifically, individuals fear that they will be seen as less committed to their career if they do so or that they will be less visible to those making advancement decisions because they will not be in the office during all regular business hours.

The concept of career plateaus (FERENCE *et al.*, 1977) examines situations within which an individual perceives a low likelihood of increased future responsibility within an organisation. Career plateau is often associated with a number of negative work outcomes such as lack of career satisfaction and job satisfaction, as well as an increase in the level of turnover intentions (Lee, 2003). Research indicates that plateaued managers are absent more frequently from work (Near, 1980), suffer more health problems (Near, 1980), and have lower confidence in their marketability (Veiga, 1981). These few differences are overshadowed by the lack of systematic differences in job attitudes (Near, 1985; Veiga, 1981), promotion aspirations (Camazza *et al.*, 1981), fear of stagnation

(Veiga, 1981), and performance (Near, 1980, 1985; Camazza *et al.*, 1981). It has been suggested that plateaued managers are likely to spend 2 to 3 years longer per job than their non-plateaued counterparts (Rosenbaum, 1979; Veiga, 1981; 1983), but other researchers suggest that age and life stage may account for many of these differences that have been uncovered (Alderfer and Guzzo, 1979; Evans and Gilbert, 1984).

Levinson (1986) argues that a period of career plateau may be healthy for individual growth and development. Levinson's work suggests that healthy adult development depends on periods of stability and continuity as much as on periods of change and discontinuity. Levinson (1986) portrays each of the major stages of adult development (early adult, mid-life, late adult) as consisting of three components: a transition period into the stage, a stabilisation period, and a transition period into the next stage. The periods of stability allow individuals to master work skills, pursue a stable family/personal life and gather energy for the ensuing transition periods. Thus, career plateaus may be functional for individuals, both personally and professionally. The dysfunctional side of career plateaus occurs when individuals are unable to realise their personal potential performance. Managers in this sense become unable to grow and change as their environment changes. Therefore, there may be opportunity costs, as well as incurred costs, to both managers and organisations because of career plateaus.

### ***2.3 Understanding Participation by Managers in Career-Focused Learning and Development: Individual and Organisational Level Perspectives***

There exists a gap in the extant literature concerning the factors that explain the self-directedness of managers to participate in CFLD. Drawing upon the literature from career theory, adult learning and development, career adjustment and human resource development, a number of theoretical perspectives are proposed to understand and explain the participation of managers in CFLD. The literature primarily focuses on the theoretical perspectives at both individual and/or organisational levels. Organisational

level perspectives have become particularly relevant in recent years. Seven individual level perspectives and four organisational level perspectives are examined in turn.

### **2.3.1 Individual Level Theories and Perspectives**

From an individual perspective, managers are required to take responsibility for their own development, take ownership of their own employability and analyse their career in terms of wider employability across industries and sectors (O'Donoghue and Maguire, 2005). The extent to which managers have control over their own learning and personal development is dependent on their role and their level within the organisation. In this context, the more scope individuals have to learn, the more opportunity they in turn will have to drive their own development and learning in the areas that support their individual goals. The literature identifies a number of individual-level perspectives to explain the self-directedness of managers to participate in CFLD.

#### **2.3.1.1 Career Motivation Theory**

The concept of career motivation applies a motivation theory framework to enable the understanding of career plans, behaviours and decisions taken by individuals (London, 1993). Career motivation is the desire to exert effort to achieve career goals and enhance career aspirations. The career motivation model was originally proposed to investigate what motivated managers due to research findings in the 1970s that suggested that young managers were not as motivated to attain leadership positions as those of a generation earlier (Howard and Bray, 1981). London and Bray (1984) found that a manager's direct boss has control of many of the factors that affect managerial career motivation at a young age. Formal learning and development programs for managers are likely to be ineffective if the boss does not support the program.

London (1983) conceptualised career motivation as a multidimensional concept that combines elements of needs, interests and personality characteristics that reflect the stimulus, direction and persistence of career-related behaviours. London (1983)

organised the construct into three domains: career resilience, career insight and career identity. Career resilience is the persistence component which London set as the foundational domain of career motivation. Factors shaping career resilience are shaped during early childhood and are set by early adulthood (London, 1993). It is the ability to adapt to changing conditions and overcome career barriers even when the circumstances are discouraging or disruptive. It is posited that career resilience creates the values, attitudes, and behaviours recognised as components of career insight and career identity. It is conceptually related to self-efficacy, agency, the need for reassurance and achievement motivation.

Career insight is the stimulus component, and relates to the ability to be realistic about a career and utilise these perceptions to establish career goals and recognise how these goals relate to the organisation's goals (Carson and Bedeian, 1994). Strong career insight allows the establishment of "clear career goals and know(ing) one's strengths and weaknesses" (London and Noe, 1997, p.62). As career insight becomes more focused and concise, the individual becomes more able to form their self-perception through career identity. It is conceptually similar to self-concept, and openness to experience (London and Mone, 2006).

Career identity is the direction component and is the extent to which people define themselves by their careers. It consists primarily of "job, organisational, and professional involvement and needs for advancement, recognition, and a leadership role" (London, 1983, p.621). Those with high levels of career identity are posited to be highly involved in their jobs, their workplaces and/or their professions (London and Mone, 2006). London and Noe (1997) suggest that, over time, these three dimensions will affect each other with career resilience being the least dynamic of the domains. They suggest that the remaining two dimensions are like to be affected by situations such as training and development, job loss, organisational restructuring, and organisational change (Day and Allen, 2004; London, 1993; London and Bray, 1984; London *et al.*, 1999; Noe *et al.*, 1990; Wolf *et al.*, 1995).

The career motivation model suggests that all three dimensions are in a dynamic relationship with the workplace to influence a person's career decisions and behaviours. Lopez (2006) proposes that situational conditions with the workplace are equally important in influencing career decisions and behaviours and therefore, in order to understand career motivation, the impact of situational constraints and social support in work environments must also be considered.

Gould and Penley (1984) suggest that managers utilise career strategies such as networking, seeking guidance, extended work involvement, and creating and investing in more opportunities than operative or professional employees. Managers typically have the greatest potential for extrinsic measures of career success such as salary progression and career advancement in organisations (Noe *et al.*, 1990), thus managers can be expected to have relatively higher levels of career motivation.

This suggests that career motivation of managers is important in explaining their developmental behaviour. Motivation to participate in CFLD may be derived from extrinsic or intrinsic drivers and may vary over the manager's career. The motivational driver may focus on different aspects of the career depending on levels of career resilience. Motivation to engage in learning and development will need to be sustained by the manager's continued need for career-related outcomes as envisaged through career identity and career insight.

### **2.3.1.2 Self-Efficacy Theory**

The concept of self-efficacy (Bandura, 1977) is one of the most significant variables used to understand and facilitate individual career development (Betz, 2006). Self-efficacy expectations refer to a person's beliefs concerning his or her ability to successfully perform a particular task or behaviour. Unlike immutable characteristics such as personality or intelligence, it is a malleable person characteristic which can be changed or improved (Maurer, 2001). These efficacy beliefs are generally task- or behaviourally-specific rather than general, i.e. self-efficacy must have a behavioural referent to be

meaningful, e.g. perceived self-efficacy to mathematics or IT skills. Gist and Mitchell (1992) cite evidence of self-efficacy being enhanced by interventions in areas such as career-related self management and idea generation. As self-efficacy expectations are perceived in reference to a specific behavioural or task domain, the number of different kinds of self-efficacy expectations is limited only by the number of behavioural domains that are considered important for some defined purpose.

Self-efficacy expectations are suggested to have three behavioural outcomes: approach versus avoidance behaviour; quality of performance in the specific domain; and persistence in the face of obstacles. The approach versus avoidance behaviour has a significant effect on career development. Approach behaviour refers to what people will try, whereas avoidance behaviour describes what they will turn away from. It therefore captures the content and process of career choice. The content of career choice relates to the type of developmental opportunities and careers an individual will attempt. Career choice process refers to the career exploratory and decision making behaviours considered essential to making appropriate career choices. The effects of self-efficacy expectations on performance relates to effects such as the requirement of a learning and development program or tests necessary to complete course-based work in an educational setting. The impact of self-efficacy on persistence is considered important in the ongoing pursuit of career goals in the face of obstacles, failures, or negative outcomes in the work environment. On the other hand, low self-efficacy regarding a behavioural domain is likely to lead to an avoidance of those behaviours, decreased performance, and an increased likelihood of giving up in the face of discouragement or potential failure.

Since the emergence of self-efficacy theory, research over the past 25 years has demonstrated that the concept is important in relation to career behaviour, including the developmental choices that individuals make, and is positively related to participation in learning and development activities (Betz, 2006).

Maurer (2001) posits that self-efficacy is positively related to participation in voluntary learning and development activities. Research has suggested that employees' beliefs that

they are capable of improving and developing their career-relevant skills are related not only to past participation in development activities (Maurer *et al.*, 1996; Maurer and Tarulli, 1994; Noe and Wilk, 1993), but also to intentions to participate in development activities in the future (Maurer *et al.*, 1996; Maurer and Palmer, 1999; Maurer and Tarulli, 1994) and to attitudes toward learning and development programs in organisations (Maurer *et al.*, 1996; Maurer and Tarulli, 1996; Noe and Wilk, 1993).

Self-efficacy for career development can be broken down into at least 3 levels of self-efficacy (cf. Bandura, 1997; Woodruff and Cashman, 1993). Task specific self-efficacy is perhaps the most common and widely researched. This is self-efficacy for performance of a specific task. Domain efficacy is somewhat more general, and refers to self-efficacy for performance within an entire definable domain of tasks. Although there may be differences in self-efficacy across tasks within the domain, overall there is a more global belief in one's efficacy within that domain. General self-efficacy is one's overall self-confidence for dealing with multiple domains in life. Self-efficacy for development can be operationalised at both the domain level and also at the task level. Maurer (2001) suggests that "self-efficacy for development ... is self-efficacy for development and learning across multiple potential development/learning tasks that one might encounter in one's career" (p.128). Although there may be differences in self-efficacy for different developmental tasks according to one's previous experiences and skills as well as present resources, the discussion here focuses on a more global belief in one's efficacy to learn and develop when necessary within one's career.

Maurer (2001) defines self-efficacy for development and learning as the confidence in truly learning new things or developing skills and competencies. Self-efficacy for performance, on the other hand, is self-efficacy for performing a task that one already has the skills required to perform.

A significant body of research has focused on managerial self-efficacy (cf. Betz, 2006; Robertson and Sadri, 1991). The tasks faced by managers involve gathering and processing large and often complex pieces of information in order to make effective

decisions. Research has shown that individuals with high levels of managerial self-efficacy are considerably better able to remain task-focused rather than self-focused, and efficient whilst also creative in their decision-making processes in the face of organisational setbacks encountered by managers (Betz, 2006). Self-efficacy can be developed through experience and proactive feedback.

Studies using manipulations to threaten the efficacy beliefs of otherwise talented managers have demonstrated a progressive deterioration in their performance, whereby they were inflicted with increasing self-doubt and became more erratic in their thinking processes (Betz, 2006). Negative organisational outcomes and a tendency to blame other parties for this reduction in performance were observed. Concomitantly, managers whose level of self-efficacy were strengthened set themselves increasingly challenging goals and utilised creative thinking processes to achieve them, with resulting enhanced organisational outcomes. Managerial self-efficacy in terms of technical, administrative, and conceptual managerial tasks has also been found to be related to measures of managerial success as determined by increased responsibilities, promotion and salary.

### **2.3.1.3 Psychological Contract Theory**

Psychological contracts are the individual belief systems held by employees and employers regarding their mutual obligations to each other (Rousseau, 1995). Employment relationships are subjectively interpreted and experienced by each party. How each understands their obligations to and agreements with others constitutes the psychological contract.

The content of the psychological contract is twofold (Rousseau, 1995). Firstly, it is transactional, where the focus is on specific monetary exchanges which are short-term in focus and include working longer hours and accepting new job roles and responsibilities in exchange for increased pay and training benefits (Herriot and Pemberton, 1997). Secondly, it is relational, with the focus being on loyalty and discretionary behaviour in exchange for job security, financial rewards and training and development opportunities.

If the psychological contract is relational, individuals tend to identify with the organisation, promoting support for the organisation's efforts to improve performance (Rousseau and Tijoriwala, 1999). Relational psychological contracts are positively related to employee perceptions that their employer supports them personally.

Transactional contracts tend to be related to lower levels of employee flexibility and contribution and are less elastic in times of change (Dabos and Rousseau, 2004a). While these arrangements may be characteristic of workers in more peripheral roles in organisations (Dabos and Rousseau, 2004b), individuals with high bargaining power such as managers or highly valued employees, or those pursuing a portfolio or boundaryless career path can also develop transactional contracts.

Rousseau (1995) posits a third type of psychological contract which has specific relevance for understanding participation in CFLD. Rousseau suggests that a 'balanced' contract combines relational features of open-ended exchange along with a focus on performance based rewards. Balanced contracts direct employee attention to continued development in response to changing performance demands. In its most comprehensive form, both the individual and the organisation share responsibility for this ongoing development. Rousseau (2005) asserts that idiosyncratic arrangements of a developmental nature are likely in the case of individuals with balanced contracts who require a certain latitude in customising their developmental opportunities in order to enhance their value to the current employer and promote their marketability in the wider labour market.

Rousseau (2005) terms these idiosyncratic arrangements "i-deals" (p.7), suggesting that they are voluntary, personalised agreements of a non-standard nature that individuals negotiate with an organisation concerning terms that benefit both parties. These individual arrangements may differ in scope from those received by others in the organisation carrying out similar work.

#### **2.3.1.4 Employability Theory**

Employability refers to an individual's ability to find a job, retain a job and move between jobs and/or industries should the need arise (Brown *et al.*, 2003). Fugate *et al.* (2004) conceptualise employability as a multidimensional collection of individual characteristics that predispose employees to proactively adapt to their work and career environments. It facilitates the identification and realisation of job and career opportunities both within and between organisations. This is consistent with the perspective that views managers as proactive rather than reactive agents (Fugate, 2006). Managers increasingly initiate change and anticipate new opportunities, instead of reacting after the event of waiting for opportunities to present themselves. Flexibility and adaptability tend to be reflected in attitudes towards career self-management and behaviours that support future employability. Meister (1998) defines career self-management as the ability to keep pace with the speed at which change occurs within the organisation and the industry and to prepare for the future. Now, the pace of change within jobs and organisations means that employability requires continual updating of skills and competencies by planning and preparing for an uncertain future by investing in key areas including “prioritising and goal setting, proactive change management, personal advocacy and networking, continuous learning and team-working” (Bagshaw, 1997, p. 188)

Changing organisational structures, contemporary career constructs and the gradual erosion of job security have led to an increasing emphasis on employability as a basis for current employment relationships (Clarke, 2008). Under this new arrangement individuals are encouraged to “think of themselves as self-employed even when they are employed by an organisation” (Garavan, 1999, p. 2) They are encouraged to embrace career self-management rather than relying on the organisation for career planning and job security, and to search for ways to maintain and enhance their attractiveness in the labour market “through enriched jobs, lateral moves and multiple career paths” (Iles *et al.*, 1996, p.19). Research suggests that a new psychological contract that emphasises employability has replaced one which espouses promotions or vertical movements where

organisations assist individuals with development, with employees concomitantly increasing their market value as a result of these opportunities.

Employability may be seen as a pragmatic response to the transactional nature of employment contracts in the twenty-first century (Baruch, 2004) rather than being perceived as an avoidance of employer responsibility. It is suggested that employees, not employers, have been the instigators, pushing for greater self-control over careers (Nicholson, 1995), in an attempt to redefine the employment relationship into one which offers greater flexibility (Capelli, 1999), autonomy (Guest, 2004) and independence (Inkson and Arthur, 2001) as opposed to paternalism and security. For companies that cannot reasonably offer job security, employability in practice means increased investments in company-financed employee learning and development programs to ensure that employees' skills are up to date and marketable if they are unexpectedly out of work (Benson, 2006). The assumption is that if the organisation can reduce the uncertainty of finding another job if needed, then employees are more likely to feel committed and remain with the organisation (Galunic and Anderson, 2000). Under this implicit underlying agreement, employability replaces the notion of long-term job security and employees are then free to develop organisational commitment and willingness to remain with the firm (Waterman *et al.*, 1994; Craig *et al.*, 2002). Craig *et al.* (2002) suggest that a particular premium is placed on providing general or marketable skills that are in demand in the wider labour market.

There is mixed evidence on the types of skills that organisations are prepared to offer employees. Clarke (2008) posits that there is little evidence that there has been a shift in thinking with regard to skill development and maintenance in line with contemporary perspectives on employability, to the extent that employers appear reluctant to offer generic skill development. Their preference is for job specific training designed to bring immediate results, rather than more generic training designed to prepare employees for future employment (Carbery and Garavan, 2005). Some organisations may fear that upskilling employees will increase the likelihood that they will leave for a better paid position in another workplace (Baruch, 2001).

Benson (2006) found that the provision of general skills with broad marketability which are intended to serve as a replacement for job security may actually serve to facilitate the exit of employees. Benson found that promotion after earning a degree reverses the positive relationship between earning a degree and intention to turnover, and shows that retention also depends on whether development of general skills are met with career advancement. According to this study, employees do not work hard to gain general skills solely to use them as insurance against potential unemployment. This suggests that development programmes that give employees broadly marketable skills should be integrated with career planning and promotion opportunities. While organisations cannot promote everyone who gains new general skills, particular attention may need to be given to managers and other high-performing employees.

The changing nature of employment contracts has further exacerbated the issue of the provision of generic skills. Employers may be reluctant to provide training or skill development to short-term contract employees because they do not expect a good return on their investment over the duration of the contract (Connell and Burgess, 2006). Where short term contracts are offered there is a preference to employ people who already have the necessary skills and experience and who will therefore not incur training costs. However, there are widespread examples of companies increasing investments in development under the assumption that it aids in retaining employees (e.g. ASTD, 1999; Benson, 2006).

Employability with a focus on generic skills, as envisaged by current researchers (cf. Fugate *et al.*, 2004), may be more appropriate to investigate at a managerial level. Van Buren (2003) suggests that new models of career may be beneficial for managers “whose market power enables them to demand and receive fair treatment from employers” (p. 134), whereas the majority of employees in most industrialised countries are likely to be disadvantaged by decreasing job security. Operative employees, whose skills may be at a relatively lower level and more readily replaceable, will only be able to compete in the

wider labour market if they are able to consistently upgrade both their organisationally specific and their generic skills.

### **2.3.1.5 Action Theory**

With the changing nature of jobs (Bridges, 1995) and the concept of boundaryless (Arthur and Rousseau, 1996) and protean careers (Hall, 1996; 2004), there has been a shift in the responsibility for careers from employers to employees (Arnold, 2001) and a call for people to be proactive regarding their careers (Seibert *et al.*, 1999), which requires a high degree of personal initiative (Frese and Fay, 2001). Action theory implies that individual actions are regulated by the knowledge and experience that have been acquired at work. When managers do not know how to accomplish a goal, they attempt to solve the problem by thinking up new strategies. If managers perceive a gap in development, or perceive the need for participation in CFLD activities, they may seek to take action to remedy this disparity.

Action theory attempts to explain how employees enhance control over their own careers by engaging in different activities that increase career self-management (Raabe *et al.*, 2007). In action regulation theory, control means that individuals steer their own activities in conjunction with some goal (Frese and Zapf, 1994). The concept of action theory or personal initiative (Frese and Fay, 2001) is based on individual initiative acting as an underlying basis for identifying the content and process of developmental interventions to self-manage and further careers. In a large sample of managerial workers, initiative and proactivity were found to be positively related to career satisfaction, salary and frequency of promotion (Seibert *et al.*, 1999).

Raabe *et al.* (2007) suggest that individuals attempt to enhance career self-management behaviours in an action theory framework through three variables (Frese and Zapf, 1994): goal commitment; self-knowledge; and quality of a self-management plan. These three variables in turn should facilitate actions to develop one's own career such as participation in learning and development activities.

Goal commitment has been defined as “one’s determination to try for a goal” (Locke *et al.*, 1981, p. 143) and includes the intent to put effort into goal attainment and to persist in goal pursuit (Campion and Lord, 1982; Hollenbeck and Klein, 1987). Action theory espouses the belief that information collection is a prerequisite of planning. Self-knowledge provides insights about which essential career management competencies to develop. Therefore managers who know how to utilise their strengths and weaknesses in career management will develop more meaningful and specific plans. Action theory also suggests that the quality of the career development plan is central. Although goal commitment is the first stage in the process (Frese and Zapf, 1994), goals are only transformed into actions by a plan. Both goal commitment and self-knowledge can enhance development plan quality, the key variable leading to improved career self-management behaviour, suggesting that the relationship between the intervention and plan quality is mediated by self-knowledge and goal commitment.

According to action theory, plans help transform general goals into specific implementation intentions, which then lead to goal-directed behaviours (Gollwitzer, 1993; Gollwitzer and Brandstatter, 1997). Effective plans need to have certain qualities, including specific action steps and the timing of these steps (Gollwitzer and Brandstatter, 1997), as well as alternative plans in case unexpected problems occur (Frese and Zapf, 1994). Managers value control, voluntary opportunities for participation in learning and development activities, and autonomy suggesting that career self-management behaviours could also affect career satisfaction directly, regardless of other payoffs involved. The development and application of implementation plans is likely to ensure training transfer in almost every field of skill development (Raabe *et al.*, 2007).

The action theory model suggests the importance of feedback from the organisational environment, such as organisational responsiveness, pay increase, opportunities to participate in learning and development programs, or speed in job transition. In order to elicit feedback from the environment, plan implementation is important to feedback. When actions are successful so that goals are achieved and positive feedback is received,

action theory predicts that positive outcomes such as career satisfaction will increase (Pekrun and Frese, 1992). Managers engaging in more active career self-management behaviours such as participation in CFLD should have more control over their careers and should be more satisfied with their progress and careers as a result.

This has important implications for managers. In order for managers to undertake CFLD, proactive behaviours must be demonstrated. For example, managers will need to engage in career strategy planning and update their skills and competencies accordingly. Kraimer (2006) suggests that contemporary careers such as the boundaryless career require four proactive career behaviours. Firstly, career planning in terms of setting goals, exploring career options, and formulating plans. Secondly, skill development refers to mastering important skills and competencies necessary for a manager's current position and developing general skills to foster employability in the wider labour market. The third element, consultation, involves feedback seeking behaviours and social support whereby managers seek feedback from peers and senior managers on performance outcomes and development needs. Finally, networking behaviours are suggested to enable the establishment of networks that can be used as learning systems. These networking systems provide a source of information to managers on organisational socialisation and identification of types of CFLD that are valued.

Organisations can similarly benefit from embracing a proactive self-management approach in their career development programs, in which they support managers to foster their own careers and thereby become more satisfied with their careers and decreasing the likelihood of organisational withdrawal. Self-management may also be applied to other areas of learning and development, such as leadership development.

### **2.3.1.6 Agency Theory**

Agency theory attempts to provide an understanding of employer-employee relations and explains how best to organise relationships in which one party, the principal, determines the work, which another party, the agent, undertakes (Eisenhardt, 1985). Agency

relationships are problematic to the degree that the principal and agent may have conflicting goals and it may be difficult for the principal to monitor the work of the agent (Eisenhardt, 1989). The principal-agent relationship involves the delegation of duties or authority by the principal to agent to act on the principal's behalf (Cook and Ferris, 1999). The principal does not necessarily trust the agent to act in their best interests, and assumes that the agent is opportunistic and will pursue personal interests that conflict with those of the principal. Contracts are used to regulate these dealings and efficient contracts align the goals of principles and agents at the lowest possible cost.

The extent to which individuals pursue self-interests and opportunistic behaviour is dependent on the amount of control which the principal exercises over the agent's activities and the degree of information asymmetry (transactions where one party has more or better information than the other) that exists between the parties (Akerlof, 1970). Low principal control over the agent and high information asymmetry in favour of the agent allows the individual significant discretion to pursue their own interests. To assuage the agent's propensity to engage in opportunistic behaviour, the principal must either monitor the behaviour of the agent, or provide incentives to align their interests in a mutual manner, for example, management compensation linked to organisational performance is posited to achieve this objective.

The concept of human agency in career related research refers to the ability of individuals to formulate projects for the future and to carry them out (Emirbayer and Mische, 1998). Individuals are increasingly conceptualised as both owners and agents of their own careers, capable of providing self-direction in situations that are ambiguous and provide relatively few prominent courses for action (Alvarez, 2000; Weick, 1996). The perspective where the individual is perceived to be the originating agent lies in historical expressions of symbolic interactionism, which advocate an "active, creative and agentive view of the self" (Gecas, 1982, p.18). Expressions such as self-efficacy, competence motivation, and instrumentality consider individuals as perceiving themselves to be causal agents of their environment (Gecas, 1982).

Levinthal (1988) asserts that, given discretion in the direction and degree of investment in human capital, agency theory posits that organisations are significantly more likely to provide firm-specific training and development opportunities over more generic skills and competencies which can increase the ease with which individuals move to other organisations. For a manager who wishes to pursue CFLD activities that may be non-firm specific in nature, asserting control over the employer-employee relationship is of particular importance and is closely linked to self-efficacy, motivation, psychological contract and self-regulated behaviours.

### **2.3.1.7 Self-Regulation Theory**

Self-regulation theory proposes that individual's transactions with the environment "enable (them) to guide his/her goal-directed activities over time and across changing circumstances" (Karoly, 1993, p. 25). Interventions to apply self-regulation theory generally focus on increasing control and self-regulation, and they have been found to be effective for very specific, short-term employee behaviours such as job attendance (Frayne and Latham, 1987; Latham and Frayne, 1989), reduction of problematic workplace behaviours (Godat and Brigham, 1999), and sales (Frayne and Geringer, 2000). Evidence regarding interventions to attain more complex, long-term goals such as career development and participation in CFLD is limited, however Raabe *et al.* (2007) suggest that it is possible to induce individuals to engage in such self-regulatory behaviours by expanding self-management principles from more specific behaviours, such as attendance, to self-control of more global, complex goal-directed actions needed in career building. Frayne and Latham (1987) found that self-management enables individuals to cope effectively with personal and social obstacles to their development, and, consistent with social-cognitive theory (Bandura, 1986; 1997), it increased their self-efficacy by enabling them to exercise influence over their behaviour.

Self-regulation theory is based on the idea that goals, plans and feedback are relevant considerations for determining individual actions (Carver and Scheier, 1982; Frese and Sabini, 1985; Hacker, 1985). An action sequence (Frese and Zapf, 1994) comprises of

five steps: goals, information collection, planning, execution, and feedback. People monitor their environments, gathering information to aid in planning a course of action. As a result of goals and information, they develop plans. Executing the plan means to actively influence the environment on one's behalf, and the results are feedback regarding one's actions. Personal initiative, therefore, characterised by managers being self-directed, proactive and persistent in the face of barriers (Frese, *et al.*, 1996), serves as the basis for participation in CFLD.

The goal construct is perhaps the most important component in self-regulation theory (Kanfer, 1990; Vancouver, 2000). Traditionally, psychology and organisational behaviour studies have focused on people's goals surrounding task performance (VandeWalle, 1997). However, Dweck and Leggett (1988) identify learning goal orientation as another goal construct. Whereas performance goal orientation involves demonstrating and validating an individual's competence, learning goal orientation involves developing competence by acquiring new skills and mastering new situations (Dweck and Leggett, 1988; Elliott and Dweck, 1988). Research in learning and organisational contexts (e.g., Fisher and Ford, 1998; Kozlowski *et al.*, 2001) has demonstrated the relationships between learning and performance goal orientations and different affective, cognitive, and behavioural responses.

Recent empirical evidence indicates that goal orientation is best represented not by two, but by three dimensions (Elliot and Harackiewicz, 1996; VandeWalle, 1997): learning, performance-prove, and performance-avoid. People with a high learning goal orientation view skills as malleable (Martocchio, 1994); they make efforts not only to achieve current tasks but also to develop the ability to accomplish future tasks (Button *et al.*, 1996; Farr *et al.*, 1993). People with a high performance-prove goal orientation tend to focus on performance and try to demonstrate their ability by looking better than others. People with a high performance-avoid goal orientation also focus on performance, but this focus is grounded in trying to avoid negative outcomes (Elliot and Harackiewicz, 1996), to the extent that it is fundamentally aversive and threat based (Elliot, 1999).

The differences between these goal orientations are important to self-regulation theory (Elliot and Harackiewicz, 1996). Learning and performance-prove goal orientations are characterised as self-regulated based on potential positive outcomes, task mastery and normative competence respectively. Research has demonstrated that individuals with a learning (mastery) goal orientation have increased motivation to learn and typically engage in more learning and development activities than do individuals who are performance goal oriented (Colquitt and Simmering, 1998; Phillips and Gully, 1997). Chiaburu and Tekleab (2005) report that performance goal orientation is positively related to both training motivation and training transfer. These approach orientations motivate affective and cognitive processes that facilitate optimal task engagement (Elliot and Harackiewicz, 1996) such as cognitive and affective immersion in the activity (Wegner, 1994), and lead to a mastery pattern of beneficial outcomes such as achievement (Elliot and Church, 1997; Elliot and Harackiewicz, 1996). Performance-avoid goal orientation, however, is characterised as self-regulation focused on avoiding negative outcomes, and it is hypothesised to motivate processes that produce detrimental achievement outcomes, since individual protective processes interfere with or prevent optimal task engagement for example, anxiety-based preoccupation with personal rather than task concerns (Elliot and Harackiewicz, 1996).

Porath and Bateman (2006) posit that self-regulation is “far more than stoic willpower during goal pursuit” (p. 187). Self-regulation requires strategic thought and action on the part of managers to participate in CFLD. Managers with a learning goal orientation perform best when engaged in challenging tasks and ongoing development, whereas those who have a performance goal orientation may require training that keeps to their expectations of the outcomes of training programs (Smith *et al.*, 2008). Therefore common developmental programmes will not meet the needs of both groups unless the material is both challenging and in keeping with expectations, requiring managers to seek specific CFLD opportunities that may be delivered outside of the organisation.

### **2.3.2 Organisational-Level Perspective on Careers**

Sonnenfeld (1989) posits that “a career does not exist in a social vacuum but is...directed by the employer’s staffing priorities” (p.202). Organisations have a strong interest in the development, control and exploitation of the careers of individuals for commercial gain. It is easier for organisations to predict and control what is happening inside the workplace rather than outside it, therefore it provides an incentive to develop an internal labour market where vacancies can be filled from within and staff developed so that they are ready to fill these vacancies. The focus on sophisticated organisational career management processes is not so much on individual vacancies than on the development of career systems to process and direct the combined resources manifest in individuals’ careers towards meeting organisational goals (Sonnenfeld, 1989). Organisational perspectives on individual careers can utilise principles of strategic management and assist the individual, while “satisfying the dynamic and strategic human resource needs of the organisation” (Duffus, 2004, p.144). The organisation can then become an active, and possibly controlling, force in the individual’s career. Four organisational perspectives on careers are suggested to be pertinent. A summary of these concepts is provided in Table 2.3.

#### **2.3.2.1 Career Systems**

Career systems are “the collections of policies, priorities, and actions that organisations use to manage the flow of their members into, through and out of the organisations over time” (Sonnenfeld and Peiperl, 1988, p. 588). Essentially they relate to the set of HR policies and practices, and management actions that are used to direct employees during their organisational tenure. The majority of research on career systems has focused on the practices contained within organisational career systems (Bowen and Ostroff, 2004). However, changes in the external environment and concomitant organisational strategy cause employers to change the objective nature of the employment relationship and the subsequent composition of career systems (Slay and Taylor, 2007).

Cappelli (1999) comments on these changes as follows: “What ended the traditional employment relationship is a variety of new management practices, driven by a changing environment, that essentially brings the market - both the market for a company’s products and the labor market for it’s employees - directly inside the firms....pushing out of its way the behavioral principles of reciprocity and long-term commitment, the internal promotion and development practices and the concerns about equity that underlie the more traditional employment contract” (p.1). Batt (1996) noted decreasing levels of career movement in the late 1980s and early 1990s among managers to “a fraction of what existed in the 1950s through 1970” (p.72).

Individual level career perspectives such as boundaryless (Arthur and Rousseau, 1996) or protean (Hall, 1996) careers that transcend organisations (Peiperl and Baruch, 1997) have a strong appeal among academics and individual career actors (Baruch, 1999a), however, organisations face the practical task of actually managing people in a turbulent business environment. They require guidelines to help them manage individuals, to indicate what practices can be useful, and under which circumstances. A large number of traditional organisational career management systems are predicated on archaic approaches which assume old-style hierarchical frameworks (Inkson, 2007). The 1990s and 2000s have fostered a new organisational paradigm which includes a new structural fluidity and flexibility, an evolving culture, and the impact of technology and information systems (Baruch and Peirperl, 2003).

The traditional hierarchical management framework, within which long-term career planning was possible, is gradually being abandoned by both organisations and individuals. While recent literature emphasises the role of the individual in career management, it is important to note that organisations should not be excluded from the process (Baruch, 2003). It may not be necessary for organisations to abandon career management, but to adjust the career system to the new paradigms (Gunz, 1989; Gunz and Jalland, 1996; Peiperl *et al.*, 2000).

In perhaps the most contemporary career system model believed to reflect the current marketplace for labour (Slay and Taylor, 2006), Sonnenfeld and Peiperl (1988) proposed a strategic response typology in order to examine career systems across two dimensions: supply flow, referring to the labour markets wherein organisations look for managerial potential (i.e. internal versus external labour markets), and assignment flow, referring to the base for development and promotion. Supply flow describes the extent to which organisations hire new employees at levels above entry levels or rely on internal development and succession. Assignment flow describes the extent to which assignment and promotion decisions are based on individual performance on the one hand, versus overall contribution to the group or organisation on the other.

Research on this career system suggests that the relationship between organisational strategies and career systems can be reflected in whether they follow a ‘make’ or ‘buy’ strategy (Baruch and Peirperl, 2003). Organisations that pursue a ‘make’ strategy rely on the internal labour market for the development of managers, providing significant investment in HRD activities and career systems. ‘Buy’ strategy organisations rely on the external labour market for the requisite skills and competencies. There may be benefits for managers in both types of organisations: managers can engage in CFLD in organisations pursuing a make strategy, while those pursuing a buy strategy may be attractive for managers whose skills and competencies are in demand in the wider labour market and can demand appropriate recompense from the organisation.

Lepak and Snell (1999) have also developed a HR architecture of career systems model. They argue that the competencies and contributions desired by an organisation from its employees drive its choice of HRD policies and practices, including learning and development and career management. Lepak and Snell (1999) propose that the decision by organisations to utilise a particular set of career management practices is based on the relative value and uniqueness that each individual possesses. Employees are valuable to the extent that their competencies contribute to the amount a customer is willing to pay for products or services produced by the organisation, while they are considered unique if their skills are useful to the employer but are not widely available in the external labour

market. Lepak and Snell posit that if managers have both high value and high uniqueness, organisations will attempt to foster organisation-based relationships (Tsui *et al.*, 1995) by applying commitment-based HR practices (Arthur, 1994) that allow for participation in CLFD and greater autonomy in decision making. In addition to investing in learning and development initiatives, Lepak and Snell (1999) suggest that organisations “sponsor career development...programs to encourage employees to build idiosyncratic knowledge” (p.37).

In this model of career systems, organisations offer opportunities for participation in CFLD to build and maintain human capital that are both valuable and unique to the organisation, in return for organisational commitment and flexibility in performing work assignments as needed by the firm on the part of the manager. Empirical tests of the HR architecture model have provided stronger support for its predictions than the Sonnenfeld and Peiperl (1988) model, suggesting a positive link between organisational performance and managerial career systems (Slay and Taylor, 2006).

### **2.3.2.2 Career Imprinting**

Stinchcombe (1965) argued that different types of organisational structures vary systematically depending on the environmental context and time period in which organisations are founded in an industry. These basic features include characteristics of the labour force, capital intensity and ratio of line to staff workers. Over time, as particular organisational forms prove effective, certain basic organisational structures become embedded, or institutionalised, and come to prevail and dominate within the wider industry. Higgins (2005) offers the concept of career imprinting as a distinct, yet related theory. While Stinchcombe refers to linkages between an organisation and its environment, Higgins refers to the linkages between individuals’ career and a specific organisational context, and suggests that organisations are able to cultivate a specific ‘career imprint’ among their employees.

Based on a study of over 3200 managers and executives, Higgins (2005) suggests that the career imprinting concept reflects the idea that there are distinct, observable patterns in the types of “capabilities, connections, confidence, and cognition that groups of people develop as a result of a common set of career experiences in a particular organisation” (p.9). Capabilities refer to types of human capital, skills and competencies regarding work and getting work done. Connections relate to elements of social capital such as internal and external relationships and support networks related to work. Confidence refers to self-efficacy associated with getting work done. Cognition refers to taken for granted assumptions regarding work. These categories are similar in nature to the research of Arthur *et al.* (1995) on career theory which suggests that ‘knowing why’, knowing how’ and ‘knowing who’ are core competencies that individuals develop in their careers.

Research regarding the development of capabilities of managers have shown how early on-the-job experiences that involve supervisory responsibilities are critical in developing leadership skills required later in their careers. Managers frequently cite early career challenges as an important form of learning that affects professional development in the long-term (Kotter, 1988). Evidence on the connections dimension centres on the cultivation of early career connections such as a supportive manager or supervisor and other forms of social support (McCall *et al.*, 1988, p.175). Social support is found to positively influence career and psychosocial encouragement (Higgins and Kram, 2001). Bennis and Nanus (2003) find that cultivation of specific forms of confidence such as self-efficacy is particularly important for the professional development of managers. Finally, development of cognitive capabilities suggests that managers’ cognitions and knowledge of opportunities available to them considerably shape career development (Lent and Brown, 1996; McLennan and Arthur, 1999).

Higgins (2005) suggests that these four dimensions together constitute an organisational imprint derived from what individuals learn at a particular organisation. Higgins argues that the concept is an organisational-level phenomenon influenced by the cumulative effect of culture, socialisation processes and developmental opportunities. Widening the

perspective of career imprints beyond simply organisational socialisation, it is postulated that the career imprinting process is similarly shaped by elements of organisational context, including structure and strategy. In a business where learning and development strategies are closely aligned to the business strategy, it is possible that the type of learning and development opportunities may affect the career imprinting process. Since individuals are the carriers of career imprints from one organisation to another, it is possible that these imprints can have a lasting impact on other organisations. While career imprints are associated with a specific organisation, individuals have a choice as to how they will respond to an organisational career imprint acquired at a particular firm (Higgins, 2005). Although early career imprints can affect the types of design choices that managers and leaders are likely to make in subsequent organisations, individuals with strong career imprints from previous employers have significant latitude in deciding what to export to another workplace (Higgins, 2005).

Placing career development within the wider business context extends traditional management research concerning careers beyond inwardly aligned aspects of organisation culture.

### **2.3.2.3 Mass Customisation**

In response to evidence of a shrinking pool of skilled labour, rising ratios of female to male employees in the workplace, and changing family structures, Benko and Weisberg (2007) posit an organisational framework which they label mass career customisation. Allied with the aforementioned factors, younger generations (Generation X and Generation Y workers) are less motivated by possibilities of the traditional normative career mode where career success is measured by prestige, earnings and upward advancement, and are more aware of the trade-offs of pursuing a customised career.

Customised careers are “unconventional patterns of workforce engagement by individuals who would ordinarily be expected to adhere to traditional career paths” (Valcour, 2006, p.220). They differ from the traditional career on one or more of three

dimensions: work time (e.g. working reduced hours rather than full time), timing (e.g. discontinuities in the pattern of work engagement over the span of a career such as women entering the workforce late or leaving it temporarily to care for children), and type of employment relationship (independent contracting work instead of long-term organisational employment). The customised career assumes that personal identities are shaped by multiple life roles, including, but not solely limited to, work roles.

The majority of research on customised careers has focused on managers and related professionals, due to traditional career patterns constituting a strong cultural schema for these groups, given their strong emphasis on significant consistent work involvement.

Managers who pursue customised careers gain some control over their time and conditions of employment (Valcour, 2006). Individual productivity and job satisfaction tend to be higher amongst these individuals. They are often generally better able to integrate their work and non-work lives, have less work-family conflict and have higher levels of life satisfaction. A corollary of this, however, is the likelihood that they will suffer in terms of objective determinants of career success (e.g. earnings, advancement). They tend to receive less support for career development from their employer and have fewer opportunities for promotion. They may also feel that they have made career sacrifices and experience a degree of hesitancy towards the state of their careers, characterised by the normative expectations surrounding traditional careers that they have chosen to forego.

Benko and Weisberg (2007) suggest that organisations need to identify, develop and advance talented individuals who choose to pursue a customised career in ways that simply go beyond marginal systems of flexible work arrangements. Their mass career customisation model “supports a customized approach to career development that engages the individual as a partner in his or her development – and signals that organisation’s commitment to each individual’s growth” (p.79). Mass career customisation diverges away from uniform organisational approaches to career development towards supporting multiple career paths, each designed and carried out in

mutual collaboration between employee and employer. It eliminates the linear, lockstep characteristics of the corporate hierarchy and replaces it with a more adaptive framework that encourages longer-term thinking with multiple career path outcomes. Benko and Weisberg (2007) suggest that mass career customisation be applicable to all individuals in an organisation, rather than be perceived as a type of reactive flexible work arrangement that is usually applied to only those who seek, and are granted such arrangements on a one-off basis.

The mass career customisation framework postulates a set of employment options along four career dimensions and provides a structure to articulate and manage these options on an ongoing basis rather than one-off accommodations. The first dimension, pace, outlines options related to the rate of career progression and addresses how quickly an individual is deemed to progress to increasing levels of responsibility and authority. Workload, the second dimension, details choices relating to the quantity of work output and addresses the quantity of work performed, usually measured in days or hours per month, or performance cycle. The third dimension, location/schedule provides options for when and where work is performed. This examines how work gets done and challenges the 'face-time culture' where employees are either implicitly or explicitly expected to be physically presented in the workplace for a set period of time regardless of the quantity of work performed. Technological advancements have facilitated a multitude of choices amongst this dimension (Benko and Weisberg, 2007). Role, the final dimension, refers to the category of an employee's position, job description, and responsibilities. This dimension is likely to be the one that is customised the most based on the nature of each organisation's business.

Benko and Weisberg (2007) argue that mass career customisation allows organisations to bring career planning to the forefront of HRD processes and facilitate employees who wish to more effectively manage a non-traditional career path. It must be noted that customised careers are closely associated with features of the employment context. The nature of an organisation affects its employees' ability to customise. It is more difficult to customise in the context of economic downturn where an organisation has reduced its

workforce and placed additional work on remaining employees than in a situation where there is more flexibility in staffing levels. The success a mass career customisation model from an employee perspective depends primarily on the values and identities of the person who crafts the career, whereas from an organisational perspectives success appears to depend on the existence of social supports such as a flexible organisational culture and the absence of situational constraints to development.

Managers will have little opportunity to customise when they work in organisations with rigid cultures and hierarchical structures and when no alternative career policies have been articulated and implemented. Managers, in these cases, are faced with two options: stay on the traditional career path regardless of the personal cost or quit entirely.

#### **2.3.2.4 Gift-Exchange Theory**

Gift-exchange theory, derived from social exchange theory, argues that general training can be viewed as a resource that an organisation can use to demonstrate support to targeted employees (Balkin and Richebe, 2007).

Human capital theory, framed to explain organisational training decisions, views training as an investment that should be justified according to its expected financial returns. Human capital theory suggests that training costs should be paid for when the organisation is in a position to achieve appropriate financial returns to the training investment compared to alternative uses of how its financial resources could be employed (Becker, 1964). General training, which can be transferred to other organisational contexts, is viewed by human capital theorists as a less secure investment than alternative, more job-specific forms of training (Rees, 1979). The investment uncertainty is based on the fact that an individual receiving general training can quit to take advantage of an external employment offer to the loss of the training organisation which is subsequently deprived of its employee's newly acquired skills. Therefore, human capital theory argues that the cost of general training should, in the main, be funded by individuals themselves, rather than by a firm, so that an organisation avoids the

uncertainty of losing its training investment to employee turnover (Baron and Kreps, 1999; Becker, 1964; Lazear, 1998).

Gift-exchange theory offers an alternative approach to explain why organisations make human capital investments in general skills and offer opportunities for participation in CFLD. Gift-exchange theory does not attempt to calculate expected costs and benefits attributed to general training in the manner of human capital theory; instead it views the provision of general skills as part of a process that links the employer and employees in a collaborative long-term relationship that both parties deem beneficial (Balkin and Richebe, 2007).

Gift exchange is a method different parties use to build and strengthen relationships. The exchange of gifts between two parties illustrates a special type of social exchange used to bond and strengthen ties between parties, and which are governed by a set of rules that apply to how to exchange the gifts. Gift exchanges are carried out based on norms of reciprocity, which stipulate that people should feel compelled to help those who have helped them (Flynn, 2003; Gouldner, 1960).

When a gift exchange is in equilibrium the parties in the exchange perceive that their relationship is in balance. For example, a gift exchange relationship could occur between an employee and an employer who exchange favours - an employee works overtime on an important project and later receives a preferred work assignment from the employer. Or an employer provides developmental opportunities to an employee, and the employee later reciprocates by volunteering to work on a public committee that provides positive public relations to the organisation in the local community. A key function of a gift exchange is to sustain the relationship between the parties, with less concern is placed on the actual resources being exchanged when the relationship is going well (Blau, 1964; Mauss, 1967).

General skills development can be framed as a gift that increases a manager's bank of portable skills. The organisation who pays for the manager's general skills development

will want to frame this resource as a gift which can be accomplished by following the rules governing gift exchange. The manager receiving the training is likely to notice that his or her personal needs are being taken into consideration by the employer. Thus, they are likely to believe that their economic welfare is being made more secure by the employer who pays for skills that make the manager more marketable, independent of whether he or she stays or leaves the organisation. By feeling “cared for” by an employer, a manager in turn is likely to feel a moral obligation to reciprocate according to norms of reciprocity (Gouldner, 1960; Mauss, 1967). An important way that a manager receiving general training can reciprocate is through the act of cooperation with respect to the employer’s welfare (Flynn, 2003; Konovsky and Pugh, 1994). One form this cooperation can take is by enacting discretionary extra-role behaviours that go beyond the core job tasks and assist the smooth functioning of the organisation (Brandes *et al.*, 2004). Cooperation should benefit the employer and may justify the general training expenditures.

Cooperation is the wilful contribution of personal efforts to the completion of interdependent jobs and is essential whenever people must coordinate activities among differentiated tasks (Wagner, 1995). Managers who are cooperative take the collective interests of their organisation into consideration when enacting their work roles. Managers have significant discretion in how they enact their roles in either an individualistic or collectivist basis (Wagner and Moch, 1986). While individualists look after themselves and tend to ignore group or organisation interests, collectivists look out for the well-being of the organisation to which they belong, even in some cases that require personal interests to be set aside.

Some forms that manager cooperation can take that benefit the employer in a gift exchange include: organisational citizenship behaviours which are discretionary actions outside the expected job role that promote organisational effectiveness such as voluntarily mentoring of new managers (Konovsky and Pugh, 1994; Organ, 1988; Tepper and Taylor, 2003); demonstrating manager commitment to the employer such as turning down an outside job offer in order to remain with the current employer (Eisenberger *et*

*al.*, 1990); providing innovations to the employer (Eisenberger *et al.*, 1990); and accepting employer initiated changes in employment policies that make the workplace more efficient, and proactively embracing and learning new technologies promoted by the employer that replace the established work methods rather than resist them (Pfeffer, 1994; Snell and Dean, 1992). An organisation that provides general skills development that is framed as a gift to a manager, and in turn receives some of the above listed forms of cooperation from a reciprocating manager, can have a balanced exchange.

Offering opportunities to participate in general skills development facilitates the establishment of a collaborative relationship between an employer and a manager by enhancing their marketable skills (Pfeffer, 1998). Those receiving the general skills development, depending on whether the employer is viewed as being helpful and consistent in accordance with the rules of the gift exchange process, are likely to respond in kind to an employer's gesture according to norms of reciprocity (Flynn, 2003; Gouldner, 1960). Managers reciprocate by working more cooperatively (taking the organisation's needs into consideration), and working less on an individualistic basis (placing individual interests over collective interests of the organisation) (Blau, 1964; Emerson, 1987). A greater manager emphasis on cooperation includes providing increased levels of organisational citizenship behaviors (Konovsky and Pugh, 1994), innovations and manager commitment to the firm (Eisenberger *et al.*, 1990), as well as a greater propensity for managers to accept changes in work rules and technology (Pfeffer, 1998; Snell and Dean, 1992).

Organisations that provide general skills development to managers consistent with the gift-exchange rules are likely to receive two distinct benefits from the managers targeted for training. First, the managers receiving general skills development may be more productive due to their higher level of skill yielding economic rents to the employer (Balkin and Richebe, 2007). Second, offering general skills development following gift-exchange rules will give rise to norms of reciprocity in which the trained manager will feel obligated to be more cooperative by adopting work behaviours that support collective goals of the organisation. Concomitantly, by having a more committed manager, the

employer reduces the uncertainty of losing the general training investment due to an untimely quit because the manager is more likely to want to maintain the gift exchange relationship with the host organisation.

A summary of the individual level constructs and their implications for CFLD is provided in Table 2.2.

### **2.3.3 Synthesis**

The various concepts identified here set out the rationale for understanding participation of managers in CFLD, rather than it being directly operationalised. Understanding the situational factors allows for an investigation of the various concepts included in the research model and allows them to be operationalised.

European workplace learning literature tends to focus on contextual and work content issues whereas the US literature is strongly positivistic and focuses on the predictors of individual learning. This literature base provides useful insights on the variables of interest in this research. The US-based literature dominates a great deal of literature in workplace participation in learning and development and a significant proportion of the literature in this research is drawn from this field.

The dominant theoretical lenses; human capital, agency and contextual approaches; are made explicit and each of the research questions is measured via a latent variable in the research model. The literature identifies a number of concepts that are conceptually similar, thus the human capital approach includes education attainment, job experience and responsibilities. The agency approach examines the self-directedness and employability aspect of CFLD and includes motivation to learn, autonomy, career exploration and planning, and self-efficacy. Contextual factors are examined by investigation the influence of a number of macro-level variables including organisation size, organisation ownership and organisational barriers.

**Table 2.2 Individual-Level Theoretical Perspectives Used to Understand Participation in Career-Focused Learning and Development**

Theoretical Perspective	Key Constructs	Implications for CFLD
Career Motivation Theory	<ul style="list-style-type: none"> <li>• Motivation of the individual is important in explaining the developmental behaviour of the manager</li> <li>• Motivation to participate may be derived from extrinsic or intrinsic drivers</li> <li>• Motivation to participate in CFLD may vary over the manager’s career</li> <li>• The motivational driver may focus on different aspects of the career</li> </ul>	<ul style="list-style-type: none"> <li>• The motivational state of the manager is important in explaining his/her desire to participate in career focused learning</li> <li>• Motivation to participate may be driven by a combination of the intrinsic outcomes of career-focused learning or the job advancement and financial benefits that will be derived</li> <li>• Motivation to learn will be sustained by the managers continued need for career-related outcomes.</li> </ul>
Self-Efficacy Theory	<ul style="list-style-type: none"> <li>• Self-efficacy for development will predict the extent to which a manager will participate in CFLD</li> <li>• Self-efficacy may focus on the general or the specific</li> <li>• Self-efficacy will likely influence the motivation of the manager to participate in CFLD</li> <li>• Self-efficacy can be developed through experience and positive feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Self-efficacy will be important in explaining a manager’s take up CFLD</li> <li>• It will also be important in explaining the extent to which the benefits of career-focused learning will be derived or exploited.</li> <li>• Participation in CFLD will potentially enhance self-efficacy to further learning and development</li> </ul>
Psychological Contract Theory	<ul style="list-style-type: none"> <li>• Manager’s contract with the organisation is based on the notion of mutual benefits.</li> <li>• The content of the contract focuses on perceptions, beliefs, promises and expectations.</li> <li>• Manager’s are encouraged to negotiate a contract which gets the highest return for their human capital</li> <li>• The managers relationship with the organisation is transactional and the focus is on employability security rather than job security</li> </ul>	<ul style="list-style-type: none"> <li>• CFLD is increasingly viewed as an important expectation of the psychological contract</li> <li>• Organisations may invest in CFLD to manage and meet the expectations of the manager</li> <li>• CFLD may be renegotiated at different times depending on the scale of the psychological contract</li> <li>• Managers may have to tenure commitments to the organisation in return for learning and development benefits</li> <li>• Investment in general and specific competencies</li> <li>• Commitment to career development</li> <li>• Willingness to seek ‘i-deals’.</li> </ul>
Employability Theory	<ul style="list-style-type: none"> <li>• Managers are encouraged to embrace career self-management rather than relying on the organisation for career planning and job security</li> <li>• Employability policies are intended to retain committed employees when job security cannot be guaranteed.</li> <li>• Managers place a premium on acquiring general or marketable skills that are in demand in the wider labour market</li> <li>• Marketability of general skills allows managers to demand more from the employment relationship</li> <li>• Employability theory focuses on the types of competencies that are possessed by the manager</li> <li>• Managers who possess generic or portable competencies are considered to be more employable</li> <li>• The modern labour market is dynamic and managers are likely to change jobs often.</li> </ul>	<ul style="list-style-type: none"> <li>• Development of transferable skills helps to improve employability and marketability in the labour market</li> <li>• Requirement for managers to learn to sustain employability</li> <li>• Managers have to career self-manage for employability.</li> <li>• CFLD can be used to enhance the generic or portable competencies of managers</li> <li>• Investment in CFLD will need to be an ongoing investment to ensure that competencies do not become obsolete</li> <li>• CFLD will provide long term benefits to the manager and present numerous career choice options</li> <li>• Managers have the prime responsibility to invest in employability</li> </ul>
Action Theory	<ul style="list-style-type: none"> <li>• Shift in responsibility for career development requires managers to be more proactive regarding skill and competency acquisition.</li> <li>• Managers increase career self-management by steering developmental activities in</li> </ul>	<ul style="list-style-type: none"> <li>• Need for managers to engage in career planning activities such as goal setting, exploring career options, and formulating plans.</li> <li>• Requirement for managers to seek feedback from peers and senior managers on</li> </ul>

	<p>accordance with a particular goal.</p> <ul style="list-style-type: none"> <li>• When managers perceive the need for participation in CFLD activities they seek to take action address this.</li> <li>• Managers who participate in CFLD should have more control over their careers and should be more satisfied with their progress and careers as a result.</li> </ul>	<p>performance outcomes and development needs.</p>
Agency Theory	<ul style="list-style-type: none"> <li>• Individual and organisation have conflicting values</li> <li>• Focuses on the relationship between agent and principle and the extent to which the principle's economic interests require the efforts of agents</li> <li>• Agents do not bear the complete economic cost of their decisions and may have the economic self-interest to advance their personal economic interests at the expense of the principle's interest</li> <li>• Principles have two options to minimise agency problems, monitoring or incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Need for individual to assert control within employer-employee relationship</li> <li>• Access non firm-specific HRD activities</li> </ul>
Self-Regulation Theory	<ul style="list-style-type: none"> <li>• Personal initiative acts as the basis for participation in CFLD</li> <li>• Self-regulation requires strategic thought and action on the part of managers to participate in CFLD.</li> <li>• Self-regulation enables managers to cope effectively with personal and social obstacles to their development.</li> </ul>	<ul style="list-style-type: none"> <li>• Managers with a learning goal orientation will require CFLD that involves challenging tasks and ongoing development.</li> <li>• Managers with a performance goal orientation may require CFLD opportunities that focus on expectations of the outcomes of learning and development programs</li> </ul>

## **2.4 Building a Model to Examine CFLD for Managers: Key Concepts & Variables**

The extant literature on participation in learning and development in general has been relatively well established in the social sciences but conspicuously less so in the academic- and practitioner-based HRD literature. Social science research into participation first emanated from the USA where populations studied tended to be institutionally specific. Nationally representative studies were not undertaken until after the Second World War, with Johnstone and Rivera's (1965) research of particular eminence.

Research into participation has gained recognition from the desire of policymakers to improve the relationship between the supply and demand of learning and development activities. Socioeconomic and cultural characteristics of the archetypal adult learner have been examined in order to develop a typology of learner needs profiles. Such profiles have tended to be used by public and private providers of learning and development in the formulation of labour market and adult education policies (Carbery and Garavan, 2007). A further perspective of the sociological research is based on the notion that learning and development is a means of achieving individual or collective upward mobility for participants. It then serves as a productive function for participants, but as a detrimental function for non-participants (Doray and Arrowsmith, 1997).

Courtney (1992) highlights the striking consistency over time of the factors influencing participation. The author found that age, gender, initial level of education, and occupation consistently affect participation. However, as Doray and Arrowsmith (1997) point out, "the debate about the determinants of participation is still not settled" (p. 42) due to the heterogeneity of the field from a global point of view; definitions of participation have changed over the years; and there exists a continual need to understand how participation is influenced by developments in the wider social and economic context, and by educational policies. This has given rise to theoretical frameworks combining socio-demographic and socio-psychological variables, most notably

Cookson's (1986) model and further developed upon by Doray and Arrowsmith (1997) and Xiao and Tsang (2004).

The literature on participation in learning and development activities reveals a gap in our understanding of the processes and antecedents that influence participation behaviour. Wang and Wang (2004) highlight this lacuna and suggest that HRD participation research is required to address low participation rates. Hurtz and Williams (2009) suggest that the self-directed nature of many development activities requires an understanding of factors that encourage employees to pursue these activities in a proactive manner and to participate and learn from them. However, many of the models proposed to explain participation tend to treat employee populations as homogeneous with the assumption that learning and development activities are diffused equally among all workers regardless of the job they hold and their place in the occupational hierarchy. Lepak and Snell (1999) suggest that organisations attach different significance to different categories of employment in terms of the human resource practices that are used to manage their employees. They posit that managerial jobs, which they label as having high value and high uniqueness, require competencies that directly contribute to enhancing the organisation's competitive advantage and require internal development. Tight (2000) highlights that, in the main, empirical studies of participation tend to focus on excluded groups or disadvantaged individuals rather than managers. More recently, McCracken (2004) carried out an analysis of barriers to participation in learning and development that managers encounter. He found that managers attributed their unwillingness to participate in learning and development activities to primarily extrinsic factors, most notably organisational culture which he found had a strong negative influence on participation. Furthermore, McCracken and Winterton (2006) indicate that the prioritisation of management development has been surpassed by the goal of widening participation to low-skilled and previously excluded groups. They highlight that this is of particular concern in the UK where incumbent managers are relatively less qualified compared to their European counterparts.

The advantage in terms of learning and development opportunities that managers have over other occupational groups has been well documented (Bradley *et al.*, 2000; McCracken and Winterton, 2003). However, a distinction must be first made between access to learning and development opportunities and actual participation in such activities. A large body of the literature has looked at access to participation where opportunities to engage in training and development are considered whether or not the individual takes up these opportunities. Access models look at to whom opportunities to engage in learning and development are available to rather than those who ultimately participate. This is an important distinction to make as, for various reasons relating to job roles, situational constraints and social supports, the differences between those who wish to participate and those who actually do can be considerable.

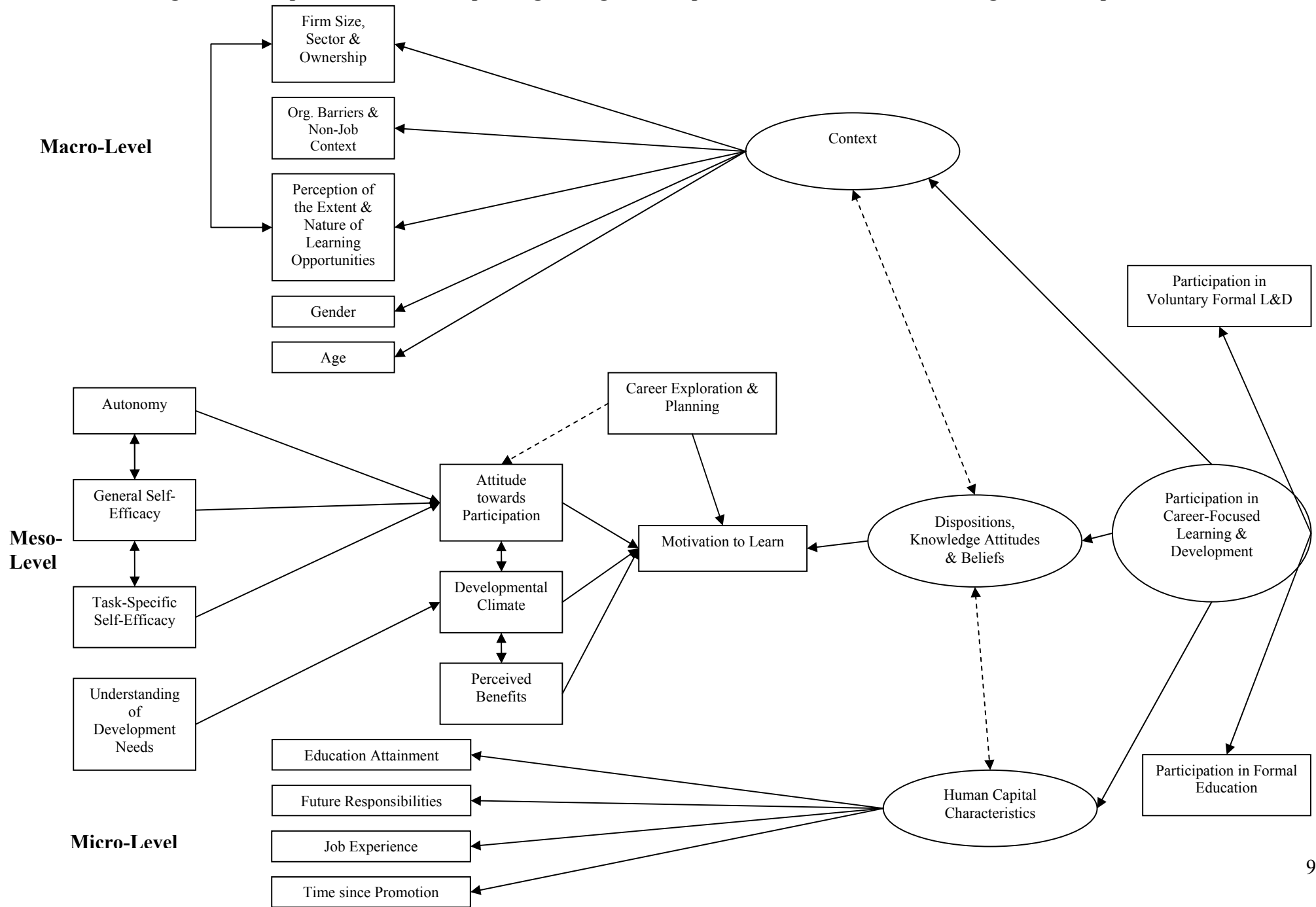
The literature on participation in CFLD generally draws from two divergent perspectives: psychological and economic. The psychological perspective uses a social exchange model of organisations and assumes that the opportunity to participate in CFLD is viewed by managers as a benefit in that it contributes to higher organisational commitment (Noe *et al.*, 1997; Tansky and Cohen, 2001). The economic perspective predicts that managers are motivated to participate in CFLD to enhance generic competencies and increase employment and salary opportunities (Krueger and Rouse, 1998). Therefore managers who participate in CFLD will do so primarily with career objectives in mind.

In order to understand the participation of managers in CFLD and to account for the complex interplay of agency, human capital and contextual factors, a three-level framework based on the framework presented by Carbery and Garavan (2007) is proposed which allows for a layered understanding of influencing factors on participation in CFLD. Agency, human capital characteristics and context are argued to be important in explaining participation in learning and development activities (Alvarez, 2000; Poell and van den Krogt, 2003). Each level of this framework comprises of a latent construct which is hypothesised to influence the dependent latent variable, participation in CFLD. Within each of these latent constructs are directly observed independent variables. At the micro-level of the framework different types of human capital such as education, current

skills, responsibility and time since promotion are included as key influences on participation. The meso-level focuses on dispositions, knowledge, attitudes and beliefs of managers, and includes preferences, desires and other dispositions such as autonomy, attitudes to learning, career exploration and self-efficacy. The macro-level focuses on aspects of context and include characteristics of organisations and individuals. Each level is explained in turn.

Figure 1 presents the proposed theoretical framework. The constructs of the framework are explained and a number of hypotheses are suggested to elucidate the aims of the research. The general theoretical perspectives discussed in the earlier parts of the chapter inform each of these propositions.

**Figure 1. Conceptual Framework Explaining Manager Participation in Career-Focused Learning and Development**



### **2.4.1 Micro-Level: Human Capital Characteristics**

Human capital variables do not operate in isolation but are impacted by dispositional characteristics of the manager and characteristics of context. Four human capital characteristics of managers are included in the framework – educational attainment; expectations of future responsibilities; job experience; and time since last promotion. Educational attainment is inconsistent in explaining participation in CFLD. Levels of education and training may have an impact on personal motivation and how a manager perceives both work and career. Education may not be significant when looking at managers due to the suggestion that while education levels gain initial organisational entry, it is more the subjective social factors and networks that lead to advancement to managerial level (Ibarra and Smith-Lovin, 1997). However, Belanger and Tuijnman (1997) find that education level is the strongest predictor of an individuals' participation in learning and development and may be linked to motivation to learn. The longer the duration in education and the higher the level of education attainment, the greater the propensity of individuals to participate in organised formal learning activities through their working lives.

*Proposition 1: Higher levels of educational attainment are positively related to participation in CFLD.*

A manager's job experience is likely to impact upon the perceived value the manager places on learning and development opportunities. The extent to which managers have control over their own learning and personal development is dependent on role and structural features within the organisation. In this context, the more scope managers have to learn, the more opportunity they in turn will have to drive learning and development which focuses on self and career. Accordingly, it is expected that managers at middle and senior levels have the scope to participate in self-directed CFLD on an ongoing basis (Bosley *et al.*, 2006). Garofano and Salas (2005) propose that previous work experience, which is developmental in nature, will impact both career exploration and motivation to learn. Prior work experience will influence beliefs concerning the value of learning and development as well as their motivation to participate.

*Proposition 2: The amount of job experience is positively related to managerial participation in CFLD.*

A manager's perception of the likelihood of increased future responsibilities is important in the context of career plateaus. Recently, career advancement in terms of vertical promotion has become more competitive as organisational structures have become more horizontal. Career plateau is defined as "the point in one's career at which the probability of a vertical assignment or of a promotion in the near future is not very likely" (FERENCE *et al.*, 1977). More managers tend to perceive that it is getting tougher to go up the hierarchy in their organisations (Jung and Tak, 2008). Within this type of environment, perceived career plateau has become one of the major stressors that can be found in organisations (Rosen and Jerdee, 1990). Managers who perceive their career advancement is no longer possible in the future are also likely to have low levels of work motivation. Perceived career plateau has been negatively related to job satisfaction and career satisfaction (Burke, 1989; Chao, 1990; Ettington, 1998; Lee, 2003; Trembley *et al.*, 1995). Perceived career plateau has also been significantly related to absenteeism (Near, 1984), intention to leave (Lemire *et al.*, 1999), and job performance (Ettington, 1998; Lemire *et al.*, 1999). It is argued that managers will attempt to ameliorate the effects of a career plateau and low likelihood of future responsibilities in an organisation by increasing their employability and participating in CFLD activities. The extent of time since last promotion is also likely to be important in this context. The greater the time since a manager was promoted the more likely s/he is to participate in CFLD.

*Proposition 3: Low likelihood of future responsibilities is positively related to participation of managers in CFLD activities.*

*Proposition 4: Time since last promotion is positively related to participation of managers in CFLD activities.*

#### **2.4.2 Meso-Level: Dispositions, Knowledge, Attitudes and Beliefs**

Career concepts such as the protean, authentic and portfolio career place emphasis on the manager to take responsibility for managing his/her own career. The manager's

own personal career choices and search for self-fulfilment represent core elements of these concepts. They highlight the important role of dispositions, attitudes and beliefs in CFLD as significant considerations in explaining the manager's participation in such activities. It is postulated that these dispositions, attitudes and beliefs can be operationalised through motivation to learn.

Attitudes and beliefs regarding development activities are believed to be important determinants of participation (Noe *et al.*, 1997). Motivation to learn, measured as the desire to learn the content of the development program, has been suggested to be directly related to both participation and effectiveness. Studies have shown that motivation to learn is positively related to learning and program completion (Baldwin *et al.*, 1991). It is posited that dispositional characteristics are important structuring components that shape a manager's learning behaviour. There is some debate concerning the extent to which these characteristics can be manipulated or changed (Garafano and Salas, 2005). Four important characteristics are focused upon which are placed at the meso-level in the framework: autonomy, general self-efficacy and task-specific self-efficacy, and understanding of development needs. The first three factors mediate attitude towards participation whereas the latter mediates the development climate. Attitude towards participation, the development climate, perceived benefits of participation in CFLD, and career exploration and planning are hypothesised to influence motivation to learn.

#### **2.4.2.1 Motivation to Learn**

Baldwin *et al.* (1991) find that motivation to learn is positively related to participation in learning and completion of learning. This framework highlights the mediating processes that underpin motivation to learn: attitude towards participation, developmental climate, perceived benefits of learning and development, and career exploration and planning.

It may be possible to further examine the motivational processes that underpin the notion of the self-directed manager as learner through a further extrapolation of a motivational model within the wider participation in CFLD framework.

Potentially useful tenets to understand motivation in this context are Ajzen and Fishbein's (1970) theory of reasoned action and Deci and Ryan's (1985) self-determination theory (Carbery and Garavan, 2010). The theory of reasoned action suggests that when people have to make complex decisions (in this case, whether or not to engage in CFLD), they draw on information available to them at the time to arrive at a behavioural intention decision. Three variables influence this decision to participate: attitude towards participation in CFLD activities; developmental climate – social supports or situational constraints that encourage or hinder participation; and perceived benefits of participating in CFLD. The attitudinal literature has consistently demonstrated that intentions are the single best predictor of actual behaviour (Ajzen and Fishbein, 1980; Mowday *et al.*, 1984). It is suggested that career exploration and planning also mediates motivation to learn

*Proposition 5: Motivation to learn is positively related to participation of managers in CFLD activities*

*Proposition 6: Career exploration and planning, a positive attitude towards participation, a supportive developmental climate and high perceived of benefits of CFLD are positively related to managers' motivation to learn*

#### **2.4.2.2 Attitude Towards Participation**

Three individual characteristics have a mediating influence on attitudes towards participation: autonomy, general self-efficacy, task-specific self-efficacy of the manager. The concept of autonomy underpins current conceptions of career (Quay *et al.*, 2003). The boundaryless career envisages autonomy in a psychological sense to move across boundaries, between jobs, functions and skill sets. The concept places particular emphasis on the perception of the capacity to make successful transitions. The protean and authentic career concepts emphasise a self-directed approach to learning and the idea that it is the manager who drives the career (Hall, 2002). The manager is expected to adopt a mindset which highlights freedom, self-direction and the selection of career and learning opportunities which are based on the manager's personal values. Autonomy is defined as a situation where the manager takes the initiative to identify learning needs and goals, select appropriate learning strategies

and participate in CLFD (Elligner, 2004; Knowles, 1975). Autonomy can be operationalised through motivational processes (Deci and Ryan, 1985; Connell and Wellorn, 1991) with different categories of motivation reflecting different levels of autonomy. The highest degree of autonomy is intrinsic motivation. This refers to participation in learning for its own sake; to experience the inherent pleasure and satisfaction that derives from participation (Deci, 1975). Extrinsic motivation implies engagement or participation as a means to an end rather than for any intrinsic satisfaction.

Attitudes towards learning and social influence are mediated by socio-contextual factors that facilitate the natural processes of self-motivation towards participation. Deci and Ryan (1985) have developed a typology of these socio-contextual factors under the rubric of self-determination theory. It is a motivational approach based on the relative importance of specific psychological needs – competence and autonomy – to understand why individuals engage in self-directed activities, self-directed participation in CFLD in this case.

The need for competence implies that individuals seek to be effective in their interaction with the environment. Thus, a perception of competence must exist when individuals participate in learning and development activities. For optimal psychological functioning this must be accompanied by a sense of autonomy. The concept of self-efficacy can be used to capture perceptions of self-competence. Self-efficacy refers to an individuals' confidence in their ability to organise and carry out a particular course of action to solve a problem or complete a task (Bandura, 1977; 1986). Research suggests that self-efficacy is an important determinant of an individuals desire to participate in learning and development (Noe, 1986; Noe and Schmitt, 1986).

The need for autonomy indicates that individuals seek choice in the initiation, maintenance and regulation of human behaviour. This suggests that voluntary learning and development activities, undertaken out of choice, satisfy the need for autonomy as opposed to organisationally prescribed activities. Operationalising autonomy is usually done through motivational processes (Deci and Ryan, 1985;

Connell and Wellorn, 1991) with different categories of motivation reflecting different levels of autonomy.

According to self-determination theory, extrinsic motivation can vary greatly in its autonomy. Externally motivated behaviours that are least autonomous are known as externally regulated. They are performed solely to satisfy an external demand or reward contingency. Due to a perceived externality of locus of control, externally regulated behaviour is perceived as controlling (deCharms, 1968) and is the basis for operant theorists. The most autonomous form of extrinsic motivation is integrated regulation. This occurs when identified regulations are fully assimilated to the individual. Such behaviours are performed by choice because the individual judges them as important (Ryan and Deci, 2000).

Behaviours characterised by integrated motivation share many qualities with intrinsic motivation, although they are still considered extrinsic since they are done to attain separable outcomes aside from inherent satisfaction. This corresponds closely with the conceptualisation of CFLD as voluntary activities. They are self-directed, fulfilling the need for autonomy, and are undertaken with the primary goal of enhancing career related skills and competencies instead of only for the innate satisfaction of participation. Managers who participate in activities for externally regulated reasons are not satisfying their need for autonomy (Quay *et al.*, 2003). This suggests that participation in mandatory learning and development activities will be characterised by low perceptions of autonomy and external regulations. The existence of such perceptions is associated with negative psychological behaviour including dropping-out behaviour, lack of creativity and unwillingness to engage in similar activities in the future (Vallerand *et al.*, 1997).

The concept of self-efficacy is central to the majority of current career concepts (Bandura, 1997). The authentic career concept envisages individuals having the self-confidence to enact their careers and possessing the self-efficacy to integrate their current with previous self (Svejenova, 2005). The authentic career also advocates being truthful to one's self. Self-efficacy is likely to mediate the extent to which an individual pursues a protean career. It envisages that the manager is confident in making internal changes and has the confidence to combine cognitive and affective

skills to ensure effective learning. Self-efficacy is operationalised as a manager's confidence to organise and pursue CFLD. It is envisaged that self-efficacy will mediate attitude to learning which will in turn explain participation in CLFD (Machin and Fogarty, 2004; Noe, 1986). Self-efficacy acts as an intermediate motivational mechanism (Potosky and Ramakrishna, 2002) that allows managers to enable the effort, cognitive resources and actions necessary to perform specific behaviours (Kanfer, 1987). Potosky and Ramakrishna (2002) suggest that a high degree of self-efficacy in what is perceived as an unsupportive developmental climate will lead to discontinuous learning behaviours and negative responses, including organisational withdrawal. Bandura (1997) states that "the optimal level of generality at which self-efficacy is assessed varies depending on what one seeks to predict and the degree of foreknowledge of the situational demands" (p. 49). Self-efficacy can be divided into general self-efficacy and task specific self-efficacy. General self-efficacy refers to the manager's perceptions of their capabilities and confidence to perform a role successfully. Task specific self-efficacy refers to perceptions of capability and confidence to perform specific tasks. Bong (1997, 1999, 2001) found that self-efficacy perceptions were indeed associated with some degree of generality within domains. Lent *et al.* (1997) found that self-efficacy perceptions could be measured within both general and task-specific domains.

It is therefore suggested that a manager's attitude towards participation in CFLD is multi-dimensional. It is driven by three important dispositional factors.

*Proposition 7: Attitude towards participation in CLFD is positively related to high levels of autonomy, high perceptions of general self-efficacy and task-specific self-efficacy.*

### **2.4.2.3 Developmental Climate**

Developmental climate represents an important construct in the context of CLFD. It is generally conceptualised as consisting of two elements; situational constraints and social supports (Kozlowski and Hults, 1987; Noe and Wilk, 1993). CFLD requires a developmental climate that is free of situational constraints such as resource barriers, time problems, and managerial role performance requirements. It also requires the

availability of sufficient levels of social support to the manager to pursue learning and development opportunities. These include psychological support from direct reports, key organisational decision makers, and a positive, supportive development climate.

Cognitive evaluation theory (CET), a subtheory of self-determination theory, suggests that social and environmental factors may either inhibit or facilitate perceived competence and autonomy (Deci and Ryan, 1985), indicating the interrelationship between the theory of reasoned action and self-determination theory. Similar to the social influence element of Ajzen and Fishbein's (1970) theory of reasoned action, CET implies that the social environment should offer the conditions for individuals to perceive themselves as both competent and autonomous.

The perceived presence of such supports and constraints, referred to here as the developmental climate, impact participation in learning and development (Kozlowski and Hults, 1987; Noe and Wilk, 1993) and it is proposed that it comprises of two elements – situational constraints and social support. The concept of situational constraints has been used in the training and development literature as a predictor of participation. Noe and Wilk (1993) found that employees' perceptions of the supportiveness of their work environment influenced their rate of participation in development activities. A supportive situational climate positively influenced participation with situational constraints negatively influencing intent to participate in the future.

Social support can be characterised as a positive supportive environment where participation in training and development is encouraged. This element of the developmental climate construct is potentially mediated by feedback seeking behaviours. Feedback has been determined to increase performance by both motivating individuals and directing them to correct performance strategies (Ammons, 1956; Vroom, 1964). Regular feedback involves the provision of information regarding development needs, or where individuals are encouraged to implement newly acquired skills and knowledge by their peers and higher managers. A supportive environment can positively influence participation (Noe *et al.*, 1997).

The provision of feedback would appear to be particularly important in the case of managers. Wanberg and Kammeyer-Mueller (2000) found that the higher the skill level of the job, the more frequent the individual seeks feedback. However, actual feedback on performance becomes less frequent and less consistent the higher the manager's position within the organisation (Conway and Huffcut, 1997). The control theory (Carver and Scheier, 1981) approach to self-regulated behaviour suggests that managers can use feedback to determine any discrepancy between a self-assessed standard of desired competency and actual behaviour (Ashford and Tsui, 1991). In this framework, managers adopt a benchmark competency level, assess themselves against this standard using information from their environment, and take action to reduce any detected discrepancy. The managers' regulatory aim is to reduce any discrepancy between the benchmark level and the behaviours utilised to attain a specific objective. This process of self-regulation involves three distinct sub processes: benchmark setting; discrepancy detecting; and discrepancy reducing. Managers search for information and feedback from social sources such as superiors, peers and subordinates when setting benchmark competency levels (Ashford and Tsui, 1991). Once this standard is established managers can use available feedback or seek additional feedback to ascertain how others perceive their behaviour. Here any discrepancy between their behaviour and standards can be detected. This discrepancy may be reduced and corrected through participation in further voluntary learning and development activities.

The extent to which a manager understands their development needs is also likely to influence the development climate. Understanding of development needs refers to the manager's perception of the reasons s/he is attending or participating in a learning and development programme.

*Proposition 8: The developmental climate for CFLD is positively related to the existence of social support, low situational constraints and a high understanding of development needs on behalf of the manager.*

#### **2.4.2.4 Perceived Benefits of Participation**

It is proposed that motivation to learn is also mediated by the managers' perceived benefits of participation in CFLD. These benefits are defined as the managers' perception of the intrinsic and extrinsic benefits that can be derived from participation in CFLD.

*Proposition 9: High perceived benefits of participation in CFLD is positively related to motivation to learn.*

#### **2.4.2.5 Career Exploration and Planning**

The conceptual framework proposes that the extent to which a manager participates in CFLD will be influenced by the extent of career exploration and planning which the manager engages in. Career exploration is generally defined as a lifelong process of information gathering about career options, information gathering in jobs, organisations, and learning opportunities as well as self-exploring career values, interest and expectations (Savikas, 1997). Hall (2002) suggests that career planning complements career exploration. It involves the setting of learning goals on an ongoing basis and the identification of strategies to achieve these goals. Zikic and Klehe (2006) find that where managers plan their career, the more they engage in environmental career exploration. An authentic career concept emphasises the need to be truthful to one's self (Peterson, 1997) and to others by ensuring congruence between what one feels and what one demonstrates in public behaviour about one's competence. This suggests that the authentic seeking manager is willing to take the initiative and be responsible for his/her learning. The manager is able to achieve congruence between the private and public domains of one's self. Self-exploration leads managers to question career options. Ibarra (2003) finds that managers contemplating a career change experiment with various options. Colquitt *et al.* (2000) find that career exploration predicted motivation to learn, however they note that studies measure career exploration in different contexts. Garofano and Salas (2005) suggest that career exploration should be not dismissed as a factor especially when it is measured using appropriate cognitive and behavioural dimensions. It is likely that

that a manager's selection of CLFD strategies for career self-management is facilitated when the manager has greater self-knowledge.

It is proposed that the extent of a managers' knowledge of learning opportunities both internal and external to the organisation represents an important human capital characteristic. Managers who participate in career exploration and planning activities are likely to have a greater knowledge of learning opportunities. The manager's perception of what constitutes a learning opportunity is also important. Proponents of the boundaryless career suggest that learning opportunities may arise from participation in extra-organisational networks, personal-family boundaries and the subjective interpretations of the individual (Tams and Arthur, 2006). The portfolio career concept envisages that learning opportunities may be derived from experience with multiple employers and the performance of roles which allow the accumulation of portable skills (Handy, 1989). Greater knowledge of learning opportunities may accrue to those managers working in organisations with a structured HRD department which emphasises generic as well as specific development developmental opportunities. The extant literature suggests that a significant proportion of learning opportunities provided by organisations consist of courses and online development activities and developmental assessment centres with feedback (Hay Group, 2007).

*Proposition 10: Career exploration and planning activities by a manager are positively related to motivation to learn.*

### **2.4.3 Macro- Level: The Influence of Context**

The framework envisages that aspects of context including structure, institutional conditions and characteristics of individuals may act as boundaries, rigidities, barriers or facilitators of participation in CFLD. Both individual and organisational dimensions of context are included.

#### **2.4.3.1 Individual Context**

Gender, age, ethnicity and socio-economic status are considered to be unique characteristics of an individual. Socio-cognitive theory is however concerned with

their psychological and social effect. Their primary relevance to participation in career focused learning is linked to the reactions they evoke in the socio-cultural environment as well as from their relationship to the opportunity structures that provide learning and development. Therefore, age, gender and socio-economic status may be viewed as characteristics that are socially constructed and transcend their biological properties (Lent, Brown and Hackett, 1996).

Differences in socialisation also account for much of the gender differences in educational directions taken by men and women. The most common argument for inequality between gender differences is the relatively low labour-force participation of women, which may cause employers to invest less in their training and development (Royalty, 1996). Women managers have fewer opportunities to participate in learning (Cleveland *et al.*, 2000). They are not however necessarily less motivated to participate. Booth (1991) suggests that discrimination may be a possible factor in lower levels of participation. Leuven (1997) suggests that differences in preference may also explain different patterns of participation in development.

Cleveland and Shore (1992) find a negative relationship between age and participation in training and development. Chronological age was the most consistent predictor of both self-ratings and managers' rating of participation in development activities. Younger managers are more willing to engage in self-development than older managers to prepare for increased levels of organisational responsibility. Noe *et al.* (1997) posit that the climate of development for older managers is different than that for younger managers, making it easier for younger managers to develop. Negative perceptions may inhibit older managers' confidence in their ability to handle new challenges, thereby decreasing their participation in development activities. London and Bassman (1989) suggest that opportunities for participation in training and development may be limited for older managers as "many organisations do not view older workers as able to learn or accept new technologies and function in an increasingly competitive environment" (p. 358). Relatively older, more mature learners are more likely to engage in independent and self-directed learning than their younger counterparts (Woodley and McIntosh, 1979; Holland, 1980; Smith and Sadler-Smith, 2006).

While individual socioeconomic attributes are treated as an independent variable in general adult education models of participation, it is unlikely that they are relevant to a study of managers' career focused learning and development participation behaviours. Working status and social class may not be relevant to self-instigated activities with the aim of increasing employability amongst a managerial population. For these reasons the aforementioned variables are excluded from the proposed framework.

*Proposition 11a: Younger managers will participate in more CFLD activities.*

*Proposition 11b: Male managers will participate in more CFLD activities.*

#### **2.4.3.2 Organisational Context**

Handy's (1989) portfolio career concept views work as an overall portfolio rather than a linear experience where individuals use diverse skill sets in multiple types of organisations and/or industries. Mallon (1998) finds that a manager's decision to embrace a portfolio career is due to organisational push rather than the initial attractiveness of the work. It is suggested that various characteristics of organisations impact opportunities for participation in CFLD. These include sector, size and ownership characteristics of the organisation as well as the types of learning opportunities that are made available. Firm sector may influence the extent of opportunities. Doray and Arrowsmith (1997) for example, find that firms in the ICT sector provided more resources for training and development. Firm size will influence the extent of learning and development opportunities (Capelli and Rogovsky, 1994). Larger firms tend to provide more learning opportunities than smaller firms (OECD, 1991). There has been little research done on how firm ownership influences participation in training and development. While cross-country comparative studies have identified how many adults participate in training and development activities, there has been no analysis of the nature of the ownership of the firms providing the training. However, there is some evidence indicating that US-owned firms operating in Ireland provide significantly more training and development opportunities than Irish-owned firms (Garavan and Carbery, 2003). The suggestion that US-owned firms offer more opportunities to participate in training and development would appear to be refuted by Stern *et al.* (2004) who found that there

was no significant increase in the overall trend of workplace training between 1970 and 2000 in the US. However, they did find that managers based in the US experienced greater levels of schooling, and that more educated people engage in more learning at work.

*Proposition 12a: Managers from large organisations will have more opportunities to participate in CFLD.*

*Proposition 12b: Managers from the ICT sector will have more opportunities to participate in CFLD.*

*Proposition 12c: Managers from US-owned firms will have more opportunities to participate in CFLD.*

### **2.4.3.3 Perception of the Extent and Nature of Learning**

#### **Opportunities**

Organisations provide different types of learning and development opportunities. Some may focus specifically on organisational needs whereas other activities may facilitate the development of competencies that will port. Organisations may be less likely to provide learning opportunities that facilitate the development of multiple competencies (Sullivan, 1999). Becker (1962) defines general training as a human capital investment that raises the individual's productivity at other employers to the same extent as the employer that has provided the training. He also defines specific training as an investment that only increases productivity yielding to the employer who provided the training. Human capital theory advocates that individuals should broaden their skill base, invest time and energy in their personal development, and focus on competencies with high portability (Benson, 2006). Concomitantly, there may be a relationship between organisation size, sector, ownership and the types of learning opportunities in the proposed framework.

Lynch (1992) finds that specific on-the-job training raises wages at the current employer but not with future employers, whereas more general, off-the-job training raises wages more with future employers than with the current employer. Loewenstein and Spletzer (1999) also find that training increases future wages more

for those who switch employers suggesting that there is a premium on work flexibility and adjustment.

*Proposition 13: Managers in organisations that provide generic rather than company specific training will participate in more CFLD activities.*

#### **2.4.3.4 Organisational Barriers to Participation & Non-Job Context**

There is an increased focus on the non-work life and its impact on the behaviour and actions of managers (Major and Germano, 2006). Hall and Mirvis (1995) suggest that distinctions between the work and non-work life have blurred to the extent that the decision to pursue CFLD will impact the manager's personal time and energy. Where a manager's non-work context is complex and places many demands on mental and emotional resources, then this will likely impact the extent of participation in formal CFLD activities.

There has been an increase in the number of managers working relatively longer hours in developed countries (Clarkberg and Merola, 2003; Kodz *et al.*, 2002). This has been attributed to increased workload, job insecurity and a pervading organisational culture perspective that views longer working hours as the norm. Workplace stress and stress-related illnesses are frequently cited as common occurrences with the general perception that the workplace is becoming more and more stressful (Jones and Bright, 2001) and managers are likely to experience negative spillover from work to the non-work context (Grzywacz *et al.*, 2002).

Examples of non-job contextual variables that negatively impact behaviours include work and family resources, work and family demands, gender and dependents (O'Driscoll *et al.*, 2006). The consequences of these antecedents manifest themselves in withdrawal behaviours such as absenteeism, decrease in job satisfaction and reduced psychological well-being. O'Driscoll (1996) found that the non-work context also had a negative impact on career outcomes, including the likelihood of participation in CFLD.

*Proposition 14: Barriers to participation and non-job constraints are negatively related to participation by managers in CFLD activities.*

#### **2.4.4 Participation in Career-Focused Learning and Development**

In operationalising a conceptualisation of CFLD, the literature on the myriad of definitions of learning, training, and development was examined. Opportunities for development tend to place less emphasis on skills and behaviours for a specific position or job, and more importance on requisite skills for long-term personal effectiveness and employability, while simultaneously contributing to the organisation's ability to remain competitive by providing high value-added goods and services (Noe *et al.*, 1997). Becker (1965) defined 'general' skills as those that increase the productivity of labour across all companies and 'specific' skills as those that increase the productivity of labour in a single company. Human capital theory suggests that developing general skills that are useful across a wide range of firms increases external job opportunities and the likelihood that employees will market their skills elsewhere (Becker, 1965; Lynch, 1991).

Development implies an ongoing process of growth more so than learning and training, and therefore provides a more rigorous understanding of the motivational processes that underpin the choice to participate in development activities (Garofano and Salas, 2005). The term CFLD as used in this study denotes development from learning activities that are undertaken to enhance employment related skills and competencies by capturing the ongoing nature of employability driven career management. It is significantly different from lifelong learning which addresses all learning undertaken in a civic, social and employment perspective which is not confined to career focused activities while engaged in employment (European Report on Quality Indicators on Lifelong Learning, 2002). Maurer (2001) highlights that there must be development, or learning of new skills or new levels of existing skills. If the "development activity" just involves application of existing knowledge or skills, then it is not really development. Rather, it is performance. Also, if the development task mainly involves "topping off" an already well developed skill by extending it a little further, then this will not be as developmentally challenging as developing an entirely new skill or extending the existing ones significantly. Increasingly, more

attention has been given to self-initiated pursuits of voluntary activities (Birdi *et al.*, 1997; Maurer, 2001; Maurer and Tarulli, 1994).

As outlined in Section 1.4, CFLD is conceptualised in terms of voluntary participation in formal learning and development activities that are career-focused. CFLD is defined as activities that are formal in nature, are ongoing and which focus on the development of competencies that port well to other contexts. CFLD is voluntary and self-directed. This definition excludes on-the-job development and development activities mandated by the organisation.

A second element of the CFLD definition is participation in formal programs of education. Baruch (1999a) argues that formal education is an important component of career development, particularly at managerial level. He argues that engagement in education for career purposes can be funded by individuals or organisations. Under the latter practice, the organisation selects people of managerial or technical potential and sends them on a formal programme of study as part of their development path. This can be a first degree in engineering, an MBA, or other graduate or postgraduate studies for managerial personnel, as well as professional and vocational qualification courses for non-managerial employees. Alternatively individuals can propose themselves for such a programme. Organisations have been less prepared to offer such long-term investment in people, due to the short-term period of the new era job contracts. This tendency is expected to continue, and organisations will prefer to acquire people already educated rather than those who need to be sent on study programmes. Therefore, short-term specific training may replace academic studies sponsored by organisations. The most frequent programme utilized to develop managerial competence is the Master in Business Administration (MBA) degree. Several studies have indicated the importance of the MBA, and the reputation of certain business schools (Lorinc, 1989). An MBA degree from a leading business school can make a difference for its holder in terms of managerial competence, career progress, and remuneration (Baruch and Leeming, 1996) but the problem organisations face is that of insecurity and instability of investment in people. Employees are not the property of the employer; they can move on to different jobs and organisations, with the new employer.

The concept of CFLD offers a new perspective on a different dimension of training and development. Most previous concepts look at all aspects of training and development. There exists a gap in the literature to address the voluntary aspects of participation in learning and development for career benefits, which is the sole focus of CFLD. The decision to focus on formal learning and development activities is supported by Keys and Wolfe (1988), who suggest that much of the career related learning that occurs on the job is undirected and tends to reinforce traditional behaviours and attitudes rather than promote new behaviours and attitudes that will be necessary for long-term career growth of the manager.

CFLD is different from generic workplace training and development as definitions of this tend to include both informal and formal activities (Noe *et al.*, 1997); different from organisational learning as this implies that learning is a collective experience for the advancement of the organisation. A learning organisation may facilitate CFLD, but the context is different in that the focus of organisational learning is not focused on a specific individual's career development (Argyris and Schön, 1978); different from career development which is the total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to influence the nature and significance of work in the total lifespan of an individual (Schein, 1980).

Many studies have examined the organisational constructs of learning and how that learning impacts the organisation as a whole, but lack the individual's role in applying that learning to his or her career growth. To date, studies have not examined the individual's initiative in career related learning. London and Smither (1999) propose a comprehensive model of a somewhat similar concept, career-related continuous learning (CRCL). The primary difference between CRCL and CFLD being that CRCL focuses on both formal and informal activities whereas CFLD is conceptualized as formal voluntary learning and development activities. The antecedents between the model of CRCL and CFLD are markedly different. The framework proposed to explain CFLD incorporates a range of contextual variables which are not included in the CRCL model. A number of dispositional variables at the meso-level of the framework including career exploration and planning and understanding of development needs are incorporated which are not addressed in the

CRCL model. London and Smither (1999) also identify a number of additional variables not included in their model such as demographic characteristics, career exploration and job involvement and call for their inclusion in subsequent models. These variables are included in the framework to explain CFLD.

## **2.5 Summary**

The purpose of this chapter has been to provide a framework which explains why managers participate in CFLD. Managers were chosen as there is evidence that roles and careers of managers have undergone significant changes in recent years (Tengblad, 2006). We are in the post-bureaucracy era which is characterised by flexible and non-hierarchical organisations built on shared values of dialogue and trust. This has had a profound impact on the way managers perform their work, manage their career, and the value they place on learning and development. The new role of the manager is to be a facilitator and partner. This role is less structured, managers require more discretion, tasks are less clear and they have increasingly to cope with instability and change. Manager's careers are likewise more complex. They no longer follow a traditional career model. Instead managers are expected to be self-directed and to pursue careers that are increasingly fragmented, non-linear and which involve numerous career changes. This changing work and career context places a strong imperative on managers to participate in CFLD.

### **2.5.1 Potential Value of the Model**

CFLD has been defined as activities that are formal in nature, are ongoing and which focus on the development of competencies that transfer well to other contexts. CFLD is voluntary and self-directed. This definition excludes on-the-job development and development activities mandated by the organisation. CFLD poses major challenges for the manager, including the need to be motivated to participate in learning and to possess the self-confidence to learn. Since contemporary careers are more boundaryless, protean and authentic leveraging CFLD becomes more important. We have witnessed a shift from position-based power to individual-based learning. This concept of CFLD draws from lifelong learning concepts but restricts its focus to

learning and development that addresses career issues and develops generic competencies.

A multi-level framework which seeks to reveal the potential interaction between agency and context has been proposed. The need for multi-level framework is recognised within the field of HRD. Klein *et al.* (1999), for example, suggest that multi-level models have the potential to provide a “deeper and richer portrait” of the factors that explain behaviour in organisations (p. 246). Multi-level models acknowledge the influence of context and provide the basis to make explicit links between a variety of constructs and concepts. Garavan *et al.* (2004) highlight the need for multi-level theory building in HRD and suggest that systems theory may be useful in understanding how managers as agents and decision makers about CFLD are influenced by a multiplicity of dimensions of context. These include individual, organisational and institutional factors.

Nordhaug (1987) identifies the value of individual and organisational perspectives in understanding participation in learning and development and cites the ongoing acquisition of new knowledge and updating and expanding skills as essential to the welfare of individuals and organisations.

The research framework highlights the important role of the manager as an active agent. The notion of self-directed behaviour brings with it significant responsibilities. Managers will find themselves becoming less competitive unless they are open minded and make choices for learning that reflect their personal values and career trajectories. They may have to finance some of their development, to participate in development activities outside of work time and make difficult choices where there is a conflict between portable and specific competency development.

Each of the three latent variables posited to influence participation in CFLD, namely human capital characteristics, dispositions, knowledge, attitudes and beliefs, and context were expanded upon and developed further in order to allow a deeper analysis of the subject matter and to inform a clear and detailed research program.

The result of this analysis is fourteen propositions in relation to manager's participation in CFLD through which it is hoped to empirically test the proposed model. The outcome of this stage of the conceptual framework is to allow a determination of the factors that affect the participation of managers in CFLD.

Empirical testing of this framework will be carried out using structural equation modelling (SEM) (Joreskog and Sorbum, 1984). Its suitability is based on its ability to test for causal paths among latent rather than manifest variables, which frees the path estimates from any unreliabilities of the manifest variables. SEM is of particular use to mediated model frameworks that use latent variables. It allows the researcher to test all links in a mediated model at the same time, as opposed to the general piecemeal type analyses favoured by models that use regression analysis techniques. SEM allows for the possibility of clarifying ambiguous aspects of a given model, while also providing the researcher with the option of refining the model by contrasting it with alternative conceptualisations (Vallerand *et al.*, 1992).

The following chapter seeks to outline the overall research design and methodology employed by the current research thereby providing an overview and discussion of the scale used and subsequent questionnaire design.

## **Chapter 3. Research Methodology**

### ***3.1 Introduction***

The purpose of this chapter is to outline the theoretical and philosophical stance influencing the research investigation and secondly, to illustrate the methodological stance of this study. Cognisant of the quantitative focus of the research and the theoretical and philosophical stance employed, a research design is developed. This research strategy seeks to capture the factors that explain manager participation in voluntary CFLD activities and consideration is given to the rigour of the research design in terms of the underpinning methods, collection and analysing strategies associated with its operationalisation.

This chapter evaluates the theoretical considerations and methodological approaches taken in influencing the choice of research design to investigate managers' participation in CFLD. Firstly, an overview of the research methodology employed is outlined which leads to a discussion of the social scientific assumptions inherent in the research design and the methodological defence of these is set out. Values in the research design are presented, emphasising the importance of validity and reliability. Implications for the research design are discussed followed by an overview of the research instrument design and administration. A discussion of the actual research instrument is provided with a detailed description of the scales utilised in the study and a discussion of the independent scale items and the internal reliabilities for each highlighted. The fieldwork undertaken is discussed followed by a description of the study population. In addition, the chapter looks at methodological issues of concern. Finally, the chapter concludes with an overview of how the data was prepared for analysis.

#### **3.1.1 Overview of the Research Process**

Commentators on the research process (Brannick and Roche, 1997; Gill and Johnson, 2002; Domegan and Fleming, 2003) purport that detailing a plan of activity, accommodating for the what, how and actually doing (Kumar, 2005), is required in

order to meet the objectives of a research study. The research process guides the research study towards its objectives and Hakim (2000) compares researchers to both the architects and, in turn, the builders of the research process. The research process framework signals the structure of the subsequent discussion. The key phases of the research process include the formulation of the research question and objectives (purpose); the theoretical and philosophical framework (theory); the research framework (methodology), including a robust validation of the collection techniques (methods) and the overarching ethical considerations associated with the entire process. Supportive of such a holistic approach to the design of research from conceptual to operational stages, is O’Leary (2007) who identifies that “research is more of a journey than a task; and like any journey, it needs to be managed, navigated, and negotiated from early conception to final destination” (p.15).

### **3.1.2 Research Question and Research Objectives**

The research question is: What factors explain managers’ participation in career-focused learning and development?

Domegan and Fleming (1999) argue that by defining the research question it enables researchers “to anticipate activities, information requirements, (and) data sources” (p.43). Regarding research objectives, Kumar (2005) identifies that they grow from the question and, moreover, transform the research question into behavioural aims. As outlined in preceding chapters, the primary goal of this study is to contribute to understanding the factors that explain managers’ participation in CLFD and the following research question and supportive research objectives, in a descriptive vein, purport to reflect this purpose.

Arising from this, are a number of specific research objectives emerge:

*Objective 1:* What contextual issues influence participation in career-focused learning and development?

*Objective 2:* What impact do individual dispositions, knowledge, attitudes and beliefs have on participation in career-focused learning and development?

*Objective 3:* How do individual human capital characteristics influence participation in career-focused learning and development?

*Objective 4:* What do the findings tell us overall about managers' participation in career-focused learning and development?

Having ascertained the research question and the respective research objectives, attention is directed towards the philosophical position that informs the research process, the aforementioned research question and objectives as a precursor to the methodological stance adopted.

### **3.2 Overview of Methodology**

The development of a detailed conceptual framework and derived hypotheses allowed the research to progress to considering the overall research design and how best to achieve the research goals within the current context. The research framework sought to consider one holistic framework in identifying those factors which affect participation in CFLD. It was not deemed necessary to control for the amount of opportunities offered to managers in the first place, bearing in mind the voluntary nature and definition of CFLD used in the study. A copy of the questionnaire is contained in Appendix D. For reasons identified in Section 3.3, a quantitative approach is posited to be the most suitable method to investigate the research questions.

Two approaches can be utilised in developing this framework. One is based on the descriptive model and the other on the normative model. The debate about using descriptive versus normative models is extensive and has a long history, and both models have been utilised in various fields of management theory, such as decision making (Stanovich and West, 1999).

A descriptive model is based on data and analysis of life realities and existing state of practice. It refers to business applications and factual records, and analyses what happens in practice. Its development relies heavily on field studies and surveys. In contrast, the normative model is based on what may be the best way to deal with the framework, phenomenon and concept. Its development usually relies on theory and the views of those who set norms; in an academic context these tend to be expert scholars. Descriptive models are objective, whereas normative models are comprised of recommendations (Thomas and Kilmann, 1978). Keely (1980, p. 355) identifies the basic notion of social normative models as tending “to function on social ideals, implying how things ought to be”.

General organisational models, for example, clearly serve to inform practitioners how activities should be organized and managed”. John and Weitz (1989) reiterate the relative deficiencies of descriptive models and normative models. The principal problem of descriptive models is the fact that realities do not necessarily represent the best or optimal case, while the main drawback of a normative model is that it may be impractical and based on unrealistic ideas or wishful thinking.

### ***3.3 Implications for Research Design***

The current study adopts a realist ontology, which assumes an objectivist view of the social world as an independent concrete structure. Hempel (1970) argues that realism holds that science should pursue objectivity, in that its statements should be capable of public tests, whose results do not vary significantly with the tester. This is consistent with Creswell (1994), who contends that the existence of a reality ‘out there’ independently of the researcher enables the objective measurement of phenomena through questionnaires and survey instruments. This is not to say that an individual’s perception of the situation is rendered defunct but rather realists recognise that any observations made, and any evidence claimed to accumulate, are inevitably filtered through and limited by the characteristics of individual senses, the methods of measurement and the social cultural context in which the research is conducted (Boal *et al.*, 2003).

A positivistic frame of reference is adopted. The research shares the main aim of positivist research in the field of management research in so far as it is dedicated to generating laws which govern the ways in which organisations operate. One of the aims of this research is to analyse the factors that affect managers' participation in CFLD. The research aims to understand the antecedents of participation and, in doing so, will provide guidance for the development of effective HRD practices for organisations. The focus of the positivist paradigm is on the observable and the approach to the analysis of organisations assumes that their reality is objectively given, functionally necessary and politically neutral (Willmott, 1992; 1997). Positivist epistemologies strive to explain and forecast outcomes in the social world by searching for systematic patterns, regularities and causal relationships (Burrell and Morgan, 1979). Within a positivistic stance, the social world is deemed to be concrete, observable and measurable (Easterby- Smith *et al.*, 2001; Gill and Johnson, 2002). Furthermore, recent literature highlighting potential to do research in participation in learning and development primarily advocated a positivist approach to testing hypotheses (cf. Garofano and Salas, 2005; Wang and Wang, 2004)

This research adopts a nomothetic approach which embodies the use of a deductive form of logic wherein theories and hypotheses are tested in a cause and effect order (Creswell, 1994). Deductive research methods, in line with the nomothetic approach, have been applied in this research. A detailed conceptual model was developed prior to testing through empirical observation. In doing so, the research attempts to develop generalisations that contribute to theory and enable one to better explain and understand the participation of managers in CFLD.

### **3.4 Research Instrument Design and Administration**

#### **3.4.1 Study Population Sample and Response Rates**

The research was carried out in conjunction with Chartered Institute of Personnel and Development (CIPD) Ireland as part of the University of Limerick/CIPD "Who Learns at Work" surveys of Irish employees. The first set of data for these surveys was gathered in 2003. For the 2003 survey, to obtain the information a sample of 250

firms was randomly selected. From this a sample of 1500 individuals was selected to participate in the study. Only those who were employed were included. Self employed or contract managers were excluded. The sample was representative of employees in the private and public sector and of full and part-time managers. Firms were also divided to make them representative within different sizes of private sector organisations in terms of number of managers. The firm sizes were less than 100, 101-200, 201-500, 501-1000 and over 1000 managers. The questionnaire was completed manually by each respondent. The response rate was 49.5% (742 completed responses). This was carried out solely using hard copies of the questionnaire. For results of this survey see Garavan and Carbery (2003) and Carbery and Garavan (2004).

A number of issues were identified with this data set; therefore in order to gather the data for a subsequent survey of managers, a somewhat different approach was taken. A number of the same survey and scale items were used in the research instrument, but the questionnaire was hosted on-line at SurveyMonkey <http://www.surveymonkey.com/> for reasons identified in Section 3.4.3. A number of additional questions were asked in this survey including those relating to likelihood of future responsibilities, time since promotion and the extent and nature of learning opportunities. This data was gathered in 2006 and 2007 and is the basis for the current research.

Invitations to participate were initially sent out via email with 1475 invitations distributed. This yielded 687 responses via the online portal. However, of these 687 responses, only 196 responses from managers were usable due to a disproportionately large number of missing values which could not be addressed by statistical techniques such as the expectation-maximisation (EM) algorithm. Of these 491 unusable responses, the majority had completed the first two pages of the questionnaire but proceeded no further. While SurveyMonkey allows for a respondent to log off and continue at a later stage from where they left off at a previous point, these 491 individuals did not return to the survey page. Two possible reasons are presented for this. Firstly, the length of the questionnaire may have acted as an inhibitor to survey completion to the extent that individuals were discouraged once they had completed the first two sections. Secondly, unlike a hard copy of a questionnaire which has a

physical manifestation, an online questionnaire exists solely on a computer screen. If, for whatever reason, a person is distracted or clicks away from the screen, it is possible that it becomes 'out of sight and out of mind'. SurveyMonkey allows the researcher to send reminder emails to those who have not completed the survey in full or who have not taken the survey at all. This feature was utilised two weeks after the initial email invitation and again one week later, but to little avail. This proved to be a severe limitation in the administration of the questionnaire.

To counteract this, it was decided to distribute additional questionnaires by post. A further 480 hard copies of the questionnaire were distributed to managers, with an additional 179 usable responses received. This yielded a total sample size of 375 managers with a response rate of 18%. This can be considered to be an acceptable response rate for an academic study in the behavioural sciences (Baruch, 1999b). Of those responding and hence included in the analysis, 59.5% were male (n=223) and 40.5% (n=152) were female.

The relatively large sample size and overall results of the research should allow for a degree of generalisability. On this front the study findings should be applicable to managers in different organisational roles and in a variety of organisations. From a cultural perspective Ireland exhibits substantial cultural similarities with other predominantly Anglo-Saxon societies including the US, UK and Australia. Therefore the study results should be cautiously generalisable to equivalent managers in other Anglo-Saxon countries.

A number of limitations are recognised and these will be addressed in section 3.6.5.

### **3.4.2 Research Instrument**

In order to ensure the validity of the study results a number of published measures of motivation to learn, attitudes to learning, and other dispositions, attitudes and beliefs were utilised. Responses were given on a five point likert scale, which ranged from one (representing strongly disagree) to five (representing strongly agree). A mid-range option, which represented 'Neither agree nor disagree', scored as three on the questionnaire, was also included. The questionnaire opened with a short overview of

the research purpose as well as highlighting confidentiality and anonymity for participants. An opening email accompanied the link to the survey with detailed instructions on how to complete it, deadline for completion, assurance of confidentiality and contact details should the respondent have any queries.

The following are the details of the main likert scale items used in the research. Reliabilities for each of the scales are reported, and factor structures are provided in Chapter 4.

*Motivation to Learn:* Motivation to learn refers to the level of motivation that the manager has to improve skills, and enhance knowledge. Motivation to learn was measured utilising a 16-item scale developed by Noe *et al.* (1997). This scale measures the perceived motivation to learn of managers. Typical items include: “I try to learn as much as I can from training programmes” and “I would like to improve my skills”. In this study the scale yielded a reliability (Cronbach alpha) of  $\alpha = 0.80$ .

*Understanding of Development Needs:* Understanding of development needs refers to the manager’s perception of the reasons s/he is attending or participating on a learning and development programme. This was measured using a 6-item scale developed by Noe *et al.* (1997). Typical items include: “I usually understand why I am asked to attend training programmes in this company” and “in this company I have freedom to choose the training programme I want to attend”. In this study the scale yielded a reliability of  $\alpha = 0.70$ .

*Autonomy:* This scale focuses on the freedom to choose CFLD opportunities and the voluntary nature of participation in learning and development activities. It refers to the manager’s perception of the nature of participation in learning and development. The researcher measured voluntary nature of participation in learning and development using a 4-item scale developed by Noe *et al.* (1997). Typical items include: “I usually participate in training and development programmes because my supervisor expects me to” (R) and “I feel that participation in training and development activities is totally voluntary – I take courses based on my needs and interests”. In this study the scale yielded a reliability of  $\alpha = 0.60$ . Kline (1999) suggests that while Cronbach alphas of 0.70 and over are suitable, a value as low as

0.60 can be used due to diversity of the constructs being measured. Cortina (1993) also notes that scales with a low number of items are significantly more likely to have lower reported reliabilities. Therefore it was decided to use this measure of autonomy in the research study.

*Attitude towards Participation:* General attitude towards participation in CFLD is defined as the perceived value that the manager attributes to learning and development. The researcher measured general attitude towards participation in CFLD utilising a 3-item scale developed by Noe *et al.* (1997). Typical items include: “In general I value education” and “I think the best way to learn something new is by trial and error on the job, as opposed to attending a formal training programme”. In this study the scale yielded a reliability of  $\alpha = 0.70$ .

*Perceived Benefits:* CFLD benefits are defined as the managers’ perception of the intrinsic and extrinsic benefits that can be derived from participation in learning and development. The researcher measured learning and development benefits utilising a 14-item scale developed by Noe *et al.* (1997). Typical items include: “Participation in training and development programmes will help my personal development” and “Participation in training and development programmes will give me a better idea of the career path that I want to pursue”. In this study the scale yielded a reliability of  $\alpha = 0.79$ .

*Extent and Nature of Learning Opportunities:* The extent and nature of learning opportunities was operationalised by measuring the managers’ evaluation of learning and development experiences. This refers to the perceptions that the manager has in respect of the quality of past learning and development activities and whether the activities were general or specific in scope. The researcher measured evaluation of learning and development experiences utilising a 13-item scale developed by Noe *et al.* (1997). It also includes reasons to take up CFLD and refers to the manager’s perceptions of the reasons for participation in learning and development. Typical items include: “My past experiences in learning and development programmes in this company have generally been positive” and “Learning and development in my place of employment is a waste of time” (R). In this study the scale yielded a reliability of  $\alpha = 0.83$ .

*General Self-Efficacy and Task-Specific Self-Efficacy:* This is comprised of two individual level factors. Firstly, general self-efficacy refers to manager's perceptions of their capabilities and confidence to perform a role successfully. The researcher measured general self-efficacy using a 13-item scale developed by Noe *et al.* (1997). Secondly, task-specific self-efficacy refers to the manager's perceptions of capability and confidence to perform specific tasks. The researcher measured self-efficacy using a 3-item scale developed by Noe *et al.* (1997). Typical general self-efficacy items include: "My past experiences and accomplishments increase my confidence that I will be able to perform successfully in my job" and "In general I am usually a good judge of my own capabilities", while task-specific self-efficacy items include: "I am confident that I can do well in training courses that deal with information (e.g. facts, concepts and ideas)" and "I am confident that I can do well in training courses that deal with things (e.g. tool operation, using tools or body to move objects)". These were combined together into one scale and the scale yielded a reliability of  $\alpha = 0.84$ .

*Career Exploration and Planning:* Career exploration and planning refers to the perceptions of managers concerning the value of learning and development in facilitating the achievement of career goals. The researcher measured career exploration and planning using an 11-item scale developed by Noe *et al.* (1997). Typical items include: "I understand how training can help me reach my career goals" and "At this time I have a definite career goal in mind". In this study the scale yielded a reliability of  $\alpha = 0.82$ .

*Developmental Climate:* This can be measured using two constructs: Situational Constraints and Social Support: Situational constraints refer to the manager's perception of how various characteristics of the workplace inhibit participation in learning and development. Social support refers to the manager's perception that there is support from supervisors and peers to participate in learning and development. These were measured using a 32-item scale developed by Noe *et al.* (1997). Typical items include: "My manager can be counted on to help me develop the skills emphasised in training" and "My employer values development of new skills or acquisitions of new knowledge" and "I don't have time in my job to try and

strengthen my skill weaknesses”. In this study the scale yielded a reliability of  $\alpha = 0.92$ .

#### *Non-scale items*

A number of non-scale measures were used in the research instrument including the contextual, demographic and human capital variables, and consisted of a mixed set of question types including dichotomous or nominal variables. Education distinguished between different level of schooling e.g. primary level; college level qualification; post-graduate level qualification. Job experience was measured by length of time in the role. Time since promotion used a temporal categorisation. Likelihood of future responsibility used a four-point scale item ranging from likely to not at all likely. Gender, age, organisation size, sector, and ownership used established categorisations of these variables. A measure of non-job context examined the manager’s perception of reasons for not participating in CFLD in the previous 12 months. The researcher measured specific reasons for non-participation using an 11-item nominal scale developed by Reynolds *et al.* (2002). Typical items include “Family and personal reasons outside work prevented me from participating”. Table 3.1 summarises the observed variables.

**Table 3.1 Description of Observed Variables**

<b>Variables</b>	<b>Definitions</b>
<i>Context</i>	
• Size	Range from less than 100 staff to 1000+
• Ownership	Six categories of ownership: Irish, UK, US, European, non-European and Other
• Sector	Divided into 6 categories incl. ICT, manufacturing & services
• Org. Barriers and Non-Job Context	11-item nominal scale developed by Reynolds <i>et al.</i> (2002)
• Perception of the Extent and Nature of Learning Opportunities	13-item scale developed by Noe <i>et al.</i> (1997)
• Gender	Male or female
• Age	People younger than 16 and full-time students excluded
<i>Dispositions, Knowledge, Attitudes and Beliefs</i>	
• Motivation to Learn	16-item scale developed by Noe <i>et al.</i> (1997)
• Career Exploration & Planning	11-item scale developed by Noe <i>et al.</i> (1997).

• Attitude towards Participation	3-item scale developed by Noe <i>et al.</i> (1997)
• Development Climate	32-item scale developed by Noe <i>et al.</i> (1997)
• Perceived Benefits of Participation	14-item scale developed by Noe <i>et al.</i> (1997).
• Autonomy	4-item scale developed by Noe <i>et al.</i> (1997).
• General Self-Efficacy	13-item scale developed by Noe <i>et al.</i> (1997)
• Task-Specific Self-Efficacy	3-item scale developed by Noe <i>et al.</i> (1997)
• Understanding of Development Needs	6-item scale developed by Noe <i>et al.</i> (1997)
<i>Human Capital Characteristics</i>	
• Education	Based on six levels ranging from no qualification to post-graduate qualification
• Future Responsibilities	4-item scale ranging from likely to not at all likely
• Job Experience	Length of time in the role measured in years
• Time since Promotion	Temporal categorisation measured in years
<i>Participation in CFLD</i>	
• Participation in Voluntary Formal L&D	Voluntary participation in formal learning and development activities that are career-focused.
• Participation in Formal Education	Participation in formal programs of education.

### 3.4.3 Fieldwork

The research instrument was administered using online technology. Online surveys have been found to be as effective in data collection as postal surveys in terms of response rates and quality; they have also been found to be more effective in terms of time and cost considerations (Crawford *et al.*, 2002; Forsman and Varedian, 2002). Online methods tend to be aesthetically pleasing to respondents compared to the receipt of a ‘manual’ of questions. Online questionnaires also preclude respondents from skipping or missing questions, thereby enhancing the number of completed responses.

Tse *et al.* (1995) posit a number of disadvantages to the use of online technology in survey research. Fear of traceability and revealing potentially sensitive information can reduce the response rate for online questionnaires. To reduce the potentially negative effects of these issues, respondents were offered the option of completing a paper-based version of the questionnaire which could be requested by email. This

could then be received by post with a stamped addressed envelope for return. For potentially sensitive information such as age, the questions were posed in a categorical format. Respondents were also assured that all responses were confidential and anonymous and at no stage would references be made to individual managers or individual organisations.

A number of online data collection software tools were assessed for their capabilities to import gathered data into SPSS, aesthetic appeal, end user friendliness, and manageable user interface. SurveyMonkey (<http://www.surveymonkey.com>) was eventually chosen for ease of data collection, excellent interface and flexibility in questionnaire design. A considerable amount of time was spent designing the questionnaire on SurveyMonkey to design the instrument in such a way as to maximise the response rate. Sheehan (2001) suggests a number of techniques to increase the response rate of online questionnaire which were incorporated into the design.

#### **3.4.4 Data Analysis**

It is suggested that empirical testing of the theoretical framework be carried out using Structural Equation Modelling (SEM) (Joreskog and Sorbum, 1984). Structural Equation Modelling (SEM) is a general data analytic technique with a number of advantages over traditional approaches to statistical analysis, and which is increasing in popularity in social sciences research. SEM encompasses everything that 'traditional' linear modelling techniques can accomplish, and it has been argued that it has considerable advantages to offer researchers (Shevlin and Miles, 1998). This is increasingly being recognised by researchers of many disciplines, and the use of SEM techniques has been increasing.

Its suitability is based on its ability to test for causal paths among latent rather than manifest variables, which frees the path estimates from any unreliabilities of the manifest variables. SEM is of particular use to mediated model frameworks that use latent variables. It allows the researcher to test all links in a mediated model at the same time, as opposed to the general piecemeal type analyses favoured by models that use regression analysis techniques. SEM allows for the possibility of clarifying

ambiguous aspects of a given model, while also providing the researcher with the option of refining the model by contrasting it with alternative conceptualisations (Vallerand *et al.*, 1992).

Tremblay and Gardner (1996) documented the increasing use of SEM in psychological research, finding the percentage of articles involving SEM had doubled between 1987 and 1994, and there has been an increase in the number of journals which publish papers involving SEM. Bentler (1986) noted that the adoption of SEM techniques occurred much more quickly than other statistical methods (for example ANOVA in the 1920's, 30's and 40's, or multi-level modelling in the late 1980's and 1990's).

Traditionally, the results from statistical analysis are reported in terms of a particular statistical model such as multiple regression, factor analysis or, most typically, analysis of variance (ANOVA). Most of the commonly used statistical models can be formulated within a single, more general, linear framework. This general linear model, and programs used to estimate them, are known by many names: Structural equation models, LISREL models, latent variable models or analysis of covariance structures. In psychology, for example, structural equation models have been reported in the areas of psychometrics (Saris and Andrews, 1991), industrial psychology (Kelloway, 1996), clinical research (Hoyle, 1994; Hoyle and Smith, 1994), behavioural genetics (Hewitt *et al.*, 1992) and educational psychology (Gustofsson and Balke, 1993) developmental psychology (Tanaka, 1987). Structural Equation Modelling is relatively less well established in HRD research, with a number of notable exceptions (cf. Ellinger *et al.*, 2002; Naquin and Holton, 2002; Yang, 2004).

Structural equation models are a synthesis of two data analytic traditions, namely path analysis and factor analysis. Path analysis is a method of pictorially representing the relationships between variables in a path diagram and determining the relationship between these variables by solving the equations that the path diagram imply. This is most commonly done in a multiple regression framework (Cohen and Cohen, 1983). The advantage of path analysis was that it allowed the direct, indirect and total effect of one variable on another to be estimated. The distinguishing aspect of path analysis

is that the variables are considered to be directly observed, that is, the measurements are free from measurement error.

In contrast, factor analytic procedures assume that each directly observed measurement contains a proportion of unique variance or measurement error. This technique aims to determine what is common among a number of these directly observed variables, called factors, and what is unique to each variable. For example, Spearman (1904) posited the existence of a latent variable, general intellectual ability (g), to account for the pattern of correlations among individual cognitive tests. The emphasis is not on the relationship between observed variables, but between the observed variables and the latent factor(s).

It was the work of Jöreskog (1973), Keesling (1972) and Wiley (1973) that combined these two approaches in what has become known as the 'JKW model'. This model comprised a measurement component and a structural component. The measurement model describes the relationship between the observed and hypothesised latent variables (factor analysis), and the structural component incorporates the relationship that links the latent variables (path analysis, regression). Within this model, the structural and measurement components can be estimated simultaneously, thereby determining the psychometric properties of the measurements employed and the relationships between the latent variables.

SEM can replace, and provide equivalent results to, many common types of statistical analysis in social sciences, such as analysis of variance and covariance (comprising multivariate and repeated measures), bivariate/multiple and multivariate regression and correlation, and factor analysis. Structural equation models are preferred to these more specific statistical procedures as they are more general and flexible, can correct for measurement error, and test for the ability of the model to explain the observed pattern of data.

The generality of SEM makes it a desirable approach for testing research hypotheses in the social sciences. Mulaik and James (1995) describe a structural equation model "...as a representation of an objective state of affairs" (p. 118), and often the 'state of affairs' that interest social scientists cannot be adequately described in terms of

narrower statistical models such as ANOVA or correlation/regression models. Structural equation models allow the researcher to test complex hypotheses that may include direct and indirect effects, interactions, parameters that are constrained to be equal or be a function of other parameters, reciprocal relations and mean differences between groups within one specified model. Hoyle (1995) notes that ANOVA and exploratory factor analysis are generally not guided by substantive theory. Whereas, in contrast, SEM is a theoretically-driven procedure. As psychological theory becomes more advanced, it is necessary for statistical models to similarly progress, in order to test hypotheses drawn from contemporary theory. Statistical models in current use are inadequate to deal with such complex theory.

In addition, by using SEM the researcher can relax both model and distributional assumptions that are incorporated in less general models. For example, in terms of model assumptions, the assumption in ANOVA that the variables are free of measurement error, or in exploratory factor analysis that the unique variances are independent, can be relaxed when these models are specified as structural equation models. Specifying models under a less restrictive set of assumptions provides conceptual and statistical advantages. Conceptually, the researcher is representing the 'state of affairs' in a more theoretically justified manner, while the estimated parameters are not statistically biased as a result of violations of distributional assumptions. In addition to restrictive model assumptions, standard statistical approaches generally rely on continuous multivariate-normal data.

The most powerful aspect of SEM is the ability to correct for measurement error. McNemar (1946) noted that "...all measurement is befuddled with error" (p. 294). In the physical sciences measurement error is usually very small, and can safely be ignored. Techniques of analysis of variance were developed within a framework of agricultural research, where the variables of interest were crop yield, or animal weight. Measurement error is particularly relevant to social scientists who are not generally interested in manifest, tangible variables such as crop yield but unobservable, or latent, variables such as anxiety, motivation or self-efficacy. The relationships between the observed variables, for instance the summed or average scores of the items comprising a scale measuring motivation, and the actual latent variable of motivation will rarely, if ever, be perfect. In contrast, the correlation

between the true weight of a number of pigs, and the measured weight of a number of pigs, will be very close to one. The consequence of this is that the observed measures of motivation contain variance that is attributable to motivation but also measurement error, whereas the variance of observed measures of the weights of pigs will contain virtually no variance that is due to measurement error. In the social sciences researchers cannot measure variables with the same degree of accuracy as physical scientists.

### **3.4.5 Assumption Testing in Structural Equation Modelling**

The following assumptions are assumed in structural equation modelling:

**Multivariate normal distribution:** In structural equation modelling, the maximum likelihood method is used and assumed for multivariate normal distribution. Small changes in multivariate normality can lead to a large difference in the chi-square test. For purposes of MLE estimation, each indicator should be normally distributed for each value of each other indicator. Even small departures from multivariate normality can lead to large differences in the chi-square test, undermining its utility. In general, violation of this assumption inflates chi-square but under certain circumstances may deflate it. Use of ordinal or dichotomous measurement is a cause of violation of multivariate normality.

**Linearity:** In structural equation modelling, a linear relationship is assumed between indicator and latent variables, and between latent variables. Violation of the linearity assumption means that estimates of model fit and standard error are not robust. However, as with regression, it is possible to add exponential, logarithmic, or other nonlinear transformations of the measured variable to the model. These transforms are added alone to model power effects or along with the original variable to model a quadratic effect, with an unanalysed correlation connecting them in the diagrammatic model. It is also possible to model quadratic and nonlinear effects of latent variables (Kline, 1998: 287-291). Because nonlinear modelling may involve violation of the assumption of multivariate normality, some researchers advocate use of bootstrap estimates of parameters and standard errors when exploring nonlinear models.

Outlier: In structural equation modelling, data should be free of outliers. Outliers affect the model significance.

Sequence: In structural equation modelling, there should be a cause and effect relationship between endogenous and exogenous variables, and a cause has to occur before the event.

Non-spurious relationship: In structural equation modelling, observed covariance must be true.

Model identification: In structural equation modelling, equations must be greater than the estimated parameters or models should be over identified or exact identified. Under identified models are not considered in structural equation modelling. A model is under identified if there are more parameters to be estimated than there are elements in the covariance matrix. The mathematical properties of under identified models prevent a unique solution to the parameter estimates and prevent goodness of fit tests on the model.

An over identified model is desired, which means one where the number of observed variable variances and covariance is greater than the number of parameters to be estimated. When over identification exists, the number of degrees of freedom will be positive. Thus, in SEM software output, the listing for degrees of freedom for model chi square is a measure of the degree of over identification of the model.

Sample size: In structural equation modelling, most of the researchers prefer a 200 to 400 sample size with 10 to 15 indicators. As a rule of thumb, that is 10 to 20 times as many cases as variables. Theoretically, there should be at least as many cases as variables, or more as many distinct response patterns as variables (Wothke, 1993), or else the covariance matrix will necessarily contain collinearities and produce improper solutions.

Uncorrelated error terms: In structural equation modelling, error terms are assumed uncorrelated with other variable error terms, but if present and specified explicitly in the model, correlated error may be estimated and modelled in SEM.

Data: Interval data is used in structural equation modelling. However, SEM explicitly models error, including error arising from use of ordinal data. Exogenous variables may be dichotomies or dummy variables, but unless special approaches are taken (Long, 1997); categorical dummy variables may not be used as endogenous variables. In general, endogenous variables should be continuous with normally distributed residuals. Use of ordinal or dichotomous measurement to represent an underlying continuous variable represents truncation of range and leads to attenuation of the coefficients in the correlation matrix used by SEM. For this reason, if ordinal data are to be modelled, they should be modelled as ordered-categorical data, which means that Bayesian estimation must be used rather than MLE.

### **3.4.6 Steps in Performing Structural Equation Modelling**

Model specification: Since SEM is a confirmatory technique, the model must be specified correctly based on the type of analysis that the modeller is attempting to confirm. When building the correct model, the modeller uses two different kinds of variables, namely exogenous and endogenous variables. The distinction between these two types of variables is whether the variable regresses on another variable or not. Like in a linear regression the dependent variable (DV) regresses on the independent variable (IV), meaning that the DV is being predicted by the IV. Within SEM modelling this means that the exogenous variable is the variable that another variable regresses on. Exogenous variables can be recognised in a graphical version of the model, as the variables sending out arrowheads, denoting which variable it is predicting. A variable that regresses on a variable is always an endogenous variable, even if this same variable is also used as a variable to be regressed on. Endogenous variables are recognized as the receivers of an arrowhead in the model. The fact that a variable can play a double role in a SEM model (independent and dependent), makes SEM more useful than linear regression, since instead of performing two regressions one SEM model will do. There are usually two main parts to SEM: the structural model showing potential causal dependencies between endogenous and exogenous variables, and the measurement model showing the relations between the latent variables and their indicators. Confirmatory factor analysis models, for example,

contain only the measurement part, while path diagrams (distinct from linear regression) can be viewed as an SEM that only has the structural part. Specifying the model delineates two types of relationships: (1) free pathways, in which hypothesised causal (in fact counterfactual) relationships between variables are tested, and therefore are left 'free' to vary and (2) relationships between variables that already have an estimated relationship, usually based on previous studies, which are 'fixed' in the model.

A modeller will often specify a set of theoretically plausible models in order to assess whether the model proposed is the best of the set of possible models. Not only must the modeller account for the theoretical reasons for building the model as it is, but the modeller must also take into account the number of data points and the number of parameters that the model must estimate to identify the model. An identified model is a model where a specific parameter value uniquely identifies the model, and no other equivalent formulation can be given by a different parameter value. A data point is a variable with observed scores, like a variable containing the scores on a question or the number of times respondents buy a car. The parameter is the value of interest, which might be a regression coefficient between the exogenous and the endogenous variable or the factor loading (regression coefficient between an indicator and its factor). If there are fewer data points than the number of estimated parameters, the resulting model is "unidentified", since there are too few reference points to account for all the variance in the model. The solution is to constrain one of the paths to zero, which means that it is no longer part of the model.

Estimation of free parameters: Parameter estimation is done comparing the actual covariance matrices representing the relationships between variables and the estimated covariance matrices of the best fitting model. This is obtained through numerical maximization of a fit criterion as provided by maximum likelihood estimation, weighted least squares or asymptotically distribution-free methods.

Assessment of fit: Using an SEM analysis program, one can compare the estimated matrices representing the relationships between variables in the model to the actual matrices. Formal statistical tests and fit indices have been developed for these purposes. Individual parameters of the model can also be examined within the

estimated model in order to see how well the proposed model fits the driving theory. Most, though not all, estimation methods make such tests of the model possible.

However, the model tests are only correct provided that the model is correct. Although this problem exists in all statistical hypothesis tests, its existence in SEM has led to a large body of discussion among SEM experts, leading to a large variety of different recommendations on the precise application of the various fit indices and hypothesis tests.

For each measure of fit, rules of thumb have evolved regarding what represents good fit between model and data. These rules of thumb often need to be updated based on contextual factors such as the sample size, the ratio of indicators to factors, and the overall size of the model. Measures of fit differ in several ways. Some of them reward more parsimonious models (i.e., those with fewer free parameters). Because different measures of fit capture different elements of the fit of the model, it is appropriate to report a selection of different fit measures.

Some of the more commonly used measures of fit include chi-Square; a fundamental measure of fit used in the calculation of many other fit measures. Conceptually it is a function of the sample size and the difference between the observed covariance matrix and the model covariance matrix; Root Mean Square Error of Approximation (RMSEA); Standardized Root Mean Residual (SRMR); and Comparative Fit Index (CFI)

Model modification: The model may need to be modified in order to improve the fit, thereby estimating the most likely relationships between variables. Many programs provide modification indices which report the improvement in fit that results from adding an additional path to the model. Modifications that improve model fit are then flagged as potential changes that can be made to the model. In addition to improvements in model fit, it is important that the modifications also make theoretical sense.

Interpretation and communication: The model is then interpreted and claims about the constructs are made based on the best fitting model.

Caution should always be taken when making claims of causality even when experimentation or time-ordered studies have been done. The term causal model must be understood to mean: "a model that conveys causal assumptions," not necessarily a model that produces validated causal conclusions. Collecting data at multiple time points and using an experimental or quasi-experimental design can help rule out certain rival hypotheses but even a randomized experiment cannot rule out all such threats to causal inference. Good fit by a model consistent with one causal hypothesis does not rule out equally good fit by another model consistent with a different causal hypothesis. However careful research design can help distinguish such rival hypotheses.

LISREL was chosen as the most appropriate structural equation modelling package due to its ease of coding and compatibility with SPSS. When all 375 responses had been received, the 196 usable responses received online were exported from SurveyMonkey to SPSS and the additional 179 responses were inputted manually into SPSS. The exploratory data analysis, descriptive analysis, and correlation analysis was performed in SPSS. This data was then transferred to PRELIS, a precursor/pre-processor to LISREL. LISREL conducts all analyses based on a correlation of matrices or covariances of matrices. It does not use raw data as found in SPSS, rather PRELIS calculates the correct matrix for use in LISREL.

Chapter 4 presents the results of the SEM analysis.

### **3.4.7 Limitations and Methodological Issues**

There are four main limitations to the research. Firstly, all the data gathered is self-report data. Exclusive use of self-report measures in the study raises the issue of percept/percept inflation. Self-report data figures prominently in organisational and management research literature. However, a number of problems have been identified with their use (Podsakoff and Organ, 1986). While these issues are well documented and often cited as a reason to perform laboratory based experiments, it has generally been accepted that self-report data is a 'necessary evil' which, provided it is treated

with caution, plays a valuable part in organisational research. Research evidence indicates that this phenomenon is less likely to occur in self-report data when one or more of the variables represent personal verifiable information such as individual background and organisational demographics. This suggests that percept/percept bias should not be a substantial threat to the validity of the findings. The current research sought to access information about individual managers' reasons for participating in CFLD. Self-report data was therefore the appropriate choice and the study utilised responses from questionnaires distributed to individuals who had varying levels of participation in the previous 12 months.

Social desirability bias may occur when questionnaire items prompt responses that present a person in a favourable light (Podsakoff et al., 1986; Thomas and Kilmann, 1975). This type of bias is often found when an individual is asked to report on some negative behaviour that they exhibited and then either directly or indirectly attribute causes to this behaviour. Research in the social psychology area has shown that people are not indifferent to the reasons they ascribe to their failures or problems (Mitchell *et al.*, 1981). While Saunders *et al.* (2002) and Dilman (1978) have found that individuals are unlikely to provide socially undesirable responses, many authors disagree (Konrad and Linnehan, 1998). In order to minimise the potential impact of social desirability bias strict anonymity was adhered to in the analysis and collection of the data. Research has demonstrated that doing so reduces the likelihood of the presence of social desirability bias (Kantor, 1991; Oppenheim, 1996).

Self-report data may also be susceptible to consistency motif whereby an individual attempts to maintain a consistent line in a series of answers. Individuals tend to try to seek out a pattern within the questions which they think the researcher is looking for and are inclined to imagine correlations when presented with a series of events or questions (Jenkins and Ward, 1965). This creates problems because many people have lay theories of how personality, behaviour, psychological states and organisational environments are interrelated (Eden and Leviatin, 1975; Lord *et al.*, 1978). The question order within the research instrument was designed in such a way as to minimise as far as possible this bias. Questions were randomly ordered and, where possible, a number of questions sought to probe the same item so as to ensure consistency in responses.

Noe and Wilk (1993) suggest that self-report data may be a more valuable source of information on development activities as organisational sources many not differentiate between mandatory, voluntary and on-the-job development activities.

Secondly, another limitation concerns the use of online questionnaires for a proportion of the sample and the fact that these respondents are limited to those who have access to the internet. To reduce the effect that may have on the sample studied, respondents were asked to forward information on the study to other managers who may have been interested in the survey with the option of a hard copy of the questionnaire being posted to them.

Thirdly, the concept of missing values is also important to address. In order to carry out structural equation modelling (SEM), the statistical software typically requires a complete data set. SEM also requires a large sample relative to the number of variables, therefore deleting whole cases due to missing data can have a disproportionately negative effect on the reliability and validity of results of SEM. SEM also computes more fit statistics where there is a complete data set. There are a number of statistical techniques in SPSS for dealing with missing data, including pairwise deletion and listwise deletion being the most common. However, in order to retain as much data as possible the expectation-maximisation (EM) algorithm was utilised. This is an iterative procedure that proceeds in two discrete steps. First, in the expectation (E) step the expected value of the complete data log likelihood is computed. In the maximization (M) step the expected values for the missing data obtained from the E step are substituted and then the likelihood function is maximised as if no data were missing to obtain new parameter estimates. The procedure iterates through these two steps until convergence is obtained. The SPSS Missing Values Analysis (MVA) module employs the EM approach to missing data handling. Bunting *et al.* (2002) argue that this is the most statistically sound technique to dealing with missing data. Field (2005) notes that the EM algorithm is now increasingly recommended by statisticians as it approach incorporates the retention of variables and scale items that have missing data rather than deleting the entire cases as is the practice with pairwise and listwise deletion. This approach is only appropriate for continuous variables however.

Recall ability is the fourth limitation. The research utilised data submitted by managers concerning their participation in CFLD over the previous 12 months. Therefore respondents were required to remember events that occurred within this time frame; this raises the potential possibility of retrospective bias in the results. The research is unable to distinguish between managers' recollections when they completed the questionnaire versus actual outcomes in the previous 12 months. Concerns regarding retrospective bias are lessened when the event is perceived as crucial to an individual and when surveys are used (Crutcher, 1994).

### **3.5 Conclusion**

Chapter 3 has sought to develop an acknowledgement of the theoretical and philosophical underpinnings associated with this research. This chapter provides a general overview of the research methodology adopted and the reasons underlying its selection. The chapter begins with a broad overview of research methodology. As such, the research embodies a normative, positivist perspective. The resultant methodology utilises a quantitative research design given its purported suitability for accommodating the research question.

The overview is followed by a description of the scale items utilised. Following on from the scale section, an overview of the administration of the research instrument is outlined. The research involved the distribution of the questionnaire both online and via postal questionnaires. Finally, a broad overview of the research limitations and introduction to the preparatory data analysis is provided.

The following chapter begins the analysis of the actual data collected and provides the foundation for the more detailed and comprehensive statistical analysis which is to follow.

## **Chapter 4. Data Analysis**

### ***4.1 Introduction***

Chapter 4 reports the empirical data gathered as part of the thesis. The first section of the chapter presents the descriptive statistics for the study sample. This is followed by a factor analysis and reliability analysis of the variables used in the study.

An explanation of the exploratory data analysis procedures which must be conducted prior to testing the research model is presented. The results of these procedures are then explained.

The chapter then presents the results of the correlation analysis using SPSS followed by the structural equation analysis using LISREL. The correlation analysis is used to explore data prior to conducting structural equation modelling. The results of the structural equation modelling are used to evaluate the research framework and the fourteen propositions. The research framework is assessed for its absolute and comparative fit and, finally, the best fitting model is identified to evaluate the individual propositions and the predictive ability of the framework.

### ***4.2 Response Rate***

The survey received a response rate of 18% which is significantly higher than the figure of 10% which is typical of most postal questionnaires (DeVellis, 1991) and is an acceptable response rate for an academic study in the behavioural sciences (Baruch, 1999b).

### ***4.3 Description of Sample: Context***

In total 375 managers responded to the questionnaire. Of those responding and hence included in the analysis, 59.5% were male (n=223) and 40.5% (n=152) were female. Table 4.1 reveals that the majority of respondents were middle-aged, falling within the 25-34 / 35-44 year old categories, with over 46% of all respondents falling within

the 25-35 year old categories. The spread across categories is broadly similar for both male and females however it is interesting to note that the majority of male manager respondents were aged between 34 and 44 years of age, approximately 42% of males.

**Table 4.1 Respondent Age (Categorised by Gender)**

Age	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
16-24	12	3.2	7	3.1	5	3.3
25-34	173	46.1	80	35.9	93	61.2
35-44	132	35.2	93	41.7	99	25.7
45-55	50	13.3	35	15.7	15	9.9
55+	8	2.1	8	3.6	0	0
<b>Totals</b>	<b>375</b>	<b>100</b>	<b>223</b>	<b>100</b>	<b>152</b>	<b>100</b>

The vast majority of respondents, approximately 70%, defined their socio-economic category as the AB socio-economic group. This is defined as professional people, senior managers or middle management executives in large organisations. Approximately 25% of managers defined their socio-economic category as junior management (C1 socio-economic group) and 2.1% defined their socio-economic category as skilled manual workers (C2 socio-economic group). The remainder (0.8%) defined their socio-economic category as semi-skilled manual individuals. Table 4.2 highlights that the social class breakdown was similar for both male and female managers.

**Table 4.2 Respondent Social Class (Categorised by Gender)**

Social class	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
AB	264	70.4	156	70.3	108	73
C1	95	25.3	62	27.9	33	22.3
C2	8	2.1	3	1.4	5	3.4
DE	3	0.8	1	0.5	2	1.4
<b>Totals</b>	<b>370</b>	<b>98.7</b>	<b>222</b>	<b>100</b>	<b>148</b>	<b>100</b>

*(5 individuals did not give an indication of their social class)*

A significant majority of respondents worked in very large organisations. Sixty one percent of managers worked with organisations employing over 1000 employees; 11.7% of managers worked in small or micro organisations. Approximately 13% of respondents worked in medium to large sized organisations employing between 101 and 500 employees. Table 4.3 presents respondents' firm size categorised by gender.

**Table 4.3 Respondent Firm Size (Categorised by Gender)**

Size	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Under 100	44	11.7	26	11.8	18	12.2
101-200	18	4.8	6	2.7	12	8.1
201-500	31	8.3	18	8.2	13	8.8
501-1000	44	11.7	25	11.4	19	12.8
1000+	231	61.6	145	65.9	86	58.1
<b>Totals</b>	<b>368</b>	<b>98.1</b>	<b>220</b>	<b>100</b>	<b>148</b>	<b>100</b>

*(7 individuals did not give an indication of their organisation's size)*

An analysis of the sector in which managerial respondents worked reveals that a quarter worked in the financial sector (25.1%). Approximately 20% of managers worked in manufacturing, with the ICT and Services sector being strongly represented at 13.6% and 17.6% respectively. Table 4.4 presents these findings and also highlights that proportionally more female managers worked in the Services sector than male managers whereas more managers worked in the manufacturing sector.

**Table 4.4 Respondent Firm Sector (Categorised by Gender)**

Sector	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
ICT	51	13.6	32	14.4	19	12.6
Services	66	17.6	33	14.9	33	21.9
Manufac	78	20.6	52	23.4	26	17.2

turing						
Pharma	9	2.4	5	2.3	4	2.6
Medical	20	5.3	14	6.3	6	4
Finance	94	25.1	56	25.2	38	25.2
Public sector	33	8.8	17	7.7	16	10.6
Other	22	5.9	13	5.9	9	6
<b>Totals</b>	<b>373</b>	<b>99.5</b>	<b>222</b>	<b>100</b>	<b>151</b>	<b>100</b>

*(2 individuals did not give an indication of their organisation's industrial sector)*

Almost half of the respondents worked in Irish-owned organisations (49.9%); 34.4% of respondents worked in US-owned organisations and 6.4% of respondents worked in UK- or European-owned organisations. Table 4.5 presents these findings.

**Table 4.5 Respondent Firm Ownership (Categorised by Gender)**

Ownership	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Irish	187	49.9	102	45.9	85	56.3
UK	11	2.9	6	2.7	5	3.3
European	9	2.4	4	1.8	5	3.3
USA	129	34.4	87	39.2	42	27.8
Non-European	4	1.1	1	0.5	3	2
Other	33	8.8	22	9.9	11	8.8
<b>Totals</b>	<b>373</b>	<b>99.5</b>	<b>222</b>	<b>100</b>	<b>151</b>	<b>100</b>

*(2 individuals did not give an indication of their organisation's ownership)*

Managers were asked to indicate the specific barriers they encountered in the past 12 months which prevented participation in learning and development. Table 4.6 presents the results of the analysis. The analysis reveals a multiplicity of reasons preventing participation. The most frequently cited barrier was that the manager was too busy. Over three quarters of respondents suggested that this was a reason. Nearly 43% of respondents indicated that personal commitments acted as a barrier. Over 28% of managers likewise indicated that there were few relevant learning and development opportunities in the organisation.

**Table 4.6 Barriers to Participation (Categorised by Gender)**

Barriers	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Too busy	283	75.5	168	75.3	115	75.7
Personal commitments	161	42.9	110	49.3	51	33.6
L&D not relevant to job	147	39.2	93	41.7	54	35.5
Too few L&D opportunities	108	28.8	59	26.5	49	32.2
Insufficient culture of learning	107	28.5	68	30.5	39	25.7
Lack of suitable trainers	86	22.9	57	25.6	29	19.1
Lacking motivation	80	21.3	49	22	31	20.4
Career lacking direction	77	20.5	46	20.6	31	20.4
Poor quality training	66	17.6	37	16.6	29	19.1
Manager stopped participation	62	16.5	33	14.8	29	19.1
Overtrained for current role	54	14.4	32	14.3	22	14.5

#### **4.4 Description of Sample: Human Capital Characteristics**

Table 4.7 presents respondents' highest educational attainment and reveals that the respondents were highly educated. The majority of managers had obtained either a degree or post-graduate qualification as their highest level of educational attainment, with 26.5% of managers achieving a degree. The educational achievements of male and female managers were relatively similar, with two exceptions. Under 10% of females cited the Leaving Certificate as their highest attainment, compared to almost 16% of males. Also, approximately 29% of females obtained a post-graduate qualification compared to 20.3% of males.

**Table 4.7 Respondent Education (Categorised by Gender)**

Education	Total	Gender
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	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Junior Certificate	7	1.9	5	2.3	2	1.3
Leaving Certificate	49	13.1	35	15.8	14	9.2
Diploma	58	15.5	32	14.4	26	17.1
3 <sup>rd</sup> Level Cert	65	17.3	38	17.1	27	17.8
Degree	99	26.4	62	27.9	37	24.3
Post-graduate qualification	89	23.7	45	20.3	44	28.9
No qualification	1	0.3	0	0	1	0.7
Other	6	1.6	5	2.3	1	0.7
<b>Totals</b>	<b>374</b>	<b>99.7</b>	<b>222</b>	<b>100</b>	<b>152</b>	<b>100</b>

*(1 individual did not give an indication of their educational qualifications)*

Managers were asked how likely it would be that they received assignments with greater responsibility than at present in the near future. Approximately 46% of managers reported that it was very likely that they would receive assignments with greater responsibility in the near future; 32.5% of managers indicated that it is somewhat likely and 20.5% of respondents indicated that it was very unlikely or somewhat unlikely that they would receive assignments with greater responsibility in the near future. Table 4.8 indicates that female managers were more pessimistic than male managers in terms of the likelihood that they would receive assignments with greater responsibility in the near future.

**Table 4.8 Respondent Likelihood of Assignments with Greater Responsibility in Future (Categorised by Gender)**

Future Responsibility	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Very unlikely	38	10.1	20	9	18	11.9
Somewhat unlikely	39	10.4	22	9.9	17	11.3
Somewhat likely	122	32.5	79	35.4	43	28.5

Very likely	175	46.7	102	45.7	73	48.3
<b>Totals</b>	<b>374</b>	<b>99.7</b>	<b>223</b>	<b>100</b>	<b>151</b>	<b>100</b>

*(1 individual did not give an indication of likelihood of future responsibility)*

Managerial respondents had varying periods of organisational and job tenure. Approximately 30% of managers had less than three year's organisational tenure; 40% had between 4-8 years organisational tenure. Over 16% (n=61) of managers were with their current employer for over 18 years. Table 4.9 presents a breakdown of this category by gender and indicates that a significantly greater proportion of male managers had spent over 18 years with their employer compared to females.

**Table 4.9 Respondent Organisational Tenure (Categorised by Gender)**

Organisational Tenure	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Under 1 year	33	8.8	19	8.5	14	9.2
1-3 years	77	20.5	42	18.8	35	23
4-8 years	150	40	80	35.9	70	46.1
9-13 years	36	9.6	23	10.3	13	8.6
14-17 years	18	4.8	10	4.5	8	5.3
Over 18 years	61	16.3	49	22	12	7.9
<b>Totals</b>	<b>375</b>	<b>100</b>	<b>223</b>	<b>100</b>	<b>152</b>	<b>100</b>

Over 62% of managerial respondents had less than 3 years job tenure (n=235); 28.3% had between 3-6 years job tenure and 9.1% had seven years or more tenure within their current job. Table 4.10 shows that job tenure for male and female managers was broadly similar.

**Table 4.10 Respondent Job Tenure (Categorised by Gender)**

Job Tenure	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Under 1 year	102	27.2	60	26.9	42	27.6
1-2 years	133	35.5	73	32.7	60	39.5

3-6 years	106	28.3	62	27.8	44	28.9
7-10 years	22	5.9	16	7.2	6	3.9
Over 10 years	12	3.2	12	5.4	0	0
<b>Totals</b>	<b>375</b>	<b>100</b>	<b>223</b>	<b>100</b>	<b>152</b>	<b>100</b>

Thirty three percent (n=124) of managerial respondents received their last promotion less than 1 year ago; 50.9% received their last promotion between 1-4 years ago; 14.9% of respondents had not received a promotion in the previous five years. Table 4.11 indicates that, within the population sample, a much greater proportion of female managers received a promotion within the previous 4 years.

**Table 4.11 Respondents' Time since Last Promotion (Categorised by Gender)**

Time since promotion	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Under 1 year	124	33.1	65	29.1	59	39.9
1-2 years	111	29.6	57	25.6	54	36.5
3-4 years	80	21.3	56	25.1	24	16.2
5-6 years	23	6.1	18	8.1	5	3.4
6-7 years	12	3.2	9	4	3	2
Over 7 years	21	5.6	18	8.1	3	2
<b>Totals</b>	<b>371</b>	<b>98.9</b>	<b>223</b>	<b>100</b>	<b>148</b>	<b>100</b>

*(4 individuals did not give an indication of time since last promotion)*

#### **4.5 Participation in Career-Focused Learning and Development**

Table 4.12 reveals that a significant number of respondents participated in no voluntary learning and development activities in the previous 12 months. Approximately thirteen percent (n=48) of respondents indicated that they did not participate in any voluntary learning and development activities. Approximately 73% (n = 273) of respondents participated in three or less voluntary learning and development activities; 10.7% of respondents participated in 4 activities; 4.8% participated in 5 activities and 11.7% of respondents participated in 6 or more activities. Male managers participated in proportionally more activities for up to

three activities, but females had a relatively higher rate of participation for 4 or more activities.

**Table 4.12 Respondents' Participation in Voluntary Formal L&D Activities (Categorised by Gender)**

Activities	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Zero	48	12.8	30	13.5	18	11.8
One	71	18.9	40	17.9	31	20.4
Two	81	21.6	52	23.3	29	19.1
Three	73	19.5	46	20.6	27	17.8
Four	40	10.7	23	10.3	17	11.2
Five	18	4.8	8	3.6	10	6.6
Six or more	44	11.7	24	10.8	20	13.2
<b>Totals</b>	<b>375</b>	<b>100</b>	<b>223</b>	<b>100</b>	<b>152</b>	<b>100</b>

Managerial respondents were asked to indicate whether they were currently taking a college/university course to obtain a degree, diploma or certificate or were taking a college/university course which was not qualification-based. Table 4.13 reveals that 37.3% (n=140) of respondents indicated that they were currently taking a degree diploma or certificate level programme and 6.1% (n=23) indicated that they were taking a college/university programme which is non-qualification based. There is evidence of higher levels of participation in both categories for female managers, with females participating in significantly proportionally higher number of degree, diploma or certificate courses. It is important to note that each respondent participated in at least one type of CLFD activity.

**Table 4.13 Respondents' Participation in Formal Education Activities (Categorised by Gender)**

Activities	Total		Gender			
	N	% of respondents	Male		Female	
			N	% of respondents	N	% of respondents
Accredited	140	37.3	72	32.2	68	44.7

courses						
Non – accredited courses	23	6.1%	13	5.8	10	6.6
<b>Totals</b>	<b>163</b>	<b>43.4</b>	<b>85</b>	<b>38.1</b>	<b>78</b>	<b>51.3</b>

## **4.6 Factor Analysis Procedures**

### **4.6.1 Suitability of Data for Factor Analysis**

Factor analysis is used to determine the latent dimensions of a set of variables and does this by identifying groups or clusters of variables from a larger number of variables. Dooley (1995) suggests that combining related items into one category or index creates a more reliable measure while Schwartz and Bilsky (1987) assert that a clear, comprehensive categorisation is preferable to analysing each of the items separately.

Factor analysis is used in this research to allow the division of single scales into multiple sub-scales and thereby facilitating more detailed analysis of the constructs under examination. Factor analysis also facilitates the analysis in terms of validating the scales employed ensuring that the constituent items loaded on to the same factor and facilitated the identification of proposed scale items which cross loaded on more than one factor.

### **4.6.2 Assessment of the Suitability of the Data for Factor Analysis**

Factor analysis forms part of the multiple general linear hypothesis family and thus in order for the data in the current study to be considered suitable for factor analysis it must conform to the following assumptions: linear relationships, interval or near interval data, proper specification (i.e. relevant variables included, extraneous ones excluded), lack of high multicollinearity and multivariate normality for the purposes of significance testing.

Correlation coefficients fluctuate from sample to sample but this tends to be more exaggerated among smaller sample sizes than larger ones. Therefore the reliability of

factor analysis is also dependent on sample size. Much debate surrounds the necessary sample size for factor analysis resulting in numerous ‘rules of thumb’ (Field, 2000). Research has found that the most important factors in determining reliable factor solutions are the absolute sample size and the absolute magnitude of factor loadings (Guadagnoli and Velicer, 1988). Guadagnoli and Velicer (1988) argue that if a factor has four or more loadings greater than 0.6, then it is reliable regardless of sample size.

### 4.6.3 Data Screening

To begin the actual analysis of the data it is important to examine the inter-correlation between variables. This can show up items that are not correlated with anything and hence should be considered for removal before proceeding (de Vaus, 2002). All the items within each of the proposed factors correlated with all others and none were found to be particularly large, hence multicollinearity was not a problem for this particular sample.

To explore the extent of multicollinearity in the data, Bartlett’s test of sphericity is used. Bartlett’s test of sphericity indicates whether the correlation matrix is an identity matrix, which would indicate that the variables are unrelated (Table 4.14). Significance values of less than 0.05 indicate that there are probably significant relationships among the variables however a value higher than 0.10 may indicate that the data is not suitable for factor analysis. As each scale under examination returned a significance level of substantially less than 0.05 it indicates that significant relationships among the variables do exist and therefore suggests that factor analysis is an appropriate statistical tool to use.

**Table 4.14 Bartlett’s Test of Sphericity**

Scale	Significance
Motivation to Learn	.000
Career Exploration & Planning	.000
Attitude towards Participation	.000
Development Climate	.000
Perceived Benefits	.000
Autonomy	.000

Task-Specific Self-Efficacy	.000
General Self-Efficacy	.000
Understanding of Development Needs	.000
Extent and Nature of Learning Opportunities	.000

Correlation coefficients fluctuate from sample to sample; therefore the reliability of factor analysis is dependent on sample size. Field (2005) suggests a number of guidelines in terms of sample size, including having at least 10-15 respondents per variable or have at least 300 cases. This research has 20 measured independent and dependent variables. A sample size of 300 is required to have 15 cases per variable (20 variables x 15 cases = 300). The sample size for this research is 375 therefore this assumption is met.

Another alternative is to use the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The KMO measure is a statistic that indicates the proportion of variance among variables that is common variance. Values as close to 1.0 as possible and greater than 0.7, indicate that factor analysis may be useful. If the value is less than 0.5 the results of any factor analysis are likely to be unhelpful. As the scales for Autonomy, Task-Specific Self-Efficacy and Attitude towards Participation are below 0.7 they were excluded from further factor analysis (Table 4.15). Incidentally each of these three scales had a one-factor solution outcome. The small number of items included in both these scales would also suggest their exclusion.

**Table 4.15 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

Scale	Significance
Motivation to Learn	0.886
Career Exploration & Planning	0.815
Attitude towards Participation	0.647
Development Climate	0.921
Perceived Benefits	0.799
Autonomy	0.506
Task-Specific Self-Efficacy	0.540
General Self-Efficacy	0.871
Understanding of Development Needs	0.711
Extent and Nature of Learning Opportunities	0.899

## **4.7 Factor Analysis**

### **4.7.1 Factor Extraction**

There are a number of methods for determining factors in data. The researcher must decide whether results are to be generalised from a sample to a population (inferential methods) or to the sample collected (descriptive methods). The most common descriptive method is Principal Components Analysis (PCA) with Kaiser's alpha factoring approach being the most suitable inferential method. PCA restricts conclusions to the sample collected and generalisations can only be made if different samples reveal the same factor structure. Field (2005) highlights that, technically, PCA is not a form of factor analysis. Cliff (1987) suggests that PCA is "at best a common factor analysis with some error added and at worst an unrecognisable hodgepodge of things" (p. 349). Factor analysis derives a mathematical model from which factors are estimated, while PCA decomposes the original data into a set of linear variates (Field, 2000). Factor analysis therefore can estimate the underlying factors and it relies on various assumptions for these estimates to be accurate. Principal Component Analysis on the other hand is concerned only with establishing which linear components exist within the data and how a particular variable might contribute to that component.

Guadagnoli and Velicer (1988) concluded that the solutions generated from principle component analysis differ little from those derived from factor analysis techniques. There are some situations where this may not however be the case. Stevens (1992) concluded that with 30 or more variables and communalities greater than 0.7 for all variables, different solutions are unlikely however with less than 20 variables and any low communalities (<0.4) differences can occur (Field, 2000).

The alpha factoring approach was considered appropriate for this research for two main reasons. Firstly, the results of the factor analysis are presented using alpha factoring due to the desire to allow the results to be generalised to a population of managers. Secondly, the initial stage in SEM uses factor analysis rather than

component analysis. Therefore, alpha factoring is considered the appropriate technique to use for this research.

It is possible to control the number of components that are extracted and used in the computations of communality and other measures that indicate the power of the factor analysis. The first part of the factor extraction process is to determine the linear components within the data set (the eigenvectors) by calculating the eigenvalues of the R-matrix (Field, 2005). The Kaiser Criterion is a common rule of thumb which suggests dropping all components with eigenvalues under 1.00. An eigenvalue is a statistic that relates to a factor or component. It indicates the amount of variance in the pool of initial items that that particular factor explains (Field, 2000). In this study no factors with eigenvalues of less than 1 were retained.

In addition to the Kaiser Criterion this study also utilised Catell's Scree Test (Catell, 1966). This involves plotting each of the eigenvalues of the factors and inspecting the plot to find a point at which the shape of the curve changes direction and becomes horizontal. Catell (1966) recommends retaining all factors above the elbow, or break in the plot, as these factors contribute the most to the explanation of the variance in the data set (Pallant, 2001). Both of these tests provide an overview of the potentially useful number of factors to use however the fundamental decision is based on comprehensibility of the factors yielded and whether or not the selection makes conceptual sense given the research question.

Another way of determining the number of factors is parallel analysis (Horn, 1965). This involves comparing the size of the eigenvalues that exceed the corresponding values from a randomly generated data set of the same size. Only those eigenvalues that exceed the values from the random data set are retained. This approach has been demonstrated to be the most accurate approach to determining the correct number of factors to retain, with both Kaiser's criterion and Catell's scree test tending to overestimate the number of components. In this research Monte Carlo PCA for Parallel Analysis, a standalone Windows program that computes Parallel Analysis criteria (eigenvalues) by performing a Monte Carlo simulation, was used.

#### **4.7.2 Factor Rotation and Interpretation**

Once a factor structure is found, it needs to be decided which variables make up which factors. Factor loadings are a gauge of the substantive importance of a given variable to a given factor. Researchers generally take a loading of an absolute value of more than 0.3 to be important however this depends on the size of the sample. Stevens (1992) recommends that for a sample size of 50 a loading of 0.722 can be considered significant, for 100 the loading should be greater than 0.512, for 200 it should be greater than 0.364, for 300 it should be greater than 0.298, for 600 it should be greater than 0.210 and for 1000 it should be greater than 0.162. This research used a sample size of 375, therefore factor loadings greater than 0.298 are considered significant.

It may be difficult to interpret factor solutions as some items may load onto more than one factor. To facilitate interpretation, the solution can be rotated. This does not change the underlying solution, but rather presents the pattern of loadings in a manner that is easier to interpret (Pallant, 2001). The choice of rotation method depends on whether or not the underlying methods should be related. If the factors are considered independent orthogonal methods such as varimax should be used. If there are theoretical grounds for believing that the factors might correlate then oblique methods such as promax are more appropriate. Field (2005) notes that orthogonal rotation methods are not appropriate in naturalistic sciences involving humans as many psychological constructs are in some way correlated with other psychological constructs.

In this study promax rotation data is reported. Results of the promax rotation indicated that correlations existed between variables, suggesting that the items could be related. The obliquely rotated solution is therefore more meaningful. Intuitively this makes sense, given that items measuring the same construct should be correlated to some degree.

## 4.8 Factor Analysis and Reliability of Study Scales

### 4.8.1 Factor Analysis of Motivation to Learn scale

Table 4.16 Factor Analysis of Motivation to Learn Scale

MOTIVATION TO LEARN				
	Item	Factor Loadings		$\alpha$
		Component		
		1	2	
MTL 1	I tend to learn more than others	.676		0.74
	I am willing to invest effort on my personal time to develop related to my job	.579		
	I am willing to invest effort on my personal time to develop interpersonal skills	.546		
	I am willing to invest effort just for the sake of learning	.528		
	I am willing to invest effort to improve in relation to my current job	.513		
	I am willing to invest effort to prepare for a promotion	.434		
	I try to learn as much as possible	.430		
	My present job performance satisfies me	.430		
	I want to try and change habits that interfere with work	.380		
	I am usually motivated to learn the skills emphasised in training	.359		
MTL 2	I believe I can improve my skills through training		.657	0.68
	I have all the knowledge and skill I need		.650	
	I am willing to exert effort to improve my skills		.586	
	When I don't understand I stop trying to learn		.573	
	I would like to improve my skills		.467	
	I believe I can learn the material presented		.437	
<b>Overall <math>\alpha</math></b>				<b>0.801</b>

Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization. 6 iterations required

Table 4.16 reveals the presence of two distinct factors within the Motivation to Learn scale. All but one item exhibited a factor loading of greater than 0.359 which is well within the guidelines suggested by Stevens (1992). Item “Taking training courses is not a high priority for me” exhibited a factor loading of less than 0.298 and so was removed. This two factor solution accounted for 40.3% of the variance and both factors have an eigenvalue of greater than one. Parallel analysis confirms the two factor solution.

**Table 4.17 Parallel Analysis Comparison of Motivation to Learn Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	5.103	1.3830	Accept
2	1.345	1.3139	Accept
3	1.146	1.2510	Reject
4	1.007	1.1999	Reject

An analysis of the factor loadings reveals that factor one (MTL 1) is concerned with willingness to learn and resulted in a Cronbach alpha of .74 for this sub-scale. Factor two (MTL 2) concerns the motivation of managers to improve skills through CFLD. This factor produced a Cronbach alpha of .68. The overall Cronbach alpha for the combined Motivation to Learn scale is 0.80.

#### 4.8.2 Factor Analysis of Career Exploration & Planning scale

**Table 4.18 Factor Analysis of Career Exploration & Planning Scale**

CAREER EXPLORATION & PLANNING				
	Item	Factor Loadings		$\alpha$
		Component		
		1	2	

<b>CEP 1</b>	At this time I have definite career goals in mind	.816		0.817
	My manager is aware of my career goals	.738		
	I have a strategy for achieving my career goals	.681		
	I understand the different career paths I can choose to follow in my current company	.638		
	I am aware of what knowledge and skill I need to obtain to achieve my career goals	.586		
	Opportunities available to me in my current company have been clearly communicated to me	.485		
<b>CEP 2</b>	I have thought about how past education & work experience related to my career goals		.895	.671
	I have sought information on my career interests from friends/colleagues/company career sources		.415	
	I understand how training can help me reach my career goals		.408	
	I have initiated conversations concerning my career plans with my manager		.378	
<b>Overall <math>\alpha</math></b>				0.838
Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization. 3 iterations required				

Table 4.18 presents the results of the factor analysis of the Career Exploration and Planning scale and indicated the presence of two factors. All but one item exhibited a factor loading of greater than 0.378, which is within the guidelines suggested by Stevens (1992). Item “I frequently change my career goals” exhibited a factor loading of less than 0.298 and so was removed, reducing the number of total items to 10. Parallel analysis confirms the two factor solution.

**Table 4.19 Parallel Analysis Comparison of Career Exploration & Planning Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	4.237	1.2769	Accept

2	1.232	1.1974	Accept
3	1.083	1.1401	Reject
4	1.001	1.0857	Reject

The two factor solution accounted for some 49.7% of the total variance within the sample and all two factors have an eigenvalue of greater than 1. An analysis of the factor loadings reveals that factor one (CEP 1) is concerned with a clear understanding of career opportunities and resulted in a Cronbach alpha of .817 for this sub-scale. Factor two (CEP 2) concerns exploration and information seeking behaviours. This factor produced a Cronbach alpha of .671. The overall Cronbach alpha for the combined Career Exploration and Planning scale is 0.838.

#### 4.8.3 Factor Analysis of Development Climate Scale

**Table 4.20 Factor Analysis of Development Climate Scale**

DEVELOPMENT CLIMATE						
	Item	Factor Loadings				$\alpha$
		Component				
		1	2	3	4	
DC1	My manager is supportive of my efforts to acquire new knowledge and skills	.829				0.943
	In the past my manager has helped me understand how to perform my job more effectively	.816				
	My manager makes sure I get the training needed to remain effective in my job	.815				
	My manager provides sufficient coaching and guidance to help me achieve my work objectives	.786				
	My manager is usually willing to discuss problems I have using new skills	.780				
	My manager can be counted on to provide me with specific feedback regarding how well I am performing at my job	.760				
	My manager helps me develop the skills emphasised in training	.758				
	My manager provides advice on specific opportunities for exposure or visibility on the job	.748				
	My manager enthusiastically supports my participation in training programmes	.743				
	The frequency of feedback I get from my manager is just about right	.739				

	When I make a mistake, my manager treats it as a learning experience	.678	
	My manager believes advice or training is one of his major job responsibilities	.649	
	I would not hesitate to tell my manager of a training need I have in a particular area	.624	
	My manager shares company information with me that can influence my career plans	.591	
	My employer values development of new skills or acquisition of new knowledge	.559	
	I feel comfortable discussing my skill weaknesses with my manager	.513	
	I can expect my manager to assign me to special projects requiring skills emphasised in training	.498	
<b>DC2</b>	I will be difficult to improve my skills because of my relations with my co-workers	.686	0.69
	Processes, rules and methods change so quickly its not worth acquiring new skills	.547	
	My co-workers tend to resist my efforts to apply new skills or knowledge on the job	.491	
	It is unreasonable to try to apply new skills because if I fail it will affect my performance evaluation	.458	
	More experienced co-workers are usually reluctant to give me guidance	.447	
	In general, my co-workers view training as a waste of time	.358	
<b>DC3</b>	On the job I've so much work to do that its difficult to participate in training	.732	0.718
	I don't have time in my job to strengthen my skill weaknesses	.653	
	My workload makes it difficult to use new knowledge and skills	.610	
	The demands of non-work activities make it difficult to participate in training	.399	
<b>DC4</b>	I can count on my co-workers for the help needed to complete my job	.543	0.60
	Co-workers help me develop the skills emphasised in training	.336	
	It is likely the tools, equipment, or machinery needed to use my skills will be provided by my employer	.329	
<b>Overall <math>\alpha</math></b>			<b>0.908</b>
Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization. 3 iterations required			

The results of the factor analysis indicated the presence of four factors (Table 4.20). All but two items exhibited a factor loading of greater than 0.329, which is within the guidelines suggested by Stevens (1992). Items “My present job requires updating of my skills and abilities” and “Insufficient materials or supplies will likely inhibit the

use of training content in my work” exhibited a factor loading of less than 0.298 and so were removed, reducing the number of total items to 30. Parallel analysis confirms the four factor solution.

**Table 4.21 Parallel Analysis Comparison of Development Climate Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	9.690	1.5937	Accept
2	2.872	1.5149	Accept
3	1.828	1.4543	Accept
4	1.444	1.4005	Accept
5	1.160	1.3594	Reject

The four factor solution accounted for some 49.5% of the total variance within the sample and all four factors have an eigenvalue of greater than 1. An analysis of the factor loadings reveals that factor one (DC 1) is concerned organisational support and resulted in a Cronbach alpha of .943 for this sub-scale. Factor two (DC 2) concerns situational constraints. This factor produced a Cronbach alpha of .69. Factor three (DC 3) concerns issues related to job constraints. This factor produced a Cronbach alpha of .718. Factor four (DC 4) concerns peer and co-worker support and produced a Cronbach alpha of .60. The overall Cronbach alpha for the combined Development Climate scale is 0.908.

#### 4.8.4 Factor Analysis of Perceived Benefits of Training scale

**Table 4.22 Factor Analysis of Perceived Benefits Scale**

PERCEIVED BENEFITS OF TRAINING					
	Item	Factor Loadings			$\alpha$
		Component			
		1	2	3	
PB1	I feel training will help me obtain a salary increase	.846			0.790
	I feel training will increase my chances of getting a promotion	.656			
	I feel training will help me reach my career objectives	.627			

	I feel training will give me a better idea of the career path I wish to pursue	.599			
	I feel training will result in more opportunities	.433			
<b>PB2</b>	I feel training will help my personal development		.673		0.70
	I feel training will help me perform my job better		.652		
	I feel training will help me stay up-to-date on new developments related to my job		.646		
	I feel training will help me network with other employees		.613		
<b>PB3</b>	I feel training will help me got along better with my manager			.663	0.67
	I feel training will give me a needed break from my job			.598	
	I feel training will help me got along better with my peers			.547	
	I feel training will lead to more respect from my peers			.344	
<b>Overall <math>\alpha</math></b>					0.805
Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization. 5 iterations required					

Table 4.22 reveals the presence of three distinct factors within the Perceived Benefits scale. All but one item exhibited a factor loading of greater than 0.344 which is within the guidelines suggested by Stevens (1992). Item “I feel training will result in having to do extra work without being rewarded for it” exhibited a factor loading of less than 0.298 and so was removed. This three factor solution accounted for 54.42% of the variance and both factors have an eigenvalue of greater than one. Parallel analysis confirms the three factor solution.

**Table 4.23 Parallel Analysis Comparison of Perceived Benefits Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	4.342	1.3407	Accept
2	1.988	1.2617	Accept
3	1.290	1.1975	Accept
4	1.069	1.1457	Reject

An analysis of the factor loadings reveals that factor one (PB 1) is concerned with extrinsic benefits and resulted in a Cronbach alpha of .79 for this sub-scale. Factor two (PB 2) concerns intrinsic benefits of CFLD. This factor produced a Cronbach alpha of .70. Factor three (PB 3) concerns the social benefits of CFLD. This factor

produced a Cronbach alpha of .67. The overall Cronbach alpha for the combined Perceived Benefits scale is 0.805.

#### 4.8.5 Factor Analysis of General Self-Efficacy Scale

Table 4.24 Factor Analysis of General Self-Efficacy Scale

GENERAL SELF-EFFICACY				
	Item	Factor Loadings		$\alpha$
		Component		
		1	2	
GSE 1	My past experience & accomplishments increase my confidence to perform successfully	.632		0.838
	I can generally do the work necessary to accomplish my goals in training	.628		
	In general, other people perceive me as being a capable person	.623		
	I feel confident that my skills & abilities equal or exceed those of my colleagues	.619		
	When faced with an unfamiliar problem in training, I expect to be able to solve it	.591		
	In general, I am usually a good judge of my own capabilities	.582		
	I expect to be able to do things that need to be done with future events	.566		
	If I had a job which involved many different tasks I would probably do very well at almost all	.566		
	My job is within the scope of my abilities	.532		
	When I take training courses in unfamiliar areas, I expect to be able to do well in them	.480		
	If offered a job in a field I don't know much about, I could learn to do the job well	.429		
GSE 2	Tackling problems, I can't tell in advance how well I will do at it		.848	0.64

	My estimates of how well I can deal with a new situation are not very accurate		.484	
<b>Overall <math>\alpha</math></b>				0.813
Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization.3 iterations required				

Table 4.24 reveals the presence of two distinct factors within the General Self-Efficacy scale. All items exhibited a factor loading of greater than 0.429 which is within the guidelines suggested by Stevens (1992). This two factor solution accounted for 48.82% of the variance and both factors have an eigenvalue of greater than one. Parallel analysis confirms the two factor solution.

**Table 4.25 Parallel Analysis Comparison of General Self-Efficacy Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	4.487	1.3310	<b>Accept</b>
2	1.340	1.2438	<b>Accept</b>
3	1.176	1.1774	Reject
4	0.842	1.1261	Reject

An analysis of the factor loadings reveals that factor one (GSE 1) is concerned with perceived competence and resulted in a Cronbach alpha of .84 for this sub-scale. Factor two (GSE 2) concerns low expectations regarding elements for dealing with problems or new situations. This factor produced a Cronbach alpha of .64. The overall Cronbach alpha for the combined General Self-Efficacy scale is 0.813.

#### **4.8.6 Factor Analysis of Understanding of Development Needs Scale**

**Table 4.26 Factor Analysis of Understanding of Development Needs Scale**

UNDERSTANDING OF DEVELOPMENT NEEDS			
	Item	Factor Loadings	$\alpha$

		Component 1	
	The performance appraisal information I receive is valuable for my personal development	.629	0.70
	I agree with my supervisors assessment of my strengths & weaknesses	.611	
	Past training programmes have focused on the skills and knowledge I needed to perform my job	.521	
	I have freedom to choose training programmes I want	.488	
	I usually understand why I am asked to attend training	.475	
	I am confident that I have a good idea of my training needs	.471	
<b>Overall <math>\alpha</math></b>			0.70
Extraction Method: Alpha Factoring. 6 iterations required			

Table 4.26 reveals the presence of one distinct factor within the Understanding of Development Needs scale. All items exhibited a factor loading of greater than 0.471 which is within the guidelines suggested by Stevens (1992). This one factor solution accounted for 40% of the variance and the factor has an eigenvalue of greater than one. Parallel analysis confirms the one factor solution. The overall Cronbach alpha for the combined Understanding of Development Needs scale is 0.70.

**Table 4.27 Parallel Analysis Comparison of Understanding of Development Needs Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	2.354	1.1701	Accept
2	1.086	1.0895	Reject
3	0.812	1.0260	Reject

#### **4.8.7 Factor Analysis of Extent and Nature of Learning Opportunities Scale**

**Table 4.28 Factor Analysis of Extent and Nature of Learning Opportunities Scale**

<b>EXTENT AND NATURE OF LEARNING OPPORTUNITIES</b>				
	<b>Item</b>	<b>Factor Loadings</b>		<b><math>\alpha</math></b>
		<b>Component</b>		
		<b>1</b>	<b>2</b>	
<b>EXT 1</b>	The quality of training material here is satisfactory	.859		0.896
	In my company, trainers have generally created an environment conducive to learning	.840		
	Communications concerning the purpose of training in my company are clear and accurate	.797		
	My past experiences in training programmes have been positive	.767		
	Most training I have attended here has been relevant to the skills I hoped to develop	.676		
	I believe those in charge of training in my company are competent & well-trained	.657		
	Other employees of this company feel training is worthwhile	.646		
	There is generally a good balance between trainer inputs and participant involvement in the training programmes	.582		
Training in my company is a waste of time	.416			
<b>EXT 2</b>	People do training because they cant do their job right in the first place		.590	0.50
	Outside training consultants don't know enough about my employer to develop a good training programme		.468	
	I have little idea of when development activities are scheduled to be offered by my current employer		.325	
<b>Overall <math>\alpha</math></b>				<b>0.852</b>
Extraction Method: Alpha Factoring. Rotation Method: Promax with Kaiser Normalization.3 iterations required				

Table 4.28 reveals the presence of two distinct factors within the Extent and Nature of Learning Opportunities scale. All but one item exhibited a factor loading of greater than 0.325 which is within the guidelines suggested by Stevens (1992). (1992). Item

“I have more than enough training to do my job well” exhibited a factor loading of less than 0.298 and so was removed. This two factor solution accounted for 59% of the variance and both factors have an eigenvalue of greater than one. Parallel analysis confirms the two factor solution.

**Table 4.29 Parallel Analysis Comparison of Extent and Nature of Learning Opportunities Scale**

COMPONENT NUMBER	ACTUAL EIGENVALUE FROM FA	CRITERION VALUE FROM PARALLEL ANALYSIS	DECISION
1	5.181	1.3201	Accept
2	1.477	1.2366	Accept
3	1.022	1.1779	Reject

An analysis of the factor loadings reveals that factor one (EXT 1) is concerned with positive experiences of developmental opportunities in the managers’ current workplace and resulted in a Cronbach alpha of .896 for this sub-scale. Factor two (EXT 2) concerns negative experiences of developmental opportunities in the managers’ current workplace. This factor produced a Cronbach alpha of .50. A small number of items within this subscale may account for the low reliability indicator. The overall Cronbach alpha for the combined Extent and Nature of Learning Opportunities scale is 0.852.

The following table (Table 4.30) summarises the main descriptive statistics for all scale and post-factor analysis subscale variables included in the research and lists the means, standard deviations and reported range of the scales.

**Table 4.30 Scale Means and Standard Deviations of Scale Variables – all respondents**

Independent Variables	N	Mean	Standard Deviation	Median	Min	Max
<b>Motivation to Learn</b>	375	4.30	.432	4.38	1.00	5.00
MTL1	375	4.15	.512	4.20	1.00	5.00
MTL2	375	4.56	.453	4.67	1.00	5.00
<b>Career Exploration &amp; Planning</b>	375	4.02	.716	4.10	2.00	5.00
CEP1	375	3.84	.879	4	1.00	5.00

CEP2	375	4.28	.685	4.50	1.00	5.00
<b>Development Climate</b>	375	3.73	.529	3.73	2.00	5.00
DC1	375	3.74	.861	3.88	1.00	5.00
DC2	375	4.22	.638	4.33	1.00	5.00
DC3	375	3.38	.936	3.25	1.00	5.00
DC4	375	3.58	.801	3.67	1.00	5.00
<b>Attitude towards Participation</b>	375	4.38	.621	4.67	1.00	5.00
<b>Perceived Benefits</b>	375	3.64	.610	3.69	1.00	5.00
PB1	375	3.85	.863	4.00	1.00	5.00
PB2	375	4.37	.617	4.50	1.00	5.00
PB3	375	2.66	.892	2.66	1.00	5.00
<b>Autonomy</b>	375	3.49	.896	3.67	1.00	5.00
<b>Task Specific Self-efficacy</b>	375	4.32	.571	4.33	2.00	5.00
<b>General Self-Efficacy</b>	375	4.15	.473	4.15	1.00	5.00
GSE1	375	4.26	.480	4.27	1.00	5.00
GSE2	375	3.55	1.010	3.58	1.00	5.00
<b>Understanding of Development Needs</b>	375	4.03	.644	4.00	1.00	5.00
<b>Extent and Nature of Learning Opportunities</b>	375	4.02	.624	4.00	2.00	5.00
EXT1	375	4.06	.705	4.11	1.00	5.00
EXT2	375	3.89	.816	4.00	1.00	5.00

## ***4.9 Preparing the Data for Further Analysis***

### **4.9.1 Assumption Testing**

When inferential statistical tests are used to draw inferences about an underlying population, these tests generally make certain assumptions about the underlying population distribution (Sheskin, 2000). Many statistical procedures are parametric in nature. All parametric tests have four basic assumptions that must be met for a parametric test to be accurate: normally distributed data, homogeneity of variance, interval data and independence. The assumptions of interval data and independent measures are tested by common sense (Field, 2005). The most common assumption is that the population exhibits a frequency distribution that approximates a normal curve (Sheskin, 2000). The shape of a normal distribution is such that the closer a score is to the mean, the more often it occurs.

### 4.9.2 Testing for Normality

There are a number of tests which measure the normality of the sample distribution, however there are three key stages to assessing normality. A visual examination of the curves (presented in Appendix E) provides an indication of the type of distribution concerned. The superimposed normal curve gives an indication as to whether or not the distribution is normal and from this visual examination of each of the dependent and independent variables under consideration it appears some of the distributions are non-normal.

This visual examination alone will not identify if the deviation from the superimposed normal curve is small enough to say that the distribution is approximately normal. As such, a second test was undertaken to examine the skewness and kurtosis scores. A normal distribution is symmetrical. A non-symmetrical distribution is described as being either positively or negatively skewed. When a distribution is represented as a histogram its skewness can be seen in the actual shape of the graph. A negatively skewed distribution is one in which the long tail of the distribution is to the left. A positively skewed distribution has the long tail on the right side (high values) on the horizontal axis. The skewness statistic is negative if the distribution is negatively skewed, positive if positively skewed and zero if it is symmetrical. In a symmetrical distribution the mean will also be the same as the median. A normal distribution also has a kurtosis of 0 (the degree of peakedness or flatness of the distribution). If a distribution meets the criteria of zero kurtosis and zero skewness it will have a normal distribution. However, large samples will give rise to small standard errors so when sample sizes are big, significant values arise from even small deviations from normality (Field, 2005). Therefore, the z-score criterion that can be calculated from skewness and kurtosis statistics to determine their significance should not be used for this sample (n=375). de Vaus (2002, p.76) suggests that, as a rule of thumb, a skewness of greater than one indicates a non-symmetrical distribution.

The skewness and kurtosis scores for each of the independent and dependent variables are outlined in Tables 4.31 and 4.32 below. These results indicate that all but two of the variables under consideration are normally distributed. Motivation to Learn and Attitude towards Participation are negatively skewed with values of greater than 1.

**Table 4.31 Distribution Skewness and Kurtosis Scores for Independent Variables**

Independent Variables	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Motivation to Learn	375	-1.384	.126	4.072	.251
Career Exploration & Planning	375	-.789	.126	.275	.251
Attitude towards Participation	375	-2.547	.126	9.347	.251
Development Climate	375	.011	.126	-.103	.251
Perceived Benefits	375	-.455	.126	.688	.251
Autonomy	375	-.204	.126	-.562	.251
Task-Specific Self-Efficacy	375	-.618	.126	.022	.251
General Self-Efficacy	375	-.225	.126	-.468	.251
Understanding of Development Needs	375	-.425	.126	-.394	.251
Extent and Nature of Learning Opportunities	375	-.679	.126	.717	.251

**Table 4.32 Distribution Skewness and Kurtosis Scores for Dependent Variables**

Dependent Variables	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Voluntary L&D	375	.460	.126	-.693	.251
In Education	-320	-.320	.126	-1.908	.251

A further test of normality used is the Kolmogorov-Smirnov Z test. This test evaluates statistically whether the difference between the observed distribution and a theoretical normal distribution is small enough to be due to chance. If the test yields a significance level of less than 0.05 it means that the distribution is probably not normal.

If it could be due to chance we could treat the distribution as normal however for each of the dependent and independent variables under examination, as outlined in Table 4.33 below, the Kolmogorov-Smirnov Z test yielded a significance level of less than

0.05 for all but two of the variables and contradicting the skewness and kurtosis results by suggesting that the majority of distributions are non-normal.

**Table 4.33 Kolmogorov-Smirnov Test for Normality of each of the Independent & Dependent Variables**

<b>Independent Variable</b>	<b>N</b>	<b>K-S Significance</b>
Motivation to Learn	375	.000
Career Exploration & Planning	375	.000
Attitude towards Participation	375	.000
Development Climate	375	.200
Perceived Benefits	375	.000
Autonomy	375	.000
Task-Specific Self-Efficacy	375	.000
General Self-Efficacy	375	.015
Understanding of Development Needs	375	.000
Extent and Nature of Learning Opportunities	375	.000

<b>Dependent Variable</b>	<b>N</b>	<b>K-S Significance</b>
Voluntary L&D	375	.000
In Education	375	.000

While the Kolmogorov-Smirnov test suggests that the distributions are non-normally distributed, other factors need to be considered. A visual examination of the curves combined with the skewness and kurtosis statistics suggest that the curves approximate a normal distribution. It must also be noted that the Kolmogorov-Smirnov test can get significant results from only small deviations in normality in large sample sizes. Furthermore, in the social sciences, the rules associated with the normal distribution are less rigidly applied because of the typically perceptual nature of the data being collected (Morgan and Griego, 1998). This supports the use of parametric tests for the data collected in this research.

As noted, the Motivation to Learn and Attitude towards Participation scales are both negatively skewed with values of greater than 1. The reflect and square root transformation of these variables is recommended to correct for non-normality. The skewness and kurtosis of reflect and square root transformation of Motivation to

Learn are -0.836 and 1.621 respectively and the skewness and kurtosis of reflect and square root transformation of Attitude towards Participation are -1.688 and 4.504 respectively. The Kolmogorov-Smirnov test remained at .000 in both instances. Appendix E presents the before and after reflect and square root transformation of these variables.

In terms of further analyses, SEM is robust to any violations of the assumptions of non-normality. A number of methods have been developed to deal with non-normally distributed variables which have an underlying continuous distribution. Cudeck and Browne (1993) suggest that if the distributions of a sample are approximately normal, the Maximum Likelihood (ML) technique available in LISREL for specifying structural equation models can be used. Muthen and Kaplan (1985) compared ML to other SEM techniques for non-normal data and note that if variables have a kurtosis and skewness in the range of +1 to -1, very little distortion will occur if ML is used.

#### **4.10 Correlation Analysis**

Correlation analysis is used to describe the strength and direction of the linear relationship between two variables (Pallant, 2001). This refers to the degree to which the scores (from a set of subjects) on two variables co-relate, i.e. the extent to which a variation in the scores on one variable results in a corresponding variation in the scores on the second variable (Hinton, 1995).

This study uses Pearson's correlation as the assumptions underlying parametric correlation are not violated given the approximation of normality in the distribution of the data set. Table 4.34 presents a correlation matrix which includes all dependent and independent variables in the study and reveals a number of significant and important findings.

Cohen (1988) suggests that effect sizes should be reported in terms of what correlations constitute a small or large effect where:  $r = .10$  (small effect), the effect explains 1% of the total variance;  $r = .30$  (medium effect), the effect explains 9% of the total variance; and  $r = .50$  (large effect), the effect explains 25% of the total variance. These guidelines are adopted for Sections 4.10.1 and 4.10.2.

**Table 4.34 Intercorrelation Matrix – All variables**

Variables	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1 Voluntary L&D	-																							
2 In formal education	-	-.080																						
3 Gender <sup>1</sup>	-	.049	-.121*																					
4 Age	-	.052	.155**	-.229**																				
5 Firm size	-	.141**	.300**	-.080	.082																			
6 Firm sector	-	-.012	.117*	.009	.084	.120*																		
7 Firm ownership	-	.069	.044	-.120*	-.014	.207**	-.320**																	
8 Barriers & non-job context	-	-.120*	-.138**	-.050	-.082	-.191**	-.125*	.023																
9 Extent & nature of learning opportunities	0.852	.220**	.087	.042	.188**	.201**	.074	-.049	-.288**															
10 Motivation to learn	0.801	.232**	.232**	.014	.054	.159*	.080	.062	-.269**	.414**														
11 Career Exploration & Planning	0.838	.137**	-.162**	.004	-.112*	.013	.002	.111*	-.032	.207**	.351**													
12 Attitude towards Participation	0.700	.043	.020	-.008	.102*	-.080	.081	-.024	-.095	.208**	.320**	.109*												
13 Development Climate	0.908	.108*	.064	.015	.105*	.161**	.073	.068	-.167**	.561**	.318**	.382**	.276**											
14 Perceived Benefits	0.805	.117*	-.069	.002	-.082	.066	-.026	.061	-.053	.304**	.275**	.251**	-.008	.222**										
15 Autonomy	0.60	.154**	-.046	.151**	.003	-.022	.017	-.043	-.158**	.167**	.316**	.166**	.136**	.189**	-.011									
16 General Self-Efficacy	0.813	.101	.115*	-.031	.116*	.104*	.087	.004	-.212*	.293**	.520**	.362**	.295**	.253**	.128*	.188**								
17 Task-Specific Self-Efficacy	0.842	.141**	.031	-.083	.010	.111*	.040	.044	-.221**	.291**	.459**	.324**	.150**	.237**	.261**	.118*	.582**							
18 Understanding of Development Needs	0.700	.226**	.030	.153**	-.014	.142**	.014	.034	-.245**	.531**	.397**	.510**	.160**	.542**	.286**	.334**	.334**	.298**						
19 Education Attainment	-	.000	.126*	.074	-.019	-.023	.189**	-.033	-.110*	-.013	.140**	.046	.215**	.035	.074	.100	.209**	.044	.057					
20 Future Responsibilities	-	.096	.043	-.028	-.110*	.133*	-.045	.078	-.060	.032	.058	.192**	-.108*	.010	-.043	.008	.061	.115*	.098	.043				
21 Job Experience	-	-.077	-.014	-.107*	.335**	-.097	.061	-.107*	.012	.036	-.059	-.078	.042	-.017	-.001	.055	.074	.079	-.038	.060	-.060			
22 Time since Promotion	-	-.123*	.117*	-.205**	.449**	.033	.122*	-.073	-.033	-.003	-.113*	-.125*	.021	-.039	-.096	-.087	.072	.012	-.135**	.033	-.164**	.524**		

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

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

<sup>1</sup> Point-biserial correlation

#### 4.10.1 Relationships with the Dependent Variables

With respect to the two dependent variables, eleven independent variables are statistically significantly correlated with participation in voluntary learning and development activities and ten independent variables are statistically significantly correlated with participation in formal education. Voluntary learning and development has a small effect with motivation to learn ( $r = 0.232, p < .01$ ). This suggests that high levels of motivation to learn are positively correlated with participation in learning and development activities. A number of small statistically significant effects exist between voluntary learning and development and firm size ( $r = .141, p < .01$ ), extent and nature of learning opportunities ( $r = 0.220, p < .01$ ), career exploration and planning ( $r = 0.137, p < .01$ ), development climate ( $r = 0.108, p < .05$ ), perceived benefits ( $r = 0.117, p < .05$ ), autonomy ( $r = 0.154, p < .01$ ), task-specific self-efficacy ( $r = 0.141, p < .01$ ), and understanding of development needs ( $r = 0.226, p < .01$ ). Two small statistically significant negative correlations exist between voluntary learning and development and barriers and non-job context ( $r = - 0.120, p < .05$ ), suggesting that the existence of barriers to learning and development will constrain participation in voluntary learning and development activities; and time since promotion ( $r = - 0.123, p < .05$ ), suggesting that the longer a manager goes without being promoted, the less likely s/he is to participate in voluntary learning and development activities.

A medium effect existed between participation in formal education and firm size ( $r = 0.300, p < .01$ ), suggesting that managers working in larger organisations were more likely to participate in formal education activities. A number of small statistically significant effects existed between participation in formal education and age ( $r = 0.155, p < .01$ ), sector ( $r = 0.117, p < .05$ ), motivation to learn ( $r = 0.232, p < .01$ ), general self-efficacy ( $r = 0.115, p < .05$ ), education attainment ( $r = 0.126, p < .05$ ) and time since promotion ( $r = 0.117, p < .05$ ). Three small effects existed between participation in formal education and gender ( $r = - 0.121, p < .05$ ), indicating that male managers were less likely to participate in formal education compared to female managers; barriers and non-job context ( $r = - 0.138, p < .01$ ), suggesting that the existence of barriers to learning

and development will constrain participation in formal education activities; and career exploration and planning ( $r = -0.162$ ,  $p < .01$ ), indicating managers with a high degree of career exploration and planning were less likely to participate in formal education.

#### **4.10.2 Relationships between Independent Variables**

A number of large statistically significant effects exist between the independent variables. General self-efficacy and task-specific self-efficacy, perhaps unsurprisingly, have a large effect ( $r = 0.582$ ,  $p < .01$ ), indicating that managers with high levels of general self-efficacy will also have high levels of task-specific self-efficacy. Extent and nature of learning opportunities has a large effect with development climate ( $r = 0.561$ ,  $p < .01$ ), indicating that where organisations offer opportunities for participation in learning and development opportunities, managers will perceive a positive development climate. Development climate also has a large effect with understanding of development needs ( $r = 0.542$ ,  $p < .01$ ), indicating that managers working in organisations with a positive development climate will also have a better understanding of their career development needs. Understanding of development needs also shows a large effect with the extent and nature of learning opportunities ( $r = 0.531$ ,  $p < .01$ ), suggesting that where organisations offer opportunities for participation in learning and development, managers are likely to have a greater understanding of their career development needs.

Unsurprisingly, job experience has a large effect with time since promotion ( $r = 0.524$ ,  $p < .01$ ), indicating that the longer a manager stays in his/her job, the less likely he/she is to be promoted. As expected, job experience also has a medium effect with age ( $r = 0.335$ ,  $p < .01$ ). Motivation to learn has a large effect with general self-efficacy ( $r = 0.520$ ,  $p < .01$ ), suggesting that managers with high levels of motivation to learn will also have high levels of belief in their ability to carry out tasks requiring generic skills. Career exploration and planning also has a large effect with understanding of development needs ( $r = 0.510$ ,  $p < .01$ ), indicating that managers who have a better understanding of their development needs will engage in proactive career exploration behaviours.

A number of medium positive correlations exist between the independent variables. Motivation to learn has a positive correlation with task-specific self-efficacy ( $r = 0.459$ ,  $p < .01$ ), indicating that managers with a high level of motivation to learn will also have a relatively high level of belief in their ability to master task-specific skills. Age has a medium effect with time since promotion ( $r = 0.449$ ,  $p < .01$ ), suggesting that as a manager ages, the longer s/he goes without being promoted. Extent and nature of learning opportunities has two medium effects with both motivation to learn ( $r = 0.414$ ,  $p < .01$ ) and perceived benefits ( $r = 0.304$ ,  $p < .01$ ).

Motivation to learn has a number of medium effects, including understanding of development needs ( $r = 0.397$ ,  $p < .01$ ), career exploration and planning ( $r = 0.351$ ,  $p < .01$ ), attitude towards participation ( $r = 0.320$ ,  $p < .01$ ), development climate ( $r = 0.318$ ,  $p < .01$ ), and autonomy ( $r = 0.316$ ,  $p < .01$ ).

Career exploration and planning has three medium effects with both general self-efficacy ( $r = 0.362$ ,  $p < .01$ ), and task-specific self-efficacy ( $r = 0.324$ ,  $p < .01$ ), indicating that managers who engage in career planning behaviours also have strong beliefs in their ability to master generic and specific skills; and development climate ( $r = 0.382$ ,  $p < .01$ ). Understanding of development has two identical medium effects with perceived benefits ( $r = 0.334$ ,  $p < .01$ ) and autonomy ( $r = 0.334$ ,  $p < .01$ ).

A negative medium effect exists between firm ownership and firm sector ( $r = -0.320$ ,  $p < .01$ ), indicating that, in this research, larger organisations were less likely to operate in ICT sectors.

A statistically significant number of small effects exist between the independent variables. Of note is the negative correlations that exist between barriers and non-job context and extent and nature of learning opportunities ( $r = -0.288$ ,  $p < .01$ ), motivation to learn ( $r = -0.269$ ,  $p < .01$ ), development climate ( $r = -0.167$ ,  $p < .01$ ), autonomy ( $r = -0.158$ ,  $p < .01$ ), general self-efficacy ( $r = -0.212$ ,  $p < .05$ ), task-specific self-efficacy ( $r = -0.221$ ,  $p < .01$ ), and understanding of development needs ( $r = -0.245$ ,  $p < .01$ ).

The small statistically significant effects between career exploration and planning and time since promotion ( $r = - 0.125$ ,  $p < .05$ ) suggests that the longer a manager goes without being promoted, the less career planning behaviours utilised by the manager. Attitude towards participation has a number of small statistically significant effects including general self-efficacy ( $r = 0.295$ ,  $p < .01$ ), development climate ( $r = 0.276$ ,  $p < .01$ ), and education ( $r = 0.215$ ,  $p < .01$ ). Attitude towards participation had a small statistically significant effect with perceptions of future responsibilities ( $r = - 0.108$ ,  $p < .05$ ), indicating that managers were less likely to have a positive attitude towards participation in learning and development activities where they perceived a reduced likelihood of engaging in roles with increased responsibility in the future.

Development climate had a small effect with general self-efficacy ( $r = 0.253$ ,  $p < .01$ ), suggesting that a supportive organisational climate for development is correlated with managers' belief in his/her ability to perform general tasks. General self-efficacy also had a small effect with education attainment ( $r = 0.209$ ,  $p < .01$ ), indicating that managers with higher levels of general self-efficacy achieved greater educational qualifications.

### **4.11 Structural Equation Modelling**

This section presents the results of the structural equation modelling (SEM). As outlined in Chapter 3, all of the SEM analytical techniques were carried out using LISREL. SEM determines the overall model fit and parameter estimates. The model fit statistics indicate the strength of the conceptual framework, and presents a number of alternative models based on the conceptual framework, to determine which model best fits the data. The parameter estimates provide information as to whether the propositions derived from the conceptual framework are useful for the purposes of prediction.

When carrying out SEM analysis, two estimators were used to compare any effects of non-normality on the results. Non-normal data in SEM increases the likelihood of rejecting models that may not be false and indicate that particular parameter estimates are statistically significantly different from zero when in fact this is not the case (type 1 error). LISREL affords the opportunity to use generalised least-squares (GLS) instead of the default maximum likelihood (ML) to compute the overall model fit chi-square test, parameter estimates, and standard errors where data is assumed to be non-normal in nature. Under joint multivariate normality, when the fitted model is not false, GLS and ML return identical chi-square model fit values, parameter estimates, and standard errors (Bollen, 1989). The standard recommendation is to use the ML estimator when fitting a model to data that are drawn from a population with variables that are assumed to be normally and continuously distributed in the population from which you drew your sample. No significant differences were found in the standard parameter estimates using GLS and ML, therefore the data presented in Section 4.11 are drawn from the ML analysis.

#### 4.11.1 Overall Model Fit

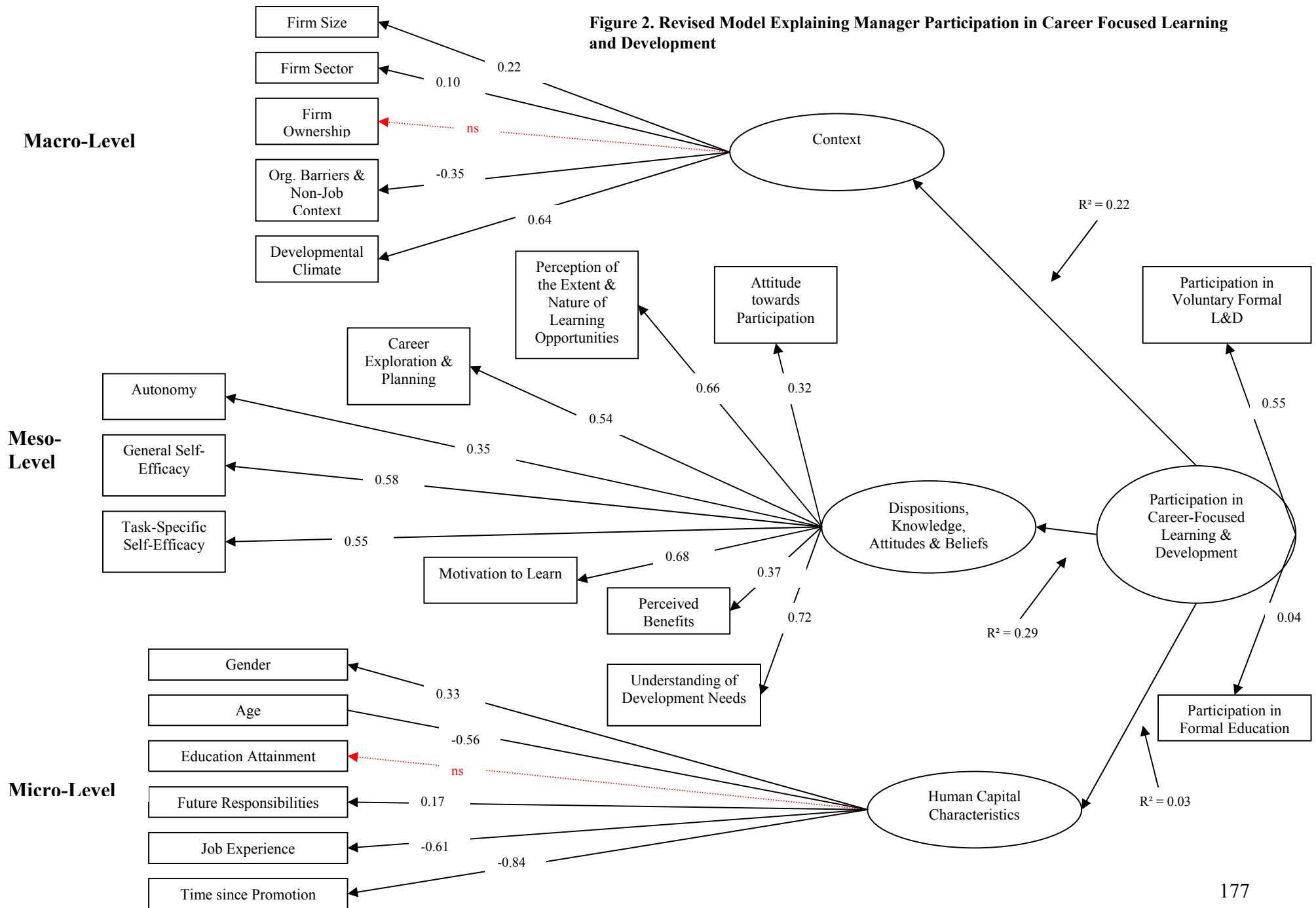
The original conceptual framework fits the data well ( $X^2 = 687.66$ ,  $df = 203$ ,  $p < 0.001$ ,  $RMSEA = 0.080$ ) and is presented in Appendix A. Using the change in chi-square (Bentler and Bonett, 1980), the conceptual framework is compared to a number of other models. The results of the comparison are presented in Table 4.35. The first comparison illustrates that the conceptual framework provides a better fit than Modified Model 1 ( $X^2 = 890.75$ ,  $df = 284$ ,  $p < 0.001$ ,  $RMSEA = 0.10$ ). Modified Model 1 is presented in Appendix B, and utilises all factor subscales identified in Section 4.8. The increase in chi-square, and the lack of comparative parsimony suggests that the conceptual framework is a better fit for the data than Modified Model 1. Parsimony has long been thought of as a desirable quality in a scientific theory (Popper, 1961), and this is also the case with SEM. A paradox within SEM is that the addition of parameters will always improve model fit, as measured by chi-square, the incremental fit indices and the goodness of fit index, but at the expense of parsimony.

Using modification indices to the conceptual framework results, LISREL suggested three modifications, which were then made in Modified Model 2. Firstly, redrawing the path for development climate directly to the latent variable 'Context'. It also suggested removing the age and gender variables from the latent variable 'context' and redrawing them to the latent variable 'Human Capital Characteristics', in addition to removing the paths between the three latent variables. The remaining variables were also found to be significant when drawn directly to the latent variable "Dispositions, Knowledge, Attitudes and Beliefs" rather than using intermediate dummy variables (see Modified Model as presented in the Appendix A). The change in chi-square test indicates that Modified Model 2 is a significantly better fit ( $X^2 = 581.84$ ,  $\Delta X^2 = -105.82$ ,  $df = 203$ ,  $p < 0.001$ ,  $RMSEA = 0.071$ ). As Modified Model 2 is the best fitting model, this model is retained and interpreted in order to examine the individual hypothesised relationships. Figure 2 presents Modified Model 2.

**Table 4.35 Comparison of Model Fit Statistics**

<b>Framework</b>	<b>X<sup>2</sup> (df)</b>	<b>Δ X<sup>2</sup> (Δ df)</b>	<b>NC (X<sup>2</sup> /df)</b>	<b>RMSEA</b>	<b>90% CI RMSEA</b>	<b>PClose RMSEA</b>	<b>Model details</b>
Conceptual Framework	687.66 (203)	-	3.38	0.080	0.073, 0.087	0.000	Conceptual framework
Modified Model 1	890.75 (284)	203.09 (81)	3.13	0.010	0.098, 0.115	0.017	Conceptual framework with factor sub-scales
<b>Modified Model 2</b>	<b>581.84 (203)</b>	<b>-105.82 (0)</b>	<b>2.86</b>	<b>0.071</b>	<b>0.064, 0.077</b>	<b>0.00</b>	<b>Conceptual framework with three adjusted paths</b>

**Figure 2. Revised Model Explaining Manager Participation in Career Focused Learning and Development**



#### 4.11.2 Details of Best Fitting Model

According to Modified Model 2, the macro-level accounts for 22% of the variability in participation in CFLD; the meso-level accounts for 29% of the variability in participation in CFLD; and the micro-level accounts for 3% of the variability in participation in CFLD.

The most significant measure of SEM, the Root Mean Square Error of Approximation (RMSEA), developed by Steiger (1990), is a measure of “discrepancy per degree of freedom” in a model (Browne and Cudeck, 1993). This fit index recognises that models can only ever be approximately correct. This flexible index is based on chi-square, yet takes parsimony into account; the addition of a parameter which reduces chi-square by a substantial degree, will cause a decrease in the RMSEA. An advantage of this index is that (unlike many other fit indices) it has a known sampling distribution, allowing calculation of confidence intervals and significance tests. The most common tests calculated are the 92% confidence levels, with the significance value of the RMSEA  $<0.08$ . As the RMSEA of Modified Model 2 is 0.071, this suggests good model fit to the data.

The Comparative Fit Index (CFI) devised by Bentler (1990) is illustrative of the Type 3 incremental indices. The CFI has a very small bias and a relatively small standard error. It is easily interpretable, being scaled from 0-1, and performs well in smaller sample sizes. The CFI for Modified Model 2 is 0.85. CFI close to 1 indicates a very good fit. CFI is also used in testing modifier variables (those which create a heteroscedastic relation between an independent and a dependent, such that the relationship varies by class of the modifier). CFI should be equal to or greater than .90 to accept the model, indicating that 90% of the covariation in the data can be reproduced by the given model. However, CFI overestimates goodness of fit for small samples (Fan *et al.*, 1999). Bollen (1989) suggests that a cut off point of 0.85 may be appropriate for sample sizes greater than 300 respondents, indicating that Modified Model 2 fits the data well from this perspective.

The normed chi-square (NC) is used to reduce the sensitivity of the chi-square to sample size, and it is calculated by dividing the value of chi-square by the degrees of freedom. However, there is no clear guideline as to what value of the NC is acceptable (Kline, 1998). Bollen (1989) notes that values of 2, 3, or even as high as 5 have been recommended as indicating reasonable fit. The value of NC for Modified Model 2 is 2.86, reduced from 3.38 for the Conceptual Framework, indicating that Modified Model 2 fits the data well.

Hoelter (1983) devised the Critical N (CN) criterion. A CN value exceeding 200 is thought to show a well-fitting model. However, the CN has a serious limitation; it is very sensitive to sampling distributions. The CN shows a strong positive relationship to sample size, meaning that with large samples a cut-off value of 200 may be inadequate. Critical N (CN) for Modified Model 2 is 163.49. This can be explained by the large sample size of 375. For samples closer to 400, a cut off point CN point of 150 is recommended, suggesting that Modified Model 2 fits the data well.

#### **4.11.3 Predictive Ability of the Model**

Examining the variance explained by the three latent variables, Dispositions, Knowledge, Attitude and Beliefs variables explain the most variance in participation in CFLD. The meso-level accounts for 29% of the variability in participation in CFLD ( $R^2 = 0.29$ ).

The Context variables also explain significant variance in participation. Macro-level variables account for 22% of the variability in participation in CFLD ( $R^2 = 0.22$ ).

Human Capital Characteristics explain a small amount of variance in participation in CFLD. Micro-level accounts for 3% of the variability in participation in CFLD ( $R^2 = 0.03$ ).

The statistically significant parameter estimate for participation in formal voluntary learning and development activities ( $\beta = 0.55$ ,  $p < .05$ ) indicates that for every unit increase in formal voluntary learning and development activities, there is an increase of 0.55 standard deviations in participation in CFLD. The statistically significant parameter estimate for participation in formal education ( $\beta = 0.04$ ,  $p < .05$ ) indicates that for every unit increase in participation in formal education, there is an increase of .004 standard deviations in participation in CFLD.

#### **4.11.4 Proposition Testing**

An examination of the standardised parameter estimates indicates that twelve of the fourteen propositions are significant in the predicted directions.

The following section examines the significance of the propositions and considers the predictive ability of the framework in terms of the significant propositions.

##### **4.11.4.1 Micro-Level Propositions**

**Proposition 1:** Higher levels of educational attainment are positively related to participation in CFLD.

There is no support for proposition 1, the parameter estimate is not significant ( $\beta = -0.03$ ,  $p > .05$ ). This indicates that educational attainment is not a significant predictor of manager participation in CFLD.

**Proposition 2:** The amount of job experience is positively related to managerial participation in CFLD.

The statistically significant parameter estimate ( $\beta = -0.61$ ,  $p < .05$ ) indicates support for proposition 2, but in the opposite direction. This suggests that the more experience a manager has, the less likely they are to participate in CFLD. Specifically, for every one

unit increase in time spent in the current job, there is a decrease of 0.61 standard deviations in participation in CFLD.

**Proposition 3:** Low likelihood of future responsibilities is positively related to participation of managers in CFLD activities.

The statistically significant parameter estimate ( $\beta = 0.17$ ,  $p < .05$ ) indicates support for proposition 3, but in the opposite direction. The finding suggests that where managers perceived that they will be required to take on positions of greater responsibility in the future, they will participate in more CFLD activities.

**Proposition 4:** Time since last promotion is positively related to participation of managers in CFLD activities.

The statistically significant parameter estimate ( $\beta = -0.84$ ,  $p < .05$ ) indicates support for proposition 4. The results indicate that the greater the length of time since a manager has been promoted the more likely s/he is to participate in CFLD activities. Specifically, for each additional year that a manager goes without promotion, there is an increase of 0.84 standard deviations in participation in CFLD activities.

**Proposition 11a:** Younger managers will participate in more CFLD activities.

**Proposition 11b:** Male managers will participate in more CFLD activities.

The statistically significant parameter estimate for age ( $\beta = -0.56$ ,  $p < .05$ ) indicates support for first part of proposition 11. The negative sign of the regression coefficient indicates that as managers get older, the less likely they are to participate in CFLD activities. For every unit increase in age, there is a decrease of 0.56 standard deviations in participation in CFLD.

The statistically significant parameter estimate for gender ( $\beta = 0.33$ ,  $p < .05$ ) indicates support for second part of proposition 11. This indicates that female managers are more

likely to participate in CFLD activities than male managers. The results indicate that there is an increase of 0.33 standard deviations in participation in CFLD if the manager is male.

Table 4.36 presents the results of the Micro-Level analysis.

**Table 4.36 Effect of Human Capital Characteristic Variables on CFLD**

Human Capital Variable	$\beta$	t-value	Significance
Education	-0.03	-0.43	ns
Job experience	-0.61	-8.37	$p < 0.05$
Likelihood of future responsibility	0.17	2.8	$p < 0.05$
Time since promotion	-0.84	-10.34	$p < 0.05$
Age	-0.56	-4.92	$p < 0.05$
Gender	0.33	5.22	$p < 0.05$

#### 4.11.4.2 Meso-Level Propositions

**Proposition 5:** Motivation to learn is positively related to participation of managers in CFLD activities

The statistically significant parameter estimate ( $\beta = 0.68$ ,  $p < 0.05$ ) indicates support for proposition 5. This suggests that the managers with higher levels of motivation to learn will participate in more CFLD activities. For every unit increase in motivation to learn there is an increase of 0.68 standard deviations in participation in CFLD.

**Proposition 6:** Career exploration and planning, a positive attitude towards participation, a supportive developmental climate and high perceived of benefits of CFLD are positively related to managers' motivation to learn.

The statistically significant parameter estimate for career exploration and planning ( $\beta = 0.54$ ,  $p < 0.05$ ) indicates support for first part of proposition 6. As outlined in Section 4.11.2, career exploration and planning was fitted directly to the latent variable 'dispositions, knowledge, attitudes and beliefs' rather than motivation to learn. This

indicates that for every unit increase in career exploration and planning, there is an increase of 0.54 standard deviations in participation in CFLD.

The statistically significant parameter estimate for attitude towards participation ( $\beta = 0.32$ ,  $p < .05$ ) indicates support for second part of proposition 6. As outlined in Section 4.11.2, attitude towards participation was fitted directly to the latent variable ‘dispositions, knowledge, attitudes and beliefs’ rather than motivation to learn. This indicates that for every unit increase in career exploration and planning, there is an increase of 0.32 standard deviations in participation in CFLD.

The statistically significant parameter estimate for perceived benefits ( $\beta = 0.37$ ,  $p < .05$ ) indicates support for forth part of proposition 6. As outlined in Section 4.11.2, perceived benefits was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This indicates that for every unit increase in development climate, there is an increase of 0.37 standard deviations in participation in CFLD.

**Proposition 7:** Attitude towards participation in CFLD is positively related to high levels of autonomy, high perceptions of general self-efficacy and task-specific self-efficacy.

The statistically significant parameter estimate for autonomy ( $\beta = 0.32$ ,  $p < .05$ ) indicates support for first part of proposition 7. As outlined in Section 4.11.2, autonomy was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This indicates that for every unit increase in autonomy given to managers, there is an increase of 0.32 standard deviations in participation in CFLD.

The statistically significant parameter estimate for general self-efficacy ( $\beta = 0.58$ ,  $p < .05$ ) indicates support for second part of proposition 7. As outlined in Section 4.11.2, general self-efficacy was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This indicates that for every unit increase in general self-

efficacy of managers, there is an increase of 0.58 standard deviations in participation in CFLD.

The statistically significant parameter estimate for task-specific self-efficacy ( $\beta = 0.55$ ,  $p < .05$ ) indicates support for third part of proposition 7. As outlined in Section 4.11.2, task-specific self-efficacy was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This indicates that for every unit increase in task-specific self-efficacy of managers, there is an increase of 0.55 standard deviations in participation in CFLD.

**Proposition 8:** The developmental climate for CFLD is positively related to the existence of social support, low situational constraints and a high understanding of development needs on behalf of the manager.

As outlined in Section 4.11.2, development climate was fitted directly to the latent variable ‘context’ rather than motivation to learn. Understanding of development needs was also fitted directly to the latent variable ‘dispositions, attitudes and beliefs’. The statistically significant parameter estimate for understanding of development needs ( $\beta = 0.72$ ,  $p < .05$ ) indicates support for the revised relationship. The results indicate that for every unit increase in understanding of development needs, there is an increase of 0.72 standard deviations in participation in CFLD.

**Proposition 9:** High perceived benefits of participation in CFLD is positively related to motivation to learn.

As outlined in Section 4.11.2, perceived benefits was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This revised relationship proved significant in Proposition 6.

**Proposition 10:** Career exploration and planning activities by a manager are positively related to motivation to learn.

As outlined in Section 4.11.2, career exploration and planning was fitted directly to the latent variable ‘dispositions, attitudes and beliefs’ rather than motivation to learn. This revised relationship proved significant in Proposition 6.

**Proposition 13:** Managers in organisations that provide generic rather than company specific training will participate in more CFLD activities.

As outlined in Section 4.11.2, extent and nature of learning opportunities was fitted directly to the latent variable ‘dispositions, knowledge, attitudes and beliefs’ rather than ‘context’. The statistically significant parameter estimate for extent and nature of learning opportunities ( $\beta = 0.66$ ,  $p < 0.05$ ) indicates support for the revised relationship. The results indicate that for every unit increase in the provision of generic training and development activities, there is an increase of 0.66 standard deviations in participation in CFLD.

Table 4.37 presents the results of the Meso-Level analysis.

**Table 4.37 Effect of Dispositions, Knowledge, Attitude & Beliefs Variables on CFLD**

Dispositions, Attitudes & Beliefs Variables	$\beta$	t-value	Significance
Motivation to learn	0.68	13.75	$p < 0.05$
Career exploration and planning	0.54	10.16	$p < 0.05$
Attitude towards participation	0.32	6.52	$p < 0.05$
Perceived benefits	0.37	6.79	$p < 0.05$
Autonomy	0.35	6.80	$p < 0.05$
General self-efficacy	0.58	11.19	$p < 0.05$
Task-specific self-efficacy	0.55	11.03	$p < 0.05$
Understanding of development needs	0.72	16.03	$p < 0.05$
Extent and nature of learning opportunities	0.66	14.29	$p < 0.05$

#### 4.11.4.3 Macro-Level Propositions

**Proposition 12a:** Managers from large organisations will have more opportunities to participate in CFLD.

**Proposition 12b:** Managers from the ICT sector will have more opportunities to participate in CFLD.

**Proposition 12c:** Managers from US-owned firms will have more opportunities to participate in CFLD.

The statistically significant parameter estimate for organisation size ( $\beta = 0.22$ ,  $p < .05$ ) indicates support for first part of proposition 12. This indicates that for every unit increase in organisation size, there is an increase of 0.22 standard deviations in participation in CFLD.

The statistically significant parameter estimate for organisation sector ( $\beta = 0.10$ ,  $p < .05$ ) indicates support for second part of proposition 12. This indicates managers working in the ICT sector are 0.10 standard deviations more likely to participate in CFLD.

There is no support for proposed relationship between organisation ownership and in participation in CFLD. This indicates that organisation ownership is not a significant predictor of participation in CFLD.

**Proposition 14:** Barriers to participation and non-job constraints are negatively related to participation by managers in CFLD activities.

The statistically significant parameter estimate for barriers to participation and non-job constraints ( $\beta = -0.35$ ,  $p < .05$ ) indicates support for proposition 14. This indicates that for every unit increase in barriers non-job constraints, there is a decrease of 0.35 standard deviations in participation in CFLD.

**Proposition 6:**

The statistically significant parameter estimate for development climate ( $\beta = 0.64$ ,  $p < .05$ ) indicates support for third part of proposition 6. As outlined in Section 4.11.2, development climate was fitted directly to the latent variable ‘context’ rather than motivation to learn. The results show that for every unit increase in development climate, there is an increase of 0.64 standard deviations in participation in CFLD. This indicates that the existence of a supportive development climate increases participation in CFLD.

Table 4.38 presents the results of the Macro-Level analysis.

**Table 4.38 Effect of Context Variables on CFLD**

<b>Context Variables</b>	<b><math>\beta</math></b>	<b>t-value</b>	<b>Significance</b>
Organisation size	0.22	3.66	$p < 0.05$
Organisation sector	0.10	1.96	$p < 0.05$
Organisation ownership	0.05	0.87	ns
Barriers & non-job constraints	-0.35	-6.24	$p < 0.05$
Development climate	0.64	9.83	$p < 0.05$

## **4.12 Conclusion**

The key finding of the data analysis reveals that the use of SEM identifies that, while the conceptual framework fitted the data well, a more parsimonious modified model was a significantly better fit ( $X^2 = 581.84$ ,  $df = 203$ ,  $p < 0.001$ ,  $RMSEA = 0.071$ ). The various fit indices ( $RMSEA = 0.071$ ,  $CFI = 0.85$ ,  $CN = 163.49$ ) indicates that the data fits the modified model well.

Examining the three latent variables, macro-level accounts for 22% of the variability in participation in CFLD; the meso-level accounts for 29% of the variability in participation in CFLD; and the micro-level accounts for 3% of the variability in participation in CFLD. Of the fourteen propositions, nine are fully supported. All but two relationships are significant. The implications of these findings will be discussed in Chapter 5.

The first part of Chapter 4 presented the results of the descriptive data. The descriptive statistics reveal that the majority of respondents were male, and were aged between 25 and 44 years of age. Over sixty percent of managers worked in large organisations, with the majority coming from financial, manufacturing, and ICT sectors. Respondents were highly educated, and the majority of managers had obtained either a degree or post-graduate qualification as their highest level of educational attainment. Almost three quarters of respondents participated in three or less voluntary training and development activities.

A factor analysis and reliability analysis of the variables used in the study reveals that all but one of the measures had a reliability of less than 0.80, indicating strong reliability of the chosen scales. Skewness and kurtosis tests indicate that the data is approximately normal, however the Kolmogorov-Smirnov Test indicates that the majority of distributions are non-normal.

The correlation analysis reveals that eleven independent variables are significantly correlated with participation in voluntary learning and development activities and ten independent variables are significantly correlated with participation in formal education. General self-efficacy and task-specific self-efficacy have a large effect ( $r = 0.582$ ,  $p < .01$ ), indicating that managers with high levels of general self-efficacy will also have high levels of task-specific self-efficacy. Extent and nature of learning opportunities has a large effect with development climate ( $r = 0.561$ ,  $p < .01$ ), indicating that where organisations offer opportunities for participation in learning and development opportunities, managers will perceived a positive development climate. Development climate has a large effect with understanding of development needs ( $r = 0.542$ ,  $p < .01$ ), indicating that managers working in organisations with a positive development climate will also have a better understanding of their career development needs. Understanding of development needs also shows a large effect with extent and nature of learning opportunities ( $r = 0.531$ ,  $p < .01$ ), suggesting that where organisations offer opportunities for participation in learning and development, managers are likely to have a greater understanding of their career development needs.

## **Chapter 5. Discussion, Implications and Conclusions**

### ***5.1 Introduction***

This aim of this chapter is to draw together all the various strands of the research to provide an overview of the findings of the research, its contribution to the literature and the implications these findings have for policy and practice. The chapter will also examine the limitations inherent within the research with a view to providing some suggestions for future research.

Each of the propositions identified in Chapter 2 are revisited to determine if they have been accepted or rejected in view of the findings. Summary tables providing an overview of the findings in relation to participation in CFLD are presented. Each supported hypothesis posited is presented with an overview of the statistical analysis performed and the implications of the findings. In addition, those hypotheses which were rejected are also reviewed as these can often be as important to contributing to our understanding of participation in CFLD.

The findings of the research make a significant contribution to the HRD participation literature and that of managers' career strategies. An analysis of how the current research advances our understanding of participation in CFLD is presented and related back to the initial literature review undertaken at the start of the research project.

The research findings should also provide practical insights for managers and organisations to allow them to develop sound policies and practices to provide opportunities for CFLD. The findings of this research have the potential to guide organisations in the development of learning and development activities that enhance the employability of managers. It also identifies strategies that managers can use to manage their careers through participation in CLFD.

The research is not without its limitations and it is important that those which exist within the research design are examined the research findings understood within this context. Section 5.4 deals with each in detail and highlights the potential problems which may arise as a result.

Finally, the chapter examines the possible future direction of the research and makes a number of suggestions both regarding how to improve the current research design and also potential future developments and advancements.

## ***5.2 Contribution to Literature***

Much of the training and development literature has been cross-sectional in nature, focusing on the antecedents and outcomes of individual training and development sessions or experiences. The nature of development, however, implies an ongoing series of interrelated and interdependent developmental episodes that serve to hone and develop employee knowledge and skills (Baldwin and Magjuka, 1997).

This study address an important area within the field of career development, namely that many career development models and participation models treat professional groupings as homogenous and do not discriminate on the grounds of industry or profession. This understanding lies at the base of this study and provides an important foundation to this work. The tripartite model of manager participation in CFLD makes a significant contribution to the literature.

Also, the study distinguishes between career trajectories, describing the career concepts of boundaryless, protean, and authentic careers. These concepts are developed further to understand how agency interacts with contextual conditions to predict managers' career planning, long-term perspectives, and learning and job-related decisions.

### **5.3 Discussion**

The results of the propositions tested are presented in Table 5.1. Only one proposition was rejected outright with partial support for one more. Six propositions had full support and five propositions had full support after restating the propositions in light of choosing Modified Model 2. One proposition was not tested due to respecification of the original conceptual framework.

The overall research question posed in Chapter 1 was: What factors explain managers' participation in career-focused learning and development?

Within this broad question the study investigated the following sub-questions:

1. What contextual issues influence participation in career-focused learning and development?
2. What impact do individual dispositions, attitudes, knowledge and beliefs have on participation in career-focused learning and development?
3. How do individual human capital characteristics influence participation in career-focused learning and development?
4. What do the findings tell us overall about managers' participation in career-focused learning and development?

The discussion of the sub-questions is framed within three subheadings: Contextual issues; dispositions, knowledge, attitudes and beliefs; and human capital characteristics.

**Table 5.1 Results of Proposition Testing Using SEM**

Proposition		Support			SEM Results
		$\beta$	t-value	Significance	
<b>Micro-level</b>					
Higher levels of educational attainment are positively related to participation in CFLD.		-0.03	-0.43	ns	No support: Higher levels of educational attainment are not significantly related to participation in CFLD.
The amount of job experience is positively related to managerial participation in CFLD.		-0.61	-8.37	p < 0.05	Full support: Job experience is significantly related to managerial participation in CFLD.
Low likelihood of future responsibilities is positively related to participation of managers in CFLD activities.		0.17	2.8	p < 0.05	Full support: Likelihood of future responsibilities is significantly related to participation of managers in CFLD activities.
Time since last promotion is positively related to participation of managers in CFLD activities.		-0.84	-10.34	p < 0.05	Full support: Time since last promotion is significantly related to participation of managers in CFLD activities.
Younger managers will participate in more CFLD activities.	Age	-0.56	-4.92	p < 0.05	Full support: Age and gender are significantly related to participation of managers in CFLD activities.
Male managers will participate in more CFLD activities.	Gender	0.33	5.22	p < 0.05	
<b>Meso-level</b>					
Motivation to learn is positively related to participation of managers in CFLD activities		0.68	13.75	p < 0.05	Full support: Motivation to learn is significantly related to participation of managers in CFLD activities
Career exploration and planning, a positive attitude towards participation, a supportive developmental climate and high perceived of benefits of CFLD are positively related to managers' motivation to learn.					Not tested due to respecification of model in Modified Model 2.
Attitude towards participation in CFLD is positively related to high levels of autonomy, high perceptions of general self-efficacy and task-specific self-efficacy.	Attitude	0.32	6.52	p < 0.05	Restated supported proposition with full support*: <i>Positive attitude towards participation, high levels of autonomy, high perceptions of general self-efficacy and task-specific self-efficacy are significantly related to participation of managers in CFLD activities.</i>
	Autonomy	0.35	6.80	p < 0.05	
	GSE	0.58	11.19	p < 0.05	
	TSSE	0.55	11.03	p < 0.05	
The developmental climate for CFLD is positively related to the existence of social support, low situational constraints and a high understanding of development needs on behalf of the manager.**		0.72	16.03	p < 0.05	Restated supported proposition with full support*: <i>High understanding of development needs on behalf of the manager is significantly related to participation of managers in CFLD activities.</i>
High perceived benefits of participation in CFLD are positively related to motivation to learn.		0.37	6.79	p < 0.05	Restated supported proposition with full support*: <i>High perceived benefits of participation in CFLD are significantly related to participation of managers in CFLD activities.</i>
Career exploration and planning activities by a manager are positively related to motivation to learn.		0.54	10.16	p < 0.05	Restated supported proposition with full support*: <i>Career exploration and planning activities are significantly related to participation of managers in CFLD activities.</i>
Managers in organisations that provide generic rather than company specific training will participate in more CFLD activities.		0.66	14.29	p < 0.05	Full support: Managers in organisations that provide generic rather than company specific training participate in more CFLD activities.
<b>Macro-level</b>					
Managers from large organisations, the ICT sector and US-owned firms, will have more opportunities to participate in CFLD.	Size	0.22	3.66	p < 0.05	Partial support: Organisation size and sector is significantly related to participation in CFLD. Organisational ownership is not significantly related to participation in CFLD.
	Sector	0.10	1.96	p < 0.05	
	Owner	0.05	0.87	ns	
Development climate**		0.64	9.83	p < 0.05	Restated supported proposition with full support*: <i>The developmental climate for CFLD is positively related to participation of managers in CFLD activities.</i>
Barriers to participation and non-job constraints are negatively related to participation by managers in CFLD activities.		-0.35	-6.24	p < 0.05	Full support: Barriers to participation and non-job constraints are significantly related to participation by managers in CFLD activities.

\* Propositions restated due to respecification of model in Modified Model 2.

\*\* Proposition restated and recategorised due to respecification of model in Modified Model 2.

### **5.3.1 Context**

The context variables explained 22% of the variability in participation in CFLD. Five observed variables were examined, of which four were significant.

#### **5.3.1.1 Firm Size**

The study reveals that firm size accounts for significant differences in participation in CFLD with managers working in larger organisations participating in more CFLD activities. Larger firms tend to adapt a blended learning approach and often use a greater mix of methods. Smaller establishments more often rely on the traditional methods and tend to be more conservative in their perception of what constitutes effective learning interventions (Garavan *et al.*, 2008).

The analysis indicates that organisation size explained differences in training and development opportunities. Managers were less likely to participate in voluntary learning and development activities in small and medium sized firms. Managers from larger firms are also more likely to participate in formal education. Managers from larger firms also report significantly higher levels of generic competency rather than specific competency learning and development opportunities.

A possible explanation for these findings is suggested by Garavan *et al.*, (2008) who posits that firm size is a very significant influence on the existence of a strategic approach to training and development. Large establishments are significantly more likely to rank strategic priorities as the key drivers for learning and development. This suggests that in larger organisations learning and development is considered to be an important stakeholder in organisational strategy. Learning and development functions in larger organisations are more likely to have credibility and to have a presence on the business planning team. Larger organisations are also more likely to consider the learning, training and development implications of strategic decisions.

### **5.3.1.2 Firm Sector**

Firm sector accounted for significant differences in participation in CFLD. Managers working in the ICT sector participated in significantly more CFLD activities. The time that the study took place may have particular bearing on this finding. The growth rate of employment in knowledge-intensive industries in Ireland grew significantly faster than the EU average for the period 1997-2002. In 2006, Ireland had the largest proportional share of trade in highly R&D intensive industries among OECD countries. The National Centre for Partnership and Performance (NCPP) (2005) suggest that the growth of knowledge intensive employment would be one of the most important influences impacting upon work in future years, with the skill content of most jobs increasing significantly.

Economic circumstances have an immediate impact on firms which in turn compel employees to upgrade their skills. Research suggests that organisations that compete in ICT sectors adopt new business strategies and invest substantially more in learning and development than organisations in other sections of the labour market (Doray and Arrowsmith, 1997). Ireland's enterprise strategy was centred on the development of internationally traded services, high-value added manufacturing in the ICT sector along with world-class locally traded businesses (National Centre for Partnership and Performance, 2005). This industry was one of the main economic drivers in the Irish economy, and thus managers working in these organisations were more likely to have access to CFLD activities.

### **5.3.1.3 Firm Ownership**

Previous research regarding firm ownership and participation in learning and development has been contradictory and this study found no significant differences according to country of ownership. While there is some evidence indicating that US owned firms operating in Ireland provide significantly more learning and development opportunities than other firms (Garavan and Carbery, 2003), this study suggests that firm ownership is not significant in explaining manager's participation in CFLD.

#### **5.3.1.4 Organisational Barriers and Non-Job Context**

Organisational barriers and non-job constraints are significantly related to participation of managers in CFLD activities. This suggests that the decision to pursue CFLD will impact the manager's personal time and energy. If a manager's non-work context is complex and places demands on mental and emotional resources, this has a negative impact on participation in CFLD activities. Non-work context has a negative impact on career outcomes, including the likelihood of participation in CFLD (O'Driscoll, 1996).

This finding supports the research of McCracken (2004), who carried out an analysis of barriers to participation in learning and development that managers encounter. He found that managers attributed their unwillingness to participate in learning and development activities to primarily extrinsic organisational factors such as time constraints and increasing workloads. To address these barriers, organisations may need to consider the possibility of personalising flexible learning and development packages designed with the manager's personal circumstances and preferences in mind. Time constraints could be addressed through viewing CFLD as a non-discretionary application of time, although secondments and mentoring may be more valid methods of informal learning and development for managers.

#### **5.3.1.5 Developmental Climate**

As a result of the respecification of the model in Modified Model 2, the developmental climate for CFLD explained significant differences in the participation of managers in CFLD activities at the context level. The findings suggest that development climate can be conceptualised as a macro-level organisation construct rather than an individual belief.

The perceived presence of supports and constraints to develop, referred to as the development climate, respectively include lack of monetary resources and equipment; and supervisor or manager encouragement/feedback. Noe and Wilk (1993) found that perceptions of the supportiveness of their work environment influenced their rate of participation in development activities. A supportive situational climate positively

influenced participation with situational constraints negatively influencing intent to participate in the future.

Social support can be characterised as a positive supportive environment where participation in training and development is encouraged, regular feedback is provided regarding development needs, or where employees are encouraged to implement newly acquired skills and knowledge by their supervisors and peers. A supportive environment can positively influence participation (Noe *et al.*, 1997).

In order to foster a supportive developmental climate, Cunningham and Iles (2001) suggest that organisations should be characterised by empowerment, senior management support and a workforce that is engaged in continual skill development. An important element in many analyses of what determines an organisation's developmental climate is the attitude of senior management. Mullen and Lyles (1993, p.35) argue that organisations are essentially large and complex social networks, and that attempts to initiate learning and development activities without the support of senior managers can either "accelerate or block management development efforts".

### **5.3.2 Dispositions, Knowledge, Attitudes and Beliefs**

Dispositions, knowledge, attitude and beliefs variables explained 29% of the variability in participation in CFLD. Nine observed variables were examined, and all were significant.

#### **5.3.2.1 Attitude towards Participation**

The supposition that two characteristics had a mediating influence on attitudes towards participation (autonomy, and self-efficacy) did not hold true. The constructs were found to directly predict CFLD rather than be factors of one another. Attitude towards participation is significantly related to participation of managers in CFLD activities. Therefore, the theory of reasoned action (TRA) and self-determination theory (SDT) may not be suitable tenets to understand why self-directed managers engage in CFLD. The TRA (Fishbein and Ajzen, 1975) has been tested and supported in a variety of contexts

for over 30 years, including employee development, and provides a sound theoretical basis for understanding factors that influence individuals' decisions to engage or not engage in a given behaviour. However, the specific structure of the TRA was not fully supported in this study. The modifications made in this study may need to be re-evaluated in future research. However, the significance of the observed variables within the dispositions, knowledge, attitudes and beliefs construct provides clear evidence of their importance in explaining participation in CFLD activities.

### **5.3.2.2 Perception of the Extent and Nature of Learning Opportunities**

Managers in organisations that provide generic rather than company specific training participate in significantly more CFLD activities. This confirms the findings of Lynch (1992), who identified a premium on generic portable skills, in that specific on-the-job training raises wages at the current employer but not with future employers, whereas more general training raises wages more with future employers than with the current employer. Loewenstein and Spletzer (1999) also argue that training increases future wages more for those who switch employers suggesting that there is a premium associated with work flexibility and adjustment. Likewise, human capital theory advocates that individuals should broaden their skill base, invest time and energy in their personal development, and focus on competencies with high portability (Benson, 2006). The acquisition of generic skills allows managers to pursue career concepts such as the boundaryless and protean career with increasing success. Hurtz and Williams (2009) suggest that anticipated availability is an important dimension of behavioural control. This focuses on the individual's belief that learning and development activities will be made available if he/she desires to participate.

### **5.3.2.3 Career Exploration and Planning**

Career exploration and planning activities are significantly related to participation of managers in CFLD activities. Managers who participate in career exploration and planning activities are likely to have a greater knowledge of learning opportunities. While Colquitt and Simmering (1998) found that career exploration predicted motivation

to learn, they noted that studies measure career exploration in different contexts. In this study it directly predicted CFLD. Career exploration and planning affects subsequent career outcomes including job offers, job expectations and work motivation (Stumpf and Hartman, 1984). Therefore, managers may need to engage in the development of positive attitudes towards development, develop clear work preferences, and understand the utility of exploration behaviours, perhaps through participation in different learning and development activities to increase awareness of the different options available.

#### **5.3.2.4 Autonomy**

The study reveals that autonomy is significantly related to participation of managers in CFLD activities. This has particular significance for career development. The boundaryless career conceptualises autonomy from a psychological perspective and postulates freedom to move across boundaries, between jobs, functions and skill sets. It places particular emphasis on the perception of the capacity to make successful transitions. Protean and authentic career concepts underpin this self-directed approach to learning and the idea that it is the manager who drives the career (Hall, 2002). Autonomy facilitates the adoption of a mindset which highlights freedom, self-direction and the selection of career and learning opportunities which are based on the manager's personal values.

#### **5.3.2.5 General Self-Efficacy**

General self-efficacy is significantly related to participation of managers in CFLD activities. This suggests that managers who have a strong perception of their capabilities and confidence to perform a role successfully will participate in more CFLD.

Self-efficacy may however be moderated by outcome expectations. Outcome expectations of participation in CLFD, such as rewards, will not impact participation behaviour if general self-efficacy is low. However, general self-efficacy will not effect behaviour (including performance) if an individual's outcome expectations are not perceived as positive. Napier and Latham (1986) found that managers had high self-

efficacy and that they could conduct effective performance reviews for their subordinates. However, they choose not to conduct such reviews because the outcome they expected for doing so was nothing. Managers perceived that employees who received a positive appraisal would be treated no differently by management from those that perceived a negative approval. This suggests, in the context of learning and development participation, that the extent to which individuals mobilise their efforts will be determined by the outcomes and their general self-efficacy that they can master the content of the learning and development programme.

#### **5.3.2.6 Task-Specific Self-Efficacy**

The study reveals that task-specific self-efficacy is significantly related to participation of managers in CFLD activities. This suggests that managers who have a strong perception of their confidence and capability to participate in different learning activities will participate in more CFLD.

Maurer (2001) suggests that task-specific self-efficacy is the most valid measurement of self-efficacy. Managers who possess the belief that they are capable of mastering particular learning and development content are more likely to participate in CFLD. Task-specific self-efficacy also influences intention to participate in training (Colquitt and Simmering, 2000) and this study adds to the body of knowledge by indicating that it also explains actual participation in learning and development.

#### **5.3.2.7 Motivation to Learn**

Motivation to learn is the strongest variable accounting for significant differences in participation in CFLD at the meso-level, and the third strongest in the study. As originally proposed, this variable is directly related to participation in CFLD. The SEM results however, suggest that motivation to learn is not mediated by other variables in the model and is distinct from the proposed antecedents.

Motivation to learn will be sustained by the managers' continued need for career-related outcomes. It would be expected that motivation to learn may be influenced by beliefs concerning effort-performance and performance-outcome relationships, career/job attitudes, and reactions to skill needs assessment. Managers who are enthusiastic about attending the learning and development activities and express a desire to learn the content of the program are likely to acquire more knowledge and skills and demonstrate greater behaviour change and performance improvement than those not motivated to learn.

It may be necessary for career workshops to be provided by the organisation in order to provide managers with a clearer picture regarding career paths and the prerequisite skills for movement throughout the organisation. These activities may stimulate exploratory-type behaviours and improve managers' preparedness for learning and development by increasing motivation to learn. It may be necessary to determine the types of career planning activities (e.g., self-assessments of career goals, discussions of career paths within the organisation), if any, enhance CFLD effectiveness. Also, the appropriate timing of these activities in relation to training program attendance needs to be determined. Programmes offered in advance may give participants the opportunity to complete a more detailed self-assessment of their skills and career interests which may maximise motivation to learn (Noe, 1986).

### **5.3.2.8 Perceived Benefits**

Managers' perceived benefits of participation in CFLD are significantly related to motivation to learn. These benefits may be extrinsic or intrinsic in nature. Extrinsic benefits including salary, promotion and achievement of career objectives were the most significant predictors of perceived benefits of participation in CFLD.

Certain organisation cultures are characterised by competitive behaviours. These behaviours have a collective character and differ from the benefit expectations of individuals. Achievement focused cultures tap into the autonomy orientation of individuals. Ryan and Deci (2000) argue that motivation is inferred by the individual to

be intrinsic. High achievement oriented individuals will attend to cues in the culture that suggest “free choice”. Organisational reward systems may mandate stretch goals and the culture will base rewards on performance. Latham and Locke (2008) argue that where an organisation’s culture is dynamic, this will contribute to greater goal setting. Similarly, Drach-Zahavy and Erez (2002) found that performance will decrease when goals are framed in terms of avoiding a negative outcome rather than a positive one. In the context of learning and development, the primary achievement related activity focuses on skill development, certification, and enhancement of opportunities for career advancement. Where achievement and benefit norms within the culture are strong then it will have may have a positive impact on individual decisions to participate in CFLD.

### **5.3.2.9 Understanding of Development Needs**

The study reveals that understanding of development needs is significantly related to participation of managers in CFLD activities and is the stronger overall predictor variable in the meso-level. Managers who have a clear understanding of their development needs will be able to identify the types of CFLD activities that best suit their specific needs. This may be facilitated by communicating to individuals that development activities are valuable experiences and helping them to develop their skills; senior managers and peers may also have a positive influence on learning attitudes, their perceptions regarding the benefits that can be obtained from participation in development activities, and their understanding of skill strengths and weaknesses.

Research suggests that where individuals perceive that situational constraints exist in their work environment, the less positive their attitudes toward learning, the less beneficial they will view development activities, and the greater the likelihood that they will have an incomplete understanding of their development needs (Noe and Wilk, 1993). These unfavourable attitudes and perceptions will result in lower levels of participation in development activities.

### **5.3.3 Human Capital Characteristics**

Human capital characteristics variables explained only 3% of the variability in participation in CFLD. However, five of the six observed variables were significant.

#### **5.3.3.1 Gender**

Gender explains significant differences in the participation of managers in CFLD activities. However the direction of the relationship was in the opposition direction of the original proposition and is contrary to the majority of the participation literature. Overall, gender presents a number of complications in explaining participation in CFLD. Females may be less motivated to attend formal workplace training events (Leuven, 1997), however it has been suggested that this may be related to organisational discriminatory practices.

The finding that women are more likely to participate in CFLD than men is significant and suggests that learning and development activities with a specific career focus have an explicit attraction to female managers. While females participate in less overall training and development (Cleveland, 2002), this study suggests that they are more likely to participate in voluntary learning and development activities and participate in formal education. Perhaps in recognition of the difficulties facing female managers who pursue off-ramp or kaleidoscope careers, these individuals seek out participation activities themselves. Similarly, because of the likelihood of gender-based discrimination (Booth, 1991), females may be participating in formal education to mitigate for the lack of opportunities in the workplace.

#### **5.3.3.1 Age**

Age is significantly related to participation of managers in CFLD activities. The negative direction of the relationship confirms the findings of Cleveland and Shore (1992) who also found a negative relationship between age and participation in learning and development.

The age relationship is complicated by issues related to age stereotypes and discriminatory organisational learning and development participation practices. Individuals of different ages may have different work-related and personal growth expectations. Younger employees are more motivated to engage in development activities whereas older employees may have doubts concerning their self-efficacy to handle training material. In contrast, Woodley and McIntosh (1979) and Holland (1980) found evidence that more mature learners were more likely to engage in independent and self-directed learning activities.

### **5.3.3.2 Education Attainment**

Level of educational attainment was not significantly related to participation in CFLD, therefore there is no support for this proposition. This finding may be unique to the managerial study sample. The Matthias principle (“to those that hath shall be given”) has had a significant effect on learning (McCracken and Winterton, 2003). There is evidence that those who have previously been engaged in learning are significantly more likely to be current participants than those who have not previously been (McGivney, 1999). Managers and related professionals tend to enjoy a higher level of participation in learning activities at work than their subordinates. Bradley *et al.* (2000) have argued that a skill polarisation is developing with those already skilled gaining more opportunities for training and development with fewer opportunities open to semi-skilled and unskilled workers. Learners tend to be younger individuals; in non-manual occupations; have stayed in full-time education longer; and have higher educational qualifications (Beinart and Smith, 1998).

### **5.3.3.3 Future Responsibilities**

Likelihood of taking on future responsibilities is significantly related to participation of managers in CFLD activities. This finding suggests that managers engage in self-directed

preparatory activities to ease the 'onboarding' process when faced with the likelihood of taking on more responsibilities and to prevent career plateau.

Inaccurate perceptions of abilities and past performance influence this type of career planning activity (Feldman and Weitz, 1986). Managers may receive very little feedback, inconsistent feedback, or feedback based on unreliable or invalid performance appraisal devices (Latham and Wexley, 1981). Managers may also misconstrue the feedback they do receive (Ross, 1977), particularly if it is negative. As a result, managers may stay in their jobs or organisations longer than their performance warrants; they might not pick up whatever subtle social cues do exist that no future movement is likely or that they should exit gracefully.

#### **5.3.3.4 Job Experience**

Job experience is significantly related to managerial participation in CFLD. However the data revealed the relationship to be in the opposite direction to the original proposition. The study found an inverse relationship between job experience and participation in CFLD suggesting that the more experience a manager has, the less likely they are to participate in CFLD.

One interpretation of this finding could be related to acquisition of job knowledge. Schmidt *et al.* (1986) found that job experience has a significant impact on the acquisition of knowledge. Therefore managers with relatively greater amounts of job experience may facilitate skill acquisition and foster CFLD through more informal methods of learning and development. A more qualitative approach may be appropriate to gain further insights into this finding.

#### **5.3.3.5 Time since Promotion**

Time since last promotion is significantly related to participation of managers in CFLD activities and displays the strongest relationship with CFLD in the study. Related to the desire to participate in CFLD for perceived extrinsic benefits, increasing time without a

promotion expedites participation in CFLD in order to achieve promotion, or alternatively, to develop competencies that will be valued in the external labour market. This variable also has a strong correlation with age, indicating that older managers who go longer periods without a promotion participate in significantly more CFLD activities.

#### ***5.4 Limitations of Study***

Although this study has suggested a number of important theoretical and practical findings, some limitations should be noted. Methodologically, the sample was restricted by the number of participants who did not complete the online questionnaire. To help avoid this potential problem, it may be advisable for future studies to use a shorter survey to help increase the response rate.

Method bias is also a concern, given that a variety of constructs were measured solely in a self-report survey. Such effects could artificially inflate relationships among variables. One fact that partially mitigates this concern is the finding of near-zero correlations among some variables that are theoretically unrelated.

Another potential limitation of the framework concerns the demographic and human capital characteristics. The extant literature indicates that under-represented group members of all types (gays and lesbians, people with disabilities, and those who are obese, in addition to women, lower SES, and “non-White,” ethnically diverse employees) typically have fewer opportunities to participate in learning and development activities than those in the majority in any system, but the propositions examined in this study do not account for “minority-run” organisations (i.e. women-owned businesses). If the issue for non-participation in CFLD is discrimination, the propositions examined might be expected in white, male dominated systems, but not necessarily in other organisations. However the unit of analysis in this study is the individual, not the organisation.

Another limitation of the research is that it may reflect a predominant bias towards managers in US and European countries. The model may have specific applicability

towards to a Western mindset, in that it includes factors such as autonomy that play out differently depending on cultural values. If the intent is to offer a model with multicultural utility, many of the variables may need to be re-considered in this context.

### ***5.5 Implications for Practice***

The contribution of the research is primarily conceptual. The model explaining participation of managers in CFLD has significant explanatory power. Variables included in the model stem from (1) the micro-level, which includes human resource capital such as education, job experience, and likelihood of future responsibilities; (2) the meso-level, which includes personal characteristics, such as preferences, desires and other dispositions such as autonomy, attitudes to participation, understanding of development needs, and self-efficacy; and (3) the macro-level, which covers contextual factors.

The organisation is important in mediating a managers' self-direction. The initial belief that CFLD was an entirely individually driven concept was not exclusively true. The finding that macro-level contextual factors explain significant variance in participation in CFLD suggests that the organisation plays a major role in regulating participation in CFLD. Barrett and Beeson (2002) identify specific aspects of organisation culture, including entrepreneurial risk taking environments, feedback rich cultures, and continuous improvement orientations that influence an organisations' desire to offer career development opportunities to managers. This places the onus on organisations to create realistic expectations as to what they can, and cannot, do to further an individual's career (Stringer, 2008).

Strategic reorientations and accompanying needs for large-scale organisational changes heighten the need for development activities that focus on leadership skills (Conger and Xin, 2000). Many companies in the later decades of the 20th century discovered that their managers tended to be stronger in management skills than in leadership skills (Kotter, 1988). For example, they were often better at planning and budgeting than strategic

vision. They were effective at day-today problem solving, providing policies, and creating systems to monitor performance, but were weak at communicating, motivating, and inspiring. In addition, a faster paced environment demanded that strategic and tactical decision making be undertaken by executives beyond the CEO. The need for distributed leadership will become paramount and an increasing number of executive programs focus on leadership development as a central activity (Conger and Xin, 2000).

Organisations are presented with a potential dilemma, however. Loewenstein and Spletzer (1999) found that the majority of learning and development initiatives provided by organisations represent specific competency development initiatives. Lynch (1991) similarly found that managers view formal organisation-based learning interventions as highly firm-specific. This suggests that managers are likely to view organisation provided programmes as significantly less marketable than those provided in other ways. This raises the question of whether organisations should provide formal learning and development activities that contribute to the development of generic competencies. Craig and Bouchikhi (2002) suggest that organisations may have little choice in this matter. They suggest that for organisations that cannot offer job security, employability in practice means that they will have to finance learning and development activities that guarantee the managers' skills and portability in the workplace (Martin and Butler, 2000).

The various career concepts identified in this study provide organisations with challenges to develop different types of competencies and provide different types of career and development opportunities. For example, how effectively can an organisation manage to sustain two or more career concepts simultaneously? It is posited that it will be difficult to have a multiplicity of career concepts in one organisation; however it may be essential if they are to retain the best managers, and also develop managers for employability purposes. It challenges organisations to offer a mix of development strategies that focus on career issues. Organisations need to recognise the value of learning experiences to the individual and construct conditions that enable and encourage self-direction. These may include career contracts and a 'cafeteria' approach which incorporates elements that can

be individualised. They need an ongoing process of assessing managers' career motives and concepts.

The individual manager has to consider the extent to which he or she practices agency to improve their careers (Inkson, 2007). It has been suggested that the traditional organisational career is dead and the individual is required to exert agency over their career by independent self-assertion and control (Alvarez, 2000; Marshall, 1989). However, given that the authentic career is so dynamic and fluid is it possible for the manager to plan their career management strategy in advance? Is it possible to plan a contemporary career with any certain degree? Arthur *et al.* (2005) argue that there exists a lacuna in the analysis of the boundaryless career in the examination of career success. Future research is required to have an understanding of career success which is more subjective in nature.

The research highlights the important role of the manager as active agent. The notion of self-directed behaviour brings with it significant responsibilities. Managers will find themselves becoming less competitive unless they are open minded and make choices for learning that reflect their personal values and career trajectories. They may have to finance some of their development, to participate in more development activities outside of work and make difficult choices where there is a conflict between portable and specific competency development.

## **5.6 Implications for Research**

The findings raise important questions for further research. The conceptual framework and subsequent testing of the model is based on the premise that managers will pursue CFLD activities for career benefits. Future research should address whether this assumption is true or false. The concept of CFLD may also need to be expanded to include informal learning and development activities. Current literature suggests that informal learning activities are growing in value, because individuals are taking more control of their careers and professional development and many organisations cannot

afford to field a variety of formal programs that may no longer fit the varied needs of their employees. It may be useful to attempt to operationalise and include informal learning and development activities in future, broader conceptualisations of CFLD.

A treatment of CFLD including informal activities could be extended further to predict the antecedents of boundaryless, protean, and authentic careers. What factors predict bounded careers, or development within the same career trajectory? What are the roles of agency and context in influencing career paths and learning experiences along the way? What distinguishes between preparatory learning (e.g., formal education, workshops, on-line training, self-directed reading, etc.) and exposure to job challenges that people use as levers for learning and career advancement? From an organisational perspective, it may be useful to address to what extent do organisations recognise the value of learning experiences to the individual and construct conditions that enable and indeed encourage self-direction?

The model may benefit from multiple measurements over time in order to gain a more accurate picture of the factors that explain participation in CFLD. A one-time measure precludes any measurement of change in the various variables and prevents the drawing of causal inferences. Hurtz and Williams (2009) and Garofano and Salas (2005) have espoused the need for modelling the continuous nature of development over time. Such a treatment could explore how experiences, interests, abilities, and education evolve, the role of self-determination, and the influence of chance, opportunities, barriers, and challenges.

The measurement of context may be best achieved through the use of qualitative methodologies. Context is difficult to explore and understand. In order to achieve a deeper understanding of both the nature and impact of context, researchers will need to think creatively about how best to combine data collection methods and ensure that the complexity of context is effectively captured. Future researchers may want to consider the use of detailed observational studies that use open coding techniques and subsequently make theoretically informed interpretations. How best to integrate a variety

of quantitative and qualitative measures to understand antecedents of participation for various forms of CFLD may need to be considered. This study looks at CFLD from individual level rather than organisational level outcomes, however it is possible that investment in this type of development may have payoffs for the organisation. This may require a multilevel methodological approach to incorporate organisational- and individual-level variables. A multilevel modelling research design can be problematic to implement (Ferris *et al.*, 1998) but it allows the researcher to move from a purely individualistic to a more comprehensive analysis of complex, contextual issues (Goldstein, 2003). Hales (1986) points out that it is difficult to study the behaviour of managers and it is sometimes difficult to separate differences that stem from contextual factors and those that are related to characteristics of the individual.

## **5.7 Conclusion**

The purpose of this study has been to provide a framework to explain why managers participate in CFLD. A managerial focus was adopted because there is evidence that roles and careers of managers have undergone significant changes in recent years (Tengblad, 2006). We are in the post-bureaucracy era which is characterised by flexible and non-hierarchical organisations built on shared values of dialogue and trust. This has had a profound impact on the way managers perform their work, manage their career, and the value they place on learning and development. The new role of the manager is to be a facilitator and partner. This role is less structured, managers require more discretion, tasks are less clear and they have increasingly to cope with instability and change. Manager's careers are likewise more complex. They no longer follow a traditional career model. Instead managers are expected to be self-directed and to pursue careers that are increasingly fragmented, non-linear and which involve numerous career changes. This changing work and career context places a strong imperative on managers to participate in CFLD.

CFLD was defined as voluntary, self-directed activities that are formal in nature, are ongoing and which focus on the development of competencies that port well to other

contexts. This definition excluded on-the-job development and development activities mandated by the organisation. CFLD poses major challenges for the manager including the need to be motivated to participate in learning and to possess the self-confidence to learn. Since contemporary careers are more boundaryless, protean and authentic, leveraging CFLD becomes more important. We have witnessed a shift from position-based power to individual-based learning. This concept of CFLD draws from lifelong learning concepts but restricts its focus to learning and development that addresses career issues and develops generic competencies.

The research model recognises self-regulating and contextual forces that influence managers' behaviour. The three-level model includes individual experiences (micro-level) that determine degree of human capital managers bring to their jobs and careers, individual characteristics (meso-level) that influence motivation to learn, and social/societal and organisational characteristics (macro-level) that comprise context. The study describes the variables under each of these levels and how they influence participation CFLD, noting at the outset that careers can be boundaryless, protean, and/or authentic in character.

The study utilised a multi-level framework which sought to reveal the potential interaction between agency and context. The need for multi-level framework is recognised within the field of HRD. Klein *et al.* (1999), for example, suggest that multi-level models have the potential to provide a “deeper and richer portrait” of the factors that explain behaviour in organisations (p. 246). Multi-level models acknowledge the influence of context and provide the basis to make explicit links between a variety of constructs and concepts.

In summary, the study has implications for HRD, management and psychology fields. It potentially provides important insights into a new concept of career development. Fundamentally, it addresses a lacuna in the literature on the factors that affect managers' participation in career-focused learning and development.

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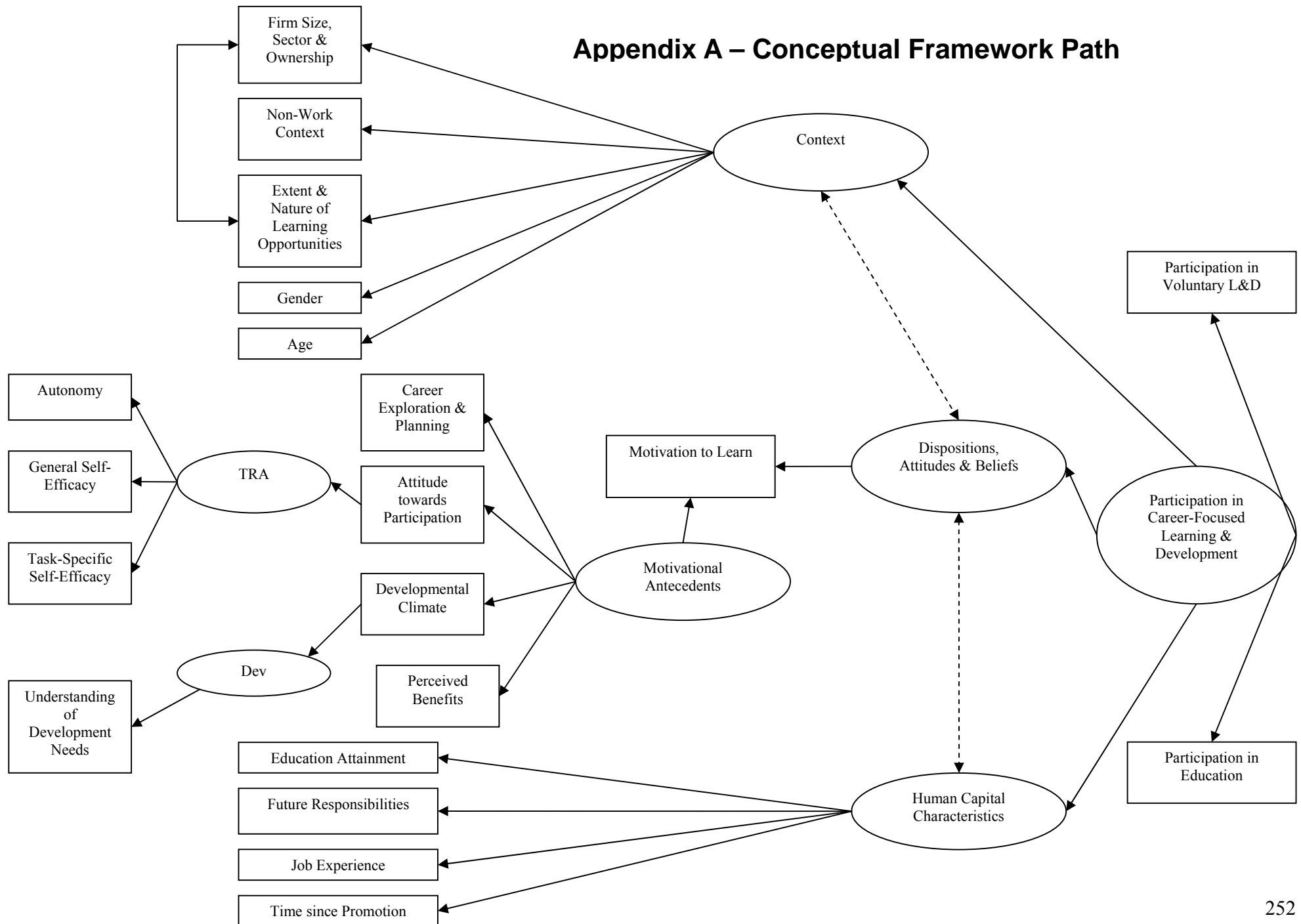
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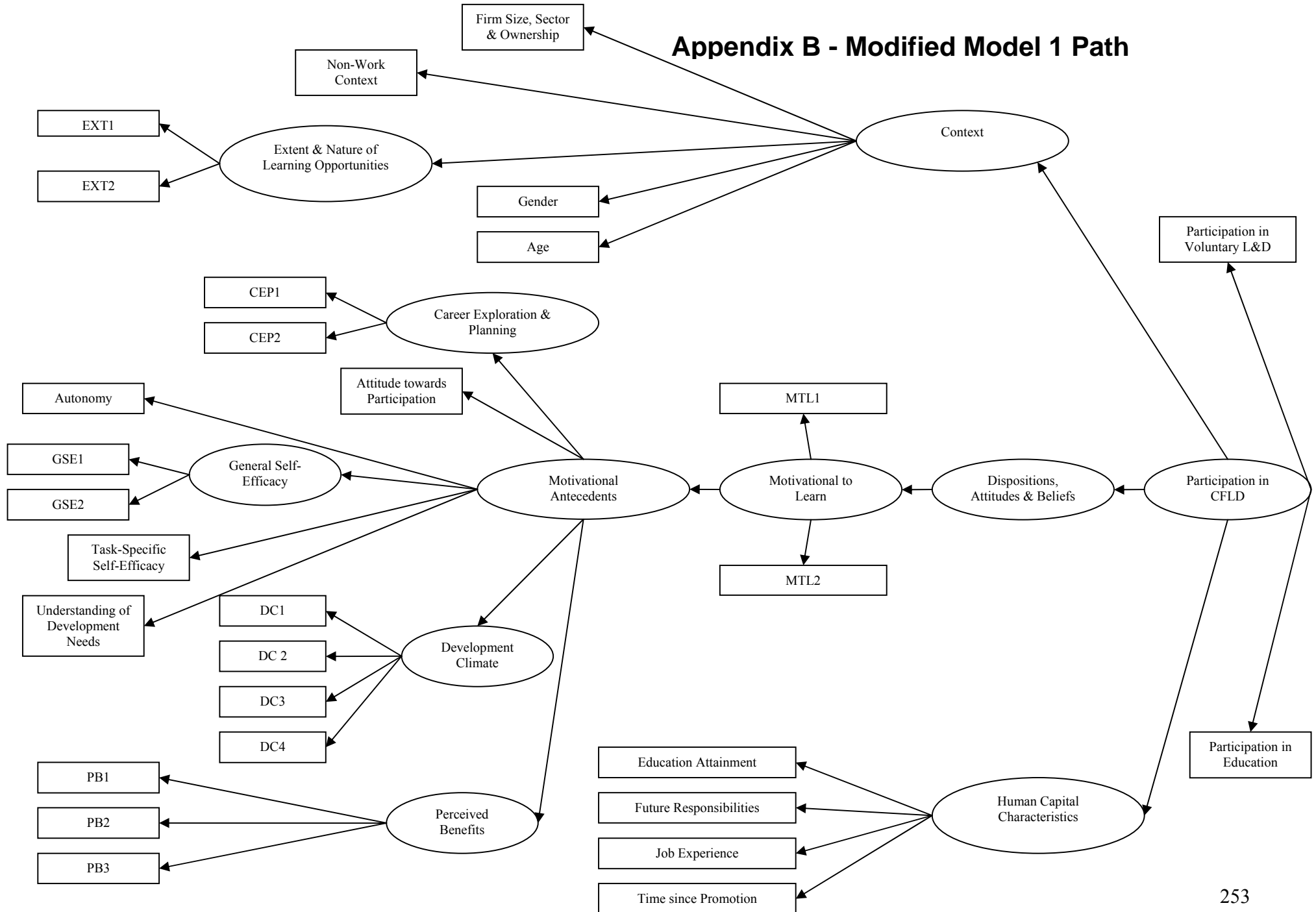
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## Appendix A – Conceptual Framework Path



## Appendix B - Modified Model 1 Path



## Appendix C - Cover Letter

May 2006

Dear «Title» «Surname»

Subject: Participation in Learning and Development research

The University of Limerick is currently undertaking a study on manager attitudes and motivations to participate in learning and development activities.

In 2003 we carried out the first study in the Republic of Ireland to investigate the perceptions of learners concerning training and development opportunities and learning characteristics in the workplace. We had 742 respondents to that survey and are seeking to significantly improve upon the response rate for this survey.

We would value your honest opinions on the matters that are included in this questionnaire. **All of the information you provide is confidential.** We will make no reference to individual questionnaire responses in our analysis.

We would be grateful if you could complete the questionnaire by the 22<sup>nd</sup> May 2006 and return it to us in the enclosed stamped addressed envelope.

We would be more than happy to discuss this research further or to explain in more detail the research focus. If you have any queries at all, please don't hesitate to contact Ronan Carbery on 061-202666 or alternatively by email at [Ronan.Carbery@ul.ie](mailto:Ronan.Carbery@ul.ie).

Thank you for your cooperation,

Yours sincerely



Dr. Thomas N. Garavan



Ronan Carbery

## Appendix D - Questionnaire

### Who Learns at Work?

The purpose of this survey is to find out how you, the learner, think about the learning and development you participated in the past twelve months. We would like to find out your views on the amount of training you received, how successful that training was, your perceptions of different types of learning, your motivation to learn, and whether you are satisfied with your learning and development activities.

We define learning and development for the purposes of this survey, as ‘any form of voluntary planned instruction or tuition, whether it was carried out in the workplace or elsewhere, which was provided by your employer or by yourself, with the aim of helping you to do your job better and/or furthering your career’.

## Section 1: Amount of Learning and Development

The following set of questions asks you to provide an indication of your participation in and evaluation of learning and development activities conducted by your current employer. That is, consider both in-house and externally offered workshops and seminars.

- Q.1 How many professional and personal learning and development events or management programmes have you attended in the past year on a voluntary basis? (Tick as appropriate)

a)	None
b)	1
c)	2
d)	3
e)	4
f)	5
g)	6 or more

- Q.2 Are you currently taking courses at a college or university in order to obtain a degree, diploma or certificate?

Yes	
No	

- Q.3 Are you currently taking courses at a college or university not related to obtaining a degree, diploma or certificate?

Yes	
No	

## Section 2: Motivation to Participate

- Q.4 Please indicate your level of agreement with the following statements. (Circle as appropriate).

	Disagree		Agree		
a) I try to learn as much as I can from training programmes	1	2	3	4	5
b) I believe I tend to learn more from training programmes than most people	1	2	3	4	5
c) When I'm involved in training sessions and I can't understand something, I get so frustrated I stop trying to learn	1	2	3	4	5
d) I am usually motivated to learn the skills emphasised in training programmes	1	2	3	4	5
e) I would like to improve my skills	1	2	3	4	5
f) I am willing to exert considerable effort in training programmes in order to improve my skills	1	2	3	4	5
g) I believe I can improve my skills by participating in training programmes	1	2	3	4	5
h) I believe I can learn the material presented in most training programmes	1	2	3	4	5
i) My present job performance satisfies my personal expectations and goals	1	2	3	4	5
j) Participation in training programmes is of little use to me because I have all the knowledge and skill I need to successfully perform my job	1	2	3	4	5
k) I am willing to invest effort to improve skills and competencies	1	2	3	4	5

related to my current job					
l) I am willing to invest effort to improve skills and competencies just for the sake of learning	1	2	3	4	5
m) I am willing to invest effort to improve skills and competencies in order to prepare myself for a promotion	1	2	3	4	5
n) I want to try and change habits and routines that interfere with my work effectiveness	1	2	3	4	5
o) I am willing to invest effort on my personal time to develop technical skills related to my job	1	2	3	4	5
p) I am willing to invest effort on my personal time to develop my interpersonal skills	1	2	3	4	5

Q.5 Please indicate your level of agreement with the following statements. (Circle as appropriate).

	Disagree			Agree	
a) My past experiences and accomplishments increase my confidence that I will be able to perform successfully in my job	1	2	3	4	5
b) I feel confident that my skills and abilities equal or exceed those of my colleagues	1	2	3	4	5
c) I am confident that I can do well in training courses that deal with information (e.g. facts, concepts or ideas)	1	2	3	4	5
d) I am confident that I can do well in training courses that deal with people skills (e.g. teamwork, supervision, coaching, negotiating)	1	2	3	4	5
e) I am confident that I can do well in training courses that deal with things (e.g. tool operation, using tools or body to move objects)	1	2	3	4	5
f) My job is within the scope of my abilities	1	2	3	4	5
g) In general, I am usually a good judge of my own capabilities	1	2	3	4	5
h) In general, other people that know me well perceive me as being a capable person	1	2	3	4	5
i) My estimates of how well I can deal with a new situation are not usually very accurate	1	2	3	4	5
j) I expect to be able to do things that need to be done with future events	1	2	3	4	5
k) When I tackle a problem I usually can't tell in advance how well I will do at it	1	2	3	4	5
l) If I had a job which involved many different tasks, some easy and some difficult, I would probably do very well at almost all of them	1	2	3	4	5
m) When I take training courses in unfamiliar areas, I expect to be able to do well in them	1	2	3	4	5
n) If I were offered a job in a field which I didn't know much about, I think I could learn to do the job well	1	2	3	4	5
o) I can generally do the work necessary to accomplish my goals in training courses or seminars	1	2	3	4	5
p) When faced with an unfamiliar problem in a training session, I expect to be able to solve it.	1	2	3	4	5
q) I am computer literate and 'comfortable on the net'	1	2	3	4	5

Q.6 Please indicate your level of agreement with the following statements. (Circle as appropriate).

	Disagree			Agree	
a) In general I value education	1	2	3	4	5
b) I am fearful of classroom situations	1	2	3	4	5
c) I think the best way to learn something new is by trial and error on the job, as opposed to attending a formal training programme	1	2	3	4	5

d) I like training activities that deal with information (e.g. facts concepts or ideas)	1	2	3	4	5
e) I like training activities that deal with people skills (e.g. teamwork, supervision, negotiations)	1	2	3	4	5
f) I like training activities that deal with things (e.g. tool operation, using tools or body to move objects)	1	2	3	4	5
g) I am confident that I have a good idea of my training needs	1	2	3	4	5
h) I usually understand why I am asked to attend training programmes in this company	1	2	3	4	5
i) I agree with my supervisor's assessment of my strengths and weaknesses	1	2	3	4	5
j) The performance appraisal information I receive in this company is valuable for my personal development	1	2	3	4	5
k) In this company, I have freedom to choose the training programme I want to attend.	1	2	3	4	5
l) Past training programmes I have attended in this organisation have focused on the skills and knowledge that I needed to effectively perform my job	1	2	3	4	5
m) I understand how training can help me reach my career goals	1	2	3	4	5
n) I have thought about how my past educational and work experience relate to my career goals	1	2	3	4	5
o) I have initiated conversations concerning my career plans with my manager	1	2	3	4	5
p) I have sought information on my specific areas of career interest from friends, colleagues, or company career sources.	1	2	3	4	5
q) At this time I have definite career goals in mind	1	2	3	4	5
r) I frequently change my career objectives	1	2	3	4	5
s) I am aware of what knowledge and skills I need to obtain in order to achieve my career goals	1	2	3	4	5
t) I have a strategy for achieving my career goals	1	2	3	4	5
u) My manager is aware of my career goals	1	2	3	4	5
v) The positions or jobs that I can expect to hold in my current place of employment have been clearly communicated to me	1	2	3	4	5
w) In my current place of employment, I have a good understanding of the different career paths I can choose to follow	1	2	3	4	5
x) I usually participate in training programmes because my supervisor expects me to	1	2	3	4	5
y) My participation in training programmes is usually based on expectations or norms regarding what employees with my seniority and position should sign up for	1	2	3	4	5
z) I feel that participation in training activities is totally voluntary – I take courses based on my needs and interests	1	2	3	4	5

Q.7 Reasons to take up training and development. Please rank the following reasons for your participation in training and development during the past year. (Circle as appropriate).

	Disagree		Agree		
a) To increase my job performance	1	2	3	4	5
b) To enhance my competencies	1	2	3	4	5
c) To make me more employable in the external labour market	1	2	3	4	5
d) To avail of promotion opportunities within the company	1	2	3	4	5
e) To change jobs	1	2	3	4	5
f) To enhance myself as a person	1	2	3	4	5
g) To contribute to the success of my employer	1	2	3	4	5

h) Other (please specify)	1	2	3	4	5
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Q.8 Which of the following were barriers to participation in learning and development activities for you in the past year? (Tick as appropriate).

a) I am too busy at work	
b) I do not think that the type of training provided is relevant to my job	
c) Family/personal commitments outside work prevent me from participating	
d) I do not feel sufficiently motivated to attend training	
e) My manager stopped me taking the training	
f) There is an insufficient culture of learning at the workplace	
g) There is a lack of suitably skilled trainers	
h) My career is going nowhere at this time	
i) I am over-trained for my current position	
j) There are few training opportunities in this organisation	
k) The quality of training provided is very poor	

### Section 3: Benefits of Learning and Development

Q.9 Please indicate your feelings about each of these statements concerning the potential benefits you can obtain by participating in learning and development activities. (Circle as appropriate).

Participating in learning and development activities:	Disagree			Agree	
a) will help my personal development	1	2	3	4	5
b) will increase my chances of getting a promotion	1	2	3	4	5
c) will help me obtain a salary increase	1	2	3	4	5
d) will help me perform my job better	1	2	3	4	5
e) will result in having to do more work without being rewarded for it	1	2	3	4	5
f) will result in more opportunities to pursue different career paths	1	2	3	4	5
g) will lead to more respect from my peers	1	2	3	4	5
h) gives me a needed break from my job	1	2	3	4	5
i) will help me get along better with my manager	1	2	3	4	5
j) will help me get along better with my peers	1	2	3	4	5
k) will give me a better idea of the career path I want to pursue	1	2	3	4	5
l) will help me reach my career objectives	1	2	3	4	5
m) will help me network with other employees	1	2	3	4	5
n) will help me stay up-to-date on new processes and products, or procedures related to my job	1	2	3	4	5

Q.10 The next set of statements relate to how your current work situation, supervisors, and co-workers may influence your attendance at learning and development activities and use of skills and knowledge acquired. (Circle as appropriate).

	Disagree			Agree	
a) I don't have time in my job to try and strengthen my skill weaknesses	1	2	3	4	5
b) I can count on my co-workers to provide me with help and service needed to complete my job assignments	1	2	3	4	5
c) My workload tends to make it difficult to try and use new knowledge and skills	1	2	3	4	5
d) It is likely that the specific tools, equipment, or machinery needed to	1	2	3	4	5

use the skills or knowledge emphasised in training programmes in my work will be provided by my employer					
e) Insufficient materials or supplies will likely inhibit the use of training content in my work	1	2	3	4	5
f) Processes, rules, and methods change so quickly in my place of employment that it is not worthwhile acquiring new knowledge or skills	1	2	3	4	5
g) It is unreasonable to try and apply newly acquired skills or knowledge in my job because if I fail at something new it will affect my performance evaluation/appraisal	1	2	3	4	5
h) I feel comfortable discussing my skill weaknesses with my manager	1	2	3	4	5
i) My manager can be counted on to provide me with specific feedback regarding how well I am performing my job	1	2	3	4	5
j) Co-workers can be counted on to help me develop the skills emphasised in training programmes	1	2	3	4	5
k) My manager can be counted on to help me develop the skills emphasised in training programmes	1	2	3	4	5
l) In general, my co-workers view training as a waste of time	1	2	3	4	5
m) My manager is supportive of my efforts to acquire new knowledge and skills	1	2	3	4	5
n) My manager is usually willing to discuss any problems I am having in trying to use new knowledge or skills in my work	1	2	3	4	5
o) My employer values development of new skills or acquisition of new knowledge	1	2	3	4	5
p) When I make a mistake, my manager usually treats it as a learning experience that can prevent failure and improve performance in the future	1	2	3	4	5
q) I can expect my manager to assign me to special projects requiring use of the skills and knowledge emphasised in training	1	2	3	4	5
r) It will be difficult for me to try and work on improving my skills because of my relations with my co-workers	1	2	3	4	5
s) My manager shares information with me about problems or trends in the company that can influence my career plans	1	2	3	4	5
t) My co-workers tend to resist my efforts to apply new knowledge or skills on the job	1	2	3	4	5
u) My manager enthusiastically supports my participation in training programmes	1	2	3	4	5
v) In the past, my manager has helped me understand how to perform my job more effectively	1	2	3	4	5
w) My manager provides sufficient coaching and guidance to help me achieve my work objectives	1	2	3	4	5
x) The frequency of feedback I get from my manager is just about right	1	2	3	4	5
y) My manager believes advising or training are one of his/her major job responsibilities	1	2	3	4	5
z) I would not hesitate to tell my manager of a training need I have in a particular area	1	2	3	4	5
aa) My manager makes sure I get the training needed to remain effective in my job	1	2	3	4	5
bb) My manager provides advice on specific opportunities for exposure or visibility on the job	1	2	3	4	5
cc) More experienced co-workers are usually reluctant to give me guidance	1	2	3	4	5
dd) My present job requires updating of my skills and abilities	1	2	3	4	5
ee) On the job I have so much work to do that it makes it difficult for me	1	2	3	4	5

to participate in training and development activities					
ff) The demands of non-work activities make it difficult for me to participate in training and development activities	1	2	3	4	5

Q.11 Evaluation of learning and development experiences. Please indicate your level of agreement with the following statements. (Circle as appropriate)

	Disagree			Agree	
a) I believe those in charge of training programmes in my place of employment are competent and well-trained	1	2	3	4	5
b) My past experiences in training programmes in this company have generally been positive	1	2	3	4	5
c) People who participate in training programmes are often there because they couldn't do their jobs right in the first place	1	2	3	4	5
d) Other employees of this company feel that training programmes conducted by this organisation are worthwhile	1	2	3	4	5
e) Training in my place of employment is a waste of time	1	2	3	4	5
f) I believe that outside training consultants don't know enough about my employer to develop a good training programme	1	2	3	4	5
g) There generally is a good balance between trainer inputs and participant involvement in the training programmes I have attended in my current place of employment	1	2	3	4	5
h) Communications concerning training activities and the purpose of training in my current place of employment are clear and accurate	1	2	3	4	5
i) The quality of materials and activities used in my current employer's training programmes is satisfactory	1	2	3	4	5
j) In most training programmes I have attended in my current place of employment, trainers have created an environment that was conducive to learning	1	2	3	4	5
k) Most of the material and activities in training programmes I have attended in this organisation have been relevant to the skills I had hoped to develop	1	2	3	4	5
l) I have little idea of when development activities are scheduled to be offered by my current employer	1	2	3	4	5
m) I have more than enough training to do my job well	1	2	3	4	5
n) Taking training courses and seminars is not a high priority for me	1	2	3	4	5

#### Section 4: Personal Details

Q.12 Gender

Male	
Female	

Q.13 Age Group

16 – 24	
25 – 34	
35 – 44	
45 – 55	
56 +	

Q.14 Highest Qualification

Junior Certificate	
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Leaving Certificate	
Diploma	
3 <sup>rd</sup> Level Certificate	
Degree	
Post Graduate Degree	
No Qualification	
Other (please specify)	

Q.15 Social Class

AB (Professionals, middle management executives)	
C1 (Junior management, small establishment owners)	
C2 (Skilled manual workers)	
DE (Semi & unskilled workers)	

Q.16 How long have you worked with your current employer?

a) Less than 1 year	
b) 1-3 years	
c) 4-8 years	
d) 9-13 years	
e) 14-17 years	
f) 18 or more years	

Q.17 How long have you been in your current position?

a) Less than 1 year	
b) 1-2 years	
c) 3-6 years	
d) 7-10 years	
e) More than 10 years	

Q.18 How likely is it that you will receive future job assignments that will involve a greater level of responsibility than you have in your current position?

a) Very unlikely	
b) Somewhat unlikely	
c) Somewhat likely	
d) Very likely	

Q.19 How long ago did you receive your last promotion?

a) Less than 1 year ago	
b) 1-2 years ago	
c) 3-4 years ago	
d) 5-6 years ago	
e) 7-8 years ago	
f) More than 8 years ago	

### Section 5: Company Details

Q. 20 What industrial sector does your organisation operate in?

ICT (Information & Communications Technology)	
Services sector	
Manufacturing	
Pharmaceutical	
Medical	
Financial	
Public Sector	
Other (please specify)	

Q.21 What is the ownership of your organisation?

Irish owned	
UK Owned	
Other European owned	
Other non-European owned	
US Owned	
Other (please specify)	

Q.22 How many people does your organisation employ in Ireland?

Less than 100	
101 - 200	
201 - 500	
501 - 1000	
1000+	

## Appendix E - Distribution of Variables

Table 6.1 Distribution of Participation in Voluntary Learning and Development

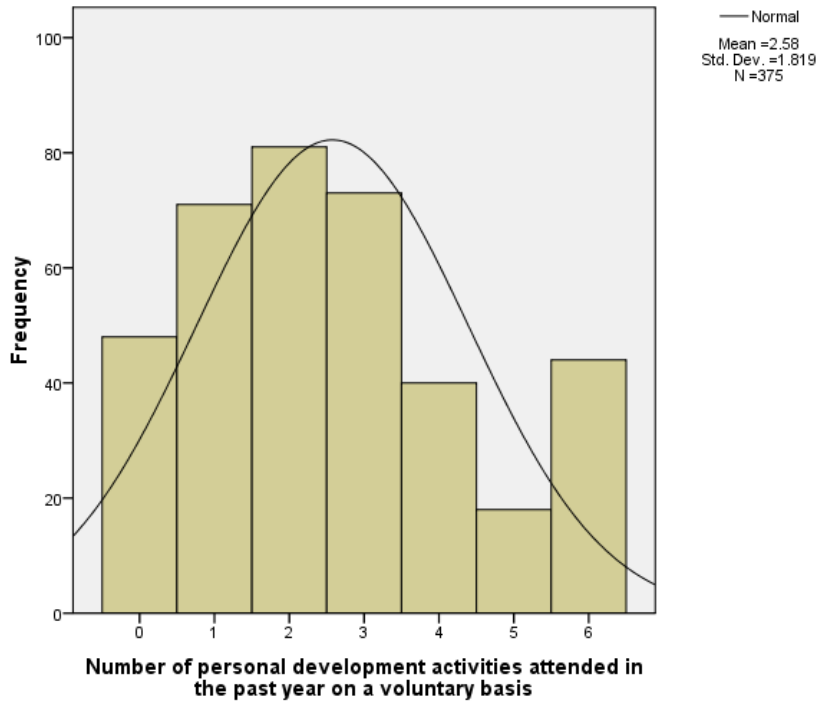
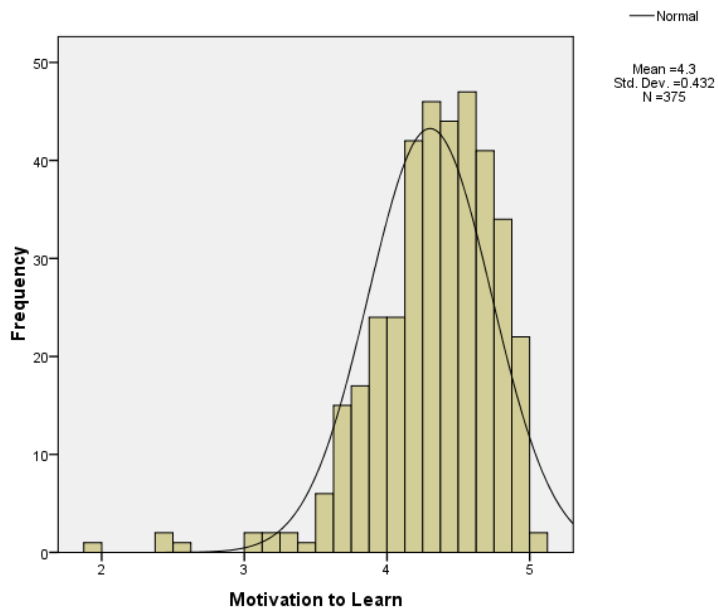
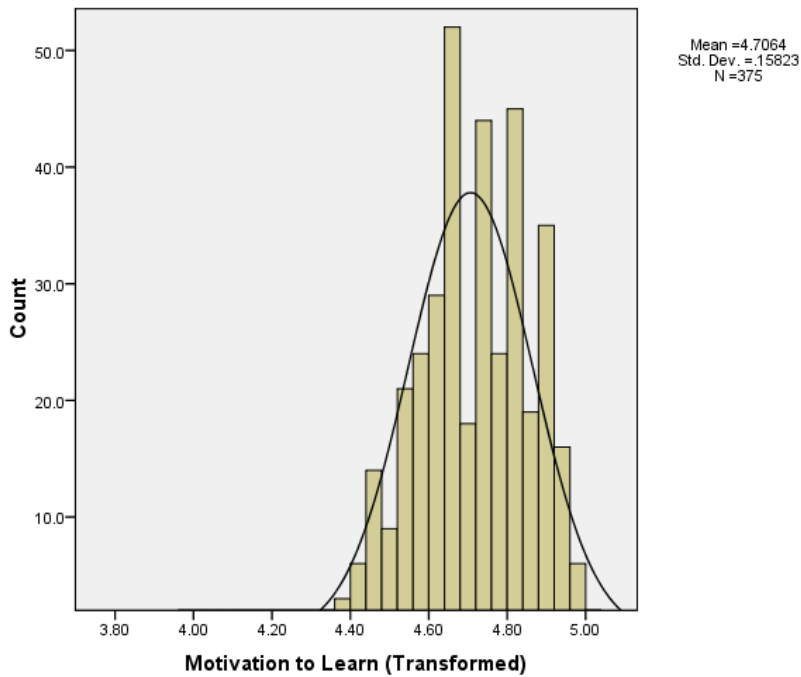


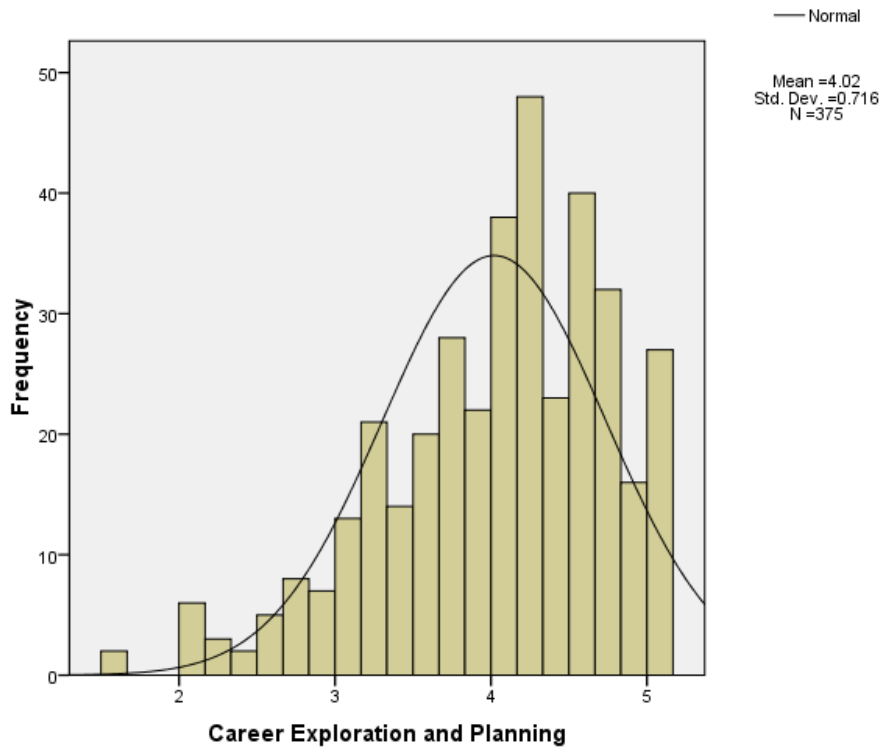
Table 6.2 Distribution of Motivation to Learn (before transformation)



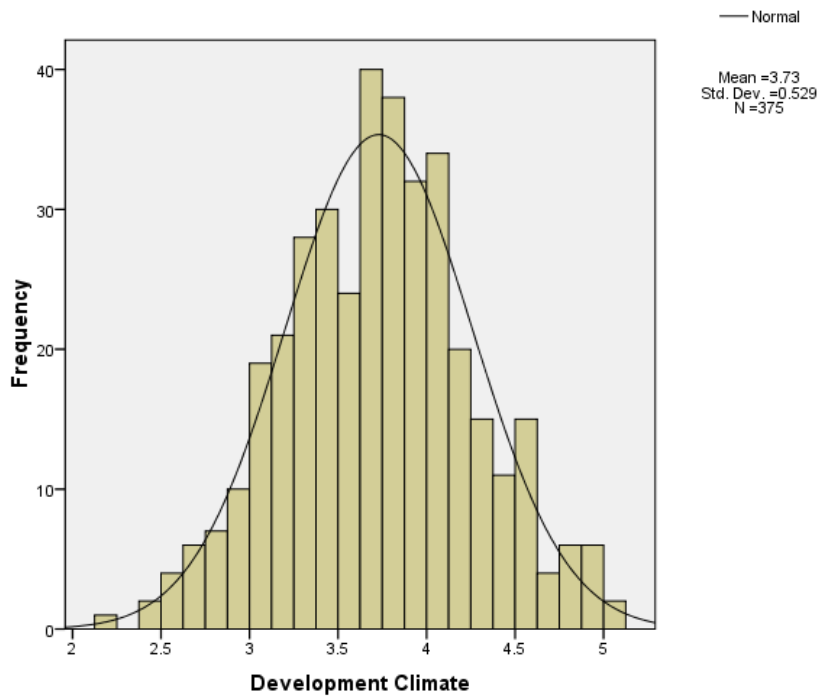
**Table 6.2.1 Distribution of Motivation to Learn (after transformation)**



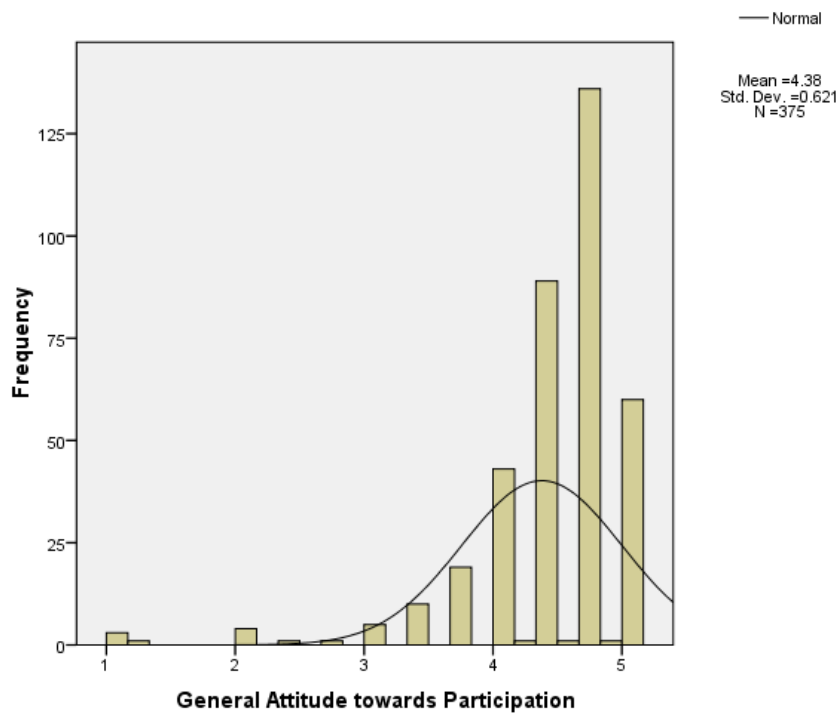
**Table 6.3 Distribution of Career Exploration and Planning**



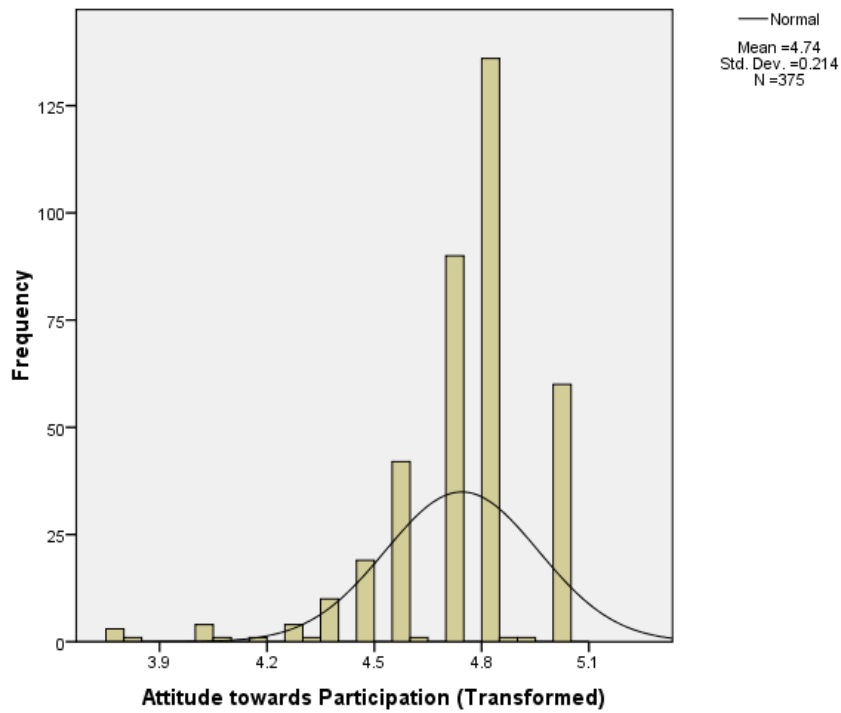
**Table 6.4 Distribution of Development Climate**



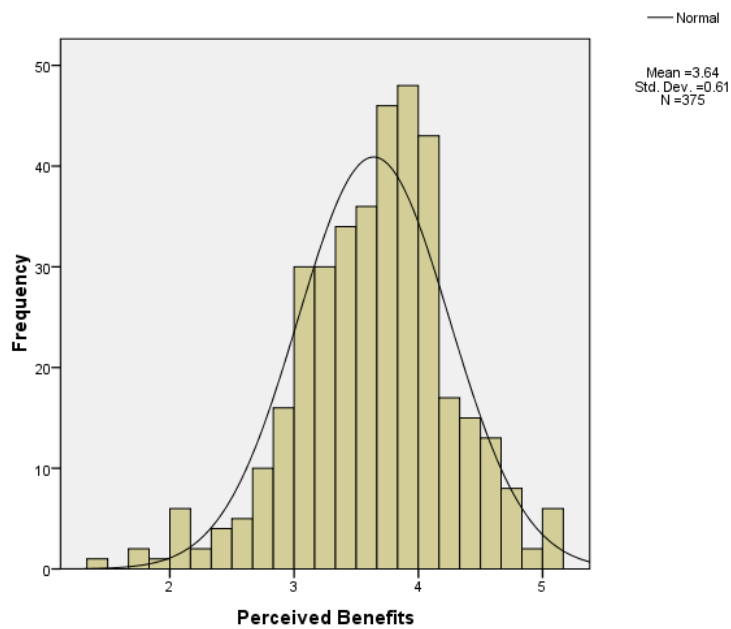
**Table 6.5 Distribution of General Attitude towards Participation (before transformation)**



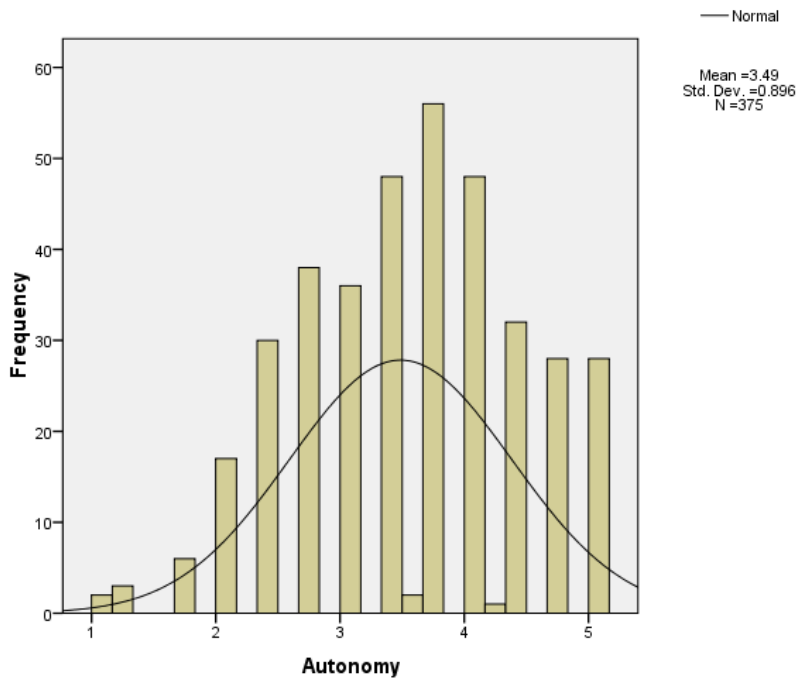
**Table 6.5.1 Distribution of General Attitude towards Participation (after transformation)**



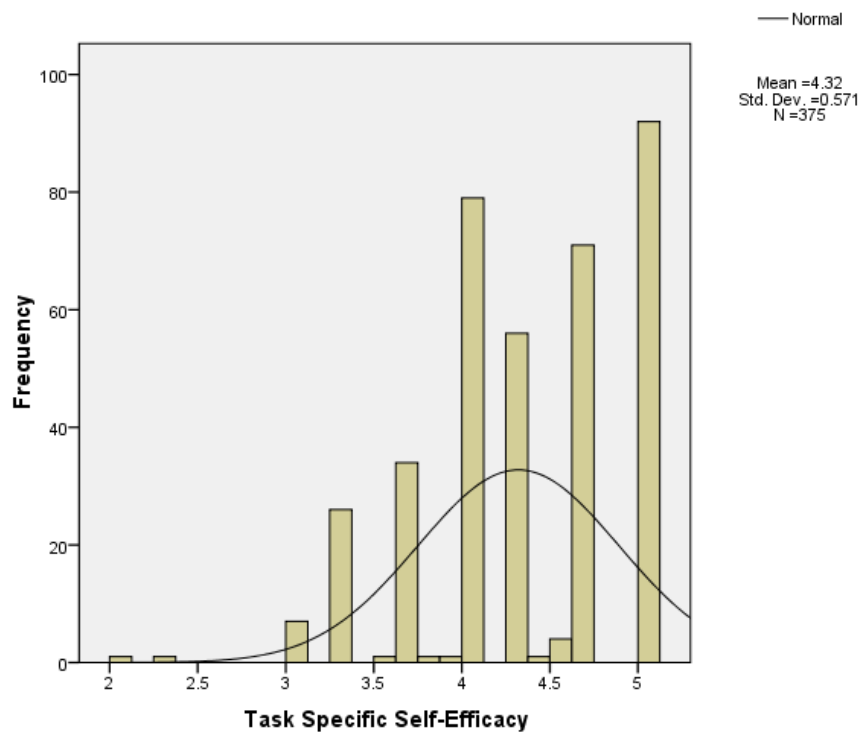
**Table 6.6 Distribution of Perceived Benefits**



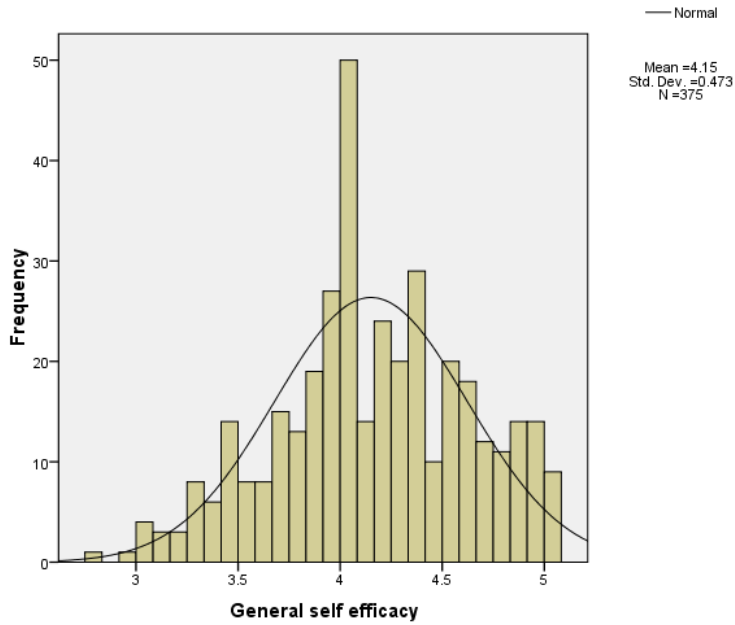
**Table 6.7 Distribution of Autonomy**



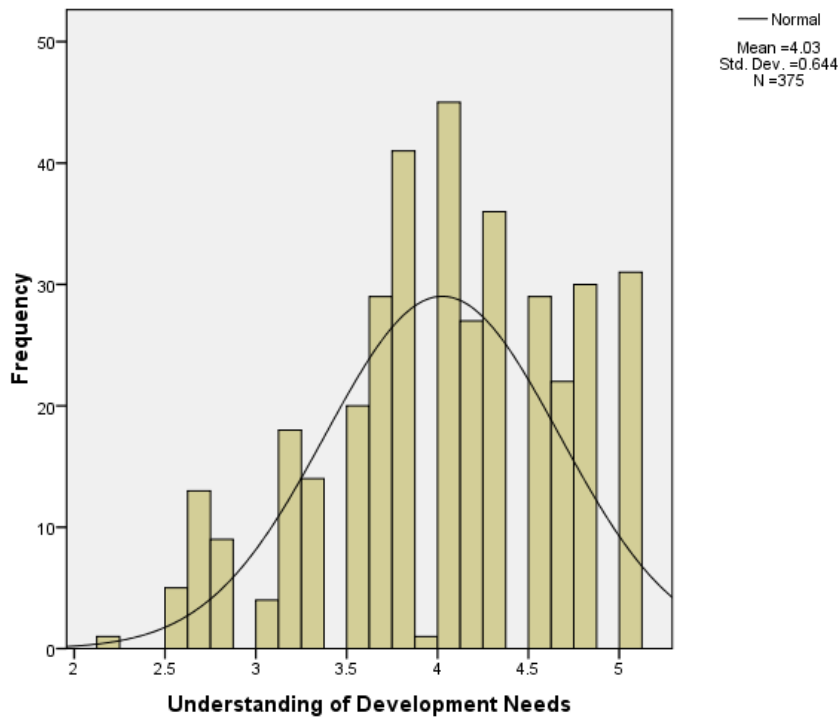
**Table 6.8 Distribution of Task-Specific Self-Efficacy**



**Table 6.9 Distribution of General Self-Efficacy**



**Table 6.10 Distribution of Understanding of Development Needs**



**Table 6.11 Distribution of Extent and Nature of Learning Opportunities**

