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**Leaders' perceptions of how learning and  
development affects organisational performance: are  
size and sector moderators?**

by

Solomon O. Akrofi

A thesis submitted to the University of Southampton in partial fulfilment  
of the requirements for the degree of Doctor of Philosophy

University of Southampton

April 2013

## **Declaration of Authorship**

I, Solomon O. Akrofi declare that the thesis entitled:

**Leaders' perceptions of how learning and development affects organisational performance: are size and sector moderators?**

- and the work presented in the thesis is my own, generated by me through my own original research. I confirm that:
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Signed *Solomon O. Akrofi*.....

Date 12<sup>th</sup> June, 2013 .....

## Acknowledgements

*"History has demonstrated that the most notable winners usually encountered heartbreaking obstacles before they triumphed. They won because they refused to become discouraged by their defeats". Bertie C. Forbes*

Working towards the fulfilment of my doctoral research was a thoroughly challenging but fulfilling experience, for which I would like to express my gratitude to a number of people.

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## **Dedication**

To the King immortal, invincible the only wise God, be glory, honour, and majesty.

I also dedicate this work to the most important people in my life – my charming wife, superb children, and loving parents.

## **Abstract**

An extensive search of the literature revealed that only a few studies (e.g. Mabey and Ramirez, 2005) have examined the effects of executive development on organisational outcomes. Furthermore, it has been postulated that limited measures of executive and leadership development exist (Collins, 2002), and therefore, based on Luoma's (2006) model of management development, an integrated measure is constructed in this research.

In addition, this research advances an empirical examination of the relationship between a measure of executive learning and development (L&D) and a composite perceptual organisational performance measure (financial, market share, customer satisfaction, innovation, and employee engagement). Executive L&D is hypothesised to affect organisational performance on the basis of a number of interrelated theoretical concepts: Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007), Dynamic Capabilities (Chien and Tsai, 2012; Eisenhardt and Martin, 2000; Zott, 2003), Human Capital (Rastogi, 2002; Ulrich, 1997; Wright et al. 2001) and Resource Dependency (Pfeffer, 1972; Pfeffer and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005).

Furthermore, drawing on the Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007) and Resource Dependency (Pfeffer, 1972; Pfeffer and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005) theories, it is hypothesised that differences in firm size will have a bearing on the effects of executive L&D on organisational performance. Based on empirical research findings on learning orientation differences across sectors (e.g. Hyland et al., 2000; Taylor and Bain, 2003; Wright and Dwyer, 2003; Dymock and McCarthy, 2006; Lee and Tsai, 2005; Khadra and Rawabdeh, 2006; Lee-Kelly et al., 2007), it is hypothesised the effects of executive L&D on organisational performance will differ across sectors (service versus industry).

Initial validation of the executive L&D measure was based on data from a sample of 150 executives. Subsequently, data was collected from 222 organisational leaders across several geographic regions (Europe, USA, Africa, Asia, Australia) to allow further validation of the measure and to test the relations between executive L&D

and organisational performance (profitability, market share, innovation, employee engagement, and customer satisfaction).

The results derived from ordinal regression analysis suggest that organisations that implemented executive L&D practices tended to show improved organisational performance. The positive effects of strategic, experiential, participative, and structured executive L&D dimensions on the composite measure of organisational performance underscores the contribution of both formal and informal learning to organisational outcomes.

Firm sector and size characteristics were also found to modify the organisational performance effects of executive L&D. Specifically, industry firms produced better performance effects of executive L&D than their service counterparts. In terms of firm size, Non-SMEs produced better effects of executive L&D on organisational performance than SMEs.

An important practical implication emerging from this result is that HRD practitioners may have to align executive L&D to firm size and sector characteristics. Importantly, the research offers theoretical extension to the Resource-Based View and Resource Dependency concepts of the firm. From the practical perspective, the amalgamation of executive L&D dimensions into a broad measure (reflecting ambidextrous learning), offers a unique nexus of both concepts with practical implications. Specifically, this suggests that HRD practitioners and senior executives need to account for a wide range of learning (formal and informal) dimensions when designing and implementing executive L&D. The results of this research provide theoretical extension for a number of theories: Resource-Based View, Human Capital, Resource Dependency, Knowledge-based, and Dynamic Capability, given the positive effects of executive L&D on organisational performance.

To conclude, this research provides an integrated measure of executive L&D, which can be applied across different firm sectors/sizes to drive organisational performance.

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# **Chapter One: Introduction**

## **1.0 Rationale behind the Research**

In the turbulent and dynamic business environment in which modern firms operate, the capacity to maintain superior performance, competitiveness, and crucially, long-term organisational stability is becoming far more challenging now than ever (Gavetti, 2005; Agarwal and Helfat, 2009; Mellahi and Sminia, 2009). This situation is compounded by the fact that most organisations have to deal with numerous challenges, some of which include increased agility, flexibility, and adaptability to heterogeneous customer needs and demonstrable responsiveness to wide stakeholder issues (Khatri, 2000; Collier et al., 2005).

Against this background, many organisations consistently explore a broad range of avenues, strategies, resources, and capabilities to drive superior organisational performance and survival (Jimenez and Sanz-Valle, 2006). In seeking to leverage competitiveness and overall corporate performance, firms have advanced a plethora of ideas to achieve their organisational performance outcomes. One the key avenues pursued by organisations is executive development and learning, but there appear to be scant measures for this construct (Collins, 2002).

Certain challenges have actually hindered the progress in the development of an integrated executive and management development measure. Some researchers in the field hold the view that management learning and development (L&D) is a complex multidimensional phenomenon influenced by many variables, which renders them difficult to assess (Burt and Ronchi, 2007).

In addition, some of these variables are often perceived to consist of an intricate web of culture and power-based, structural, and micro-political factors that influence the priority, impact, content, and significance of development dimensions undertaken by organisations (Mabey & Finch-Lees, 2008; Western, 2008). Therefore, L&D at the executive level is conjectured to be situated within a socio-political context of power relations and informal socialisation processes, transcending predictable considerations (Lim and Johnson, 2002; Rodan and Galunic, 2004; Anderson, 2007; Sheehan, 2012).

Considering such complications, some of the traditional training and development assessment processes and tools are likely to become inadequate in terms of predicting or analysing the effective deployment of executive L&D. The main limitation of such traditional training and development assessment tools is the overreliance on oversimplified measures, such as the number of training days (e.g. Wright et al., 2003; Guest et al., 2003), which may well be useful in terms of workforce planning and forecasting the training budget for staff at the lower echelon (Appleyard and Brown, 2001; See Appendix A for a summary of studies on some of the traditional measures of training and development). However, such measures may be inadequate in predicting and analysing the effective deployment of executive L&D within organisations.

The lack of an integrated strategy for executive L&D can also be attributed to the plethora of research, advancing different aspects of the subject. Mabey and Finch-Lees (2008) outline four main discourses or strands of research in management development – dialogic, critical, constructivist, and functionalist – and these can be extended to the domain of executive L&D. The dialogic approach offers a mechanism that enables organisations to construct a dynamic and negotiated identity. Research domains under this strand of research encompass management development discourses and issues regarding organisational identity construction and deconstruction.

In contrast, critical management development research tends to focus on the preservation or the transformation of the balance of power within organisations and the functions of management development. Within this strand, the research examines how management development influences resistance to order, predictability, control, domination, and subordination in organisations.

Research domains associated with the constructivist approach focus on the modes of management development and their outcomes and the cultural significance of management development within organisations. Furthermore, constructivists view management development as an enabler of collective learning and self-development conferring meaning and status to individuals and organisations.

Functionalists hold the view that management development encompasses the development of skills, competencies, and capabilities required to address performance gaps as well as optimisation of scarce organisational resources. In effect, this strand of research tends to focus on formal dimensions and general evaluation studies.

It can be argued that while these different research strands have led to significant diversity in the field of management L&D, this trend has perhaps hindered the development of comprehensive executive learning measures. This is because, to the disadvantage of specific perspectives, researchers have advanced approaches that are rather generic and likely to address issues related to the top echelon and senior executives.

In addition to the abovementioned issues, within the field of human resource development (HRD), Wang and Spitzer (2005) decry the overall lack of emphasis on measuring and evaluating studies within the domain of HRD empirical research. They call for cross-disciplinary and comprehensive measures underpinned by theory-building research approaches in contrast to the practice-oriented, atheoretical, and process-driven operational methods, which are widely used but have diminishing usefulness in today's conditions.

Further challenges faced in terms of measuring executive human capital perhaps relate to the degree of autonomy, decision-centeredness, and the unpredictable nature of executive work (Miller and Hart, 2001). In essence, these characteristics may render any executive L&D metric quite difficult to construct.

Consequently, many organisations either fail to measure the impact of executive L&D entirely or simply resort to simplistic measures such as the number of training days and cost expended per head (e.g. Lee and Miller, 1999; Horgan and Muhlau, 2006; Horgan and Muhlau, 2006; Way, 2002). Nevertheless, the question then arises whether such measures of L&D are equally applicable and relevant to executives, compared to employees in the lower organisational echelon. Given the critical role that executives play in organisations, in terms of making strategic decisions, risk-taking, and driving innovation (Beeson, 2010; Charan et al., 2011) to maintain organisational survival, empirical research examining the effects of an integrated

measure of L&D on organisational performance will provide useful insight to both academicians and practitioners.

In addition, a review of the literature on the effects of organisational leadership and executive development revealed that very few evaluative studies have been conducted in this field (e.g. Mabey and Ramirez, 2005).

Consequently, this research aims to address the identified gaps in literature. First, a measure of executive L&D is formulated based on Luoma's (2006) model of management development, reflecting an integrated approach with four dimensions: strategic, experiential, participative, and structured.

An empirical examination of the relationship between executive L&D and a composite perceptual organisational performance (financial performance, market share, customer satisfaction, innovation, and employee engagement) is conducted. The hypotheses that executive L&D will affect organisational performance is formulated, drawing on a number of interrelated theoretical concepts: Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007), Dynamic Capabilities (Chien and Tsai, 2012; Eisenhardt and Martin, 2000; Zott, 2003), Human Capital (Rastogi, 2002; Ulrich, 1997; Wright et al. 2001), and Resource Dependency (Pfeffer, 1972; Pfeffer and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005).

The examination of size effects is based on the Resource Dependency and Resource-Based View theories. Organisational size has been found to be correlated with innovation and performance (Damanpour, 1992), and this relationship is moderated by organisational slack (Bowen, 2002). According to Bourgeois (1981), slack relates to the resources in reserve that permit the adaptation of changes in strategy when environmental shifts occur. Larger organisations are perceived to have more slack and are therefore expected to cope better with resource scarcity than small- and medium-sized enterprises. Some of the effects of resource dependency and slack may apply to executive L&D contexts, given that large firms may have the extra resource capacity to deploy highly sophisticated development approaches when environmental changes occur, compared to small firms (Mole et al., 2004). Furthermore, large organisations have the capacity to hold power over their supplier chains and can

establish sophisticated learning partnerships to create differentiated products, thereby obtaining a competitive advantage (Raymond and St-Pierre, 2004; Gardet and Mothe, 2012) over small firms. In addition, according to the Resource-Based View (Barney, 1991; Teece et al., 1997; Winter, 2003; Teece, 2007), firms with superior resources are likely to pursue unique strategies, which are not easily replicable and imitable by competitors. Compared to SMEs, large firms are expected to have the capacity to gain access to such unique resources (Winter, 2003; Teece, 2007). Therefore, based on the Resource-Based View, it is expected that the effects of executive L&D effects on organisation performance are expected be better in large firms than in SMEs as the latter lack the resources required to pursue unique strategies, which are not easily replicable and imitable by competitors.

Sector effects of executive L&D on organisational performance are also examined in this study. Some scholars have suggested that learning orientations differ across industrial sectors (Lee-Kelly et al., 2007). According to Lee and Tsai, (2005). Learning orientation is a mechanism that affects a firm's ability to challenge old assumptions and facilitate new techniques and methodologies. Baker and Sinkula (1999) view learning orientation as the combination of mental models (Geus, 1998) and dominant logics (Bettis and Prahalad, 1995) that are likely to influence a firm's learning behaviour.

Several authors (e.g. Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006) have emphasised on the importance of learning orientation in the manufacturing sector, and particularly, leadership is considered to be a crucial enabling agent for learning in the manufacturing sector (Yeo, 2008). Furthermore, Datta et al. (2005) examined how industry characteristics affect the relative importance and value of high-performance work practice (HPWP) systems and reported that the impact of human resource systems on productivity is influenced by industry capital intensity, growth, and differentiation. Their results further suggested that the effects of HPWP on labour productivity were greater in industries with low-capital intensity or high-growth rates and that such industries are likely to include sectors characterised by a combination of high discretionary behaviour and customer contact, which are all features of the service sector.

However, increased applicability of HPWP in the service sector is not universally supported. Comb et al. (2006), in their meta-analysis of 92 studies, found that many studies supported increased applicability of HPWP in the manufacturing organisations compared to in their service counterparts, but the impact of this on performance measures across the sectors was found to be invariant.

It is expected that the effects of firm size and sector differences in executive L&D will be observed on organisational performance, owing to the differences in learning orientation across sectors, as cited by scholars (Hyland et al., 2000; Taylor and Bain, 2003; Wright and Dwyer, 2003; Dymock and McCarthy, 2006; Lee and Tsai, 2005; Khadra and Rawabdeh, 2006; Lee-Kelly et al., 2007).

## **1.1 Unique Contributions**

The unique contributions of this research can be summarised in three main points. Firstly, this research presents an integrated measure of executive L&D and evaluates the effect of the measure on organisational performance, in response to the gap identified within literature for such integrated measure of executive and leadership development (Weiss and Molinaro, 2006) and the limited number of studies evaluating the effects of such measure on performance (Collins, 2002). Secondly, the differential effects of executive L&D by firm size are evaluated to confirm the Resource Dependency and Resource-Based View effects. Finally, the effects of differences in learning orientation on organisational performance are examined, to contribute to this emerging field.

## **1.2 Research Aim and Objectives**

The research aims to enhance the knowledge and understanding of the effects of executive L&D on organisational performance by drawing on a number of theoretical concepts: Resource-Based View, Dynamic Capability, Resource Dependency, and Human Capital. The outcome of the research will offer new insight to practitioners and researchers interested in advancing the capacity for executives and leaders to optimise organisational performance outcomes through L&D. Specifically, the main objectives of the research are:

1. To develop an integrated executive L&D measure, encapsulating both formal and informal dimensions
2. To evaluate the effects of executive L&D on organisational performance
3. To evaluate the possible moderating effects of firm size and sector on the relationship between executive L&D and organisational performance

Additionally, the research objectives can be classified into theoretical, practical, and academic criteria as follows:

From a theoretical perspective, the research attempts to examine the effects of executive L&D on organisational performance variables, drawing on a number of theoretical concepts: Resource-Based View, Dynamic Capability, Resource Dependency, and Human Capital. The moderating effects of sector are examined to determine the impact of learning orientation (service versus industry) on the relationship between executive learning and organisational performance. In addition, firm size effects are examined, in light of the Resource-Based View and Resource Dependency, on the relationship between executive learning and organisational performance.

From a practical perspective, it is noteworthy that organisations invest in substantial resources for developing executive capabilities and will consequently be interested in the performance effects of such investments. In addition, from the firm size perspective, (SME versus Non-SME) organisations may be interested in understanding whether specific executive L&D dimensions can drive organisational performance better than others. This knowledge can assist SMEs adopt a balanced view in deploying their scant resources, owing to Resource-Based View and Resource Dependency implications. This research also investigates the differential effects of executive L&D on specific organisational performance variables in terms of sector (service versus industry). This will highlight to HR directors the importance of factoring in firm size and sector effects in the design of executive L&D programmes instead of following generic approaches, which may have limited effectiveness in specific contexts. The resulting measure can also be utilised to

benchmark executive L&D against competitors, thereby enabling organisations to identify and address any competency gaps in order to remain at par with competitors.

This research is one of the few studies presenting executive L&D as an integrated measure (accounting for formal, informal, organisational, team, and individual dimensions), reflecting the notion of ambidextrous learning (Benner and Tushman, 2003). Finally, such an integrated measure of executive L&D may be applicable to other contexts, industries, geographical settings and guide organisations in driving superior organisational performance effects.

### **1.3 Research Structure**

The thesis is organised into six chapters as follows: Chapter One offers a brief introduction to the research.

Chapter Two starts by exploring the definitions of executive L&D, from the organisational perspective, highlighting differences and overlaps between the constructs of executive and management development. Importantly, the convergence of both constructs within the organisational context is highlighted. This is followed by discussions on dimensions and existing models of executive and management development, culminating with the formulation of a conceptual executive L&D measure based on Louma's (2006) model of management development. This section then presents the theoretical justification for the predicted effects of executive L&D on organisational performance, based on the Resource-Based View, Human Capital, Dynamic Capability, and Resource Dependency theories. The justifications for the expected firm size and sector differences in executive L&D on organisational are also addressed. This section ends with a review of the literature on the effects of leadership and executive development on organisation performance, definition of organisational performance, and the formulation of a conceptual research model.

Chapter Three, which is dedicated to research methods and data analysis, commences with the development of the research hypotheses and detailed conceptual research framework. Then, this section addresses methodological issues, including a discussion on alternative methodologies as well as the justifications for adopting the survey approach. For clarity, the data analysis section is split into two parts. The first

part is dedicate to the design of the executive L&D measure, including procedures adopted for exploratory, confirmatory, and discriminant validation. The second part focuses on the justifications for selecting the ordinal regression technique to investigate the effects of executive L&D on organisational performance and procedures for confirming and disconfirming the research hypotheses. This section ends with the rationale behind conducting Harman's common methods analysis and the specific results for this research.

Chapter Four is dedicated to reporting the results obtained by testing the hypotheses under ordinal regression analysis procedures and reporting observed changes in the Chi-square and pseudo R-square values. In addition, significant predictors of executive development on organisational performance measures are reported for the overall sample. The moderating effects of firm size (SME versus Non-SME) and sector (service versus industry) are also reported.

Chapter Five discusses the findings of the research

Chapter Six is devoted to the conclusions of the research, highlighting research implications, contributions, and limitations as well as proposals for further research.

## **Chapter Two: Literature Review**

### **2.0 Definitions of Management and Executive Development**

Executive development has been cited as being the means for driving organisational stability (Brown, 2003), and several researchers (e.g. Beardwell and Holden, 2001; Fuller-Love, 2006; Longenecker and Fink, 2001; Scherpereel and Lefebve, 2006) have emphasised on the fact that to succeed in today's ever-changing environment, business executives need to be far more innovative and proactive with regard to career development now than before.

Like most management terminologies, the word "executive" attracts different interpretations within organisations and from researchers. This often triggers ambiguity given the wide spectrum of managers who tend to fall under this category. Indeed, the range can extend from line managers to the members of the board.

Here, the term applies specifically to senior or top-level managers with strategic and operational responsibility within their organisations, including CEOs. It is a common practice within literature for executives, particularly at the top levels to be collectively classified as members of the top management team – hereafter referred to as TMT. In addition, the composition of the TMT varies across studies.

Most CEOs are often expected to demonstrate vast experience, expertise, and dexterity prior to attaining such a significant role within organisations. However, CEOs may lack the capacity to drive performance unilaterally and consistently without the input of executives at the top of the organisational hierarchy, especially in very large and complex firms with multiple operations. In effect, the substantial experience of the CEO is likely to be augmented by the expertise of a core group of senior executives when it comes to effectively achieving the strategic vision and objectives of an organisation (Carpenter, 2002; Ferrier, 2001).

In effect, the collective expertise of the other layers of executives may be required to drive organisational success in terms of developing, revising, and implementing strategic activities. Supporting this expansive view of the term executive, Castanias and Helfat (1991) note that the overall firm performance of organisations is driven by

the human capital of the entire TMT rather than the individual abilities of CEOs. In this research, the term executive will apply to a layer of middle to top managers including the CEO with operational and strategic responsibilities (Carpenter, 2002; Carpenter and Fredrickson, 2001; Ferrier, 2001).

Widening the bracket of executives to include members other than the CEO allows the examination of executive development from a novel perspective. Particularly, as the interaction between the top and other layers of managers in an organisation may serve as a catalyst for leveraging learning capabilities and resources to drive productivity. Shifting the focus from the highest echelon to other layers of executives complies with the approach of other researchers (Boeker, 1992; Boeker, 1997; Kazanjian and Rao, 1999; Ferrier, 2001).

Moreover, Litzky and Greenhaus (2007) propose that the term executives signifies a group responsible for setting long-run priorities and deciding on effective allocation of resources to achieve long-term organisational goals, through the efficient utilisation of human, financial, and material resources. Such individuals are therefore ultimately responsible and accountable for generating profitability within their organisations or business units.

Interestingly, executive L&D appears to be neglected by some organisations as evidenced by a 2007 Novations Group study: 90% of first-line managers received some form of training, whilst only 59% of senior executives secured any form of development (Management Issues, 2007). This corroborates past research findings that highlighted that 4 out of 10 senior managers are likely to fail within 18 months of taking on their new roles (Ellis, 2003).

Nonetheless, this limited focus on executive development highlights not only organisational apathy but also the fact that executives are sometimes ambivalent towards training and development, especially when it involves didactic forms of delivery (CIPD, 2007).

However, other findings of the report suggest that the situation is not completely dismal. According to the report, executives engage in other forms of activities, which are normally not classified as formal learning and development. Specifically,

managers at the top level often participate in visioning, coaching, strategic planning, and other endeavours that constitute learning, training, and development, if not clearly specified as such.

Therefore, delivering executive L&D solely via formal and structured approaches may reflect a limited configuration of dimensions that generate significant benefits to organisations and individual executives. On the other hand, whilst there may be valid reasons behind the disinterest in L&D among certain executives, this reluctance to continuous development may be a contributory factor to the alarming rate at which some executives underperform when they take on higher roles.

For instance, it has been reported that almost 40% of US executive underperform in new roles despite having achieved healthy career progression and demonstrable records of accomplishment in previous jobs (Davis, 2005).

This issue was highlighted over two decades ago by Kaplan et al. (1985), who suggested that on attainment of new positions, many executives believe they have crossed an invisible dividing line and have ascended to a “rarefied atmosphere”, making it difficult for them to acknowledge that they require continuous self-development to drive consistent and exceptional organisational performance.

The foregoing observation highlights the fact that sometimes there may be gaps in the executives’ experiences, competencies, and skills that require bridging through appropriate development dimensions to drive organisational performance. Indeed, some of these gaps may be attributable partly to the already highlighted reluctance of certain executives to engage in formal development activities as they progress to the top of the organisational hierarchy.

Jackson et al. (2003) outline other possible drivers of such behaviour, namely fear of change, fear of exposing weaknesses, and a belief among some executives that learning is no longer relevant to them, as they fail to recognise the potential payoff in terms of improved personal and organisational performance.

According to Brown (2006), effective deployment of executive development programmes can influence the strategic efforts of organisations by driving

improvements in strategic management competencies of executives, thereby resulting in efficacious strategy formulation and implementation (including the management of strategic initiatives). In light of this point, it can be said that L&D particularly focuses on expanding strategic competencies of executives to help them influence strategy issues positively.

Arguably, certain features of the executive job scope may offer some useful guidance to facilitate the design of suitable learning and development strategies for this cohort. According to Castanas and Helfa (1991), executives organise and direct all activities of an organisation by developing and implementing strategic and operational decisions capable of leading to economic benefits, which are non-replicable by competitors.

Here, the term rent refers to profitability derived from and linked to the effective implementation of strategic executive decisions, in line with the collective definition of executives, which is buttressed by Eistenhard et al. (1997), where executives, who through an inner circle collectively formulate, articulate, and execute the strategic and tactical decisions, are considered the aggregate informational and decisional entities that are involved in the operations of an organisation.

As observed by Castanias and Helfat, (2001) the managerial skills required at the executive level appear to be tacit in nature and involve learning by “doing” with no clear blueprint; therefore, such skills are quite difficult to replicate quickly. On linking this notion to the Resource-Based View, it can be stated that such skills embody a high degree of inimitability and constitute a crucial component of organisational human capital (Barney, 1991; Barney and Arikan, 2001; Barney, 2001).

In summary, the executive job scope involves complex capabilities, incorporating strategic focus, effective deployment of multiple information sources and critical resources, and tactics deployed to achieve long- and short-term organisational outcomes. This implies that executive L&D must be pitched at the right level, reflect the correct combination of formal and informal activities, and most importantly, reflect a strategic focus. Neglecting any of the aforementioned dimensions of

executive L&D may render the whole process ineffective and mechanistic, potentially leading to negative or neutral organisational outcomes.

Supporting this view, Castanias and Helfat (2001) delineate managerial human capital across a continuum of positions: board; CEO; TMT; and upper, middle, and lower levels. Moreover, they classified the range of skills of the different levels of managers as follows: generic, related-industry, industry-specific, and firm-specific; the related-industry and industry-specific skills are most likely to be of most relevance to executives considered in this research.

The findings of the research underscore the notion that a one-size-fits-all approach to establishing L&D may be counterproductive. Consequently, even when specific development or training is cascaded and deployed within organisations, it may be necessary to align it to the different expertise and staff levels across the firm.

Developing executive competencies may involve the enhancing of a range of behavioural, cognitive, and social skills, via diverse learning modes and at differential rates (Day and Halpin, 2004, Lord and Hall, 2005).

While some of the skills discussed above may be associated with didactic processes, Lord and Hall (2005) argue that from a sociological leadership viewpoint, the development needs of executives are mostly leadership oriented, complex in nature, and require some form of customisation to become sustainable.

It is also important to examine some of the definitional tensions existing in the literature, focusing first on management development followed by executive development. This approach may assist in broadening the interpretation and perspective on such a nebulous but important subject.

Management development is characterised by lack of coherence and agreement and divergence (Vloeberghs, 1998). The term often attracts multiple and conflicting definitions and conveys different meanings to practitioners and researchers (Lees, 1992). Conceptualisation of management development, attributed to Storey (1989a, 1989b), relates to its proximity with the purpose of deployment. Hence, management

development activities are not ends in themselves but must relate to organisational objectives.

Further variations in the definitions ascribed to the concept of management development are outlined as follows:

Molander (1986, p. 76) views it as a conscious and systematic approach to control the development of managerial resources in the organisation for the achievement of goals and strategies.

Wexley and Baldwin (1986, p. 287) contend that management development is the whole complex process by which individuals learn, grow, and improve their abilities to perform professional management tasks.

According to Storey (1989a, p. 5), management development denotes processes which engender enhancement of capabilities, with a scope for discretion, creativity, and indeterminacy.

Mumford (1987, p. 223) views management development as an attempt to improve managerial effectiveness through a planned and deliberate learning processes.

According to Burgoyne (1988, p. 40), management development is the management of managerial careers in an organisational context.

For Lees, (1992, p. 90) management development is a term which embraces much more than education or training. The term denotes an entire system of corporate activities with the espoused goal of improving the performance of the managerial stock in the context of organisational and environmental change.

Management development is the complex process by which individuals learn to perform effectively in managerial roles (Baldwin and Padgett, 1994, p. 277).

Van der Sluis-den and Hoeksema (2001, p. 168) posit that the central challenge of management development is to control and manage the learning process of

managers, by focusing on individual development, career succession, and/or achieving organisational goals.

Jansen et al. (2001, p. 107) define management development as the system of personnel practices by which an organisation tries to guarantee the timely availability of qualified and motivated employees for its key positions. The aim of the management development is to have at his/her disposal the right type of managers and specialists at the right moment

Management development is a multi-faceted process, in which some aspects are easier to identify and measure than others (Thomson et al., 2001, p. 10).

Knox and Gibbs (2001, p. 714) contend that management development is the entire system of organisational activities principally aimed at improving the performance of management. These activities include education and training and incorporate performance appraisal, career and succession planning, assignments, projects, and other forms of on-the-job development.

According to Brown (2003, p. 292), management development espouses a range of development dimensions intended to enhance the strategic capability and corporate performance of an organisation. The use of the word dimension implies a conscious process which has probably been initiated or stimulated at the corporate level but can encompass both formal and informal activities.

Management development is an expansion of a person's capacity to be effective in a manager's role and processes (McCauley and Van Velsor, 2004, p. 2).

Management development includes both the personal and career development of an individual manager (i.e. attendance at formal development programmes, seminars, conferences, and informal learning through methods such as coaching and mentoring, etc.). It also includes management education achieved through formal undergraduate/postgraduate qualifications (O'Connor and Mangan, 2006, p. 327).

Management development can be defined as a dynamic capability or learned pattern of collective activity through which an organisation systematically generates and

modifies it routine in the pursuit of encouraging and developing managers to balance efficiency and adaptiveness (Espedal, 2005, p. 138).

The above definitions reflect the diversity of definitions associated with the concept of management development and offer insight into the breadth and width of the subject. Some researchers focus on the individual benefits of management development (Baldwin and Padgett, 1994; Wexley and Baldwin, 1986; McCauley and Van Velsor, 2004), whilst others (Espedal, 2005; Knox and Gibbs, 2001) consider a more expansive or holistic view by considering the resulting organisational impact of management development.

The definition of management development as a dynamic capability by Espedal, (2005) is supported by other scholars (Chien and Tsai, 2012; Zott, 2003). The literature on dynamic capability highlights the importance of both learning mechanisms and knowledge resources (Chien and Tsai, 2012). Prior research has indicated that knowledge resources can generate dynamic capabilities (Griffith et al., 2006; Liao et al., 2009) and that learning forms the bridge in the transformation of knowledge resources into dynamic capabilities (Heijden, 2004).

Learning mechanisms have also been found to enhance dynamic capabilities within organisations, shedding further light on the evolution of dynamic capability within firms (Zollo and Winter, 2002). Thus, the notion that executive L&D generates dynamic capability will be adopted in this work; this will be accounted for in the selection of measures likely to capture the dynamic capability of executives, which may be situated in the external and internal work environments.

Another key thread running through the definitions is the frequent reference to management development as a process (Storey, 1989a, 1989b; Van der Sluis-den and Hoeksema 2001; Thomson et al., 2001) or system (Lees, 1992; Knox and Gibbs, 2001), with the exception of Brown (2003). Brown's (2003) view of management development as encompassing a broad range of dimensions (formal and informal) is adopted in this research. The broader definition given by O'Connor and Mangan (2006) accounting for formal and informal learning and development dimensions aligns with the holistic lens adopted in this research.

The diversity in the definitions observed above highlights the need for researchers to expand executive management L&D measures to encompass wide or holistic perspectives instead of advancing a simplistic perspective of the concept.

The diversity evident in management development definitions is also an indication of the broad nature of this subject matter, reflecting a range of activities, such as education and learning, and workplace dimensions, which could be deliberate or incidental but can enhance managerial capabilities required for achieving strategic business objectives. Contrary to the above view, some authors (Haskins and Clawson, 2006; Longnecker, 2004; Kovach, 2000) subscribe to a rather narrow definition of executive development, limiting attention mainly to executive education programmes or activities.

Management education arguably encompasses didactic forms of delivery in which a body of knowledge is emphasised on, whereas management development tends to convey practical dimensions of learning, with emphasis on a range of skills.

Although didactic and structured learning delivered through educational settings may differ in terms of practical development mechanisms, both dimensions may operate in tandem to enhance managerial capabilities. Managers may actually gain an enhanced understanding of informal activities after the mastery of theoretical concepts, principles, and ideas originating from management education and other forms of didactic learning (Mintzberg, 2004; Lawless et al., 2011).

Some authors (Burgoyne and Reynolds, 1997; Thorne and Wright, 2005) present management learning as a nexus between the long-established areas of management education and development in that management learning can be conjectured as a flexible concept, providing an all-encompassing conceptualisation of the contentious subjects of management education and development.

O'Conner (2006) states that management development encompasses all development dimensions, such as personal and career development of an individual manager, that warrant attendance at formal development programmes, seminars, and conferences and the use of informal learning techniques such as coaching and mentoring, etc.

Management education achieved through formal undergraduate and postgraduate qualifications are included in this scope.

Further, a distinction is made between the UK approach in which HRD is “supporting and facilitating the learning of individuals, groups and organisations” (McGoldrick et al., 2002) and the US approach in which HRD is expected “to enhance learning, human potential, and a high performance in work-related systems” (Bates et al., 2001).

Moreover, in the literature, some authors have used the terms executive development and management development interchangeably (Waldman and Yammarino, 1999; Jackson et al., 2003). Although both terms are applicable to managers, essentially, executive development refers to high-level or senior managerial positions. Similarly, the definition challenges observed in the management development literature extend to the executive development domain.

For instance, Jackson et al. (2003) define executive development as the provision of advanced management training and education to matured, motivated, and experienced managers. In their definition, they emphasise on both university and in-house programmes, which are focused on executives, aimed at improving individual performance in current and future career positions.

On the other hand, Vloeberghs (1998) defines executive management development as a system that enables companies to fill higher and highest executive functions, which are crucial for organisational continuity. However, both definitions have some limitations.

Advanced management training and education is a facet of the executive development and learning process, and therefore, balanced renditions are required to capture informal learning and development dimensions, and this notion is not covered in this definition. In addition, Vloeberghs (1998) fails to address the detailed components of executive development and by merely referring to it as a system, opens up a conundrum of interpretation and meanings. Focusing exclusively on succession and continuity dimensions is likely to create a narrow case for deploying executive development within organisations because other considerations, such as

current and future strategy, may well be important considerations for developing executives. Arguably, such definitions and conceptualisations of development may be more appropriate for low-level managers than for high-level executives. Thus, effective deployment of executive L&D may lead to a wide range of benefits transcending the succession dimensions specified in the above definitions, particularly effects that translate into organisational success.

On this basis, the definitions advanced by both Vloeberghs (1998) and Jackson et al. (2003) failed to address the strategic focus of executive development. In contrast, Brown (2003) defines executive management development as all dimensions deployed to enhance the strategic capability and corporate performance of organisations. This definition is probably more reflective of the nature of executive development at the senior level given the strategic focus, which stresses the requirement of linking such activities to organisational performance. In essence, the notion advanced here is that executive development is predicated by a clear strategic intent of enhancing senior managerial capabilities, aligned with the overall focus of driving short- and long-term organisational survival.

The abovementioned tensions in the definitions within literature may emanate from a number of factors. Notably, the fact that “HRD research is characterised by both ontological uncertainty and methodological hegemony” (Sambrook, 2004), results in little agreement on what HRD (which encompasses management and executive development) is or should be (Lee, 2001; McLean, 1998; Swanson, 1999).

Further definitional tensions arise because some researchers (Wiess and Molinaro, 2004) tend to use the terms executive development and leadership development interchangeably, even when the subject matter examined clearly relates to executive development.

This observation aligns with views articulated in a CIPD research on executive development. It was noted that senior managers often wanted to be treated as a “special case” to reflect their higher status in the organisational hierarchy (CIPD, 2007).

In addition, high-level executives often consider development as “leadership” rather than “management” development. The report stressed that although some TMTs are more likely to engage in a wide range of L&D dimensions compared to other employees, four significant factors, status, numbers, isolation, and political skills, genuinely differentiated them from other employees. These factors are expanded as follows:

**Status:** Senior managers are likely to be sensitive to their senior status and even in a relatively egalitarian organisation; they are likely to perceive their development needs differently.

**Numbers:** Often, senior managers are relatively fewer than other group members within organisations because most organisations retain a pyramidal hierarchy, even if they have been flattened over the years.

**Isolation:** Some senior managers may feel isolated in their roles without the presence of a peer group. Learning may occur in organisations when peers share problems and discuss solutions in informal settings. However, many senior managers lack these opportunities, and they may be burdened with significant problems, which cannot be openly discussed with more “junior” managers. Very senior members, such as CEOs, feel the loneliness related to the job and others tend to disregard the fact that such executives are faced with immense pressure on a daily basis.

**Political skills:** Political skills are essential for the survival of senior managers, and most organisations would rather not organise courses for senior managers to become adept corporate politicians. However, some legitimate assistance must be provided to new senior managers to develop such skills. Political skills are defined as the ability to understand others at work and to use such knowledge to influence others to act in ways that enhance personal and/or organisational objectives (Ferris et al., 2005).

Blass and Ferris (2007) assert that political skill represents some degree of personal learning, which is tacit in nature, encapsulating four underlying dimensions: social astuteness, interpersonal influence, networking ability/social capital, and apparent sincerity or genuineness.

Excellent lateral relationship between executives is critical for obtaining desired strategic results and is a common currency of most successful executives (Church and Waclawski, 2001; Enns and McFarlin, 2003). Indeed, executives devote considerable time influencing peers to back new initiatives (Enns, et al., 2003; Zaccaro, 2001). However, such attempts to influence peers may be unproductive (Williams and Miller, 2002), and such an outcome underscores the potential importance of providing development dimensions to enable executives perform their functions effectively in complex environments (Zaccaro, 2001).

## **2.1 Definitions of Leadership Development**

Over the past few decades, a vast portion of the literature on leadership has focused on leaders, attributes of leaders, and leadership effectiveness; this trend contributes partly to the lack of conceptual clarity and accurate definition of leadership development (Olivares, 2008).

A comprehensive distinction between leader and leadership development advanced by Day (2001) generated the impetus for further progress in the establishment of a conceptual definition of leadership development. Day (2001) argues that leader development revolves around the individual and seeks to build intrapersonal competencies, skills, and abilities, which generate human capital. On the other hand, leadership development involves "expanding the collective capacity of organisational members to engage effectively in leadership roles and processes" (Day, 2001, p. 582).

Focusing on the human capital and incremental and social perspectives, Van Velsor and McCauley (2004) consider leadership development as a human development process that is situated within the socio-historical context, in that it involves a social process of building human capital through human networks of trust, commitment, and interpersonal competencies.

Olivares et al. (2007), supports this view, but expands it to connect leadership development to the achievement of organisational goals as follows:

"Leadership development, as a type of human development, takes place over time; it is incremental in nature, it is accretive, and it is the result of complex reciprocal interactions between the leader, others, and the social environment. Leadership development requires that individual development is integrated and understood in the context of others, social systems, and organisational strategies, missions, and goals" (Olivares, 2007, p.79).

Three main ideas can be extracted from the above definitions: leadership development generates competitive advantage; it is distributive and not an individualistic process; and development mechanisms need to account for integrative (individual, team, formal, and informal) dimensions. These views are supported by other scholars as follows:

Leadership development is thought to involve a range of dimensions which enhance leadership effectiveness and human capital (Amagoh, 2009), in order to facilitate the achievement of organisational goals (Vardiman et al., 2006; Bodinson, 2005) and competitive advantage (Kim, 2007).

Considering leadership development, as "a complex reciprocal interactions between the leader, others, and the social environment" (Olivares, 2007) aligns with the distributed leadership perspective (expanded scope of leadership), where the focus shifts from a few individuals (charismatic and transactional perspective, etc.) to other layers of leadership within organisations. Therefore, from the organisational context, this implies that leadership development and leadership need to account for top-level executives and other layers (i.e. senior and middle managers). Echoing this view, several scholars argue that leadership development is increasingly critical to organisational success and development efforts must be spread across all levels (Day, 2001; O'Toole, 2001; Tichy and Cardwell, 2002; Ulrich and Smallwood, 2003; Leskiw and Singh, 2007).

Hence, in this research, the distributed approach of leadership is adopted, taking into account CEOs, top executives, directors, senior managers, and middle managers (Maryrowetz, 2008; Scribner et al., 2001; Temperly, 2009).

Martin and Ernst (2005, p. 94), state the following in support of a distributed approach to leadership development:

“Leadership development efforts must focus on the middle of the organization as this is where strategic intent and values/norms become permanently melded with stakeholder (customer, supplier, societal stakeholder) expectations. If developmental interventions addressing complex challenges are attempted at either the bottom or the top of the organization, there is a high probability that the very nature of the complex challenges, the strategic intent, the values/norms, or the resource limitations will be miscalculated and development will be compromised.”

Other scholars (Weiss and Molinaro, 2006; Marques, 2010), call for an integrated perspective to leadership development. Such an integrative approach to leadership is described as “blended learning, advocating this as the best approach to leadership development” (Bentley and Turnbull, 2005; Voci and Young, 2006).

For example, Weiss and Molinaro (2006), propose an integrated approach to leadership development, as a means by which organisations can build the capacity to survive in a competitive environment. They further argue that competitive advantage is enhanced when organisations follow a strategic, synergistic, and sustainable approach to leadership development. The integrated approach advocated by them involves eight steps as follows:

- (1) developing a comprehensive strategy for integrated leadership development,
- (2) connecting leadership development to the organisation’s environmental challenges,
- (3) using the leadership story to set the context for development,
- (4) striking a balance between global enterprise-wide needs with local individual needs,
- (5) employing emergent design and implementation,
- (6) ensuring that development options fit the organisation culture,
- (7) focusing on critical moments of the leadership lifecycle, and
- (8) applying a blended methodology (Weiss and Molinaro, 2006, p. 7).

Figure 1.1, summarises the recent development of the definitions and understanding of leadership and its impact on leadership development, according to Day and Harrison (2007). Currently, leadership is considered to have gained complexity and sophistication and has progressed from the most basic (least inclusive and complex) to the most advanced thinking around leadership (most sophisticated and complex) (Fig. 2-1, first column). The second column reflects the evolution of the definitions of leadership, progressing from exclusively role-based authority (most basic) to influence processes that may include roles (mid-level complexity) to a shared property of a social system that includes interdependencies of individuals.

Summary of evolution of thinking around leadership

Level of complexity and inclusiveness	Definition of leadership	Illustrative theories of leadership	Levels-of-analysis addressed	Leadership development focus	Parallel level of self-concept and identity knowledge principle
Most basic, least complex and inclusive conceptualization of leadership	<ul style="list-style-type: none"> <li>• Leadership is role-based authority</li> </ul>	<ul style="list-style-type: none"> <li>• Trait theory</li> <li>• Leader behaviors</li> </ul>	<ul style="list-style-type: none"> <li>• Individual level</li> <li>• Top-down influence of leader on followers</li> </ul>	<ul style="list-style-type: none"> <li>• Individual skills development</li> </ul>	<ul style="list-style-type: none"> <li>• Individual self-concept</li> <li>• Personal dominance</li> </ul>
Mid-level conceptualization of leadership	<ul style="list-style-type: none"> <li>• Leadership is an influence process between individuals</li> <li>• Roles are also important in shaping influence processes</li> </ul>	<ul style="list-style-type: none"> <li>• Leader-member exchange (LMX)</li> </ul>	<ul style="list-style-type: none"> <li>• Reciprocal dyadic influence</li> <li>• Top-down influence of leader on follower as well as bottom-up effect of follower on leader</li> </ul>	Includes both: <ul style="list-style-type: none"> <li>• Individual skill development</li> <li>• Relationship building</li> </ul>	Acknowledges both: <ul style="list-style-type: none"> <li>• Individual self-concept</li> <li>• Relational self-concept</li> </ul> Able to draw from: <ul style="list-style-type: none"> <li>• Personal dominance</li> <li>• Interpersonal influence</li> </ul>
Most advanced, complex, and inclusive conceptualization of leadership	<ul style="list-style-type: none"> <li>• Leadership is a shared property of a social system including interdependencies among individuals, teams, and organizations.</li> <li>• Can also involve roles and influence processes depending upon situation</li> </ul>	<ul style="list-style-type: none"> <li>• Shared leadership</li> <li>• Collective leadership</li> <li>• Connective leadership</li> </ul>	Multi-level approach (includes individual, team, and organizational level). <ul style="list-style-type: none"> <li>• Includes both contextual influences of organizational influences on team and leadership emergence within a team</li> <li>• Also acknowledges dyadic and individual levels</li> </ul>	Includes all: <ul style="list-style-type: none"> <li>• Individual skill development</li> <li>• Relationship building</li> <li>• Empowerment</li> <li>• Collaboration</li> <li>• Working across boundaries</li> </ul>	Acknowledges all: <ul style="list-style-type: none"> <li>• Individual self-concept</li> <li>• Relational self-concept</li> <li>• Collective self-concept</li> </ul> Able to draw from: <ul style="list-style-type: none"> <li>• Personal dominance</li> <li>• Interpersonal Influence</li> <li>• Relational Dialogue</li> </ul>

**Figure 2.1:** Summary of the Evolution of Leadership and its Implication on Leadership Development (Source: Day and Harrison, 2007).

These views have led to the need for integrated approaches to developing leadership capacity within organisations (Weiss and Molinaro, 2006), with a broadened or distributed leadership lens (Brown and Gioia, 2002). Such approaches are likely to promote shared, distributed, collective, or connected leadership capacity in

organisations (Cox et al., 2003; Day, et al., 2004). According to Graetz (2000, p. 556), "organisations that are successful in managing the dynamics of loose-tight working relationships meld strong 'personalised' leadership at the top with 'distributed' leadership, a group of experienced and trusted individuals operating at different levels of the organisation. ...[Thus ensuring]... integrated thinking and acting at all levels, particularly at the middle and lower levels of management as they can act as roadblocks to change, impeding the passage of the change process to those within their span of control".

In sum, the review of the definitions of leadership development, within the organisational context, highlight the necessity for advancing measures that account for individual and team dimensions, external environmental dynamics, predictability of the future, and are orientated towards the achievement of organisational strategy and competitive advantage and growth (Doh, 2003; Hartley and Hinksman, 2003; Boaden, 2006).

### **Leadership and Executive Development – Different, Overlapping, or Same Constructs in Organisational Context?**

Some scholars differentiate between leadership and management (See seminal reviews by Kotter, 1990; Alimo-Metcalfe and Alban-Metcalfe, 2002). Alimo-Metcalfe and Alban-Metcalfe (2002) consider "transformational leadership" to be equated with leadership and "transactional leadership", with management. Furthermore, Bedeian and Hunt (2006) suggest that leadership should be viewed as a subset of management and that both are important for facilitating organisational performance.

Other scholars (Young and Dulewicz, 2009) consider the two as overlapping and some (Rees and Porter, 2008) consider management and leadership to be almost indistinguishable constructs, in the organisational context.

In terms of leadership and executive development, the differences may be almost indistinguishable, especially when the focus of such activities is on "developing the leadership human capital and capacity to achieve strategic objectives and competitive advantage" (Hartley and Hinksman, 2003).

In addition, some of the leadership development dimensions (e.g. informal instruction, work assignments, developmental assignments, on-the-job-training, executive coaching, action learning assignments, and self-directed learning) cited by some authors (Day and Zaccaro, 2004; Zaccaro and Banks, 2004; Zaccaro et al., 2006; Ohlott, 2004; Boyce et al., 2010) have been replicated by researchers in the field of executive and management development. However, in brief, the abovementioned dimensions associated with leadership development have also been referenced to management and executive development (Vicere, 1994; Garavan, 1999; Mabey, 2004; Gray and Mabey, 2005; Sutaari and Vitala, 2008); these are discussed in detail in the next section.

Looking at the forgoing discussion, it can be said that executive and leadership development within the organisational context may be the same constructs that attract different conceptualisations from researchers.

In sum, within the organisational context, the terms leadership and executive development can be considered the same constructs, which scholars label differently. Consequently, in this research the term executive development is adopted to avoid duplicitous use of the terms executive and leadership development, supporting the assertion of Kotter (1990) that companies must ignore the literature differentiating leadership from management within the organisational context.

## **Summary**

Some interesting issues have emerged on reviewing the literature related to the definitions of executive, management, and leadership development, which are worth highlighting. First, although conflicting definitions are abundant in the literature on the subject of management and executive development, the key thread running through the review is that development dimensions can be classified broadly as formal and informal and are aimed at developing human capital to drive competitive advantage in organisations.

Second, whilst some scholars cite differences between leadership and management, others highlight the overlaps between the two constructs of leadership and

organisational development within the organisational context. This suggests that the perceived differences between the two may be attributed to the particular interest of scholars.

Last, but importantly, within the organisational context, both leadership and executive development programmes are advanced to drive competitive advantage and to improve organisational outcomes. Consequently, in this research, the term executive covers all organisational leaders who have the capacity to influence the performance outcomes (Vardiman et al., 2006; Bodinson, 2005).

The next section will focus on reviewing the dimensions and models of executive and management development with the aim of shaping the conceptualisation of an integrated measure.

### **2.3 Dimensions of Management and Executive Development**

Tensions are rife among researchers concerning the extant dimensions of effective management development. These tensions may stem from the already highlighted diverse definitions of executive and management development. However, it is highly beneficial for organisations to identify and leverage specific management development dimensions capable of producing the most significant performance effects (Longnecker and Nuebert, 2003). Therefore, this section will explore the various dimensions of executive and management development.

To help identify the various dimensions of executive and management development advanced by scholars, the changes in the trends and preferences of management and executive development dimensions will be examined. Vicere et al's. (1994; 1997) two longitudinal studies of Fortune 100 companies are among the most cited studies in this regard. Both studies are based on executive-level respondents and therefore allow comparability of dimensions as well as track changes in executive development preferences over a ten-year period. In the initial Vicere et al. study conducted from 1982 to 1992, the most prominent executive development dimensions cited in 1982 were performance feedback (48%), followed jointly by coaching/mentoring and external programmes (37%) and internal programmes

(34%). However, in 1992, the emphasis shifted to job rotation (58%), followed by internal executive development programmes (56%) with special task force and projects (39%).

The subsequent study by Vicere (1997) revealed further changes in the preferences for executive development dimensions, where task force and special projects emerged as the most preferred dimension (68 %), followed by job rotation (64%) and job training (45%).

The evidence presented above suggests that the emphasis of executive development delivery mechanisms has gradually shifted from “softer” approaches such as performance feedback to “harder” action- and work-oriented dimensions such as special projects. Action-orientated learning may be appealing because of its association with enhancing both individual and organisational learning (Hudspit and Ingram, 2002) and its perceived capacity to stimulate the achievement of strategic objectives (Boshyk, 2002; Loo, 2006). In essence, such learning may be multiplicative and aggregative in nature as it entails both individual and organisational components of learning and can therefore be expected to lead to positive organisational outcomes. This shifting trend is an indication that some of the current executive development approaches are likely to lose relevance over time because of technological, socio-cultural, and workplace changes. It is therefore important for organisations to constantly monitor executive development dimensions to confirm their relevance and alignment with their strategy.

Besides Vicere et al’s. (1994; 1997) study, other studies follow a similar line of enquiry but differ in terms of measures and methodology. Most of the subsequent studies depart from the longitudinal approach and focus on front-line, middle, executive-level managers, and a combination of these factors.

For instance, Longnecker and Nuebert (2003) elicited the views of middle and front-line managers in a number of top US organisations on what they considered the top ten effective management development practices. The three most frequently selected practices were clarification of goals and performance expectations (86%), ongoing performance measurement, feedback and coaching (78%), and mentoring by senior managers (72%). The three practices perceived to be least effective were purposeful

cross-training experiences (58%) visiting other departmental/organisational facilities (54%) and 360 feedback systems (51%). Likewise, Louma (2005) assessed the developmental requirements of middle managers in Finnish Industries (manufacturing services, bank and insurance, retail, and others). Of the management development practices presented, the preferred dimensions were ranked in the following order: self-initiated studies (68.9%), in-company courses (66.8 %), internal development projects (49.7 %), external courses (48.0%), and performance reviews (39.7%).

O'Connor et al. (2006) evaluated senior and junior managers' preferences for various management development dimensions and reported different outcomes for each group. For senior managers, the order of preferences was management development programmes, conferences, and seminars, whilst for the latter group, the order was personal skill training, conferences, and management development programmes. Overall, both groups selected the same dimensions but with varying levels of emphasis, suggesting that the development and learning needs of an executive are most likely to differ significantly across managerial levels.

At a glance, the diverse results in the above studies present a challenge in validating whether the trend observed in Vicere et al.'s studies has changed in a significant manner. However, based on a cross-sectional review, the analysis reveals that managers are becoming more interested in unstructured and informal development dimensions such as self-directed learning, conferences, seminars, and coaching.

According to Brown (2006), senior managers in the UK have developed a strong preference for informal mechanisms of development such as networking with peers, group problem solving, presentations/lectures and coaching, ranked in descending order. This observation reinforces the initial notion that informal and action-based approaches to executive development are becoming far more popular than formal dimensions or mechanisms with senior managers.

Executive Development Associates, a US-based consultancy firm, conducted a survey in 2006 on the trends in executive development, and collated information from 100 chief learning officers and heads of leadership development from top companies around the world. The survey elicited the views of respondents on the

most relevant learning methods over the next three years. These results mirrored the initial observations made by Brown (2006), listed in order of importance: use of company executive expertise, action learning, use of external consultants, external executive coaching, use of internal executive development experts, case studies, online learning, computerised business simulations, internal coaching, and finally benchmarking other organisations.

Here, we find that three learning methods dominated the survey: use of senior executive expertise, action learning, and executive coaching, as observed by Brown (2006). Brown's study excludes networking, but this may be a very important facet of executive development, discussed previously in the literature review. Executive coaching as a development mechanism is not fading off the radar, but rather features prominently as a development mechanism selected by senior managers in the US.

A CIPD study conducted in 2007 on executive development delivery dimensions highlights some of the current approaches to developing senior managerial competencies. The findings of the study reflect the utilisation of both "hard" and "soft" dimensions namely, coaching and mentoring, secondments, reading up on and attending professional and industry-related conferences. Some other methods articulated in the study, worth highlighting, are discussed as follows:

**Learning Groups:** This usually involves arranging of groups of senior managers to meet together to work on their learning needs. This approach is similar to group mentoring. Such groups typically consist of five or six managers who create their own learning agenda with the help of a skilled group adviser to make the system work.

One variant of this model is the action learning set where individuals might take on projects either individually or as a team so long as the projects are realistic and the managers focus on the "learning" and not the "action" (Ingram, 2002; Loo, 2003). Zuber-Skerritt (2002) posits that action learning recognises the possibility for learners to generate knowledge rather than merely absorbing passively the results produced by others.

According to Zenger and Folkman (2003), the most effective action learning methods tend to focus on changing behaviours and are practically orientated in order

to generate concrete results and build accountability for implementation. Huspith and Ingram (2002) view action learning as an approach in which learners work together in sets and try to solve organisational problems using good practice to inform solutions, fostering both individual and organisational learning. Loo (2003) contends that, ultimately, action learning should stimulate personal growth following reflections on multidisciplinary group reviews of solutions to a problem. However, the personal growth acquired through action learning should then transcend into some level of organisational growth, but this process is often not clear-cut. Winch and Ingram (2002) posit that action learning foments learning at different levels, depths, from new networks, through new relationships, providing senior managers faced with business issues the opportunity to achieve personal transformation through self-reflection.

**Shadowing and Mentoring:** Shadowing involves the pairing up of two senior managers with one spending the day following his colleague around which is concluded with a de-briefing from the “shadower”. Both parties can learn from the process, and role reversal occurs subsequently, if deemed necessary. This is a highly cost-effective learning mode but requires careful organising to produce the most effective outcomes. This approach is advocated as an appropriate learning method for developing tacit knowledge and in particular, skills such as presentation, teamwork, and ethical behaviour (Mcloughlin, 2004).

Mentoring, on the other hand, is a committed, long-term relationship in which, a more seasoned professional supports the development of a junior professional (Hernez-Broom and Hughes, 2004). Mentoring programmes can be highly structured or open learner-led relationships (Marcus, 2004). Executive mentoring will invariably reflect the learner-led approach given that such managers by virtue of seniority will demonstrate high levels of self-efficacy.

**E-learning:** As senior managers may not admit weaknesses in front of others, the anonymity of the internet or a company intranet can allow them to explore issues independently without directly involving others. However, many senior managers may need guidance to avoid wasting time on irrelevant websites.

The internet and multimedia technologies are reshaping the way knowledge is delivered, allowing e-learning to emerge as a solution to lifelong learning and training delivery (Zhang et al., 2004). E-learning content differs from other educational materials, in the sense that it can be disassembled as individual learning objects and tagged and stored for reuse in a variety of different learning contexts (Harris, 2005).

Research has shown that properly managed e-learning provides measurable benefits to organisations (Whitney, 2004; Chelan, 2006; Jamieson, 2005). The self-delivery environment of e-learning systems provides the opportunity for senior managers to develop their competencies at their own pace and need not depend on instructors in a traditional training environment.

**Executive Coaching:** Zeus and Skiffington (2000) suggest that executive coaching is a personalised form of assistance for learning, involving building individuals' strengths and recognising and overcoming weaknesses. Unlike other methods of development dimension, coaching is not instructional in nature but concerned with assisting and facilitating professionals enhance and maximise their performance (Du Toit, 2007). Furthermore, Stern (2004) argues that a common set of characteristics of coaching that successfully address the specific needs of management exists. These needs include an efficient and practical results-oriented approach, precisely the coaching skills that will help managers make sense of their organisational environments.

The growing importance of coaching as a development tool for executives reflects its ability to address several of the unique issues experienced by individuals in these positions. Coaching is conducted almost entirely in real business time and focuses on specific, real-life contextual issues. Jones et al. (2007) argue that the common problem of transferring training to the work environment is minimised and the application of training is maximised when coaching is used. In addition, the coaching process is personalised, contrary to a "one-size-fits-all" approach used in many other areas of executive development.

Moreover, executive coaching does not require the executive to be absent from the workplace for a substantial period and is linked to generating positive organisational

outcomes. For instance, Thach (2002) examined the impact of executive coaching on the leadership effectiveness on 186 executive managers in a six-month period, during which the perceived leadership effectiveness of the executives who underwent coaching increased by 60%. Peterson and Miller (2005) suggest that coaching can positively influence middle and executive managerial performance, leading to a positive return on investment.

Two major variants of coaching are delineated within the literature (Olivero et al., 1997; Thach and Heinselman, 2000): performance-based and in-depth coaching. The latter tends to use a rather psychoanalytical approach, attempting to reveal deep-seated issues and often exploring personal values and motivations, whilst the former focuses on practical and specific business issues such as goal setting, project management, or a specific interpersonal skill issue, which is hindering the executive in achieving high-quality business performance.

Performance-based coaching is generally short-term in nature, requiring one to several meetings between coach and client. The second category of coaching is not considered very effective for executive coaching, owing to time restrictions and the fast-result orientation of business (Judge and Cowell, 1997). Regardless of the type of coaching employed, both methodologies are targeted at enabling executives achieve goals to enhance organisational productivity and personal job satisfaction.

A cross-section of the executive development dimensions captured by researchers is presented in Table 2.1. A number of observations emerge as follows: most of the studies are based on single-country data apart from Gray and Mabey's (2005) study that employs an expansive and multi-national perspective.

Also, whilst job rotation, special projects and coaching feature quite prominently, it is unclear if this is mainly attributable to higher than proportionate impact of such dimensions on organisational outcome or simply due to perceived importance attached to them by researchers. A significant number of studies combine both formal and informal dimensions of L&D, but most researchers fail to provide a clear framework for analysing the various measures; moreover, the typical approach prominent in the literature is that involving a generic list of measures.

It is worth noting that these measures fail to account for L&D derived from the networking which occur both within and outside organisations, but the social capital

concept suggests that networking is a crucial platform for learning and development among executives (Anderson, 2007; Rodan and Galunic, 2004).

**Table 2.1:** Management and Executive Development Dimensions.

Author (s)	Management and Executive Development Dimensions	Research Overview	Country	Journal
Vicere (1994)	Job rotation, in-house training, special projects, the-job training, coaching/mentoring, performance feedback, and teaching/consulting employees	Reports on a ten-year study of global trends in the field of executive development and shows how the emphasis has evolved to keep pace with organisational dynamics	US	Journal of Management Development
Vicere (1997)	Special projects, job rotation, on-the-job training, in-house training, coaching/mentoring, performance feedback, external educational programmes, and teaching/consulting employees	Fourth in a series of investigative efforts that endeavoured to track trends in executive education and leadership development on a longitudinal approach	USA	Journal of Management Development

Author (s)	Management and Executive Development Dimensions	Research Overview	Country	Journal
Garavan (1999)	In-house development programmes, external development programmes, training centres, performance review, career development, job rotation, secondments, international assignments, consultants' mentoring, counselling, coaching, organisational role analysis, task force/project groups, seminars/workshops, group training programmes, action learning, self-development group, learning contracts, peer relationships, outdoor management, and development programmes	Discusses the debate within the field of management development, considering a wide range of definitional issues, alternatives, and complementary management development strategies	Ireland	Journal of European Industrial Training

Author (s)	Management and Executive Development Dimensions	Research Overview	Country	Journal
Longnecker and Fink (2001)	Clarification of roles, goals and performance expectations, ongoing performance, measurement and feedback, mentoring, formal career planning, challenging job assignments, purposeful cross-training experiences, formal performance appraisal and review, visiting other facilities and departments, increased contact with external/internal customer, special assignments (e.g. problem-solving teams, task forces etc.), and 360 degrees feedback systems.	Examines the specific management development practices considered most important from a manager's perspective to improving their performance in rapidly changing organisations.	USA	Journal of Management Development

<b>Author (s)</b>	<b>Management and Executive Development Dimensions</b>	<b>Research Overview</b>	<b>Country</b>	<b>Journal</b>
Longnecker and Nuebert (2003)	Clarifying roles, goals and performance expectations, ongoing performance measurement, feedback and coaching, mentoring, performance appraisal and review, challenging/difficult job assignments, formal career planning discussions, increased contact with external/internal customers, cross-training experiences, visiting other departments/organisations/facilities, and 360-degree feedback systems	Identification of what frontline managers considered the most important factors/practices for improving their performance in the context of rapidly changing organisations	USA	Career Development International

<b>Author (s)</b>	<b>Management and Executive Development Dimensions</b>	<b>Research Overview</b>	<b>Country</b>	<b>Journal</b>
Louma (2005)	Self-initiated studies, in-company courses, external courses, internal development projects, and performance reviews	Examines the perspective of individual managers on how the various forms of management development relate to managers' strategic awareness and perceived value of management development	Finland	Journal of Management Development
O'Connor, Mangan and Cullen (2006)	Personal skills training, conferences/seminars, and management development programmes	Examines numerous interrelated issues including the alignment of management development needs to business strategy, the use of management development methods, the development of high potential managers, and the assignment of responsibility for management development activities	Ireland	Journal of Management Development

Author (s)	Management and Executive Development Dimensions	Research Overview	Country	Journal
Mabey (2004)	Internal skills programmes, external courses, seminars, or conferences, mentoring or coaching, formal qualifications, in-company job rotation, external assignments, placements, or secondments, and e-learning	Policies, practices, and impact of management development in Europe	Denmark, France, Germany, Norway, and Spain	Advances in Developing Human Resources
Gray and Mabey (2005)	Internal programmes, external courses, mentoring, qualifications, rotation, e-learning, and external placements	Examines the main contrasts in management development practices between large and small firms to identify key differences in strategic approaches to management development	Britain, Denmark, Norway, France, Germany, Spain and Romania	International Small Business Journal

Author (s)	Management and Executive Development Dimensions	Research Overview	Country	Journal
Sutaari and Vitala (2008)	Management training and education programmes, self-help activities, special job assignments (e.g. projects) regular performance evaluation, job rotation, internet-based learning, personal career planning, and international assignment	Evaluates the preferences for management development methods used in the development of senior managers, and to discover the perceived effectiveness, as well as strengths and weaknesses, of different methods	Finland	Personnel Review

In addition, some authors (USA: Vicere, 1994; Vicere, 1997; Longnecker and Nuebert, 2003; Finland: Louma, 2005; Sutaari and Vitala, 2008; Ireland: O'Connor, Mangan and Cullen, 2006) focus on specific geographic regions, whilst others (Denmark, France, Germany, Norway and Spain: Mabey, 2004; Britain, Denmark, Norway, France, Germany, Spain and Romania: Gray and Mabey, 2005) advance a multinational approach in order to extend the generalisation of the findings.

It can be observed in Table 2.1 that some wide-ranging dimensions have been captured by scholars: formal (management training and education programme) versus informal (job rotation, special job assignments), internal (internal programmes) versus external delivery (external courses, seminars, or conferences), and self-initiated (self-help activities, internet-based learning, personal career planning) versus firm-initiated (in-company job rotation). Some scholars have replicated a number of dimensions across studies, with no obvious rationale behind this replication. For instance, Gray and Mabey (2005) and O'Connor, Mangan and Cullen (2006) replicated personal skills training, conferences/seminars, management

development programmes. Most of the above dimensions fail to address strategic L&D; however, Louma (2005) attempts to examine the perspective of individual managers of how the various forms of management development relate to the managers' strategic awareness and perceived value of management development. Overall, the above points reflect the growing importance of a broad conceptualisation of executive L&D, given that most scholars account for both formal and informal dimensions.

## **2.4 Informal Learning and Executive Development**

Informal learning is perceived to be an effective mechanism for developing managerial competencies (Winch and Ingram, 2002; Loo, 2002; Yorks et al., 2000). Compared to learning occurring in formal environments, informal learning occurs in parallel with work activities, thereby presenting managers with increased opportunities to quickly assimilate and integrate new knowledge, leading to the generation of positive organisational outcomes (Garavan et al., 2002; Hager, 2004a).

Consequently, informal learning may offer managers the practical benefit of identifying, generating, modifying, and integrating learning in the workplace and the resulting knowledge transformation can generate positive effects on organisational outcomes, exemplified by the development of new products and services (Pawlowsky, 2003; Curado, 2006). The dynamic diffusion and transformation of knowledge that occurs in the informal workplace environment may not be prevalent in other learning environments.

According to Malcom et al. (2003), informal learning offers synergy between practice and theory to stimulate effective learning, which may not exist in formal environments. Consequently, in formal learning environments, there may be potential time lapses between when managers actually acquire, absorb, and apply knowledge, potentially influencing the rate of competency development (Marsick, 2009). It is therefore reasonable to posit that the cycle time for generation, modification, and integration of new knowledge in the workplace and the resulting

transformation of such knowledge into novel products and services is likely to be relatively shorter under informal conditions than formal learning environments.

Furthermore, Colley et al. (2002) posit that the definition of informal learning tends to be derived from its dissimilarity with the formal modes of learning. Marsick and Watkins (2001) define formal learning as learning that typically takes place in formal educational settings, is structured in nature, and occurs off the job and outside the work environment.

This foregoing definition is narrow given that some forms of structured learning could be situated within the work environment such as training delivered in the workplace by internal and external instructors. Furthermore, the differentiation of informal modes of learning from formal modes indicates that the latter is characterised by a prescribed framework and organised learning events, leading to the award of qualifications (Eraut, 2000). Here, the view of formal learning is more expansive, referring to dimensions that occur both within the academic and work environments. The lack of certification in informal training in the workplace does not imply that such dimensions are neither well structured nor delivered effectively. As highlighted above, literature on informal learning is characterised by varying definitions; therefore, the conceptualisation of the term lies within a wide spectrum, ranging from a narrow to wide context.

Some commentators such as Dale and Bell (1999), taking a narrow focus, defined informal learning as learning that takes place in the work context, and relates to an individual's performance of the job or employability. In fact, the above definition reflects workplace learning, as a subset of informal learning.

In contrast, Marsick and Watkins (2001) offer a broad definition, positing that informal learning takes place in any setting where people have a need, motivation, and opportunity for learning and is usually intentional but not highly structured and includes self-directed learning, networking, coaching, mentoring, and performance planning. Comparatively, this is a rather encompassing definition of informal learning and hence adopted in this study.

In an attempt to provide some structure around the various definitions cited by commentators, Hager (2004a) proposed that informal learning should be conceptualised according to four broad organising principles:

- Context: learning that occurs outside of classroom based formal educational settings
- Cognisance: intentional/incidental learning
- Experiential: practice and judgement
- Relationship: learning in teams and in close proximity to others

Although these four organising principles may have a high degree of applicability to the workplace learning context, in reality, they are significantly interrelated with L&D in general. For instance, in a broad sense, formal learning includes some relational dimensions, as participants have the opportunity to develop relationships through working in teams, joint assignments, etc.

However, it can be argued that compared to the continuous relationship usually possible in informal learning settings, in formal learning settings, relational interactions are usually limited owing to time constraints. Equally, the principle of cognisance is applicable to both formal and informal settings as some unintentional and incidental learning can emerge through formal learning. Consequently, the only clearly unique features of informal learning are its principles related to context and experiential dimensions.

Garavan et al. (2002) define workplace learning as a set of processes that occur within specific organisational contexts and involve the acquisition and assimilation of an integrated cluster of knowledge, skills, values, and feelings that can result in the fundamental change of individual and team behaviour.

Workplace learning, according to Senker and Hyman (2004), involves the collective efforts that employees undertake to acquire and share knowledge. The above interpretations suggest that all layers of employees within an organisation are exposed to some form of workplace learning, and executives are not excluded from the process.

According to Dyer and Hatch (2004), firms gain a competitive advantage by transcending the learning curve more quickly than rivals, implying firms outperform rivals through effective deployment of L&D processes, and as a result, gain

sustainable long-term competitive advantage. The competitive advantage gained through learning encompasses all forms of learning and transcends all levels within organisations, including executives. As such, executive L&D should include both formal and informal activities – the latter, however, may be potentially difficult to measure. As a significant proportion of executive L&D stems from informal and workplace activities, it should constitute the largest segment of measures against which executive development and organisation performance effects are assessed.

Executives can also derive informal learning and development from social-networking activities. Such social network interactions are assumed to enhance or constrain access to valued resources and development (Seilbert et al., 2001). Networking leads to increased exposure to people inside and outside a firm, and this can enhance learning, development, and understanding of organisational practices, etc. (Lankau and Scandura, 2002).

In addition, networking provides the platform for building and nurturing personal and professional relationships, embodying a system of information, contact, and support (Whiting and De Janasz, 2004). Internal and external social networks formed by executives are characterised by parameters such as network size and strength of network ties that drive the creation of social capital, which can be harnessed to facilitate individual and organisational performance (Adler and Kwon, 2002). A vast amount of studies on networking benefits have focused on examining how this form of social capital translates into a variety of benefits for managers, such as quick promotions and high levels of compensation (Forret and Dougherty, 2004; Marlow and Carter, 2004; Maxwell and Ogden, 2006; Marken, 2001; Singh and Vinnicombe, 2001).

Some authors (Anderson, 2007; Rodan and Galunic, 2004), however, report an exception to this trend, by examining the underlying mechanisms through which executives learn and develop competencies through networking activities. Exploring the dynamics of the information-gathering behaviour of managers, Anderson (2007) posits that networking characteristics affect information benefits, but these effects are stronger for managers motivated to maximise such opportunities. Moreover, findings of studies focusing on information intensity, network size, tie strength, and need for cognition behaviour of managers suggest that continuously eliminating redundant

network links and replenishing them with increased diversity help managers maximise the benefits of social capital (Adler and Kwon, 2002).

Similarly, Rodan and Galunic (2004) examine the relationship between knowledge heterogeneity in social capital and its effects on a manager's overall performance and innovativeness. The authors refer to heterogeneity as the variety of knowledge and expertise to which a manager has access through a network. Results emerging from the study indicate that managers who move away from narrow network structures are most likely to benefit from political manoeuvrability and can stimulate higher organisational performance. In addition, the authors argue that although access to diverse knowledge and network can generate comparable impact on overall performance, it is also important for developing service and product innovation. Although these studies provide further insight into the effects of managerial networking, they do not categorise the nature and type of information transferred across the social network of managers and how such information influence L&D in general. As previously mentioned, L&D competencies gained through social interactions (within and outside the organisational settings) can enhance or contribute towards the effective development of firm strategy, but this notion requires empirical verification.

Recent academic literature on workplace learning challenges the notion that learning is purely a function of knowledge and skill acquisition. This view is advanced by Colley (2012), who draws on the socio-cultural theory to advance a more holistic view of learning as a process rather than a product. The process view of learning is also perceived to depend on social participation, encompassing issues of identity and belonging (Lave and Wenger, 1991; Hughes et al., 2007). Another important aspect of workplace learning according to Colley et al. (2003) is the concept of "vocational habitus" that highlights the significance of "fitting in" in a community of practice. Under this concept, individuals who fall outside an extant community of practice are excluded from the "vocational habitus". This concept offers supporting evidence to the "isolation" often experienced by executives when engaging in training and development dimensions, which do not reflect their level of seniority.

## **Conclusion**

To recap, the above section has considered the various dimensions of executive and management development advanced by various researchers, highlighting the shifting emphasis from formal to informal dimensions. A detailed review of how informal learning influences the process of executive L&D was also discussed in detail. In addition, it has been established that social settings and networks can provide executives with significant information that can directly or indirectly affect a firms' overall strategy formulation and implementation process (Winch and Ingram, 2002; Loo, 2002; Yorks et al., 2000; Anderson, 2007; Rodan and Galunic, 2004).

## **2.5 Models of Management and Executive Development**

Researchers have attempted to present different models to facilitate the effective deployment of management development. In one notable model attributable to Burgoyne (1988), management development is classified into six maturity levels, where level 1 reflects situations where no systematic management development is deployed, level 2 accounts for isolated and tactical management development, level 3 depicts a situation where management development is integrated and structured at the tactical level, level 4 reflects management development incorporated into corporate policy, level 5 reflects situations where management development strategy fuels corporate policy; finally, level 6 reflects where management development fuels both corporate policy and strategic development processes.

According to Burgoyne's Model, the highest level requires full alignment of management development dimensions with corporate policies to generate an optimal impact. In essence, the model posits that maximum benefits can accrue from management development dimensions if they are inextricably linked with corporate policies and goals. In other words, the sporadic implementation of management development dimensions is likely to dilute the organisational impact of management development. In reality, this can be implemented effectively by articulating credible corporate vision and goals before formulating appropriate management development policies, programmes, and activities.

Mumford (1993) presented a different model which is process-oriented and categorises management development dimensions as follows: type 1 captures informal management development and is mainly incidental in occurrence, type 2 reflects integrated dimensions with an opportunistic focus, and type 3 embodies formal management development, which is well planned and coordinated.

Whilst both authors offer some overlapping propositions on management and executive development dimensions, two main critiques can be raised against Mumford's model. Firstly, it oversimplifies the entire management development process, which, in reality, may be rather complicated. Secondly, Mumford explicitly fails to link management development dimensions to the achievement of organisational strategic goals. Some implications can arise from the latter argument. For instance, if organisations apply the Mumford model in isolation of the other considerations presented by Burgoyne, they may be inclined to develop a tactical response to management and executive development rather than advancing dimensions linked to overall corporate strategy. This could possibly explain some of the rather sporadic returns attributed to management development dimensions deployed with no explicit alignment to strategic intents of organisations.

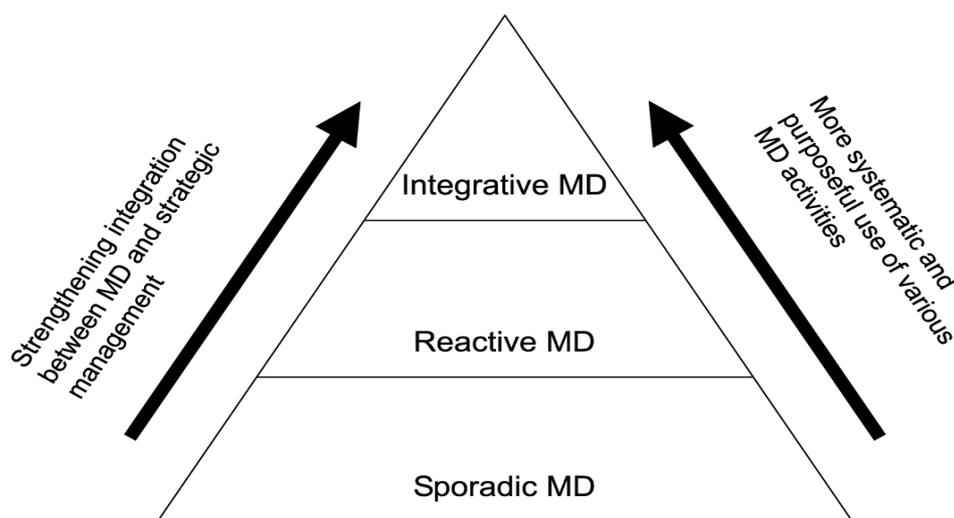
In an attempt to address the observed deficiencies in early models, Louma (2005) combined the two models developed by Burgoyne (1998) and Mumford (1993) to generate a new management development model. As a result, a three-staged model, reflecting progression towards high-level integration between strategic management and management development was formulated. Outlined below are the details related to each level:

**Sporadic management development:** Management development at this level is considered uncoordinated; the target setting is vague and organisational ownership of management development initiatives is weak. The content of management development is loosely coupled with specific development needs or future aspirations with learning benefiting individuals rather than the organisation.

**Reactive management development:** In this case, management development is used as a response to identified problems or anticipated failures in performance. Management development follows technological, financial, or product/market-

related considerations of strategy. There are some consistencies in various management development initiatives, which represent mainly formal learning and management development designed to benefit the organisation rather than individuals.

**Integrative management development:** Here, various management development initiatives, formal and informal, form an integrated solution, focusing on the key elements of current strategy, addressing previously unidentified solutions or problems, possibly leading to the generation of novel strategies. Management development's input to business strategy is sought intentionally to benefit both individuals and the organisation.



**Figure 2.2:** Louma's Model of Management Development.

Arguably, maximum benefits may be accrued from an integrated format than the sporadic configuration, which is unaligned with corporate strategy. In addition, promoting the benefits of the integrative perspective, particularly the strategic impact of such an approach may be more appealing to executives than sporadic approaches of learning and development. Furthermore, executives may perceive the sporadic deployment of L&D as irrelevant and may lack the motivation and commitment to engage in such activities.

In spite of the positive attributions associated with Louma's model of management development, it lacks the level of details for practical application, as it does not clearly specify the appropriate components of formal and informal development. However, the model offers the basis for developing a wide measure of executive L&D.

## **2.6 Theoretical Conception of an Integrated Executive L&D Measure**

In an attempt to address the abovementioned limitations, Louma's high-level conceptualisation of management development will be augmented by some concepts from the literature to present a practicable model, reflective of the executive work scope. Although learning has multiple facets and dimensions, these can be structured meaningfully to reflect the range of learning that executives experience. It is important to highlight that the following conceptualisation of L&D can involve either individual dimensions or a complex interaction between two or more dimensions at any particular time.

**Structured learning** or didactic, which is usually associated with the formality and educational pedagogical frameworks (Beckett and Hager, 2002; Hager, 2004a, 2004b) is considered an important element of executive L&D. Such learning encompasses learning deployed via direct interaction and may be delivered in academic settings or in-house, by external/internal training providers. In this particular instance, the emphasis will be on in-house and externally delivered courses. Didactic modes of learning are not without criticism. Notably, Lave and Wenger (1991) argue that learning comprises processes of participation in a community of practice, i.e. family, work teams, professional associations, etc., which is underpinned by the social theories of learning and supported by others (see inter alia, Engestrom, 2001, 2004; Wenger, 1998). Lave and Wenger established this perspective based on a case study of five organisations, illustrating that through a relational structure, a new member could progress to stability and, eventually, attain full mastery or expert status in a specific profession. In relation to executive L&D, the community of practice or participative perspective is akin to learning originating from interacting with peers, engaging in professional association programmes and

similar activities. Such activities are the main elements of the participative dimension of the executive L&D espoused in this research.

**Self-directed learning** may be didactic or unstructured in nature and may be delivered through internal or external providers, but the individual learner has control over the pace of delivery and learning outcomes (Louma, 2005; O'Connor et al., 2006). Given the characteristic of isolation associated with the executive cohort previously highlighted, another dimension of L&D that may be suitable to the executive cohort is self-directed learning, which according to Sutaari and Vitala (2008), embodies individual-initiated learning without any form of external dimension, featuring highly developed information seeking and retrieval and critical-thinking skills (Luoma, 2005). Such directed learning at the workplace is expected to be influenced by individual characteristics of the learners (Tracey et al. 2001; Machin and Fogarty, 2004).

**Participative learning** is based on the “expansive learning” concept postulated by Engrestrom (2001, 2004), drawing on the social and interactive perspectives, addressing learning, knowledge creation, and expertise to be dynamically constructed through multiple and interacting communities of practice. Engrestrom based this model on activity theory, stressing on a transformational outcome to learning which occurs when individuals question and challenge existing norms within the activity system. In addition, individuals are motivated to reconceptualise their ideas into a broad horizon because of engaging in this form of learning.

According to Engrestrom, expansive learning is not limited to pre-defined contexts and tasks and can encompass a wide context. Specifically, the application of expansive learning to an executive will encompass L&D dimensions occurring in both internal and external networking and at the individual and team levels.

**Networking-related learning** fits into the expansive learning framework as it involves social interactions, which occur within various inter-functional settings or outside the barriers of organisations, encompassing various external events and interactions such as professional associations, industry events, conferences, etc. Thus, the concept of expansive learning encompasses both network-related and

participative learning dimensions, with the latter focusing mainly on intra-organisational considerations.

**Experiential learning** is considered an important facet of executive L&D, but its definition is surrounded by conceptual ambiguity (Malinen, 2000). By taking into account the needs of executives and the fact that adult learning is a transformational process, resulting in expanding human possibilities and action (Davis and Sumara, 2000), experiential learning encompasses the expansion that shifts the logic of expert knowledge, claims universal conceptual validity, and resists knowledge authorised solely by scientific evidence (Fenwick, 2003).

Consequently, such learning encompasses a cluster of activities, namely risk taking, experimenting, and job challenges. Clarke (2005) and Chiva et al. (2007) have included these processes in the validation of the measure associated with informal learning without explicitly labelling these as experiential learning, as defined above and applied to this study.

According to McAdam and Leonard (1998), strategic practice is characterised by strategic thinking, activities, and behaviours that enhance managerial readiness to exploit dynamic opportunities and facilitate learning. Furthermore, Thompson and Cole (1997) highlight the importance of a range of strategic competencies and learning behaviours vital for competitive success, namely strategic awareness and control, strategic implementation, competitive strategy, ethics and social responsibility, stakeholder satisfaction, crisis avoidance, quality and customer care, and functional competencies.

**Strategic learning**, as applied to this study, reflects a range of behaviours and dimensions capable of enhancing executive ability to exploit dynamic opportunities in the business environment (internally and externally), taking into account ethical and wide stakeholder issues, to drive superior organisational performance.

In conclusion, the L&D dimensions discussed above, in totality, reflect a broad representation of formal and informal executive learning L&D, drawing on a review of the SHRM, management development, and strategic management literature.

Such a broad conceptualisation of executive L&D supports the notion of ambidextrous learning (Benner and Tushman, 2003; Lubatkin et al., 2006; Li and Lin, 2008), which has shown empirical evidence of positive organisational performance effects (Prieto et al., 2009; Uotila et al., 2009; Bodwell and Chermack, 2010; Luzon, and Pasola, 2011; Lee and Huang, 2012). In addition, ambidextrous learning is advanced as an integration of exploratory and exploitative approaches of learning (Dass and Parker, 1999; Cao, et al., 2009; Lee and Huang, 2012). Exploratory learning is generated through conscious transformation of current internal processes, routines, and knowledge and encompasses exploring new information or knowledge for organisational benefits (Miner et al., 2001; McGrath, 2001; Wang, and Rafiq, 2009). Conversely, exploitative learning employs knowledge embedded in an organisation's pre-existing knowledge base to generate solutions to problems (Martin and Mitchell, 1998; Schildt et al., 2005; Uotila, 2009).

The link between ambidextrous learning and the broad executive L&D measure under consideration is premised on the view that participative learning involves learning derived from engaging in internal activities and processes. Participative learning embodies some of the characteristics and semblance of exploitative learning given that the knowledge generated from this form of learning is based on interactions that occur within an organisation. On the other hand, strategic and network-related learning may arise from engaging with external parties and is highly likely to relate to exploitative learning. Thus, there is reasonable evidence of both exploitative and explorative learning in the broad conceptualisation of executive L&D, thus reflecting the characteristics of ambidextrous learning (Lubatkin et al., 2006; Li and Lin, 2008).

## **Summary**

The literature currently emphasises on holistic, systemic, and integrated perspectives of management development (Louma, 2005; Weiss and Molinaro, 2006). Such views advocate policies, approaches, and practices that locate management development within the wide technical, social, political, and cultural contexts and acknowledge the role of both individual and organisational factors within the management development process. Another prevailing view is that management development objectives and activities must be firmly grounded in organisational strategy and

structure and must align with changes at the organisational and individual executive development levels (Boshyk, 2002; Brown, 2006; Loo, 2006). The management development process must therefore be pragmatic, embedded, and practised within what managers consider as their unique organisational context and reality.

There is evidence that the focus of management development has shifted to activities such as coaching, action learning, natural learning, self-development processes, mentoring, and other peer-related learning activities (Longnecker and Fink, 2001; Mabey, 2004; Sutaari and Vitala, 2008). The concept itself has broadened to emphasise on the development of the whole person, rather than the acquisition of competencies for a particular role (O'Conner, 2006; Weiss and Molinaro, 2006). Therefore, it can be said that integrative approaches of executive L&D rather than individual-focused approaches should be implemented by organisations.

It has also been observed that executives may be attracted to L&D programmes that are linked to organisational strategy. This dimension may generally reflect the nature of work undertaken by executives and therefore convey the perception that it contributes to organisational outcomes better than other forms of learning and development (Brown, 2006).

To recap, based on the review of the models and dimensions of executive and management development, the theoretical conceptualisation of an integrated measure of executive L&D, encapsulating six dimensions (strategic, experiential, participative, self-directed, networking-related and participative) is derived.

## **2.7 Theoretical Justification Underpinning the Expected Effects of Executive L&D on Organisational Performance**

The theorisation that executive L&D will affect organisational performance, drawing on a number of interrelated theoretical concepts – Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007), Dynamic Capabilities (Chien and Tsai, 2012; Eisenhardt and Martin, 2000; Zott, 2003), Human Capital (Rastogi, 2002; Ulrich, 1997; Wright et al. 2001) and Resource Dependency (Pfeffer, 1972; Pfeffer

and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005) – is discussed in detail as follows:

### **2.7.1 Human Capital Theory**

Scholars have attributed multiple definitions to the concept of human capital (Kulvisaechana, 2006), but the extant definition considers it a repertoire of knowledge, competency, attitude, and behaviour embedded in an organisation's human resource (Youndt et al., 2004; Rastogi, 2002). It is also contended that the Human Capital theory has migrated into several research strands such as corporate value creation (Rastogi, 2002; Mayo, 2001), competitive advantage (Gratton, 2000) and long-term organisational growth (Tomer, 2003; Chuang, 1999).

The growing emphasis on human capital perhaps reflects the perception that, market values of organisations depend far less on tangible and more on intangible resources, embedded within human resources. There is an emerging view that well-developed human resources provide the foundation on which human capital can be developed and eventually utilised for the benefits of the organisation (Rastogi, 2000). Consequently, organisations are motivated to continuously invest in human capital development activities across all levels (i.e. executive, managerial, and staff) with the expectation of deriving superior corporate success and increased efficiencies (Youndt et al., 2004).

It is also noted that whilst human capital can be generated through several avenues, comprehensive training activities focusing on the depth of dimensions, duration of programmes, and breadth of offerings have been cited as some of the most reliable mechanisms for enhancing human capital capacity (Huselid, 1995; Snell et al., 2000). It implies that training and development dimensions directly affect organisational capital and can generate additional benefits such as social capital, with far-reaching effects beyond the boundaries of the firm (Youndt, 2004). Social capital, which is a subset of human capital, embodies the knowledge in groups and networks (Nahapiet and Ghoshal, 1998). Specifically, social capital encapsulates knowledge resources embedded within, available through, and derived from a network of relationships (Burt, 1992).

Development programmes not only increase employees' personal knowledge and human capital but also foster an environment where employees can build relationships with peers and transfer and share knowledge among themselves, thereby increasing their social capital capacity (Wallis et al., 2004). Likewise, as individuals learn and increase their human capital, they may be creating knowledge that can potentially form the foundation for organisational learning and knowledge accumulation (i.e. organisational capital). Such organisational capital represents institutionalised knowledge and codified experience that may be stored in databases, routines, patents, manuals, structures (Hall, 1992), and some refer to this latter knowledge as structural capital (Bontis, 1996) which can be leveraged for competitive advantage.

### **Theoretical Relationship between Human Capital Theory and Organisational Performance Effects**

Theoretically, the link between the human capital and organisational performance can be explained as follows. As organisations invest in L&D activities such as executive L&D, human capital will be generated (Rastogi, 2002; Mayo, 2001). The human capital generated through executive L&D can eventually generate competitive advantage (Gratton, 2000), leading to positive organisational performance (Tomer, 2003; Chuang, 1999).

The effects of human capital on organisational performance may be explained through the Social Capital (Nahapiet and Ghoshal, 1998) and Job Demand Resource theories (Demerouti, et al., 2001a; Demerouti, et al., 2001b) as follows:

According to Social Capital theory, networks of relationships generate valuable resources and provide members with "collectively owned capital" which can be exploited for organisational benefits (Nahapiet and Ghoshal, 1998). Adler and Kwon (2002) posit that the presence of high-level social capital is likely to enhance team-learning behaviours. Thus, as executives engage in L&D (situated within their internal and external network), they gain greater access to new resources in terms of information and guidance related to effective performance (Sparrowe et al., 2001). Executives can then deploy the social capital to offer increased support and resources to subordinates (Edmondson, 1999; Van Der Vegt and Bunderson, 2005; Van

Emmerik et al., 2011). As employees benefit from the support and resources from executives, they can in turn generate creative solutions and products (Shore and Coyle-Shapiro, 2003; Wang et al., 2005; Yukl et al., 2009) which can result in increased customer satisfaction (Babbar and Koufteros, 2008; Maddern et al., 2007) and eventually translate into enhanced organisational performance effects.

Empirically, several researchers have reported positive effects between training and development (which is considered to be a source of human capital) and organisational performance (Bae and Lawler, 2000; Bae et al., 2003; Carlson et al., 2006; Fey and Bjorkman, 2001; Harel and Tzafrir, 1999; Katou and Budhwar, 2006; Laursen and Foss, 2003; Panayotopoulou et al., 2003; Richard and Johnson, 2001; Rodwell and Teo, 2005; Rodriguez and Ventura, 2003; Sels, et al., 2006; Tessema and Soeters, 2006; Tzafrir, 2006). Specifically, Hitt et al. (2001) report direct and moderating effects of human capital combined with strategies (service diversification and geographic diversification) on organisational performance in professional service firms.

### **2.7.2 Resource-Based View Theory**

The logic behind the Resource-Based View theory is that resources possessing advantage-creating characteristics such as “inimitability” and “non-substitutability” drive organisational survival (Barney, 1991). Collis and Montgomery (1995) extend these characteristics to include inimitability, durability, appropriability, substitutability, and competitive superiority as the key ingredients of the Resource-Based View theory. Further, eight criteria, complementarity, scarcity, low tradability, inimitability, limited substitutability, appropriability, durability, and overlap with strategic industry factors are highlighted by Amit and Shoemaker (1993). Fahy (2000) classifies the advantage-creating characteristics associated with the Resource-Based View into three key criteria: value, barriers to duplication, and appropriability.

Scholars (Khatri, 2000; Clulow et al., 2007) further argue that the effective development of key resources embodying such features enable firms to achieve and sustain competitive advantage. This view is supported by several scholars (Barney, 1991; Amit and Shoemaker, 1993; Peteraf, 1993; Fahy and Smithee, 1999; Barney and Arian, 2001; Barney, 2001; Priem and Butler, 2001), indicating that such key resources offer a competitive advantage translatable into superior firm performance.

Barney (2001) defines competitive advantage as activities which increase firm effectiveness in ways that competitors are unable to replicate, resulting in economic returns to the firm's stakeholders (also called economic rent).

Intangible assets and capabilities are considered to embody the essential characteristics of value, barriers to duplication, and appropriability (Fahy 2000), and this view is supported by others (Barney and Wright, 1998; Smart and Wolfe, 2000). Mueller (1996) argues that effective deployment of SHRM can result in competitive advantage, provided resource mobility barriers are created. Furthermore, Becker and Gerhart (1996) contend that competitive advantage originates from human resource systems rather than the entire human resource pool.

### **Theoretical Relationship between Resource-Based View and Organisational Performance Effects**

Theoretically, it can be argued that the enhanced capabilities executives gain from L&D dimensions (formal and informal), are intangible, situated within a unique context, and possess inimitability characteristic. As per earlier discussions of the literature, pertaining to the definitions of management and executive development, it was observed by Castanias and Helfat (2001) that the managerial skills required at the executive level appear to be tacit in nature and involve learning by "doing" with no clear blueprint, which renders such skills quite difficult to replicate quickly. Linking this notion back to the Resource-Based View, such skills embody a high degree of inimitability and constitute a crucial component of organisational human capital (Barney, 1991; Barney & Arikan, 2001, Barney, 2001).

Therefore, executive L&D reflects some of the parameters of this view. Hence, the effective deployment of the tacit "knowledge" resources derived from executive L&D can increase firm effectiveness in ways that competitors are unable to replicate, thereby providing economic rent (competitive advantage). Such intangible resources may include the tacit knowledge that executives develop through interactions with various networks and business associations, which embody some inimitable characteristics and features, which can be leveraged for competitive advantage.

Some researchers (Hunt and Morgan, 1995; Collis and Montgomery, 1995; Fahy, 2002; Wilcox-King and Zeithaml, 2001) posit that the competitive advantage gained through intangible assets and capabilities translates into superior firm performance, measurable in terms of financial, increased profits/sales, increased sales, or market share.

Further, empirical testing of the Resource-Based View has been conducted by several studies in the last two decades. Henderson and Cockburn (1994) measured the value, rarity, and imitability of competence that has an impact on research productivity in pharmaceutical firms. In the context of Spanish manufacturing firms (over ten employees), Esteve-Perez and Manez-Castillejo (2008) confirmed that a firm's strategy for developing specific assets (advertising and creating research and development policy) may enhance its ability to adapt to the environment and improve its survival prospects.

Ray et al. (2004) observed that intangible and socially complex capabilities contribute to customer service enhancement. Importantly, Newbert (2007) reported that the enhancement of core competencies contributes to competitive advantage and firm performance. However, the Resource-Based View has been critiqued as a static theory which has paved way for the formulation of the Dynamic Capability theory.

### **2.7.3 Dynamic Capability Theory**

Countering the critique of scholars against the static assumption underpinning the Resource-Based View, some authors (Eisenhardt and Martin, 2000; Priem and Butler 2001; Barney, 2001) derived several hypotheses hinging on some aspects of the Resource-Based View (i.e. value, rarity, and imitability). Further defence is based on equifinality (e.g. difficulty to define appropriate boundaries of a specific industry, inappropriate assumption about the technological and competitive stability), product market (i.e. factor market/product market model), and the adoption of the Resource-Based View is recommended to address the questions of strategic alternatives, rent appropriation, and strategy implementation.

The defence mounted by Barney (2001) failed to stymie the emergence of a dynamic position which extends the Resource-Based View to account for the evolutionary nature of firm resources (Wang and Ahmed, 2007. Furthermore, Helfat and Peteraf

(2003) and led to the introduction of the concept of capability lifecycle to underpin the "Dynamic Resource-Based" or Dynamic Capability theory.

Market dynamism has been cited to be the antecedent of dynamic capabilities that drive development and firm performance (Wang and Ahmed (2007)). Several definitions of dynamic capability have emerged. Teece et al., (1997) define dynamic capability as the ability of firms to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. From the process perspective, Eisenhardt and Martin (2000) define dynamic capabilities as “the firm’s processes that use resources – specially the processes to integrate, reconfigure, gain and release resource – to match and even create market change”. From the “input – transformation – output” process position, dynamic capabilities are explained by Cepeda and Vera (2007) as the configuration of resources and operational routine changes.

From the behaviour perspective, Zollo and Winter (2002) consider dynamic capability to be a learned and stable pattern of collective activity through which organisations systematically generate and modify operating routines in pursuit of improved effectiveness. Importantly, Ambrosini and Bowman (2009) cite a number of internal and external factors which shape dynamic capabilities; some of the internal factors include managerial behaviour (e.g. managers’ perceptions of the environment, leadership), L&D, the existing set of resources, and social capital. From an SHRM viewpoint, Wright et al. (2001) argue that understanding and developing of dynamic capabilities is facilitated by management systems that promote and transform both the stock and flow of knowledge within the firm and enable the firm to constantly renew its core competencies.

### **Theoretical Relationship between Dynamic Capability Theory and Organisational Performance Effects**

The relationship between dynamic capability and organisational performance can be highlighted by integrating the Dynamic Capability view with the Knowledge-Based view. Drawing on the behavioural and SHRM perspectives advocated by Zollo and Winter (2002) and Wright et al. (2001), executive L&D can be considered part of the management systems and learned activities capable of improving organisational

effectiveness. Advocates of the Knowledge-Based view (Griffith et al., 2006; Liao et al., 2009) have conjectured that knowledge resources can generate dynamic capabilities and that learning serves as the bridge between knowledge resources and the creation of dynamic capabilities (Heijden, 2004). The notion that learning mechanisms enhance dynamic capabilities sheds light on the evolution of dynamic capability within organisations (Zott, 2003; Zollo and Winter, 2002). Empirically, some researchers (Ju et al., 2006; Zhang et al., 2004) have posited that knowledge and learning are instrumental in determining innovative capabilities at the individual and organisational levels, and such innovative capabilities can influence organisational stability in dynamic markets (Lee and Tsai, 2005).

The process of converting knowledge resources of into organisation performance can be explained further through the socialisation, externalisation, combination, and internalisation (SECI) model (Nonaka and Takeuchi, 1995). According to this model, the organisational knowledge creation view of the firm involves conversion processes between tacit (individual) and explicit knowledge. This processes moves through four non-linear steps, socialisation, externalisation, combination, and internalisation that help synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001). Extending the view that executive L&D generates dynamic capability can offer a theoretical link between dynamic capability and organisational performance, based on the SECI model as follows:

**Socialisation (Tacit to Tacit):** As executives engage in informal learning activities and social interactions with peers and customers, they develop tacit knowledge through face-to-face or knowledge sharing experiences. Such tacit knowledge may be difficult to formalise and can be acquired only through shared experience. Experience-based knowledge is considered important in the development of tacit knowledge, which in turn, drives innovative and competitive advantage (Byosiere and Luethge, 2008).

**Externalisation (Tacit to Explicit):** The tacit knowledge executives gain from the socialisation and informal learning can be converted into explicit knowledge by externalisation (e.g. written procedures, strategies, and process maps), thereby

serving as a facilitator for embedding the new knowledge to be disseminated across the organisation (Ambrosini and Bowman, 2001).

**Combination (Explicit to Explicit):** The newly explicit knowledge disseminated across the organisation can then be integrated with existing explicit information (organizing, integrating knowledge), combining different types of explicit knowledge to develop innovative solutions and products (Byosiere and Luethge, 2008), resulting in superior organisational performance (Tontini and Silveira, 2007).

**Internalisation (Explicit to Tacit):** The internalisation process involves a process of continuous and collective reflection and the identification of connections and patterns (executive learning and development) to drive continuous organisational effectiveness and challenge the status quo, developing further dynamic capability.

In sum, the SECI model therefore creates a knowledge spiral across the organisation, leading to the creation of innovative services and products, eventually resulting in positive organisational performance effects (Wang and Ahmed, 2002; Narver et al., 2004; Mavondo et al., 2005).

An alternative to the dynamic capability and organisation performance link can be formulated on the basis of the market-related learning perspective. According to Sinkula (1994), market-driven learning entails the development of market knowledge, which potentially influences organisational performance through the development of customer-centric products and services. Such new products and services are likely to result in increased customer satisfaction, which will in turn generate customer loyalty (Bennett and Rundle-Thiele, 2004), leading to increased organisational performance (Yeung et al., 2002; Keiningham et al., 2003). Dissatisfied customers may be inclined to transact with competitors (Barlow and Mail, 2000), leading to shrinking market share and organisational performance for the organisation in question. In essence, the dynamic capability and market-knowledge developed through frequent interaction with customers can result in enhanced organisational performance effects through the provision of customer-centric products and service (Jones and Suh, 2000).

#### **2.7.4 Resource Dependency Theory**

The Resource Dependency theory hinges on securing control over resources and inputs in order to drive superior firm performance (Pfeffer, 1972, 1976; Pfeffer and Novak, 1976). This theory was pioneered in the 1970s by Pfeffer and his colleagues (Pfeffer, 1972, 1976; Pfeffer and Novak, 1976; Pfeffer and Salancik, 1978) and consolidated by an array of subsequent empirical studies (Walter and Barney, 1990; Hitt and Tyler, 1991; Finkelstein, 1997; Hillman, 2005; Hillman et al., 2007; Bowden and Isch, 2013). Rooted in the field of financial economics, the Resource Dependency theory suggests that firms will respond to unequal market relationships by pursuing one of two strategies – “absorption” or “cooptation”. Absorption involves engaging in acquisitions, mergers, or takeovers to end the dependency relationship. On the other hand, cooptation typically involves the weak party engaging in relationships with the dominant party to influence the behaviour of the dominant party through political action or by offering its members positions on its board of directors (Pfeffer, 2003; Hillman et al., 2009; Davis and Cobb, 2010).

The Resource Dependency theory maintains that directors can provide critical links to the resources that a firm needs to survive and prosper (Pfeffer and Salancik, 1978). Previous research findings (Gales and Kesner, 1994) in the field of corporate restructuring activities, suggest that the absence of these links and decline in firm performance are interrelated. In effect, when executives fail to manage corporate resources effectively corporate performance is negatively impacted (Hillman et al., 2000; Hillman et al., 2009), leading to buyout by competitors. Some of the critical resources can be embedded within the tacit knowledge executives develop by engaging in formal and informal development dimensions (including networking, coaching, etc).

The organisational knowledge creation view of the firm, involving the conversion processes between tacit (individual) and explicit knowledge (Nonaka and Takeuchi, 1995) based on the SECI model, helps synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001). Consequently, as executives enhance their capabilities through experiential learning, the acquired knowledge can be converted into shared-knowledge through dialogue with peers and subordinates, creating a knowledge spiral across the organisation that

can be applied to generate innovative services and products (Wang and Ahmed, 2002; Narver et al., 2004; Mavondo et al., 2005). Despite its popularity, the Resource Dependency theory has been subject to one principal criticism. According to Finkelstein, (1997), the theory is largely ahistorical and assumes that economic transaction patterns are static and fails to account for dynamic interactions over time.

### **Theoretical Relationship between Resource Dependency Theory and Organisational Performance Effects**

Theoretically, the link between the Resource Dependency theory and organisational performance can be established by combining the Knowledge Creation (Nonaka and Takeuchi, 1995; Grant, 1996; Leiponen, 2006; Taminiau, et al., 2009), Leader-Member exchange (Dansereau et al., 1975; Graen and Cashman, 1975), and Job Demand Resource theories (Demerouti et al., 2001a, 2001b).

The knowledge view of the firm suggests that organisations that are capable of acquiring critical operational knowledge faster than competitors can achieve a competitive advantage against rivals (Chen and Lin, 2004; Zahra and George, 2002). Knowledge and learning, according to some researchers (Ju et al., 2006; Zhang et al., 2004), are instrumental to the creation of innovative capabilities at the individual and firm levels and that such innovative capabilities can influence organisational survival in dynamic market environments (Lee and Tsai, 2005). This view is embodied within the Knowledge-Based theory, positing that the characteristics and effective knowledge integration have consequences for organisation outcomes (Huang and Newell, 2003; McEvily and Chakravarthy, 2002; Wang et al., 2004) and that internal and external learning activities facilitate the acquisition, conversion, and application of organisational knowledge stock and flow (Pablos, 2002). Moreover, some researchers (Blackler et al., 2000; Badii and Sharif, 2003) argue that organisations can acquire sustainable competitiveness by integrating different kinds of knowledge in an effective manner. Knowledge integration processes enable organisations to transform the tacit knowledge of a number of individuals (e.g. executives) into tangible or intangible performance outputs (Huang and Newell, 2003). Enhanced innovation performance was also found to be significantly correlated with knowledge characteristics of firms, especially through enhanced knowledge integration processes – acquisition, conversion, and application (Ju et al., 2006).

Consequently, as executives become adept at acquiring and combining knowledge from external sources through informal and formal learning, they create an enabling environment for the production of innovative services and products, which can generate positive organisational performance effects (Hsiao, et al., 2011). Thus, through knowledge acquisition and combination of processes, organisations can secure control over critical resources and inputs in order to drive firm performance (Nonaka et al., 2001). This process of gaining access to critical resources through executive L&D reflects the Resource Dependency concept, given that such "knowledge assets" can enable the organisations to control resources effectively to gain competitive advantage (Pfeffer and Salancik, 1978; Nonaka et al., 2001). The cycle of knowledge conversion, already discussed under the dynamic capability section, applies here too. Thus, according to the organisational knowledge creation view of the firm, the conversion processes between tacit (individual) and explicit knowledge (Nonaka and Takeuchi, 1995) is based on the socialisation, externalisation, combination, and internalisation (SECI) model. This helps to synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001). Thus, as executives enhance their capabilities through learning and development, they acquire knowledge which can be converted into shared-knowledge through dialogue with peers and subordinates, creating a knowledge spiral across the organisation, which can be applied to generate innovative services and products (Wang and Ahmed, 2002; Narver et al., 2004; Mavondo et al., 2005).

Furthermore, by combining the Leader-Member exchange (Dansereau et al., 1975; Graen and Cashman, 1975) and Job Demand Resource theories (Demerouti, et al., 2001a; Demerouti, et al., 2001b), an explanation can be given for the connection between Resource Dependency theory and organisation performance. Liao et al's. (2010) study findings provide empirical support to this connection by demonstrating a statistically significant relationship between leader-member exchange and employee creativity. It is however expected that the presence of distributed leadership would be required for effects of executive L&D to be transmitted through the leader-member exchange and job demand resource interactions. Thus, as executives gain "knowledge resources" from L&D, the level of support they provide to employees and direct reports will be enhanced. Through distributed leadership effects, the job demand resource dynamics available to employees are enhanced;

resultantly, employees gaining access to resources through the distributed leadership job demand resources and leader-member exchange interactions are likely to respond with increased motivation and experiment with new ideas, thereby creating channels of innovative services and products, which can generate positive organisational performance effects (Nasution, and Mavondo 2008).

## **2.8 Theoretical Justification for Size and Sector Differences of the Executive L&D Effects on Organisational Performance**

### **2.8.1 Firm Sector Differences**

Some scholars suggested that learning orientations differ across industrial sectors (Lee-Kelly et al., 2007). According to Lee and Tsai (2005), learning orientation is a mechanism that affects a firm's ability to challenge old assumptions and facilitate new techniques and methodologies. Baker and Sinkula (1999) view learning orientation as the combination of mental models (Geus, 1998) and dominant logics (Bettis and Prahalad, 1995) that are likely to influence a firm's learning behaviour.

Several authors (e.g. Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006) have emphasised on the importance of learning orientation in the manufacturing sector, and particularly, leadership is considered to be a crucial enabling agent of learning in the manufacturing sector (Yeo, 2008). Furthermore, Datta et al. (2005) examined how industry characteristics affect the relative importance and value of HPWP systems and reported that the impact of human resources systems on productivity is influenced by industry capital intensity, growth, and differentiation. The results further suggest that the effects of HPWP on labour productivity were pronounced in industries with low capital intensity or high growth rates and that such industries are likely to include sectors characterised by a combination of high discretionary behaviour and customer contact, which are all features of the service sector.

However, support for greater applicability of HPWP in the service sector is not universally accepted, as Comb et al. (2006), in their meta-analysis involving 92 studies, support the greater applicability of HPWP to the manufacturing

organisations than to the service firms; however, the impact of HPWP on performance measures across the sectors was found to be invariant.

Furthering the debate on the differential learning orientation across sectors, some researchers (e.g. Taylor and Bain, 2003; Wright and Dwyer, 2003) suggest that industries dependent on low-cost mass production will tend to have a high propensity towards establishing administration-oriented HR departments and implement predetermined systems of control. This highlights the possible viable effects of HR structures across sectors on the deployment of L&D dimensions.

There are limited studies within the HRM/performance domain (e.g. Kalleberg and Moody, 1994; Chandler and McEvoy, 2000; Comb et al., 2006) that have either controlled for or highlighted the differences in learning orientations across sectors. For instance, Kalleberg and Moody (1994) examined the sector differences (nonprofit, public, and for-profit establishments) in terms of the application of HPWP, defined in terms of opportunities for participation in decision making, capacity for participation in team activities, and provision of incentives for participation. The results indicate that nonprofit and public organisations were less inclined to deploy performance incentives (gain sharing and bonuses) and multi-skilling practices than for-profit organisations, where there was an increased propensity to employ both self-directed work teams and offline committees. In addition, some single-industry studies (e.g. Appleyard and Brown, 2001; Batt, 2002) have controlled for intra-industry and segments-specific idiosyncratic characteristics and have reported a difference in orientations.

Moreover, some researchers (e.g. Lien et al., 2006; Bhatnagar, 2006), consider learning orientation to be vital to service firms. This notion is contrasted by others (e.g. Sadler-Smith et al., 2001). Specifically, Sadler-Smith et al., (2001), in their study examining the learning orientations of 300 manufacturing and service firms, suggested that manufacturing firms are more likely to engage in active learning than their service counterparts. Others (e.g. Jamali et al., 2009) reported non-significant differences in the learning orientation in service and manufacturing firms. In conclusion, the above-mentioned studies offer support for the expectation that statistically significant differences are likely to exist in the learning orientation between manufacturing and service firms.

### **2.8.2 Firm Size (SME/Non-SME) Differences**

The Resource Dependency theory (Pfeffer, 1972; Pfeffer and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005), can be used to explain why the effects of executive L&D on organisation performance are better in large firms than in SMEs, as size can be used as a proxy for the level of resources available to an organisation (Pfeffer and Salancik, 1978; Goldberg; 2012). Organisational size has been found to be correlated to innovation and performance (Damanpour, 1992) and this relationship is modified by organisational slack (Bowen, 2002). According to Bourgeois (1981), slack relates to the resources in reserve that permit the adaptation of changes in strategy when environmental shifts occur. Large organisations are perceived to have more slack and are therefore expected to cope better with resource scarcity than SMEs. In addition, some of the resource dependency and slack effects may apply to executive L&D contexts, given that compared to small firms, large firms may have the extra resource capacity to deploy sophisticated development approaches when environmental changes occur (Mole et al., 2004). Furthermore, large organisations have the capacity to hold power over other their supplier-chains can establish sophisticated learning partnerships to create differentiated products, thereby obtaining competitive advantage (Raymond and St-Pierre, 2004; Gardet and Mothe, 2012).

In addition, according to Resource-Based View theorists (Barney, 1991; Teece et al., 1997; Teece, 2007; Winter, 2003), firms with superior resources are likely to pursue unique strategies, which are not easily replicable and imitable by competitors. Therefore, based on the Resource-Based View, it is expected that the effects of executive L&D effects on organisation performance will be better in large firms than in SMEs as the latter will lack the resources to pursue such unique strategies.

SMEs generally lack the internal structures, routines, and procedures which large organisations utilise to absorb and transform knowledge in order to produce tangible and intangible organisational outcomes (Zahra and George, 2002; Van Den Bosch et al., 2003). In addition, most SMEs may often lack the managerial, entrepreneurial, and technical skills required to identify and absorb new knowledge (Renko, 2001). Moreover, given the skewed influence of owner-managers within small organisations, characterised by reluctance to delegate power and share knowledge and autocratic and defensive management behaviours, SMEs may be impeded from

effectively deploying L&D dimensions (Jones, 2003). In addition, some authors have indicated that firm size has a significant effect on learning orientation (e.g. Belkhdja et al., 2007). Specifically, Bierly and Daly (2007) reported that small firms were likely to learn from suppliers, while large firms learned well from partnership and consultants.

Moreover, Westhead and Storey (1997) state that training in small firms is different from that in their large counterparts, with the latter likely to depend on externally provided training and the former, on informal mechanisms. Small firms, according to Westhead and Storey depend on informal work-related training and knowledge owing to resource constraints. Because of such resource constraints, some SMEs will possibly lag behind their large counterparts in the adoption of emerging knowledge and technologies, possibly resulting in diminishing competitive advantage for such firms over time (Mole et al., 2004).

Differential effects of SHRM dimensions on organisational outcomes in terms of SME/Non-SME have been observed by some researchers (e.g. Brewster and Mayne, 1995; Brewster et al., 2006; Collins and Clark, 2003; Datta et al., 2005; Marginson et al., 1993; Purcell, 1999; Huselid 1995). However, large firms may encounter limitations in executive L&D, arising from the complexities in organisational structure, and this can result in a slow transformation of learning processes, whilst small firms may be able to disseminate and embed knowledge faster than large firms because of the increased proximity of managers (Lant and Mezias, 1992).

According to the Resource-Based View and Resource Dependency theories, large firms are expected to have increased resource advantages and can execute complicated HR practices to achieve high performance (Collins and Clark, 2003; Datta et al., 2005; Huselid, 1995). It is therefore expected that large firms (i.e. large number of employees) will have the capacity to translate their resource advantage into superior performance, compared to their small counterparts. For instance, Collins and Clark (2003) examined the relationships between a set of network-building HR practices, namely external and internal social networks of TMTs and organisational performance, controlling for firm size. The results, based on data gathered from 73 high-technology firms reported the effects of size on the relationship between the HR practices and firm performance (sales growth and stock

growth). The effects of firm size on performance were found to be more favourable to large organisations than to small firms. Referring back to the six dimensions of executive L&D, discussed in previous sections the literature review, SMEs are expected to engage in participative L&D, whilst non-SMEs, in a wide range of activities owing to increased access to resources.

Similarly, Fey and Bjorkman (2001) controlled for firm size in a study examining the effects of HRM dimensions on organisational performance and the results suggested that large firms slightly outperformed small firms. In addition, Brewster et al. (2003), in their study comprising a large (n = 2953) and multi-national sample, concluded that compared to small firms, large firms are able to take advantage of economies of scale, through the provision of complex HR systems, to generate superior organisational performance outcomes. Based on the above notion, it can be argued that although some small firms may be untouched by bureaucratic obstacles existing in larger organisations, small firms may lack the capacity to reap the economies of scale associated with a large organisational size. To recap, it is highly possible that firm size is likely to have an inverse effect on executive L&D.

## **Conclusions**

To recap, the above section has discussed the theoretical reasons behind why executive L&D will affect organisational performance, drawing on a number of interrelated theoretical concepts; Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007), Dynamic Capabilities (Chien and Tsai, 2012; Eisenhardt and Martin, 2000; Zott, 2003), Human Capital (Rastogi, 2002; Ulrich, 1997; Wright et al. 2001), and Resource Dependency (Pfeffer, 1972; Pfeffer and Salancik, 1978; Hitt and Tyler, 1991; Hillman, 2005). In addition, the theoretical and empirical justifications for why firm size differences will have a bearing on the effects of executive L&D on organisational performance have been discussed, in light of the Resource-Based View and Resource Dependency theories. Finally, based on the learning differences evident across sectors (e.g. Hyland et al., 2000; Taylor and Bain, 2003; Wright and Dwyer, 2003; Dymock and McCarthy, 2006; Lee and Tsai, 2005; Khadra and Rawabdeh, 2006; Lee-Kelly et al., 2007), the justifications for why sector differences will have a bearing on the executive L&D effects on organisational performance have been highlighted.

## **2.9 Executive and Leadership Development and Organisational Performance**

Organisations today are operating on strict budgetary regimes owing to capital constraints and other challenges in the business environment (Murray, 2011). Colossal pension deficits, spiralling stakeholder demands, and cost of capital burdens, have potentially intensified these pressures, implying that allocation of financial resources, including funding of executive development activities is scrutinised and value maximisation is often a common mantra across organisations (O'Connor et al., 2006; Murray, 2011). As a result, all investments, including those required to enhance managerial capabilities, are expected to yield commensurable or superior returns that are reflected in bottom-line organisational performance effects (Garavan et al., 2008).

In recent years, the general interest in the field of leadership, management, and executive development has grown rapidly within academic circles and in the professional arena. However, a significant proportion of such studies tend to be exploratory in nature or centred on the characteristics of effective management and executive development. Few studies have focused specifically on establishing the relationship between executive L&D and organisational performance. Even where such studies exist, they do not deploy a comprehensive set of measures to assess the effects of development dimensions on performance.

An important meta-analysis conducted by Collins (2002), which reviewed studies evaluating the performance implications of managerial leadership development between 1986 and 2000, will be pivotal to this research and will serve as a baseline for further reviews.

Collins conducted a search of published and unpublished management development studies, locating approximately 1000 titles, abstracts, and articles. Of these studies, only 18 included performance outcomes in their analyses. The management development dimensions were categorised through a framework into four main areas:

- i. **Development Relationships:** experiences in work settings in which other individuals influence the manager's personal development, such as one-to-one mentoring and coaching

- ii. **Formal Training Programmes:** structured training programmes designed to develop the individual manager
- iii. **Job Assignment:** assignment to an entire job, involving redesigning a system or part of a job; serving in a temporary task force
- iv. **Structured Experiences:** group activities that include goal-directed, live action and task-based interactions such as leaderless group discussions, simulations, and targeted exercises.

Twelve of the eighteen studies utilised strategic leadership as the primary dimension, two studies focused on team management, and another two focused on the effects of supportive environments on executive development activities. The remaining two studies were related to employee development and human resource systems. Out of the eighteen studies reviewed, only two focused on evaluating the impact of management development dimensions on the organisational financial performance, whilst the majority (15) focused on evaluating system performance effects. This trend does not align with the trend observed in the HRM-performance literature, where financial measures have been more popular than non-financial measures.

The two studies specifically related to management development and cited by Collin are briefly discussed as follows: Moxnes and Eilertsen's (1991) study involved 329 Norwegian private-sector supervisors (foremen), and evaluated the effects of management training on organisational climate; they used a questionnaire design employing repeated testing and statistical controls. The measurement instrument used in the research was Argyris's learning models I and II. The outcome of the study indicated that most process-oriented training programmes did not change the organisational climate, as perceived by the supervisors, but rather interpersonal conflicts and supervisory skills generated a positive impact on climate. The authors argued that increased supervisor awareness of organisational climate factors facilitated learning at work and this resulted in improvement in organisational climate effects.

Watad and Ospina's (1999) study involved evaluating the effects of managerial training on organisational outcomes, exemplified in terms of effective vertical and horizontal integration, as employees from different levels and functions learned to work together on problems and issues. The study involved 17 mid-level managers

and utilised individual and group interviews to measure the effects of training on organisational performance. Positive effects of training on performance were reported and the authors support designing of management development programmes suitable for employees at all levels and functions, suggesting that this approach will provide a strategic advantage for the organisation because it supports horizontal and vertical integration.

Whilst both studies shed some light on the effects of management development on organisational performance, they have some limitations. Moxnes and Eilertsen's (1991) study was based on the lower echelon non-managers, as the respondents were mainly supervisors, whilst Watad and Ospina (1999) focused on 17 mid-level managers – a small sample size.

Only six out of the eighteen studies were clearly related to the executive level and a variety of terminologies such as business leader, private industry business leader, senior executive, CEO and vice president were used to describe executives. Strikingly, all these six studies reflected elements of leadership dimensions such as transformational leadership, organisational change, and leadership style, with one exception focusing on leadership training programme.

A key observation made among the six executive-level studies reviewed by Collins relates to the nature of measurement instruments utilised to assess performance. These were mostly leadership orientated with some typical examples being leadership behaviour questionnaire, repertory grid technique measuring ideology, leadership style, Rotter's locus of control, and Jackson's personality inventory. Hence, although these studies are published under executive development labels, the actual issue being addressed pertained to leadership. In effect, Collins' review was composed of a mixed range of studies investigating the performance implication of both leadership and management development.

The main finding of Collin's study is that there are some unanswered questions regarding the effectiveness of executive development measures in evaluating intended organisational outcomes. This is particularly so for evaluation models and measures targeted at the enhancement of organisational performance.

To establish the currency of information, a review of literature was undertaken focusing on the period spanning from 1990 to 2010 to help identify specific studies addressing the impact of management and executive development dimensions on organisational outcomes. This period was selected in order to capture any potential studies omitted from the literature review conducted by Collins (2002).

The criterion for the initial search was the presence of the words **“evaluation”**, **“assessment”**, **“outcomes”**, **“impact”**, **“effectiveness”** and **“influence”** which were permuted with the following words, **“leadership development”**, **“managerial training”**, **“management development”**, **“executive development”**, **“management education”** and **“management skills”**. The search was conducted in the following academic databases: Emerald, Sage Journals Online, Science Direct, IngentaConnect, Wiley Interscience, and SwetsWise, yielding approximately 70,000 articles. Excluded from this list are dissertations, unpublished studies, and studies in other databases such as Goggle Scholar, which may be relevant to this research. The 70,000 articles were then categorised by type: empirical, conceptual, case studies, general review, research papers, and literature review. All other categories of studies other than empirical research were omitted, leaving behind 650 articles.

After detailed examination of the abstract, introduction, and conclusion sections, importance, and relevance to the topic, 307 articles covering irrelevant details were removed. After further comprehensive analysis, 296 articles, which failed to meet the selection criteria, were eliminated. Based on the two phases of review, 9 articles were finally included in the systematic literature review. In sum, although a large number of articles appear to be associated with the concept of executive learning and management linked with organisational performance, the majority of these studies were explorative and conceptual in nature with very few underpinned by empirical analysis.

Furthermore, some of the empirical studies captured under executive and management were actually addressing entirely different issues and these were therefore discarded.

**Table 2.2:** Summary of Selected Studies Evaluating Impact of Executive and Leadership Development on Organisational Outcomes (2000–2011).

Author (s)	Journal	Dimension Type	Performance			
			System	Capabilities	Behaviours	Financial
Bowles, et al. (2007)	Leadership & Organisation Development Journal	Coaching		Achievement of personal goals, and assessment of nine leader competencies		
Jones, et al. (2006)	Leadership & Organisation Development Journal	Coaching		Self-reported managerial flexibility		
Thach, E. C. (2002)	Leadership & Organisation Development Journal	Coaching & 360 feedback process		Multi-rater-derived leadership effectiveness.		
Seppanen-Järvelä, R. (2005)	Journal of Management Development	Internal Management Development	Organisational Development			
Hunt, J. W. and Baruch, Y. (2003)	Journal of Management Development	Interpersonal skills training		Competencies and skills improvement		
Velsor, E. V. and Ascalon, E. (2008)	Journal of Management Development	Leadership development level			Ethical behaviour	
Boaden, R. J. (2006)	Leadership & Organisation Development	Leadership development	Change			

Author (s)	Journal	Dimension Type	Performance			
			System	Capabilities	Behaviours	Financial
	Journal					
Pastor J. C. and Mayo M. (2008)	Leadership & Organisation Development Journal	Leadership orientation			Goal orientation	
Mabey and Ramirez. (2005)		Management Development				Recent/projected change in sales turnover

The studies outlined in Table 2.2 above can be broadly grouped under four main categories: **coaching, executive education, leadership development, and management development**. Three particular studies within the group focused on coaching as a development dimension (Bowles et al., 2007; Jones et al., 2006; Thach, 2002) and are examined further. Bowles et al. (2007) using the survey methodology, focused on the effects of coaching on middle managers and executives in the US Army, in relation to the achievement of specific goals (recruitment/sales, quality of life, and leadership) over a 12-month period. Although the measured outcomes were related to coached participants' achievement of quota and personal goals, assessment of nine leadership competencies, and buy-in over the one-year coaching period, other dimensions were also assessed. The evaluation was extended to capture the efficacy of the coaching process, specifically the intensity of coach-participant interactions (i.e. the degree of involvement and buy-in of participants in the coaching sessions) and involvement of coaches in coaching activity.

Personal goal attainment over the coaching period was determined by calculating the percentage of goals achieved (i.e. a participant's total number of achieved goals under a particular category divided by the total number of goals set initially). Each participant was rated by an assigned coach to assess the growth observed throughout

the coaching process, in nine leadership competencies. Consequently, these ratings also highlighted the dynamics of the learning process from the coaching experience point of view. The performance measure that can be directly linked to organisational outcomes is the achievement of set recruitment quotas by both levels of managers. Specifically, a percentage quota achievement metric was used to evaluate the recruiter (i.e. a percentage of 100 reflects fully meeting the recruiting objectives set for a specific recruiting area) over the specified period.

The study findings suggest that coached managers outperform their un-coached experienced counterparts. The impact of coaching was most significant among middle managers compared to among executive managers. Overall, both groups of participants demonstrated growth in some dimensions of recruiter-leader competencies and achievement of self-set goals.

The evaluation criterion selected for this study was expansive in the sense that it addressed both personal and organisational objectives. However, the limited impact of coaching on senior managers is quite intriguing, given that coaching, as a technique, is becoming acceptable as one of the key mechanisms for developing the capabilities of senior executives (Thach, 2002). Again, the level or seniority of the executives in question is not quite explicit, typifying the usual conundrum associated with the applicability of the term “executive” within the literature.

Jones et al. (2006) investigated the influence of executive coaching on managerial flexibility by adopting a repeat-measure approach; this study involved 111 leaders who participated in executive coaching over a three-month period. Each participant was questioned prior to, during, and after coaching. Three main individual flexibility-scaled measures (proactivity, adaptability, resilience) and general flexibility were assessed during the coaching sessions. In conclusion, it was posited that executive coaching generated positive effects on the development of managerial flexibility, indicating a significant linear trend in the data, with flexibility scores increasing with time. Although these results provide some support for the argument that executive coaching is a developmental tool that can positively improve a manager's level of flexibility, much of the evidence presented by the measures is skewed towards behavioural outcomes as opposed to the achievement of clear organisational outcomes or objectives.

Thach (2002) examined the quantitative and combined impact of executive coaching and 360-degree feedback process on leadership effectiveness. Although data from this study was elicited from a single organisation – a mid-size, global, telecommunication firm with headquarters in western USA, two clear criteria were imposed to ensure that the total sample of 281 executives constituted directors, vice-presidents, or employees identified as high-potential managers with over six months of continuous experience. Importantly, the coaching process was linked to the achievement of strategic organisational goals. The action-based research concluded by demonstrating a positive relation between executive coaching and increased leadership effectiveness. The evaluation was based on a 360-degree survey of direct reports, peers, and managers. The outcome of the study indicated a 55% increase in leadership effectiveness of participants. Further evidence identified through qualitative data illustrated some connection between the number of coaching sessions and self-perceived leadership effectiveness.

The conclusions reached by Thach (2002) suggest that executive coaching generates positive effects on leadership effectiveness and assumes a strategic link between development dimensions and organisational goals. However, the organisational goals to which executive coaching was linked are not clearly specified by the author. Furthermore, as admitted by Thach, the combination of coaching and 360 degree evaluations introduced some difficulties in terms of identifying how coaching alone influenced leadership effectiveness. Another limitation in this study is related to the lack of a clear definition of leadership effectiveness, as the term could attract differential interpretations and perceptions.

Similarly, Seppanen-Jarvela (2005) follows a qualitative approach and action-based research to examine the organisational performance effects of a two-year development programme, within a single firm, involving 41 respondents at all levels of management. Although this study offers a unique approach by following the action orientation, it exhibits one primary shortfall: the conclusion that organisational development was enhanced as a result of the management development programme was not clearly quantified or linked to specific organisational outcomes.

Hunt and Baruch (2003) assessed how 252 executives (chief executives, heads of functions, divisional or regional managers) from 48 different organisations developed a cluster of interpersonal skills via a structured training programme. The main dimensions of the training were as follows:

- *Structuring*: envisioning, target setting, prioritizing
- *Motivating*: enthusing individuals, team building, innovating
- *Assessing/rewarding*: giving positive and negative feedback, coaching, encouraging development
- *Leading*: giving direction, sensitising, focusing, information searching, scanning, and differentiating

Utilising a longitudinal methodology and a multi-rater approach, the data were analysed through cross-comparison of the skill profile of senior managers before, during, and after the training programme. Although this study focused on a narrow dimension of executive development, it has some strengths, conveyed through the details of the data analysis. Utilising cluster analysis, the study demonstrates the variable impact associated with different clusters of skill, following the training incidence. For instance, it was observed that decision-making and one-to-one skills were far less affected by training deployment than goal setting, which improved considerably after the training programme. Overall, the impact of training on executive development measured in terms of subordinate perceptions was negative as only 2 of the 14 cohorts of pre/post surveys indicated statistically significant improvements in the participant manager's performance both at the individual and aggregate levels.

The limited effectiveness of training on organisational performance reported by subordinates of managers who participated in this training programme could be attributed to the previous observation by Hunt and Baruch (2003), related to the sensitivities that some executives associate with "structured team-based training". Such sensitivities may limit the willingness of executives to experiment during group-based training programme, thereby leading to reduced skill acquisition and transfer.

Van Velsor and Ascalon (2008) evaluated the effects of a Centre for Creative Leadership Development programme on organisational outcomes, in terms of how

participants achieved both personal and organisational goals, after completion of the programme. When executives, peers, and direct reports were asked to rate the effects of manager's participation in the leadership development programme on organisational outcomes, most of the respondents cited increased focus on organisational or departmental strategy and goal setting with varying emphasis. Approximately, 75% of the peers, 71% of the participants, and 56% of the direct reports perceived increased focus of participants in these areas. Although such results are presented in support of the efficacy of the leadership development programme, the authors fail to specify the level of the managers involved in the study as well as the detailed content of the programme that was offered, making it quite difficult to validate the results or compare them with other studies.

Similarly, Boaden (2006) conducted a qualitative evaluation of an NHS-sponsored leadership development programme for senior managers, based on self-reported feedback from participants. The core component of the programme incorporated blocks of teaching, residential activities, service improvement projects, and web-supported learning.

The studies reviewed above reflect a mixture of leadership and executive development, and not just the latter. In addition, studies specifically focusing on the organisational performance effects of executive development are scarce and past studies tend to focus on individual behavioural and system effects, rather than organisational outcomes of executive development.

The final study departs from the observed trend. Specifically, Mabey and Ramirez (2005) examined the relationship between management development and productivity in their study involving 601 privately owned companies across Europe (Denmark, France, Germany, Norway, Spain and the UK). Productivity was measured in terms of financial performance. Financial growth was measured by the degree of recent/projected change in sales turnover divided by the number of managers employed. This data was accessed from the Amadeus database in 2002 and covered 179 (30%) of the 601 companies surveyed.

It was observed that large organisations were more likely to utilise management development systems than small firms. In addition, organisations which successfully integrated business and HR strategies reported increased benefits of management

development systems, favourable management development ethos, and improved perceived importance of management development. The strategic and long-term focus of management development activities was reflected significantly in the amount/diversity in management development and in the Amadeus index of firm productivity. In terms of country-specific results, firms in Germany, Norway, France, and Denmark showed no significant link between management development and productivity, suggesting that firms in these countries resemble firms in the UK, which served as the baseline country for the study.

The authors concluded that some of the productivity impact was attributable to size effects, implying that large organisations obtain high performance through management development dimensions. Furthermore, the highly significant relationship between perceived importance of management development and productivity suggests an additional and statistically significant value from advancing long-term approach to developing managerial capability. In contrast, no relationship was found between HR strategy, management development ethos, and management development systems and organisational productivity.

The review of the research examining the effects of top leadership and executive development on organisational performance highlights the neglect of non-financial aspects of performance such as innovation, customer service, and employee engagement in favour of financial aspects.

## **Summary**

The review of the literature on the effects of leadership/executive development on organisational performance highlights that only a few studies have actually isolated executive learning and development, and examined the impact of this construct on firm performance in sufficient detail. This observation implies that further research in this area can provide further insight to researchers and practitioners in the field of executive development (Mabey, 2002).

The paucity of research on the impact of leadership/executive learning and development on organisational performance may be attributed to a number of factors. One of which is the assumption that training and development effects accrue over

time, compounded by difficulties in isolating and measuring how such activities translate into bottom line organisational performance. This view is popularised by the “black box” concept of organisational inputs and outcomes conundrum. Closely connected to this view is the difficulty of devising authentic mechanisms to track the link between development dimensions and improvement in management capability and organisational outcomes (Collins, 2002).

The observed dearth of studies investigating the effects of leadership development on organisational performance may be partly due to the emphasis placed by scholars on stand-alone individual leadership theories, and how such theories influence single or multiple organisational outcomes (e.g. Avolio and Bass, 2002; Walumbwa and Schaubroeck, 2009; Walumbwa et al., 2010, 2011; Yukl, 2010; Muchiri et al., 2012). For example, transformational leadership has been linked to employee attitudes and behaviours (Judge and Piccolo, 2004; Kirkman et al., 2009; Walumbwa et al., 2007; Wang et al., 2012), organisational commitment, job satisfaction (Walumbwa et al., 2005; Steyrera et al., 2008), follower work engagement (Zhu et al., 2009), and innovation (Aragon-Correa et al., 2007; Samad, 2012).

In sum, although significant strides have been made in the field of executive development and performance literature over the last few decades, studies focusing specifically on demonstrating the effects of engaging in such activities on organisational productivity are still scant. Moreover, the few existing studies, fail to represent a wide contextualisation of development and learning, reflective of executive managers. Novel and tacit forms of L&D, which may be appealing to executives, such as learning through networking, attending seminars, team away days, teleconference calls, and self-directed learning, appear to attract limited attention of researchers.

## 2.10 Organisational Performance Measurement

There is a prevailing view that the value created by a firm should be driven by the income generated for the owners (Barney, 1995). Specific reference was made to Boselie et al.'s (2005) observation in their detailed analysis of a cross-section of 104 studies evaluating the effects of HRM on organisational performance, in which financial measures were found to dominate almost half of the sampled articles.

However, the over-reliance on financial measures of organisational performance was echoed previously by some researchers such as Venkatraman and Ramanujam (1986), who critiqued the narrow definition of performance concentrating on outcome-based financial indicators, which only reflect the fulfilment of the economic goals of firms. Furthermore, Venkatraman and Ramanujam argued against the narrow measure of "financial performance" prominent in the management literature and called for broad measures of business performance, encapsulating both financial and non-financial (e.g. innovation, product quality, market share) indicators to account for multiple stakeholder goals.

Similarly, drawing on the competing values framework (CVF) developed by Quinn and Rohrbaugh (1981, 1983), it is possible to develop a wide measure of organisational performance, encompassing financial and non-financial indicators. The central point of the competing values framework is that, organisational effectiveness is influenced by the ability to satisfy multiple performance criteria, based on four value sets that comprise a combination of two dimensions: flexibility versus control and internal focus versus external focus.

In addition, subjective measures of performance are utilised and a composite measure has been utilised by some authors (e.g. Katou, 2008; Akhtar et al., 2008). In the field of SHRM, subjective measures of performance have been applied in numerous studies examining HRM and organisational performance effects (e.g. Bae et al., 2003; Bennet et al. 1998; Bae and Lawler, 2000; Boxall and Steeneveld, 1999; Haung, 2000; Hartog and Veburg, 2005; Panayotopoule et al., 2003; Paul and Anantharaman, 2003; Rodrinez and Vutura, 2003; Snell and Youndt, 1995; Sels et al., 2006; Tzafir, 2005; Wright et al., 2003).

Some researchers (e.g. Geringer and Hebert, 1991; Powell, 1992; Wall et al., 2004) have shown that subjective measures of firm performance correlate well with their objective counterparts; nevertheless, the potential for social desirability bias is strong with the former approach (Gerhart et al., 2000b). However, a meta-analysis by Bommer et al. (1995) found that performance evaluation had correlations of only 0.27 and 0.39, respectively, with objective and subjective measures, giving empirical support for the application of the latter approach.

Researchers have called for the use of multiple organisational performance variables (Chenhall and Langfield-Smith, 2007). Therefore, following this recommendation five single-item measures of organisational performance (financial, market share, innovation, employee engagement, and customer service) will be adopted to reflect broad stakeholder goals and the competing values framework.

Goh et al. (2012) advocate that the assessment of learning capability should include both financial and non-financial performance measures to support their argument that learning capability can be linked to tangible results. Thus apart from profitability, the use of other organisational performance measures such as customer satisfaction, market share, innovation, and employee engagement is warranted.

Traditionally, profitability is expressed as a ratio of revenue over cost. This definition is supported by previous studies (e.g. Sumanth, 1984; and Sink, 1985), and perceived financial performance (over the past 3 years) is employed in a number of studies in SHRM (e.g. Bae et al., 2003, Hartog and Veburg, 2005; Sels et al., 2006).

Customer satisfaction has been defined as a post-consumption assessment regarding a product or service gained by an end-user (Bennett and Sharyn Rundle-Thiele, 2004; Yuksel and Rimmington, 1998).

Innovation performance is defined in terms of processes which bring added value and novelty to an organisation, its suppliers and customers through the development of new procedures, solutions, products, and services as well as new methods of commercialisation (Knox, 2002; McFadzean, 2005).

Market share is viewed as an important indicator of organisational brand, product, or service performance in the market place and is enhanced through the creation of new product or service (Terui, 2004; O'Regan, 2002).

Employee engagement, according to Schaufeli et al. (2002), is a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption, not reflecting a momentary and specific state, but persistent and pervasive affective-cognitive behaviour.

Single-item measures, rather than multiple-item measures, were applied in this study, and this corresponds with the approach followed in other studies in the HRM/performance literature. For example, Katou (2008) applied six single-item organisational performance measures: effectiveness, efficiency, development, satisfaction, quality, and innovation. Similarly, Som (2008) utilised six single-item subjective performance measures: level of productivity, operating efficacy, growth rate of revenue/sales/level of activity, financial strength (liquidity/reserves, borrowing capacity, etc.), market share/profitability, and innovation (product, process, systems and managerial).

## **2.11 Conclusions and Development of a Conceptual Research Model**

In the critical review of the literature, three most popular (Burgoyne, 1988; Mumford, 1993; Louma, 2005) models of management and executive development were critiqued. Louma's (2005) model offered an integrated approach to the executive L&D measure, which has been expanded to include six dimensions: structured, participative, network-related, self-directed and experiential, and strategic learning. This reflects both formal and informal domains and ambidextrous learning (Benner and Tushman, 2003; Lubatkin et al., 2006; Li and Lin, 2008). The expectation is that the integrated measure of executive L&D is likely to generate positive effects on both organisational performance.

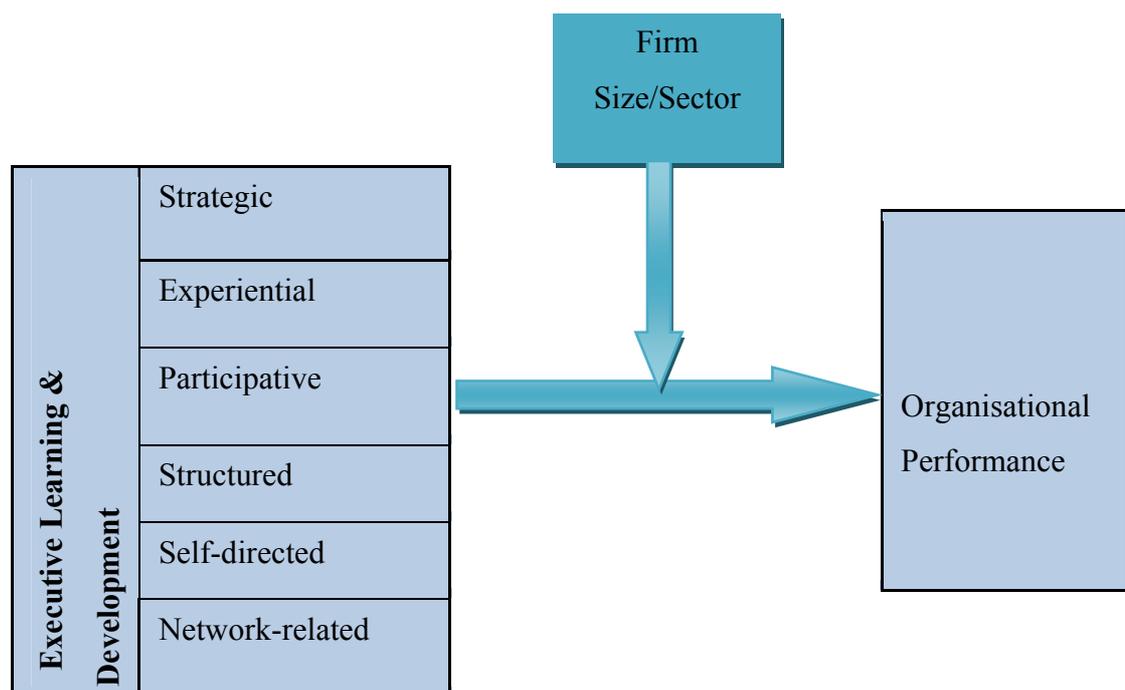
Consequently, the theoretical reasons behind why executive L&D will affect organisational performance, drawing on a number of interrelated theoretical concepts – Resource-Based View (Barney, 1991; Barney, 2001; Clulow et al., 2007), Dynamic

Capabilities (Chien and Tsai, 2012; Eisenhardt and Martin, 2000; Zott, 2003), Human Capital (Rastogi, 2002; Ulrich, 1997; Wright et al. 2001) – have been formulated and discussed. In addition, the theoretical and empirical justifications for why firm size and sector have a bearing on the effects of executive L&D on organisational performance have been discussed.

Furthermore, a review of the literature on the effects of executive and leadership development revealed that only few studies have actually isolated executive L&D and examined the impact of this construct on firm performance in sufficient detail.

The result of this study will highlight the most progressive executive L&D dimensions that organisations can focus their resources on to develop human capital required for maximum organisational performance impact (Collings and Mellahi, 2009), taking into account firm size and sector differences.

In sum, the initial research model and framework is formulated postulating that the executive L&D measure (developed in section 2.6 of the literature review) will result in positive organisational performance effects, modified by firm size and sector effects (Figure 2-3).



**Figure 2.3:** Initial Research Model and Framework.

## **Chapter Three: Research Methodology & Data Analysis**

### **3.0 Introduction**

This chapter outlines the methodological approach and data analysis procedures, including the research design and strategy, adopted for this work. Hypotheses are developed to confirm the theoretical basis for the positive relationship between the two variables (executive L&D – “independent variable” – and organisational performance measures – “dependent variable”). In addition, this chapter presents the justification for using specific control variables to determine the effects of executive L&D on organisational performance. Data collection methods and sample description of respondents recruited for this research are presented in this section. For clarity, the data analysis section is split into two parts. The first part is dedicated to the design of the executive L&D measure, including the procedures adopted for exploratory, confirmatory, and discriminant validation. The second part focuses on the justifications for selecting the ordinal regression technique to determine the effects of executive L&D on organisational performance and the procedures for confirming and disconfirming the research hypotheses. This section ends with the rationale behind conducting Harman's common methods analysis, including the specific results for this research.

As stated in Chapter One, that this research aims to enhance knowledge and understanding of the effects of executive learning and development on organisational performance based on a range of concepts; Resource-Based View, dynamic capability, Resource Dependency and human capital concepts. Specifically, the main objectives of the research are:

1. To develop a comprehensive measure of executive learning and development, encapsulating formal & informal dimensions.
2. To evaluate the effects of executive learning and development on organisational performance.

3. To evaluate the possible moderating effects of firm size and sector on the relationship between executive learning and development and organisational performance.

Considering the above objectives as well as cost and time constraints associated with mixed methodologies, interviews, and longitudinal methods, the survey approach was selected as the most appropriate methodology for this research. Surveys are usually associated with deductive approaches, commonly applied to business and management research, and are usually applied to exploratory and descriptive studies (Saunders et al., 2007). In addition, a single frame was adopted for this research owing to time, financial, and logistical constraints. To ensure confidentiality and anonymity, data protection requirements were strictly adhered to during the entire process of the survey in compliance with current legislations. Moreover, qualitative interview was deemed applicable to this research but was not implemented because the survey methodology enabled data collection within reasonable time frames and at a reasonable cost. In selecting the appropriate research approach, strategy, and design for this work, consideration was given to different approaches, such as the positivism versus interpretivism and inductive versus deductive perspectives, which are discussed in detail in subsequent sections.

### **3.1 Research Hypothesis and Framework**

In order to achieve the second and third research objectives, the theoretical justification that executive L&D will generate a positive impact on organisational performance (modified by firm size and sector) was based on a number of inter-related theoretical concepts: Resource-Based View, Dynamic Capability, Human Capital, and Resource Dependency theories which have been discussed in detail in the literature review section.

The link between the human capital and organisational performance was discussed in the literature review and it was posited that executive L&D generates human capital (Rastogi, 2002; Mayo, 2001) which eventually results in competitive advantage (Gratton, 2000) and positive organisational performance (Tomer, 2003; Chuang, 1999). The effects of Human Capital on organisational performance was explained

through the Social Capital (Nahapiet and Ghoshal, 1998) and Job Demand Resource theories (Demerouti, et al., 2001a; Demerouti, et al., 2001b). Through L&D (within internal and external networks), executives gain increased access to new resources (Sparrowe et al., 2001), which can be deployed to offer enhanced support and resources to subordinates (Edmondson, 1999; Van Der Vegt and Bunderson, 2005; Van Emmerik et al., 2011). As employees gain further support and resources from executives, they generate creative solutions and products (Shore and Coyle-Shapiro, 2003; Wang et al., 2005; Yukl et al., 2009), leading to increased levels of customer satisfaction (Babbar and Koufteros, 2008; Maddern et al., 2007) and consequently enhanced organisational performance.

From an empirical perspective, several researchers have reported positive effects between training and development (considered to be a source of human capital) and organisational performance (Bae and Lawler, 2000; Bae et al., 2003; Carlson et al., 2006; Fey and Bjorkman, 2001; Harel and Tzafrir, 1999; Katou and Budhwar, 2006; Laursen and Foss, 2003; Panayotopoulou et al., 2003; Richard and Johnson, 2001; Rodwell and Teo, 2005; Rodriguez and Ventura, 2003; Sels et al., 2006; Tessema and Soeters, 2006; Tzafrir, 2006). Specifically, Hitt et al. (2001) report direct and moderating effects of human capital with strategies (i.e. service diversification and geographic diversification) on organisational performance in professional service firms.

Some researchers (Hunt and Morgan, 1995; Collis and Montgomery, 1995; Fahy, 2002; Wilcox-King and Zeithaml, 2001) posit that the competitive advantage gained through intangible assets and capabilities translates into superior firm performance, measurable in terms of high financial profits or increased sales or market share. Ray et al. (2004) observed that intangible and socially complex capabilities contribute to enhanced customer service. Importantly, Newbert (2007) reported that the enhancement of core competencies contributes to competitive advantage and improved firm performance.

It has been noted in the literature review that learning mechanisms enhance dynamic capabilities and shed light on the evolution of dynamic capability within organisations (Zott, 2003; Zollo and Winter, 2002). Moreover, one popular definition of executive L&D cited this as a source of dynamic capability (Espedal, 2005).

Advocates of the Knowledge-Based view (e.g. Griffith et al., 2006; Liao et al., 2009) have conjectured that knowledge resources can generate dynamic capabilities and that learning serves as the bridge between knowledge resources and the creation of dynamic capabilities (Heijden, 2004). Some researchers (Ju et al., 2006; Zhang et al., 2004) have posited that knowledge and learning are instrumental in determining innovative capabilities at the individual and organisational levels, and such innovative capabilities can influence organisational stability in dynamic markets (Lee and Tsai, 2005). The SECI model (Nonaka and Takeuchi, 1995) has been postulated as converting knowledge resources of into organisation performance, moving through the four non-linear steps of the SECI model, to synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001).

Resource dependency theorists maintain that directors can provide critical links to resources that a firm needs to survive and prosper (Pfeffer and Salancik, 1978). At the same time, the knowledge view of the firm suggests that organisations capable of acquiring critical operational knowledge faster than competitors, can achieve a competitive advantage against rivals (Chen and Lin, 2004; Zahra and George, 2002).

Furthermore, by combining the Leader-Member exchange (Dansereau et al., 1975; Graen and Cashman, 1975) and Job Demand Resource theories (Demerouti, et al., 2001a; Demerouti, et al., 2001b), a connection can be established between Resource Dependency theory and organisation performance. Empirical support was recently found by Liao et al. (2010) demonstrating a statistically significant relationship between leader-member exchange and employee creativity. It is however assumed that the presence of distributed leadership would be required for the effects of executive learning and development to be transmitted through the leader-member exchange and job demand resource interactions. Thus, as executives gain "knowledge resources" from L&D, the level of support provided by them to the employees and the standard of direct reports are enhanced. Through distributed leadership effects, the job demand resource dynamics available to employees can be enhanced. As a result of employees gaining increased access to resources through the distributed leadership/job demand resources/leader-member exchange interactions, they are likely to respond with increased motivation and experiment with new ideas,

thereby creating channels of innovative services and products, which can generate positive organisational performance effects (Nasution, and Mavondo 2008).

Scholars have postulated that a high level of customer satisfaction is likely to attract customer loyalty and lead to profitability (Jones and Suh, 2000; Bennett, and Rundle-Thiele, 2004; Keiningham et al., 2003; Yeung et al., 2002), whilst dissatisfied customers may be inclined to transact with a competitor (Barlow and Mail, 2000). This has led to the development of knowledge assets in terms of building and maintaining good quality customer relations to enhance customer lifetime value (Salomann et al., 2005). Bandy's (2003) concept of "service synergy model" offers a theoretical linkage between executive L&D and customer performance. According to Bandy, executives can influence customer satisfaction in their organisation by developing a sound understanding of customer needs and preferences. The acquisition of customer insight requires executives to deploy new skills, which may entail engaging in some form of L&D. The knowledge gained through the profiling of customer needs and preference, according to Bandy (2003), can be translated into service standards which can be communicated and implemented across the organisation to generate superior products and services.

In addition, executives are also expected to play a significant role in maintaining the established service standards and will be involved in the whole cycle of acquiring and translating customer needs into profitable services and products. In effect, double-loop learning (Argyris and Schon, 1978; Argyris and Schon, 1996) is likely to occur: as executives interact regularly with customers to gain new insights into customer preferences, the acquired knowledge can be shared across the organisation (Mezias and Starbuck, 2003). Eventually, through the double-loop learning process, the diffusion of the knowledge derived from the executive interaction with customers is expected to translate into increased customer loyalty (through co-created solutions) and organisational performance (García-Morales et al., 2009).

Market share is recognised as an important indicator of an organisation's brand, product, or service performance in the market place (Terui, 2004). According to O'Regan (2002), market share is enhanced through the creation of product or service value. Several researchers (Buzzell and Gale, 1987; Chang and Singh, 2000; Lavery, 2001; Goddard et al., 2005) have suggested that the profitability-market share link is

achieved through decreased costs, channel power, and consumer loyalty, and learning effects (Al-wugavan et al., 2008; Besanko et al., 2005; Liu and Yang, 2009). Thus, the learning effects generated from executive L&D are expected to influence the market share of organisations.

Furthermore, based on the social exchange and Leader-Member Exchange theories, it can be argued that effective executive L&D results in increased employee commitment, in turn leading to employee engagement performance effects. By engaging in a broad range of L&D processes, it is expected that executives are likely to enhance their capacity to provide employees with access to a wide range of resources and support. Employees are expected to place great value on the resources and support received from executives, and reciprocate through high levels of commitment (Colquitt et al., 2005) and improved performance (Coyle-Shapiro and Shore, 2007; Lee, 2008; Tse and Lam, 2008), resulting in positive employee engagement performance effects. The reverse is likely to hold true if employees perceive the resources and support from executives as being substandard, and accordingly, reciprocate with low levels of commitment, leading to low employee engagement effects.

Several researchers (Audea et al., 2005; Bae and Lawler, 2000; Boselie et al., 2003; Bjorkman and Xiuheng, 2002; Fey et al., 2001; Faems et al., 2005; Hartog and Verburg, 2005; Horgan and Muhlau, 2006; Katou and Budhwar, 2006; Snell and Youndt, 1995; Rodwell and Teo, 2005; Sels et al., 2006; Tessema and Seoters, 2006; Thang and Quang, 2005; Tzafirir, 2005; Way, 2002; Wright et al., 2003) advancing the configurational HRM and firm performance approach have highlighted the significance of training and development dimensions in organisational success. These researchers argue that training and development are critical components of the HRM practices associated with generating superior organisational performance. However, relatively few studies (Fey and Bjorkman, 2001; Hartog and Verburg, 2005; Richard and Johnson, 2001) have incorporated management development among the bundles of HRM practices in configurational research and have reported positive outcomes.

Furthermore, some studies in the literature also suggest that the learning capability of organisational leaders generates non-financial outcomes such as employee

innovation and efficiency (Hult et al., 2003; Kontoghiorghes et al., 2005; Spicer and Sadler-Smith, 2006; Wu and Fang, 2010). Another frequently mentioned outcome of the effects of learning capability is organisational innovation or innovativeness (Aragon-Correa et al., 2007; Jimenez-Jimenez et al., 2008; Kontoghiorghes et al., 2005; Lin et al., 2008).

In addition, based on data from 601 European firms, Mabey and Ramirez (2005) have reported increased productivity to be a consequence of effective deployment of management development dimensions. Productivity was defined in terms of objective financial growth measured by the degree of recent/projected change in sales turnover against the number of managers employed. The above theoretical considerations and empirical outcomes indicate that such positive effects of executive learning and development dimensions on organisational outcomes can be replicated in other settings.

Based on the above discussions, the first hypothesis is proposed as follows: ***H1: Executive L&D will generate positive effects on organisational performance.***

### **3.2 Executive L&D Measures**

The executive L&D measure was designed on a 7-point Likert interval scale anchored from “1” = Strongly disagree; “2” = Moderately disagree; “3” = Slightly disagree; “4” = Neutral; “5” = Slightly agree; “6” = Moderately agree; to “7” Strongly agree. The purpose of adopting a 7-point Likert interval scale was to offer respondents a broad choice in capturing the occurrence of executive L&D within their organisations as well as providing a sound statistical foundation for the subsequent assessment of the scale’s validity and reliability (Hinkin, 1995; Ogba, 2006; Ogba, 2009).

### 3.3 Organisational Performance Measures

As previously discussed within the literature chapter, Venkatraman and Ramanujam (1986) have argued against the narrow measure of “financial performance” dominating management literature and called for broad measures of business performance that encapsulate both financial and non-financial (e.g. innovation, product quality, market share) indicators, to account for multiple stakeholder goals.

Therefore, drawing on the CVF developed by Quinn and Rohrbaugh (1981, 1983), a broad measure of organisational performance, encompassing financial and non-financial indicators is proposed. The central point of the CVF is that organisational effectiveness is influenced by the organisation’s ability to satisfy multiple performance criteria, based on four value sets that comprise a combination of two dimensions: flexibility versus control and internal focus versus external focus.

Accordingly, in this study, multiple organisational performance variables (Chenhall and Langfield-Smith, 2007), financial, market share, innovation, employee engagement, and customer service are covered to reflect broader stakeholder goals and the competing values framework.

Furthermore, a composite measure of organisational performance was utilised in this research, derived by computing the average of the individual organisational performance variables. Thus, the composite organisational performance measure applied in this research comprised of an average of the financial, market share, innovation, customer satisfaction, innovation, and employee engagement scores, and this approach is adopted by other scholars (Katou, 2008; Akhtar et al., 2008).

In addition, subjective measures of performance are utilised. To mitigate some of the limitations associated with subjective measures, the recommendation of previous researchers reporting single item performance measures (e.g. Katou, 2008; Akhtar et al., 2008) was adopted by requesting respondents to benchmark their responses against competitors in their primary industry according to a 5-point ordinal scale anchored from “1” = lowest 20% to “5” = highest 20%.

In effect, the organisational performance measures were anchored in the following order “1” = lowest 20%; “2” = next 20%; “3” = middle 20%; “4” = next 20%; “5” = top 20%.

### **3.4 Control Measures**

Control variables expected to affect executive L&D and organisational performances were included within the research model to extend its empirical specification. Individual, organisational, and environmental factors likely to affect HRM policies and organisational performance (Delaney and Huselid, 1996) were included in the analysis, given that the selection of control variables has been found to impact on research analysis results (Guest, 2001).

**Gender:** In terms of the individual-level factors, gender was included to evaluate the bias of male versus female effects on the model. Gender was included as a dichotomous variable (female = 0; male = 1). Nutt (1993) contends that individuals can respond differently when confronted with identical decision-making scenarios, and this phenomenon was expected to manifest across gender types. Empirical studies within the domain of business and finance have also revealed that women and men may differ in their preferences and perceptions (Yordanova and Alexandrova-Boshnakova, 2011). Therefore, the effects gender difference on executive L&D were expected in this research.

**Executive Experience:** Executive experience and title were included as control variables when assessing the variability of competency and seniority in organisation/career on the relationship between L&D and organisational performance.

The duration of executive experience has been shown to impact firm strategy and performance (Carpenter, 2002; Auden et al., 2006). Executive teams with high levels of experience have been found to deliver better organisational performance than the executive teams with less-experienced counterparts (Berman, et al., 2002; Timmerman, 2005).

Managerial experience is also considered to be a critical determinant of a firm's strategic decision, concerning the use of dynamic capabilities (Ambrosini and Bowman, 2009; Rodenbach and Brettel, 2012). Such experience is considered important to strategic HRM because working at the executive level for a sustained length of time can result in improved coordination of activities, decision-making, implementation of decisions, and performance (Hitt, et al., 2002; Stewart and McBraney, 2002).

In the model, executive experience was represented as the natural logarithm of the number of years with the original data collected as follows (1 = "0–5 years"; 2 = "5–10 years"; 3 = "10–15 years"; 4 = "15–20"; 5 = "over 20 years"). Title was included as a nominal measure taking account of the expansive definition of executives in the Top Echelon literature (Boeker, 1992; Boeker, 1997; Kazanjian and Rao, 1999; Ferrier, 2001) and spanned across CEOs to other executives (1 = "CEO"; 2 = "Top level executive"; 3 = "Senior Vice President"; 4 = "Vice President"; 5 = "Director"; 6 = "Divisional Manager"; 7 = "Senior Manager"; 8 = "Middle Manager").

**Firm Size:** Firm size was included within the model as an organisational level control variable to capture the possible size and scale effects. This is because large organisations are considered to have the capacity to implement more complex aspects of executive development dimensions than small firms, because of the likely resource constraints that prevail in the latter (Chandy and Tellis, 2000; Chandy et al., 2003).

Therefore, the relationships hypothesised in this study was modelled by including firm size as a control variable that was measured as the logarithm of total employees, consistent with other studies (Baum and Wally, 2004; Carpenter and Fredrickson, 2001; Baum and Wally, 2004). Prior to logarithmic conversion, the number employees was captured as a nominal measure (1 = "0–250"; 2 = "250–1000"; 3 = "1000–5000"; 4 = "5000–10,000"; 5 = "10,000–50,000"; 6 = "50,000–100,000"; 7 = "over 100,000").

**Firm Age:** Firm age was included to determine the effect of organisational maturity on the analysis. In effect, firm age was included as a proxy for stage of development and growth, as mature firms are expected to perform better than their younger

counterparts (Alam and Deb, 2010). Following the configuration of Hossain and Hammami (2009), age was considered as the number of years since the foundation of firms. This variable was measured by calculating the natural logarithm of the number of years since the foundation of the firm. Prior to logarithmic conversion, the number of years was captured as a nominal measure (1 = 5–10 years; 2 = 10–20 years; 3 = 20–30 years; 4 = 30–40 years; 5 = over 40 years).

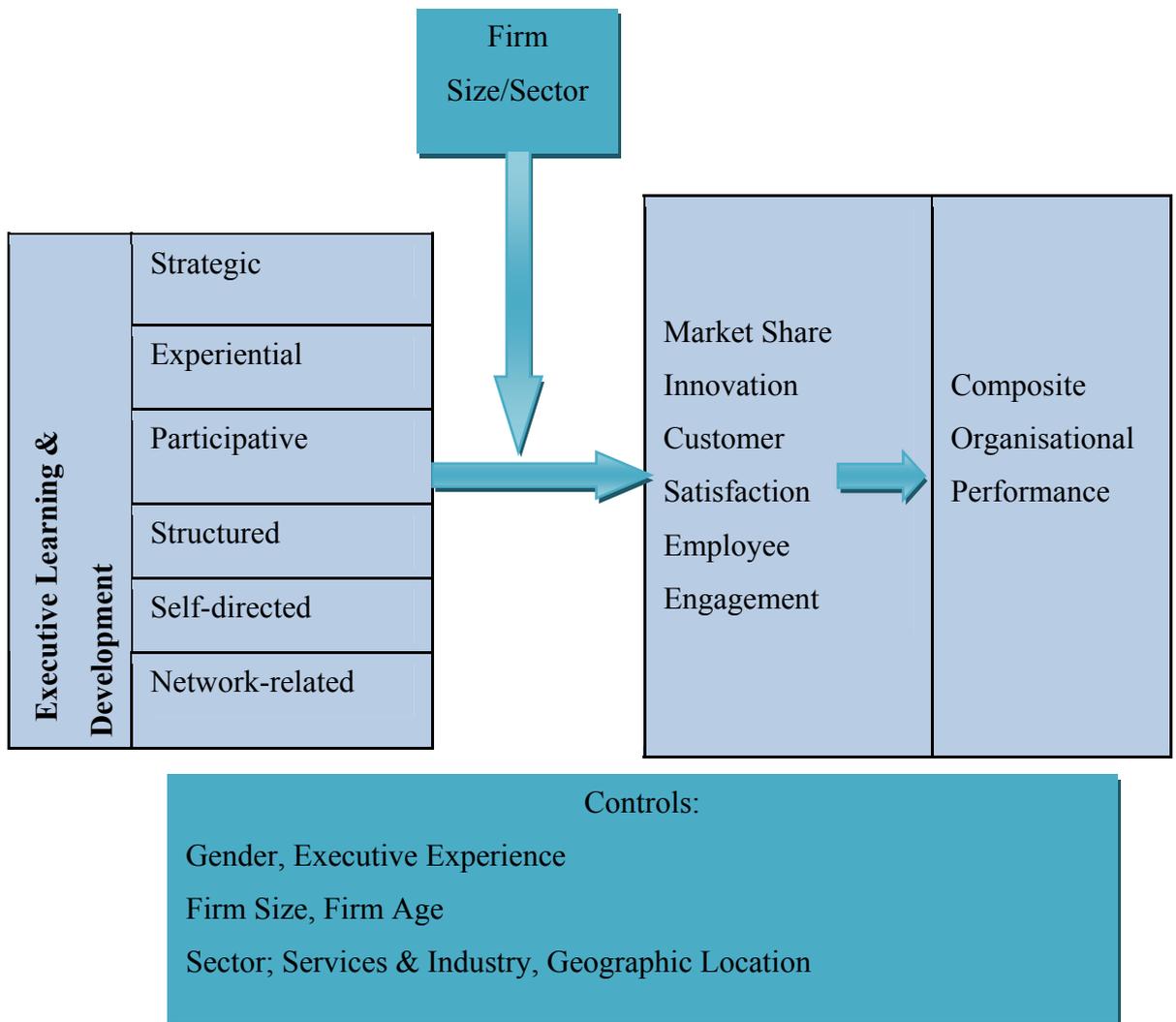
The effects of wide industrial and environmental-level control variables were assessed by observing firm sector (service and industry) and regional location-specific effects on the analysis. Sector differences are also expected to influence the relationship between executive L&D and organisational performance and is introduced into the model as a dichotomous variable (service = 1; industry = 2).

**Firm Sector:** Inclusion of sector as a control variable was premised on the notion that learning orientations are considered to differ across industrial sectors (Lee-Kelly et al., 2007) and several authors (Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006) have emphasised on the importance of learning orientation in the manufacturing sector. Moreover, some researchers (Arundel et al., 2007; Breschi et al., 2000; Malerba, 2004; Jensen et al., 2007) have focused on the importance of industry-specific factors to explain patterns of innovation within firms and the dynamics of industrial structure. The main assumption underlying these studies is that patterns of innovation of firms are sector-specific, depending on the very nature of the technological domain. Arundel et al. (2007) compared the work environment and innovation patterns across 14 European countries and highlighted how the differences in organisational forms resulted in different innovation behaviours: leaders, modifiers, and adopters.

**Geographic Location:** Arundel et al. (2007) report significant differences between countries (even after controlling for industrial structure) in the way work is organised and how firms innovate. However, others (Srholec and Verspagen, 2008) argue that heterogeneity among firms plays a significant role within both sectors and countries. Srholec and Verspagen (2008) assess the heterogeneity of the innovation processes and show that while sectors and countries matter, to a certain extent, the large proportion of variance in terms of innovation strategies is associated with the heterogeneity within both sectors and countries.

Furthermore, researchers in the field of HRM have examined individual elements of performance management within national and multi-national perspectives (Bailey et al., 1997; Schuler and Rogovsky, 1998; Yu and Zhou, 2003; Fey, 2005; Zhang et al., 2006) and the results generally suggest the influence of national culture on organisational performance. Thus, it is expected that regional differences will emerge in the examination of the relationship between executive L&D and organisational performance. National and region indicators were summarised and amalgamated based on sample size, and the effects were measured on a nominal scale as follows; the UK = 1; USA = 2; Australasia = 3; Europe = 4; Africa & Middle East = 5).

Furthermore, based on the foregoing considerations about the theorised effects of executive L&D on organisational performance, the following research framework is developed in Figure 3-1 below:



**Figure 3.1:** Conceptual Framework Testing the Effects of Executive L&D on Organisational Performance Measures, Controlling for Individual, Firm Level, and Environmental Factors.

As depicted in Figure 3, the conceptual research model suggests that executive L&D is expected to generate a positive impact on the composite measures of organisational performance. In addition to this, the model accounted for control measures, such as individual characteristics and organisational and environmental dynamics.

## **Executive L&D Effects on Organisational Performance will differ by Industry Sector (Service and Industry)**

It has been suggested by some scholars that learning orientations differ across industrial sectors (Lee-Kelly et al., 2007). According to Lee and Tsai (2005), learning orientation is a mechanism that affects a firm's ability to challenge old assumptions and facilitate new techniques and methodologies. Baker and Sinkula (1999) view learning orientation as the combination of mental models (Geus, 1998) and dominant logics (Bettis and Prahalad, 1995) that are likely to influence a firm's learning behaviour.

As discussed in the literature review, several authors (Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006) have emphasised on the importance of learning orientation in the manufacturing sector, and particularly, leadership is considered to be a crucial enabling agent facilitating learning in the manufacturing sector (Yeo, 2008). Furthermore, Datta et al. (2005) examined how industry characteristics affect the relative importance and value of HPWP systems and reported that the impact of human resource systems on productivity is influenced by industry capital intensity, growth, and differentiation. The results further suggest that the HPWP effects on labour productivity were pronounced in industries with low-capital intensity or high-growth rates and that such industries are likely to include sectors characterised by a combination of high discretionary behaviour and customer contact, all features of the service sector.

Furthering the debate on the differential learning orientation across sectors, some researchers (Taylor and Bain, 2003; Wright and Dwyer, 2003) suggest that industries dependent on low-cost mass production will tend to have a high propensity towards establishing administration-oriented HR departments and implement predetermined systems of control. This highlights the possible viable effects of HR structures across sectors on the deployment of L&D dimensions.

There are limited studies within the HRM/performance domain, which have either controlled for or highlighted the differences of learning orientations across sectors (Kalleberg and Moody, 1994; Chandler and McEvoy, 2000; Comb et al., 2006). Kalleberg and Moody (1994) examined the sector difference (nonprofit, public, and

for-profit establishments) in terms of the application of HPWPs defined in terms of opportunities for participation in decision making, capacity for participation in team activities, and provision of incentives for participation. The results indicated that nonprofit and public organisations were less inclined to deploy performance incentives (gain sharing and bonuses) and multi-skilling practices than for-profit organisations, where there was an increased propensity to employ both self-directed work teams and offline committees. In addition, some single-industry studies (e.g. Appleyard and Brown, 2001; Batt, 2002) have controlled for intra-industry and segments-specific idiosyncratic characteristics and have reported a difference in orientations.

Moreover, some researchers (Lien et al., 2006; Bhatnagar, 2006) consider learning orientation far more crucial in service firms than in other firms. This outcome is contrasted by others (e.g. Sadler-Smith et al., 2001). Specifically, Sadler-Smith et al., (2001), in their study examining the learning orientations of 300 manufacturing and service firms suggested that manufacturing firms are more likely to engage in active learning than service firms. Others (e.g. Jamali et al., 2009) reported non-significant differences in the learning orientation in service and manufacturing firms. In conclusion, the above-mentioned studies offer support for the expectation that statistically significant differences are likely to exist in the learning orientation between manufacturing and service firms. Consequently, the second hypothesis is formulated as ***H2: Executive L&D effects on organisational performance will differ by sector (service and industry).***

## **Executive L&D Effects on Organisational Performance will differ by Firm Size (SME/Non-SME)**

According to the Resource-Based View theorists, firms with superior resources are likely to pursue unique strategies, which are not easily replicable and imitable by competitors (Barney, 1991; Teece et al., 1997; Teece, 2007; Winter, 2003). Specifically, differential effects of SHRM dimensions on organisational outcomes between SME and Non-SME have been observed by some researchers (e.g. Brewster and Mayne, 1995; Brewster et al., 2006; Collins and Clark, 2003; Datta et al., 2005; Marginson et al., 1993; Purcell, 1999; Huselid 1995).

According to the Resource Dependency theory, organisational size is correlated with innovation and performance (Damanpour, 1992), and this relationship is modified by organisational slack (Bowen, 2002). Bourgeois (1981) postulates that slack relates to the resources in reserve that permit the adaptation of changes in strategy when environmental shifts occur. Large organisations are perceived to have more slack and are therefore expected to cope better with resource scarcity than SMEs. Some of the resource dependency and slack effects may apply to executive L&D contexts, given that large firms may have the extra resource capacity to deploy more sophisticated development approaches when environmental changes occur, than small firms (Mole et al., 2004). Furthermore, large organisations have the capacity to hold power over other their supplier-chains and can establish sophisticated learning partnerships to create differentiated products, thereby obtaining competitive advantage (Raymond and St-Pierre, 2004; Gardet and Mothe, 2012) over smaller firms.

Overall, there is evidence to support the view that large firms have greater resource advantages and can execute more complicated HR practices to achieve higher performance (Collins and Clark, 2003; Datta et al., 2005; Huselid, 1995) than small firms. It is therefore expected that large firms (i.e. large number of employees) will have the capacity to translate their resource-advantage into superior performance, compared to small firms. For instance, Collins and Clark (2003), in their study involving 73 high-technology firms, examined the relationships between a set of network-building HR practices –external and internal social networks of top management teams and organisational performance – controlling for firm size. The results revealed that the firm size effects of the relationships between the HR practices

and firm performance (sales growth and stock growth). The effects of firm size on performance were found to be more favourable to large organisations than to small firms.

Similarly, Fey and Bjorkman (2001), controlled for firm size in a study examining the effects of HRM dimensions on organisational performance and the results of their study suggested that large firms slightly outperformed small firms. In addition, Brewster et al. (2003), in their study involving a large (n = 2953) and multi-national sample, concluded that compared to small firms, large firms are able to take advantage of economies of scale, through the provision of complex HR system, to generate superior organisational performance outcomes. Based on the above points, it can be argued that although some small firms may be untangled from bureaucratic obstacles existing in large organisations, small firms may lack the capacity to reap the economies of scale associated with a large organisational size. Hence, it seems likely that firm size could have an inverse effect on the executive L&D; therefore, the third hypothesis is formulated as follows: ***H3: Executive L&D effects on organisational performance will differ by firm size (SME/Non-SME).***

## **3.5 Research Design and Strategy**

The following section covers the research design, strategy, and methodological approach adopted for this study.

### **3.5.1 Positivism versus Interpretivism**

The differences between positivist and interpretivist perspectives have been well articulated by Weber (2004), accounting for a wide range of research parameters. Firstly, from an ontology (the nature of reality considered by the researcher [Blaikie, 1993]) perspective, positivists consider the researcher and reality to be separate entities, whilst the interpretivists view the researcher and reality as inseparable entities. Secondly, the research object (phenomena being studied) is formulated by interpretivists on the basis of meanings structured by the lived experience of the researcher (Hatch and Cunliffe, 2006), whereas the positivists postulate that the object of research has inherent qualities existing independently of the researcher (Eriksson and Kovalainen, 2008). Thirdly, from a research methods' perspective, positivists tend to apply a variety of methods such as laboratory experiments, field experiments, and surveys, gathering large amounts of data and normally employ statistics and content analysis to detect underlying regularities (Saunders, Lewis and Thornhill, 2007; Hatch and Cunliffe, 2006). On the other hand, interpretivists tend to implement qualitative approaches, especially case studies and ethnographic, phenomenographic, and ethno-methodological studies, relying on hermeneutics and phenomenological approaches to decipher indirect meanings in order to reflect any underlying factors and conceptualisations. Fourthly, from the epistemology (knowledge or theory of knowledge) point of view, positivists assume that objective reality exists beyond the human mind, in contrast with the interpretivist's view that knowledge of the world is intentionally constructed through experiences or social construction of the world. In terms of validity (of measures and validity of the measurement process), interpretivists tend to be concerned about claims that the knowledge acquired via the research should be logically defensible; thus, according to this view, evidence presented should be examinable, and the research context and any associated claims derived thereby should be reasonably acceptable to a wider audience. Conversely, for the positivists, validity involves collecting data, which truly represent measures of reality, and involves the deployment of methodologies

articulating different types of checks: construct validity, internal and external validity, and statistical conclusion of validity.

Finally, in terms of reliability (research outcomes or the research conduct), the positivist's view is that reliable results should be replicable by other researchers, whereas the interpretivist's consideration is that reliability should be directed towards demonstrating interpretive awareness. In conclusion, Weber (2004) challenges the differences between the positivist and interpretivist views and suggests that the dissimilarities mainly lie in the choice of methods. Furthermore, Weber (2004) recommends that researchers should adopt the positivist approach when employing methods that involve experiments, surveys, and field studies, whereas interpretivist researchers are advised to implement methods associated with case, ethnographic, phenomenographic, and ethno-methodological studies.

### **3.5.2 Inductive versus Deductive**

Generally, the deductive and inductive approaches have been considered broad and separate forms of reasoning. Compared to the inductive approach, deductive reasoning is considered to have a narrow focus, concerned with testing or confirming hypotheses. According to Sekaran (2003), the implementation of the deduction process involves a number of steps. Firstly, theories and hypothesis are generated on the basis of personal experiences. Literature search or ideas are then amalgamated from another research with the view of generating solutions to existing problems. Secondly, the generated theories and hypotheses are then operationalised into concepts, allowing measurement through empirical observations. Next, steps are taken to identify alternative techniques to measure the operationalised concepts, and this includes the selection and design of the appropriate research methodologies. Finally, the falsification and discarding step is implemented, where the selected theories and hypotheses are either falsified or confirmed (Lancaster, 2005). In sum, deduction embodies a process of drawing conclusions based on logically analysed inferences. Conversely, inductive reasoning is considered more open-ended than deductive reasoning and expects researchers to establish a general proposition based on observed phenomena in a logical manner (Sekaran, 2003). Hence, the inductive process follows a sequence of steps opposite to the deductive approach, moving from specific observations to broader generalisations and theoretical conceptualisations.

Accordingly, in studies adopting the inductive approach, researchers commence with specific observations and measures, detect patterns and regularities, and formulate tentative hypotheses, before establishing general conclusions. Notwithstanding, the above cited differences, Teddlie and Tashakkori (2003) present a pluralistic view indicating that in practice, most research processes reflect an overlap of both the deduction and induction approaches, as the former can assist in the shaping of arguments whilst the latter can support the consolidation of the argumentation processes. Thus, the two forms of reasoning can be complimentary in practice.

### **3.5.3 Research Design**

Research design provides a framework for the collection and analysis of data, reflecting decisions about the priority given to a range of factors within the research process (Bryman and Bell, 2007). Furthermore, De Vaus (2001) postulates that effective research design enables the generation of unambiguous evidence to validate the research questions under investigation. According to Sekaran (2003), research design encompasses a range of rational decision-making choices regarding the purpose of a study (exploratory, descriptive, hypothesis testing), its location (i.e., the study setting), the type of investigation, the extent of researcher interference, time horizon, and the level to which the data will be analysed (unit of analysis).

Other considerations of research design extend to decisions regarding the sampling design, data collecting approaches, and procedures for measuring, analysing, testing the hypotheses generated from the research. Bryman and Bell (2007) support the view by Sekaran (2003), in that the research methods form part of the design process. Consequently, in line with Sekaran's definition of research design, this study will test a number of hypotheses derived from the conceptual framework, at a later stage of this chapter. It is believed that studies employing hypothesis testing tend to explain the nature of certain relationships, establish the differences among groups, or establish the independence of two or more factors in a situation. In effect, hypothesis testing offers an enhanced understanding of the relationships that exists among variables.

Moreover, in this study, the ordinal regression analysis is implemented to delineate the effects of executive L&D on organisational performance. The study's horizon aligns with the cross-sectional approach where data is gathered once over a period of time such as days, weeks, or months in order to answer a research question. Conversely, when data is collected at more than one point in time, the study is considered longitudinal (Creswell, 2003). Longitudinal studies according to De Vaus (2001) are amenable to situations seeking to identify the patterns and direction of change and stability. Therefore, longitudinal approaches can be employed to establish temporal order of events, developmental effects, and historical effects. In sum, this study follows the cross-sectional survey approach where data is collected at one point to determine relationships between variables at the time of the study.

#### **3.5.4 Research Approach**

Research approach refers to the pattern of assumptions, ideas, and techniques that characterise quantitative and qualitative researchers (Bryman and Bell, 2007). Whilst quantitative and qualitative research approaches are distinctive, they also have similarities and overlap in certain respects and can be combined in various ways.

Researchers choose one of these two approaches or use a combination, depending on the definition of the problem and the nature of the information being sought (Punch, 1998). The approach adopted in this study is the quantitative technique following deductive reasoning with a positivism perspective. Creswell (1994) sums up the quantitative approach as an inquiry into a social or human problem, based on theory testing composed of variables, measured with numbers, and analysed with statistical procedures, in order to determine whether the predictive generalisations of the theory hold true. Generally, quantitative research is considered to be more formalised and structured than qualitative research.

#### **3.5.5 Research Strategy**

Initially, the research strategy was to collect the primary data from HRM directors from FTSE 350 companies in the UK. Surveys were distributed to respondents by post and email, but the response rate was extremely low (5%). Consequently, because of the outcome of the initial survey, a convenient survey strategy, which extended to executives across a wider geographic location (including the UK), was

adopted. Generally, survey administration to single respondents has attracted some critique (see Bowman and Ambrosini, 1997).

Similarly, some authors suggest that the multiple respondent approach is not without challenges, such as low usable response rates and high complexities in the survey administration process (Malhotra, 1993). Furthermore, there is evidence, suggesting that the convenience-sampling technique is gaining popularity within the HRD literature, and provides a reasonable justification for applying this approach in this research. According to Dooley and Lindner (2003), 51% of 158 articles appearing in the HRD Quarterly from 1990 to 1999 applied some form of sampling strategy. The breakdown of the data reveals further that 37% used convenient sampling; 31%, purposive sampling; 17%, random sampling; and the remaining 6%, a combination of cluster and stratified sampling approaches.

### **3.6 Samples Description and Data Collection Procedures**

As noted above, convenience sampling of a wide spectrum of executives and organisational leaders (senior to mid-level) in private organisations provided data for the study elicited from different sectors (service and industry) and across a wide geographical area: USA, Canada, the UK, Western and Eastern Europe, Africa, Middle East, and Asia. Accordingly, the heterogeneous nature of the sample offers some advantages in terms of the generalisability of the findings over working environments.

In implementing the data collection process, the executive L&D instrument was mailed to diverse executives groups on the LinkedIn professional networking website: CEOs, chief learning officers, chief finance officers, HR executives and other senior management. In addition, the instrument was distributed via email to executive respondents. This approach was cost-effective and allowed the instrument to be validated across a multinational audience, offering a unique means of validating the executive L&D instrument and eliminated the possible bias resulting from collecting the data from single or few selected organisations. The data was collected in two main phases with phase one providing information for initial scale validation

and phase two enabling further confirmatory validation as well as the examination of the performance effects of the validated scale.

At distribution, three points were stressed: (1) participation was entirely voluntary; (2) executive L&D at the business, divisional, or SBU units was the focus of the study and ideal respondents were thus members of a firm/business unit/division familiar with the executive L&D dimensions utilised by their firm/business unit/division; and (3) the answer to each question should best describe the practices or situation in the respondent's firm/business unit/division. Additional data were elicited to control for gender, firm age and size, respondent executive level experience, respondent country of residence/location of business, and respondent managerial level according to business title.

Whilst solutions produced by large samples are generally expected to produce solutions that are more reliable than those produced by small samples, the sample size decision may be formulated in line with a set of factors related to the model complexity, expected rate of missing data, and estimation procedures used (Hair et al. 2006). For this study, the minimum size target of 100 usable responses per phase was set, considering the model complexity and the guidelines specified by Harris and Schaubroeck (1990), applicable to multiple group analysis.

### 3.7 Sample Description and Demographics

Table 3.1 presents the demographic detail of respondents in sample 1, reflecting executives from different levels: CEO (23), Top Level Executive (23), Senior Vice president (12), Vice President (12), and Director (40). The questionnaire deployed for this phase of the research can be found in **Appendix B**.

**Table 3.1:** Demographics of Sample 1 (Data Collected: December 2009 - March 2010).

	Sample 1 demographics (N = 150)	N	Marginal Percentage
Title	CEO	17	11.3%
	Top Level Executive	19	12.7%
	Senior Vice President	27	18.0%
	Vice President	33	22.0%
	Director	54	36.0%
Gender	Male	90	60.0%
	Female	60	40.0%
Exec Experience with the firm	0–5 years	65	43.3%
	5–10 years	47	31.3%
	10–15 years	22	14.7%
	20–25 years	9	6.0%
	Over 25 years	7	4.7%
Firm Size	SME	51	34.0%
	Non-SME	99	66.0%
Sector	Industry	55	36.7%
	Services	95	63.3%
Region	The UK	47	31.3%
	USA	33	22.0%
	Australasia	25	16.7%
	The EU	29	19.3%

	Sample 1 demographics (N = 150)	N	Marginal Percentage
	Africa	16	10.7%
Total		150	100%

In terms of the geographic spread of firms, the sample 1 covered a wide geographic area (Table 3.1).

Table 3.2 presents the demographic detail of respondents in sample 2, and reflects the distributed leadership view, presented in section 2.1 of the literature review. See **Appendix C** for the questionnaire deployed for this phase of the research.

**Table 3.2:** Demographics of Sample 2 (Data Collected: April–November 2011).

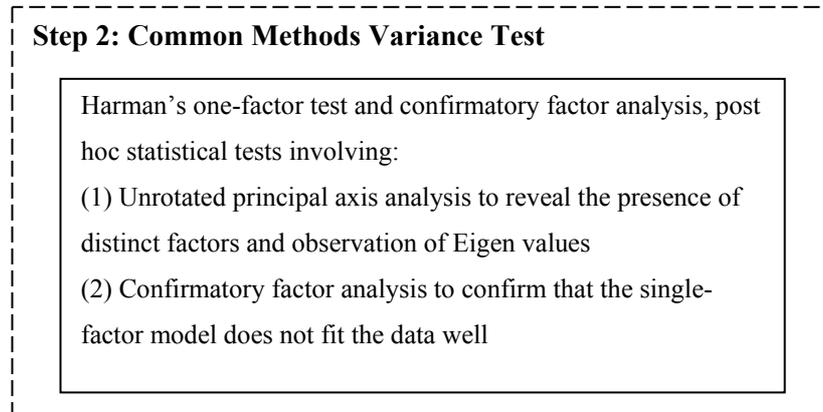
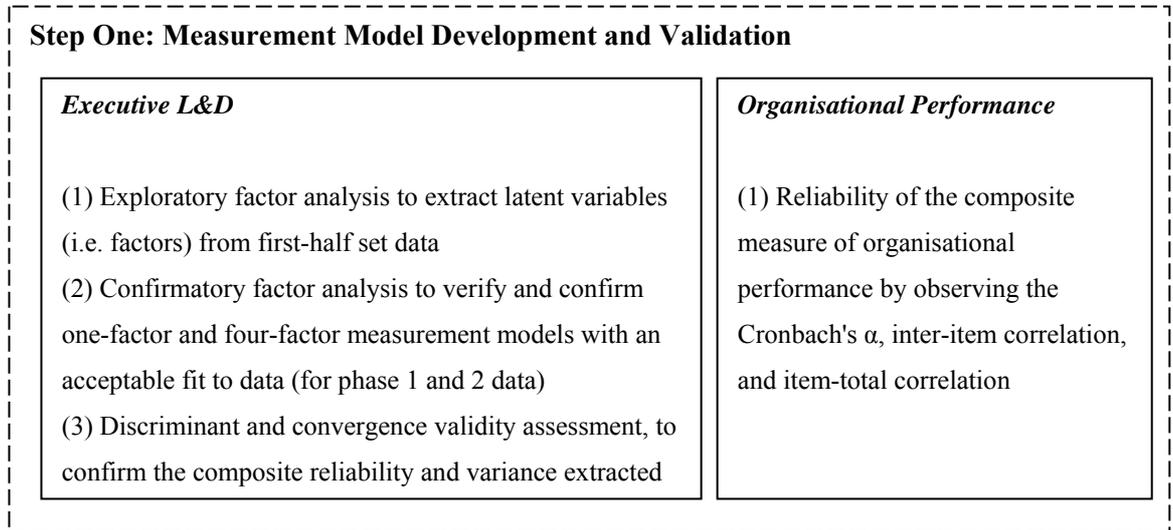
	Sample 2 demographics (N = 222)	N	Marginal Percentage
Title	CEO	23	10.4%
	Top Level Executive	23	10.4%
	Senior Vice President	12	5.4%
	Vice President	12	5.4%
	Director	40	18.0%
	Divisional Manager	16	7.2%
	Senior Management	40	18.0%
	Middle Management	56	25.2%
Gender	Male	136	61.3%
	Female	86	38.7%
Exec Experience with the firm	0–5 years	80	36.0%
	5–10 years	64	28.8%
	10–15 years	46	20.7%
	20–25 years	17	7.7%

	Over 25 years	15	6.8%
Firm Size	SME	68	30.6%
	Non-SME	154	69.4%
Sector	Industry	73	32.9%
	Services	149	67.1%
Region	The UK	45	20.3%
	USA	60	27.0%
	Australasia	32	14.4%
	The EU	42	18.9%
	Africa	43	19.4%
Total		222	100%

In terms of location, the sampled firms spanned a wide geographic area, with USA (60) and the UK (45) contributing the most.

### 3.8 Quantitative Data Analysis Procedures

Following the brief description of background information of participants and the development of the research framework in section 3.1, the data analysis has been conducted systematically as depicted in Figure 3.2.



**Step 3: Ordinal Regression Model Evaluation and Hypotheses Test**

***H1: Executive L&D -----OP***

Step1: Ordinal regression analysis models to evaluate the effects of the individual-level control variables (gender, title, and executive experience) on organisational performance

Step2: Evaluate the effects of the firm-specific control variables (age and size) on organisational performance

Step3: Evaluate the effects of the environmental (regional and industry) on organisational performance

Step4: Evaluate the effects of the executive L & D measure on the organisational performance variables, observing the changes in the chi-square and the pseudo R-square changes: confirm or disconfirm H1

***H2: Executive L&D -----OP – modified by sector***

Step1: Split data by firm size (service vs. industry) and separate ordinal regression analysis conducted to evaluate the effects of the individual-level control variables (gender, title, and executive experience) on organisational performance

Step2: Evaluate the effects of the firm-specific control variables (age and size) on organisational performance

Step3: Evaluate the effects of the environmental (regional) on organisational performance

Step4: Evaluate the effects of the executive L&D measure on the organisational performance variables, observing the changes in the chi-square and the pseudo R-square changes; confirm or disconfirm H2

***H3: Executive L&D -----OP – modified by firm size***

Step1: Split data by firm size (SME vs. Non-SME) and separate ordinal regression analysis conducted to evaluate the effects of the individual-level control variables (gender, title, and executive experience) on organisational performance

Step2: Evaluate the effects of the firm-specific control variables (age) on organisational performance

Step3: Evaluate the effects of the environment (region) on organisational performance

Step4: Evaluate the effects of the executive L&D measure on the organisational performance variables and observing the changes in the chi-square and the pseudo R-square; confirm or disconfirm H3

**Figure 3.2:** Summary of Quantitative Data Analysis Procedures.

## **Data Analysis Part 1 – Instrument Development**

### **3.9 Instrument Development: Executive L&D Measure**

The executive development measure used in this study was formulated on the basis of two main parameters. First, consideration was given to the third stage of Louma's (2005) management development model, discussed in section 2.7 of the literature review chapter. Thus, items were included in the measure taking account of the integrative stage of Louma's Model (accounting for both individuals and the organisation requirement). Second, consideration was given to the six learning and development dimensions (structured, participative, network-related, self-directed, experiential, and strategic learning) discussed in section 2.7 of the literature review chapter. As indicated previously, this approach reflects a broad and holistic conceptualisation of executive L&D. The measure is also derived from a comprehensive review of the SHRM, executive and management development, human capital, top echelon, and strategic management literature.

The design of the measure also reflects a broad spectrum of learning dimensions (both formal and informal). This was considered a pragmatic representation of the executive work scope, which tends to involve directing the activities of the organisation, including making and implementing strategic and operational decisions effectively, in order to create economic rents which cannot be replicated by competitors (Castanas and Helfa, 1991). This approach also addresses some of the perceived weaknesses in traditional training and development measures (Appleyard and Brown, 2001; Wright et al., 2003; Guest et al., 2003; Horgan and Muhlau, 2006; Way, 2002).

Specification of the items was undertaken by interrogating an extensive range of existing measures and theoretical conceptualisations relevant to executive L&D across the executive SHRM, organisational learning, management development, leadership development, and executive coaching literature. The items were designed, modified, and specified on the basis of existing measures developed by a wide range of authors (Boyles, 2007; Clarke, 2005; Chiva et al., 2007; Johnson, 2007; Lin and Shih, 2008; Miller et al., 2007; Paisey et al., 2007; Rickards et al., 2001; Spicer and Sadler-Smith, 2006; Thompson and Cole, 1999). Table 7 presents the items included

in the initial executive L&D measure. Items aligning to the six main categories of executive L&D (structured, participative, network-related, self-directed, experiential, and strategic) were selected with any overlapping items eliminated. Refer to **Appendix D** for a summary of the original and revised items.

Two experiential executive L&D items were included from the Chiva et al.'s. (2007) study to assess the level of internal support executives received from peers in terms of taking risky decisions and experimenting with new ideas in order to drive innovation, efficiency, and cost reduction; these were slightly reworded and included under the experiential dimensions of this measure. Chiva et al.'s study was based on data obtained from 157 employees in 8 manufacturing firms in Spain from which Chiva et al. (2007) constructed and validated a 14-item organisational learning capability scale, encompassing 5 main dimensions: experimentation, risk taking, interaction with the external environment, dialogue, and participative decision making. The remaining items in Chiva et al.'s measure were excluded because they fell outside the scope of this study.

A number of items were included from Lin and Shih's (2008) measure of executive strategic human resources management (ESHRM). Out of the 22 items specified in the measure of ESHRM, two items associated with training were selected, modified, and included as structured and participative L&D measures. Another item was included to measure structured L&D related to the provision of communication and problem-solving training to the TMTs. An item was included to assess participative L&D associated with evaluating organisational proclivity of establishing cross-organisational platforms that engender increased understanding of functional process and governance arrangements. Another item was modified and included as an experiential L&D measure related to the propensity at which organisations allowed executives to engage in stretch assignments. Likewise, two items related to developing team climate were included as measures of networking and participative L&D, and both items were originally defined as team climate measures within Lin and Shih's study. One additional item was included as a measure of networking L&D from Lin and Shih's measure of ESHRM, assessing the effects of top team integration on organisational competitiveness. This original item assessed the frequency of planned organisational dimensions particularly geared towards stimulating informal relations in order to drive information sharing behaviour among

executives. Items related to selection, compensation, and performance appraisal in the original Lin and Shih construct were excluded from the current measure, as they were outside the scope of the current study.

Three items in the experiential L&D measure were included from the validated measure of organisational learning orientation developed by Spicer and Sadler (2006). This study was based on data collected from 82 owner-managers, comprising a nine-item measure with Cronbach's  $\alpha$  above 0.7, and the three selected items are associated with organisational limits related to experimentation, risk-taking, and flexibility in the pursuit of superior cost and process efficiencies. To maintain consistency in the phraseology adopted across the new measure, these items were reworded to focus specifically on executives instead of the general assessment of organisational learning orientation.

One new experiential L&D measure was created by merging three items associated with a factor labelled as learning from experience from a six-factor scale, measuring leadership and team performance, developed by Rickards et al. (2001). The original measure was constructed from the responses obtained from convenience sampling of 1103 respondents involved in training and action research programmes. In the original measure, these three items addressed learning from mistakes, propensity to engage in open communications after mistakes had occurred, and the inclination of employees to try new initiatives after failing in others.

An item was included to measure networking L&D to assess the degree to which executives reviewed and elicited feedback from peers on key decisions at the inter-organisational level, and this was taken from Clarke's (2005) study on workplace learning environments. Items related to empowerment and communication, support for learning transfer, and support for reflection and job challenge were excluded from the questionnaire partly because they either overlapped with other items already specified elsewhere in the instrument or were unrelated to the focus of this research.

All the items associated with strategic L&D were obtained from Thompson and Cole's (1999) study of 32 strategic competencies categorised under 8 sub-clusters (strategic awareness and control, strategy implementation, stakeholder satisfaction, failure and crisis avoidance, ethics and social responsibility, quality and customer

care, functional competencies, and competitive strategy), originally deemed crucial for driving strategic excellence and competitive success. According to many authors (Castanias and Helfat, 2001; Day and Halpin, 2004; Lord and Hall, 2005), the mastery of competitive values, effective resource deployment, and superior understanding of business environmental shifts are considered the constituents of effective strategising, triggering a double-loop strategic learning within organisations seeking to outperform their competitors. Until now, the items developed by Thompson and Cole (1999) had not been empirically tested, although the authors mapped the measure against progressive and declining companies to demonstrate which items were aligned to each stage of organisational development.

However, as these results were derived from a qualitative approach, it is essential to conduct an empirical verification of these items. Specifically, the items tested in Thompson and Cole's study encompassed L&D derived from the following: strategising taking into account a range of considerations; ethical, holistic, current, long-term implications; maintaining awareness of changes in the business environment; maintaining close links with customers in order to create differentiated products/services; embedding new initiatives taking account of inter-functional and cross-organisational impact; and reacting to situations and events before they escalate to critical difficulties for the organisation. All six items were retained as measures of strategic L&D.

Two new items were introduced under self-directed learning, on the basis of Miller et al.'s. (2007) ideas, supported by other scholars (e.g. Sutaari and Vitala, 2008). One of the items assessed the tendency of executives to refer to various sources of information such as books and professional magazines in order to enhance their L&D (Miller et al., 2007). It is expected that by building this capacity of engaging multiple sources of information, executives will enhance their problem-solving capabilities (Louma, 2005; Gray and Mabey, 2005). The second item evaluated the degree to which organisations provided opportunities for executives to engage in self-initiated learning to enhance their capabilities (Miller et al., 2007). Such dimensions were expected to augment the other practical and interactive forms of learning that executives are likely to engage in.

In terms of participative L&D, an item was included to capture executive learning and development derived from engaging in frequent interactive activities such as conference calls, joint problem-solving initiatives, joint progress reviews of special projects, inter-functional working groups, etc. (Miller et al., 2007). The second item related to participative L&D was aimed at examining the frequency of well-planned away days, which can serve as a forum where executives can generate innovative ideas and solve specific organisational problems (Johnson, 2007).

An items list was generated on the basis of the theorised view that executives can improve their capabilities through coaching dimensions. Bowles et al. (2007) demonstrated that over a 12-month period, executives that were offered performance-based coaching specifically worked at improving recruitment, leadership, coaching, and achievement of self-goals, measured in terms of achieving recruitment targets. Although the authors caution against generalising the results of the study owing to sample size (N = 59), it remains one of the few recent empirical studies offering a direct assessment of coaching and productivity. Table 7 presents the pre-factor analysis items included in the executive L&D measure.

**Table 3.3:** Pre-Factor Analysis Items included in the Executive L&D Measure.

<b>Executive L&amp;D Measure</b>
<p><b>Experiential L&amp;D</b></p> <ol style="list-style-type: none"> <li>1. Executives are encouraged to take risks, venture into unknown territories, and experiment with new ideas to drive efficiency in processes and cost reduction (Spicer and Sadler-Smith, 2006).</li> <li>2. Executives are encouraged to experiment with new and novel approaches to resolve organisational problems (Spicer and Sadler-Smith, 2006).</li> <li>3. Executives are encouraged to amend established organisational practices in pursuit of efficiency and effectiveness (Spicer and Sadler-Smith, 2006).</li> <li>4. Executives learn quickly from past experiences, thus permitting growth, change, adaptation, and creative problem-solving (Lin and Shin, 2008).</li> <li>5. Executives are given the opportunity to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and competencies (Chiva, 2007).</li> <li>6. Executives receive support and encouragement from other peers when</li> </ol>

presenting new ideas and initiatives (Chiva, 2007).

### **Structured L&D**

1. Executives are offered suitable communication and problem-solving training and development opportunities (Lin and Shin, 2008).
2. The organisation is highly supportive of executives' attendance at professional society seminars, conferences, and programmes to enhance their skills and capabilities (Paisey et al., 2007).
3. The organisation offers strong support (financial and non-financial) to executives when they pursue non-work related studies (Paisey et al., 2007).
4. Executives are offered coaching support to enhance their personal effectiveness and leadership skills to facilitate the achievement of organisational goals and targets (Boyles, 2007).

### **Participative L&D**

1. Executives frequently engage in interactive activities such as conference calls, joint-problem solving initiatives, joint-progress reviews of special projects, inter-functional working groups, etc. (Miller et al., 2007).
2. Executives engage in regular "away day" programmes, which serve as a forum for creating strategic ideas, generating solutions for specific organisational problems, and developing interpersonal capabilities (Johnson, 2007).
3. The organisation organises regular briefings and activities to help executives understand cross-organisational operational processes and governance structures (Lin and Shin, 2008).

### **Networking-related L&D**

1. Executives are good at networking with key individuals outside the organisation and can exchange ideas for mutual benefit (Rickards et al., 2001).
2. The organisation frequently promotes informal social activities for executives to stimulate internal networking which helps them to forge informal relations (Lin and Shin, 2008).
3. Executives are encouraged to interact with a wider stakeholder group: competitors, customers, suppliers, universities, seeking to acquire and disseminate good practice across the organisation (Chiva, 2007).
4. Executives have the propensity of reviewing key decisions and ideas with peers to gain buy-in, support, and feedback (Clarke, 2005).

### **Self-directed L&D**

1. Executives in our organisations tend to consult various sources of information

such as specialist books, industry and professional association magazines, academic articles, etc. to enhance their L&D (Miller et al., 2007).

2. Executives are offered opportunities to develop new skills and competencies via bespoke flexible learning arrangement (including distant learning options) delivered in partnership with external providers (Miller et al., 2007).

3. The organisation provides a wide range of web-based learning resources (work and non-work related) aligned to the development needs of executives (Paisey et al., 2007; Miller et al., 2007).

### **Strategic L&D**

1. Executives strategise taking into account ethical, holistic, current, and future implications on the business (Thompson and Cole, 1999).

2. Executives maintain an awareness of business environment changes and their implications on the organisation (Thompson and Cole, 1999).

3. Executives maintain close links with customers in order to understand, attract, and satisfy them more effectively than competitors often resulting in the creation of differentiated, high added-value products and services (Thompson and Cole, 1999).

4. Executives embed new initiatives and changes in the organisation by taking into account inter-functional and cross-organisational influences and effects (Thompson and Cole, 1999).

5. Executives tend to react rapidly to situations or events before they escalate to critical financial, competitive, or leadership difficulties for the organisation (Thompson and Cole, 1999).

The final version of the instrument incorporated comments from the pilot phase and was implemented during phase one of the data collection process, as depicted in Table 3.3. The instrument is split into 6 main sections, consisting of 25 item measures of executive L&D.

### **3.9.1 Pre-Testing of the Executive L&D Measure**

Pilot testing of the initial executive L&D instrument was undertaken with a group of 15 senior managers (8 men and 7 women), with 5–10 years of executive-level experience in both private (85%) and public sector (15%) organisations. The senior managers included in the pilot were selected on the basis of seniority and background knowledge and experience in the field of SHRM and executive development. The instrument was distributed by email to respondents, requesting comments about the suitability of the questions as a measure of executive L&D, overall length of the questionnaire, and suggestions in terms of formulating the questions to suit executive managers. Feedback received from the pilot phase was very positive, and some minor revisions were applied to the questionnaire.

For instance, the item “Executives are given the opportunity to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and competencies” (Chiva, 2007) was originally presented as follows: “Opportunities are provided for executives to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and competencies”. The rewording offered clarity and rendered it consistent with the other items. After the pilot stage, the items were subsequently reviewed by two executive development experts (one each from the public and private sectors) to establish content validity prior to the implementation of phase one of the data collection process.

### **3.9.2 Exploratory Factor Analysis**

Exploratory factor analysis (EFA) is a statistical technique used to determine the structure of factors required for establishing dimensionality relationships between the specific items and construct under design (Pallant, 2001; Tabachnick and Fidell, 2001). The justification for the application of EFA in this study was based on the measure of sampling adequacy, the Bartlett’s test of sphericity (Bartlett’s Test), a statistical test to quantify the degree of inter-correlations among the variables, and the Kaiser-Meyer-Olkin (KMO) index (Hair et al., 1998).

Following the recommendations of Pallant, (2001), the Bartlett's Test is deemed to be significant ( $p < 0.05$ ) for the factor analysis to be considered appropriate and the sampling adequacy measure (based on the KMO index ranging from 0 to 1) values above 0.60 are considered appropriate for exploratory factor analysis. Furthermore, the strength of the relationship between the item and the latent construct as indicated by the factor loading is used to ascertain the convergent and discriminant validity of the scales (Hair et al., 2006), and items with loadings higher than 0.50 as postulated by Nunnally (1978) are retained for further analysis.

For detailed analysis of the associations between the various components of executive L&D, phase reduction processes were implemented. Statistical factor analysis provided a basis for ascertaining whether the assembled measures were related to the various components of executive L&D contained in this research.

A factor is a linearly observed variable, representing a specific underlying dimension of a construct, distinct from other items (Tabachniel and Fidell, 2001). In effect, factor analysis helps to derive a parsimonious or reduced set of factors that summarise and describe the structural interrelationships among the items within a construct in a concise manner (Gorsuch, 1983). Interpretation and evaluation of data related to factor analysis is not without controversies and debate.

This debate involves issues ranging from the adequacy of items required for factorial analysis and pros and cons of oblique and orthogonal solutions to issues surrounding the accurate interpretation of the factor solutions. In terms of rotational methodology, Child (2006) argues that although orthogonal solutions are easy to interpret, they can often produce misleading solutions at instances where the factors tend to intercorrelate, specifically when the instrument is composed of several interrelated dimensions. Child (2006) suggests that in most cases, oblique solutions should be preferred because they offer a far more realistic representation of how the factors should inter-correlate than orthogonal solutions.

To test the validity of this hypothesis, both varimax and oblimin rotational methods were employed to ascertain if any significant variances could be identified in the results from each rotational methodology. Factor loadings greater than 0.4 are often

considered to be salient, indicating that it is meaningfully related to a primary or secondary factor (Brown, 2006).

Some good practices for interpreting the factors and evaluating the quality of the solution is offered by Child (2006), involving the elimination of items reflecting the characteristics of poorly defined items such as factors on which only 2 or 3 items have salient loadings; this depicts low factor determinacy (poor correspondence between the factors and their factor scores). It is also recommended to eliminate poorly behaving items such as items with high loadings on more than one factor (i.e. cross loadings). Finally, items with small loadings on all factors (i.e. low communalities) are also candidates for elimination during factor analysis. However, Pett et al. (2003) suggest that the interpretation of factors must be balanced by considering the theoretical and empirical framework of the construct, implying that at some instances, even where some items do not behave in accordance with the expected parameters, they can be retained in the construct.

### **3.9.3 Results of Exploratory Factor Analysis Results**

To uncover the underlying structure of the set of items included in the apriori scale, EFA was performed on the data and the results are reported in Table 3.4. To aid interpretability and clarity of the items in the tables, the six pre-exploratory factor components of executive L&D were allocated the following labels: strategic = StraT, experiential = ExpE, self-directed = SelfD, participative = ParT, networking-related = NetW, structured = StruC. Examination of the information presented in Table 8 indicates that the Cronbach's  $\alpha$  exceed 0.90 across the construct.

**Table 3.4:** Results of Reliability Analysis.

Items	Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Cronbach's $\alpha$ if Item is Deleted
Executives are encouraged to take risks, venture into unknown territories and experiment with new ideas to drive efficiencies in processes and cost reduction. <b>ExpE1</b>	104.71	881.497	.600	.948
Executives are encouraged to experiment with novel approaches to resolving organisational problems. <b>ExpE2</b>	104.63	882.074	.618	.948
Executives are encouraged to amend established organisational practices in pursuit of greater efficiency and effectiveness. <b>ExpE3</b>	104.45	885.739	.571	.948
Executives in the organisation learn quickly from past experiences, thus permitting growth, change, adaptation, and creative problem solving. <b>ExpE4</b>	105.23	874.539	.691	.947
Executives are given the opportunity to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and competencies. <b>ExpE5</b>	105.03	875.328	.634	.947
Executives receive support and encouragement from other peers when presenting new ideas and initiatives. <b>ExpE6</b>	104.87	878.962	.719	.946

Items	Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Cronbach's $\alpha$ if Item is Deleted
Executives are offered suitable communication and problem-solving training and development opportunities. <b>StruC1</b>	105.04	869.904	.675	.947
The organisation is highly supportive of executive attendance at professional society seminars, conferences, and programmes to enhance their skills and capabilities. <b>StruC2</b>	104.85	872.426	.661	.947
The organisation offers strong support (financial and non-financial) to executives when they pursue non-work related studies. <b>StruC3</b>	105.83	883.791	.552	.948
Executives are offered coaching support to enhance their personal effectiveness and leadership skills to facilitate the achievement of organisational goals and targets. <b>StruC4</b>	105.18	860.444	.742	.946
Executives are good at networking with key individuals outside the organisation and can exchange ideas for mutual benefit. <b>NetW1</b>	104.21	905.682	.492	.949
The organisation frequently promotes informal social activities for executives to stimulate internal networking, which helps them to forge informal relations. <b>NetW2</b>	105.38	876.103	.668	.947

Items	Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Cronbach's $\alpha$ if Item is Deleted
Executives are encouraged to interact with a wide stakeholder group: competitors, customers, suppliers, universities, in a bid to acquire and disseminate good practice across the organisation. <b>NetW3</b>	104.83	874.596	.709	.947
Executives have the propensity to review key decisions and ideas with peers to gain buy-in, support, and feedback. <b>NetW4</b>	104.71	884.005	.650	.947
Executives engage in frequently interactive activities such as conference calls, joint problem-solving initiatives, joint progress-reviews of special projects, inter-functional working groups, etc. <b>ParT1</b>	104.48	883.070	.615	.948
Executives engage in regular "away day" programmes, which serve as a forum for creating strategic ideas, generating solutions for specific organisational problems and developing interpersonal capabilities. <b>ParT2</b>	105.35	872.203	.658	.947
The organisation organises regular briefings and activities to help executives understand cross-organisational operational processes and governance structures. <b>ParT3</b>	105.19	868.157	.726	.946

Items	Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Cronbach's $\alpha$ if Item is Deleted
Executives in tend to consult various sources of information such as specialist books, industry and professional association magazines, academic articles, etc., to enhance their learning and development. <b>SelfD1</b>	104.52	885.204	.603	.948
Executives are offered opportunities to develop new skills and competencies via bespoke flexible learning arrangement (including distant learning options) delivered in partnership with external providers. <b>SelfD2</b>	105.25	881.543	.613	.948
The organisation provides a wide range of web-based learning resources (work and non-work related) aligned to the development needs of executives. <b>SelfD3</b>	105.74	895.818	.473	.949
Executives in strategise taking into account ethical, holistic, current, and future implications on the business. <b>StraT1</b>	104.76	870.103	.719	.946
Executives in maintain an awareness of business environment changes and their implications on the organisation. <b>StraT2</b>	104.17	880.466	.688	.947
Executives maintain close links with customers in order to understand, attract, and satisfy them more effectively than competitors, often resulting in the creation of differentiated, high added-value products and services. <b>StraT3</b>	104.13	889.566	.599	.948

Items	Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Cronbach's $\alpha$ if Item is Deleted
Executives embed new initiatives and changes in our organisation by taking account of inter-functional and cross-organisational impact and effects. <b>StraT4</b>	105.02	883.308	.680	.947
Executives tend to react rapidly to situations or events before they escalate to critical financial, competitive, or leadership difficulties for the organisation. <b>StraT5</b>	105.00	885.060	.596	.948

In addition, the corrected inter-item correlation among each item was between 0.4 and 0.7, consistent with the recommended range of 0.3 to 0.7 (Ferketich 1991; Polit and Beck, 2008). Only two items (NetW1 and SelfD2) generated low corrected inter-item correlations. The structure of the Cronbach's  $\alpha$  values and the inter-item correlations together substantiate the adequacy, reliability, and internal consistency of the measure. Consequently, no revision was made to the instrument on the basis of reliability limitations.

Factorability of the measure was evaluated in terms of Bartlett's test, which produced a  $\chi^2$  value of 2433.95 degree of freedom and significance level of 0.000. The KMO test produced a measure of 0.91, which is well above the 0.60 score recommended by Tabachnick and Fidell, (2007), confirming the adequacy of the sample population and the suitability of applying factor analysis to the data.

Next, factor analysis by oblimin and varimax methodologies were independently applied to verify the possible relationships among the set of underlying dimensions. Both methodologies were employed to test the consistency of the outcome and determine whether similarities and differences will emerge from the two rotational approaches. The results of the extracted components associated with oblimin and

varimax rotational methodologies are respectively depicted in Tables 3.5 and 3.7 along with associated communalities in Tables 3.6 and 3.8.

**Table 3.5:** Results of Rotated Pattern Matrix for Direct Oblimin Rotation using Maximum Likelihood Analysis.

Items	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
<b>StraT2</b>	.912	-.072	.060	-.049
<b>StraT1</b>	.789	-.125	.182	.073
<b>StraT3</b>	.616	.195	-.062	-.009
<b>SelfD4</b>	.489	.132	.131	.005
<b>StraT4</b>	.486	.177	-.052	.244
<b>StraT5</b>	.402	.171	-.133	.304
<b>ExpE6</b>	.388	.256	.099	.169
<b>NetW1</b>	.308	.189	.154	-.034
<b>ExpE1</b>	.073	.870	-.005	-.114
<b>ExpE2</b>	.076	.797	-.078	.043
<b>ExpE3</b>	-.061	.781	.110	-.048
<b>ExpE5</b>	.000	.505	.259	.093
<b>ExpE4</b>	.149	.494	-.027	.279
<b>NetW4</b>	.232	.335	.010	.241
<b>StruC2</b>	.159	.026	.840	-.098
<b>StruC1</b>	.093	.124	.696	.018
<b>StruC4</b>	.203	.069	.570	.153
<b>SelfD2</b>	.018	-.028	.513	.339
<b>StrucC3</b>	-.098	.122	.482	.268
<b>ParT3</b>	.140	.014	-.009	.824
<b>ParT2</b>	-.093	.140	.255	.607
<b>NetW2</b>	.260	.009	.172	.437

<b>SelfD3</b>	.074	-.126	.266	.423
<b>ParT1</b>	.189	.233	.080	.290
<b>NetW3</b>	.232	.261	.133	.277

**Table 3.6:** Communalities Table for Oblimin Extraction Rotation using Maximum Likelihood Analysis.

Component	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.411	45.643	45.643	11.411	45.643	45.643	4.327	17.308	17.308
2	2.120	8.481	54.124	2.120	8.481	54.124	4.042	16.167	33.474
3	1.296	5.184	59.307	1.296	5.184	59.307	3.951	15.803	49.277
4	1.019	4.074	63.382	1.019	4.074	63.382	3.526	14.105	63.382

Both the oblimin and varimax rotations generated four-factor solutions but differed in terms of the distribution of items and the percentage of variance explained. In selecting an optimal executive L&D measure, more consideration was given to the factor structure than the differences in the percentage of variance explained in order to maintain theoretical consistency. Further details on the emerging similarities and differences in the rotational outputs are detailed as follows: First, both rotational methodologies generated four cross-loadings of which three (ExpE6, NetW3, and ParT1) were replicated under both methodologies but differed on the fourth – NetW1 cross-loaded under oblimin, but on the other hand, NetW4 cross-loaded under the Varimax solution.

The five items associated with experiential L&D (ExpE1, ExpE2, ExpE3, ExpE4 & ExpE5) along with four items related to structured L&D (StruC1, StruC2, StruC3 & StruC4) were replicated under both oblimin and varimax solutions, although the order of items under each underlying factor, structure and component differed slightly. Having identified these similarities, the two remaining factor components

from both rotational methods were subjected to further inspection. Ignoring all the cross-loaded items specified above, close examination of factor 1 associated with the oblimin rotation, shows that five strategic L&D items are interposed by only one self-directed item, which is a reasonable outcome (see Table 9). Furthermore, two participative and one networking-related L&D items are allocated to factor 4, which again offers good fit of the items. In sharp contrast, the items distributed under factors 2 and 4 in the varimax solution produced a highly dispersed item distribution pattern, thereby supporting the rejection of this output in favour of the solution generated by the oblimin rotation.

**Table 3.7:** Results of Rotated Component Matrix for Varimax Rotation by Principal Component Analysis.

Items	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
StruC2	.789	.359	.143	.059
SelfD2	.735	.145	.060	.327
StruC1	.726	.273	.228	.161
StruC3	.692	.051	.226	.189
StruC4	.682	.295	.201	.343
ParT2	.550	.099	.237	.496
StraT2	.210	.743	.179	.300
SelfD1	.214	.695	.206	.151
StraT1	.369	.689	.121	.308
StraT4	.043	.678	.329	.223
NetW1	.275	.559	.274	-.076
ExpE6	.260	.482	.399	.365
ExpE1	.084	.194	.814	-.023
ExpE3	.244	.194	.805	.023
ExpE2	.069	.247	.769	.247
ExpE5	.401	.169	.624	.152
ExpE4	.401	.169	.578	.430

Items	Component			
	Factor 1	Factor 2	Factor 3	Factor 4
ParT1	.304	.302	.367	.332
ParT3	.427	.222	.193	.680
NetW2	.385	.258	.142	.628
SelfD3	.456	.032	-.069	.604
StraT4	.099	.496	.309	.539
StraT5	.039	.446	.283	.515
NetW3	.298	.349	.367	.477
NetW4	.161	.381	.402	.440

Costello and Osborne (2005) have questioned the reliability of constructs associated with the varimax rotation, considering this approach suboptimal, as it is heavily dependent on a range of assumptions, often absent in social science research. They argue in support of the direct oblimin approach with maximum likelihood, considering this approach more likely to produce optimal results (results that can be generalised to other samples) than other extraction methods such as varimax, promax, etc., supported by the results obtained for this study. The degree of variability in the percentage of variance explained, associated with the oblimin and varimax solutions are depicted in Tables 3.6 and 3.8.

**Table 3.8:** Communalities Table for Varimax Rotation using Principal Components

Factor	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11.411	45.643	45.643	10.970	43.879	43.879	8.219
2	2.120	8.481	54.124	1.709	6.836	50.715	7.144
3	1.296	5.184	59.307	.892	3.567	54.282	6.413
4	1.019	4.074	63.382	.655	2.620	56.902	6.971

Analysis.

Briefly, the variations in the total percentage of variance explained between the two approaches were minimal ranging between 1.5% and 1.7% across the four factors. For instance, the total variance explained by the first factor with oblimin was 43.9% compared to 45.6% associated with varimax rotation (difference of 1.7%). The percentage of variance explained registered slightly lower values with oblimin than with varimax factors. Specifically, the scores associated with oblimin factors 2, 3, and 4 correspond to 6.8%, 3.6%, and 2.6% respectively, compared to the varimax extraction values of 8.5%, 5.2%, and 4.1%.

Subsequently, reviewing the oblimin solution through a theoretical lens resulted in the elimination of some other items from the initial construct. This was achieved by first deleting the four identified cross-loaded items associated with the oblimin solution and then excluding three additional items (SelfD4, SelfD3, and StruC3) based on theoretical misalignment with the overarching factor definition. Justification for the exclusions is offered as follows: First, SelfD4 was eliminated because it was considered a misfit with the five strategic L&D measures specified under factor 1. Second, SelfD3 defined in terms of provision of a wide range of web-

based learning resources (work and non-work-related) aligned with the development needs of executives does not fit logically among the two participative and the NetW2 L&D measures. Third, StruC3, “The organisation offers strong support (financial and non-financial) to executives when they pursue non-work related studies”, although originally specified as a structured L&D item, can be considered more as an enabler rather than a clear measure of structured L&D. This item was excluded to maintain a homogenous mix of clearly defined dimensions in the new construct.

On the other hand, the NetW2 item fitted logically with the two ParT measures on the premise that promoting informal social activities among executives to stimulate internal networking is most likely to encourage the incidence of participative learning. Similarly, SelfD2, an item situated among the three structured L&D items was retained because flexible learning dimensions delivered in partnership with external providers is a form of structured L&D. Hence, the decision to retain this item under this factor is theoretically justified.

Moreover, statistical rigour was applied to validate the final content of the EFA measure by generating communalities and reliability measures for the remaining items, with the combined outputs presented in Table 3.9. Deletions of additional items did not diminish the content validity of the respective measures and all items produced Cronbach’s  $\alpha$  values above 0.90. Moreover, Bearden and Netemeyer et al.’s. (2003) recommendation of retaining corrected item-to-total correlations higher than 0.5 was adhered to in this study.

**Table 3.9:** Exploratory Factor Analysis Item Communalities and Inter-item Statistics.

Factor		Item-Total Statistics					Communalities	
		Scale Mean if Item is Deleted	Scale Variance if Item is Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's $\alpha$ if Item is Deleted	Initial	Extraction
Participative L&D	NetW2	69.55	437.712	.653	.559	.929	.454	.498
	ParT2	69.53	433.821	.658	.664	.929	.526	.603
	ParT3	69.37	431.885	.716	.720	.928	.619	.827
Strategic L&D	StraT1	68.93	432.358	.721	.710	.927	.627	.694
	StraT2	68.35	441.611	.662	.661	.929	.655	.743
	StraT3	68.31	448.335	.568	.483	.931	.448	.490
	StraT4	69.19	443.754	.652	.553	.929	.483	.509
Experiential L&D	ExpE1	68.88	440.308	.600	.683	.930	.662	.775
	ExpE2	68.80	440.779	.619	.697	.930	.650	.734
	ExpE3	68.63	443.470	.569	.575	.931	.516	.568
	ExpE4	69.40	437.772	.661	.557	.929	.423	.444
	ExpE5	69.20	435.181	.645	.493	.929	.402	.384
Structured L&D	StruC2	69.02	432.664	.679	.663	.928	.636	.724
	StruC4	69.35	425.237	.747	.674	.927	.598	.672
	StruC1	69.21	431.337	.686	.665	.928	.572	.640
	SelfD2	69.42	440.527	.611	.546	.930	.489	.523

Further examination of the communalities profile of the 16 remaining items (Table 3.10) indicates that all items apart from ExpE5 generated scores above 0.4, as specified by Stevens (1992). Consequently, this item was deleted from the final measure. Based on the foregoing analysis, there is sufficient evidence that the final executive L&D measure encompassing 4 dimensions and 15 items exhibit good unidimensionality, validity, and reliability characteristics. Accordingly, a much broad measure of executive L&D conceptualised as the strategic, structured, experiential, and participative (SSEP) measure is specified in Tables 3.9 and 3.10.

**Table 3.10:** The Final 14-Item Executive L&D Measure.

<b>14-Item Executive L&amp;D Measure</b>	
<b>Strategic L&amp;D</b>	
Executives in the organisation strategise taking into account ethical, holistic, current, and future implications on the business.	StraT1
Executives maintain an awareness of business environment changes and their implications on the organisation.	StraT2
Executives maintain close links with customers in order to understand, attract, and satisfy them more effectively than competitors, often resulting in the creation of differentiated, high added-value products and services.	StraT3
Executives embed new initiatives and changes in the organisation by taking into account inter-functional and cross-organisational impact and effects.	StraT4
<b>Structured L&amp;D</b>	
The organisation is highly supportive of executive attendance at professional society seminars, conferences, and programmes to enhance their skills and capabilities.	StruC2
Executives are offered coaching support to enhance their personal effectiveness, leadership skills to facilitate the achievement of organisational goals and targets.	StruC4
Executives are offered opportunities to develop new skills and competencies via bespoke flexible learning arrangement (including distant learning options) delivered in partnership with external providers.	SelfD2
<b>Experiential L&amp;D</b>	
Executives are encouraged to take risks, venture into unknown territories, and experiment with new ideas to drive efficiencies in processes and cost reduction.	ExpE1
Executives are encouraged to amend established organisational practices in pursuit of increased efficiency and effectiveness.	ExpE3
Executives in learn quickly from past experiences, thus permitting growth, change, adaptation, and creative problem-solving.	ExpE4
Executives are given the opportunity to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to	ExpE5

broaden their job scope and competencies.	
<b>Participative L&amp;D</b>	
Executives engage in regular “away day” programmes which serve as a forum for creating strategic ideas, generating solutions for specific organisational problems, and developing interpersonal capabilities.	ParT2
The organisation organises regular briefings and activities to help executives understand cross-organisational operational processes and governance structures.	ParT3
The organisation frequently promotes informal social activities for executives to stimulate internal networking, which helps them to forge informal relations.	NetW2

### **3.9.4 Confirmatory Factor Analysis**

In order to examine the construct validity of the executive L&D measure, confirmatory factor analysis (CFA) was performed on the four-factor model, with AMOS 17.0. In addition to the four-factor model, a competing model was evaluated (see Table 15). The competing model was formulated as a one-factor model. Comparison of the goodness-of-fit indices between both models demonstrated the superiority of the four-factor model. The CFA process was performed on the data from phase two (N = 222) as well as phase one (N = 150) to ensure robustness of the resulting measure of executive L&D.

A number of goodness-of-fit measures can be used in determining the degree to which the data fits the proposed model as part of the CFA process (Arbuckle, 2003). In addition to the  $\chi^2$  goodness fit test, there are numerous ancillary indices of global fit such as the goodness-of-fit index and adjusted-goodness-of-fit index, (GFI and AGFI; Jöreskog & Sörbom, 1986), the comparative fit index (CFI, Bentler, 1990), and the root mean square error of approximation (RMSEA, Steiger and Lind, 1980). However, some of these indices such as the GFI, AGFI, (Bentler and Bonett, 1980), and normed fit index (NFI) (Hu and Bentler, 1998) have been deemed less effective in confirming model fit than other indices. Hu and Bentler recommend fit indices that have different measurement properties, such as the incremental fit index (IFI) to confirm model fit.

### **3.9.5 Results of Confirmatory Factor Analysis**

Following the recommendations of Hu and Bentler (1995), several fit indices were used to test the factor structure of the proposed and competing models of executive L&D: The  $\chi^2$ , degrees of freedom (df), CFI, Tucker-Lewis index (TLI), Bollen's incremental fit index (IFI), NFI, GFI, AGFI, and RMSEA. Bentler and Bonnett (1980) and Bentler (1992) proposed a value of 0.90 for normed indexes as a minimum for model acceptance. Browne and Cudeck (1993) suggest that RMSEA values less than 0.05 represent good fit, whilst values of 0.05 indicate a close fit, and final values up to 0.08 represent reasonable errors of approximation in the population.

The CFA analysis results from the phase one sample (N = 150) associated with the one-factor executive L&D measure, generated the following fit indices:  $\chi^2 = 365.5$ ,  $df = 77$ ,  $\chi^2/df = 4.747$ ,  $p = 0.0$ , CFI = 0.827, TLI = 0.796, IFI = 0.829, NFI = 0.793, GFI = 0.721, AGFI = 0.619, and RMSEA = 0.139. The above results suggest that the factor structure of the executive L&D measure for the phase one sample does not fit the data well. The total sample  $\chi^2/df$  of 4.747 is outside the recommended tolerance ratio of 2 or lower, suggested by Byrne (1989), required to demonstrate an acceptable fit. Furthermore, the RMSEA of 0.139 indicates a bad fit (Bentler, 1992; Browne and Cudeck, 1993). Likewise, the CFI = 0.827, TLI = 0.796, and IFI = 0.829 are all outside the recommended 0.90 threshold required to demonstrate an acceptable fit (Bentler, 1992). Moreover, other parameters, namely NFI = 0.793, GFI = 0.721, and AGFI = 0.619 were all below the recommended 0.90 cut-off (Bentler, 1992), suggesting that the one-factor executive L&D measure for the phase one sample demonstrated an unacceptable fit with the data.

In contrast, in the CFA analysis for the phase one sample (N = 150), the four-factor executive L&D measure generated the following fit indices:  $\chi^2 = 698.2$ ,  $df = 336$ ,  $\chi^2/df = 2.078$ ,  $p = 0.0$ , CFI = 0.932, TLI = 0.915, IFI = 0.933, NFI = 0.879, GFI = 0.864, AGFI = 0.806, and RMSEA = 0.048. The above results suggest that the four-factor structure of the executive L&D measure for the phase one sample was reasonably acceptable. The total sample  $\chi^2/df$  value of 2.078 is within tolerance of the ratio of 2 or lower, as suggested by Byrne (1989) required to demonstrate an acceptable fit. Furthermore, the RMSEA of 0.043 indicates a good fit (Bentler, 1992; Browne and Cudeck, 1993). Likewise, the CFI = 0.932, TLI = 0.915, and IFI = 0.933 are all within the acceptable fit of 0.90 (Bentler, 1992). However, other parameters, NFI = 0.879, GFI = 0.864, and AGFI = 0.806 were all below the recommended 0.90 cut-off (Bentler, 1992). Overall, the four-factor structure of the executive L&D measure for the phase one sample demonstrated acceptable fit with the data compared to the competing model (See Table 15).

Similarly, for the phase two sample (N = 222), the proposed four-factor executive L&D model generated superior model fit compared to the competing counterpart. For the phase two sample, the one-factor executive L&D measure generated the following fit indices:  $\chi^2 = 417.7$ ,  $df = 77$ ,  $\chi^2/df = 5.373$ ,  $p = 0.0$ , CFI = 0.821, TLI = 0.789, IFI = 0.823, NFI = 0.791, GFI = 0.726, AGFI = 0.626, and RMSEA = 0.141.

The above results suggest that the four-factor structure of the executive L&D measure for the phase one sample did not fit the data well. The total sample  $\chi^2/df$  of 5.373 is outside the recommended tolerance ratio of 2 or lower suggested by Byrne (1989), required to establish an acceptable fit. Furthermore, the RMSEA of 0.141 indicates a bad model fit (Bentler, 1992; Browne and Cudeck, 1993). Likewise, the CFI = 0.821, TLI = 0.789, and IFI = 0.823 are all outside the recommended the 0.90 threshold for an acceptable fit (Bentler, 1992). Moreover, other parameters, NFI = 0.791, GFI = 0.726, and AGFI = 0.626 were all below the recommended 0.90 cut-off (Bentler, 1992), suggesting that the one-factor executive L&D measure for the phase one sample generated an unacceptable fit with the data.

On the other hand, the four-factor executive L&D model for the phase two sample generated the following goodness-of-fit indices:  $\chi^2 = 102.8$ ,  $df = 59$ ,  $\chi^2/df = 1.742$ , CFI = 0.974, TLI = 0.965, IFI = 0.974, NFI = 0.941, GFI = 0.935, AGFI = 0.900, and RMSEA = 0.058. Comparing the above values with the values obtained for the phase one model, significant improvement can be observed in some of the goodness-of-fit indices, especially  $\chi^2/df = 1.742$ , CFI = 0.973, TLI = 0.965, and IFI = 0.974. In addition, the NFI and GFI improved considerably above the 0.9 cut-off value.

Overall, the above results suggest that the four-factor structure model of the executive L&D measure is reasonably acceptable. The ratio of  $\chi^2$  to degrees of freedom reflects a very good fit with the model for the phase two sample. Importantly, the CFI, NFI, GFI, and AGFI are all well above the 0.90 criteria required for specifying an acceptable fit (Bentler & Bonett, 1980). Additionally, the RMSEA of 0.058 indicates that the factor structure underlying the executive L&D measure is well supported. Table 15 presents the summarised model fit results for the proposed and competing models of executive L&D for the data from both phases. This indicates a reasonable improvement in the model fit parameters of the four-factor executive L&D for the phase two sample compared to that for the phase one sample. Importantly, it offers evidence in support of the superiority of the proposed four-factor executive L&D model compared to the competing one-factor version. Thus, based on the CFA results obtained for this study, it has been established that executive L&D can be measured by four factors – strategic, experiential, structured, and participative dimensions.

**Table 3.11:** Confirmatory Factor Analysis Results.

Good-of-fit Index	n	$\chi^2$	df	$\chi^2/df$	P	CFI	TLI	IFI	NFI	RMSEA
Phase 1 (four-factor model)	150	698.2	336	2.078	.000	.932	.915	.933	.879	.048
Phase 1 (one-factor model)	150	365.5	77	4.747	.000	.827	.796	.829	.793	.139
Phase 2 (four-factor model)	222	102.8	59	1.742	.000	.974	.965	.974	.941	.058
Phase 2 (one-factor model)	222	417.7	77	5.373	.000	.821	.789	.823	.791	.141

### 3.9.6 Discriminant Validity Analysis

Discriminant validity can be determined by observing the values of the composite reliability (CR) and variance extracted (VE) measures. Discriminant validity refers to testing statistically whether two constructs differ, which means that the observed variables for different latent constructs should not be highly correlated to conclude that they are measuring the same thing. The violation of discriminant validity occurs when there is conceptual overlap between two latent constructs.

The CR assesses the internal reliability of a construct and can be computed from the structural equation model as suggested by Hair et al. (1998, 2006). The CR can be represented mathematically as the squared sum of the standardized loading ( $\lambda_i$ ) for each construct, and the sum of the error variance terms for a construct ( $\delta_i$ ), where the

measurement error is one minus the square of the indicator's standardised parameter estimate (Garver and Mentzer, 1999):

$$\text{Composite Reliability} = (\sum \lambda_i)^2 / [(\sum \lambda_i)^2 + \sum_i 1 - \lambda_i^2]$$

(Adapted from Theo and Choo (2001); Garver and Mentzer [1999])

As a rule of thumb, CR estimates equal to or above 0.7 indicate good reliability (Hair et al., 2006). The VE, on the other hand, measures the total amount of variance in the indicators accounted for by the latent variable, and high values are produced when the indicators are truly representative of the latent construct (Hair et al., 2006).

The VE formula is comparable to the CR formula, except that the numerator is equal to the standardised parameter estimates ( $\lambda$ ) between the latent variable and its indicators squared and then summed. The denominator equals the numerator plus the added measurement error for each item. The measurement error is one minus the square of the indicator's standardised parameter estimate.

$$\text{Variance Extracted} = \sum \lambda_i^2 / [\sum_i \lambda_i^2 + \sum_i 1 - \lambda_i^2]$$

(Adapted from Theo and Choo, [2001]; Garver and Mentzer, [1999])

Following a similar logic, VE values less than 0.5 indicate that, on average, more errors remain in the items than the variance explained by the latent factor structure in the measurement model, thereby leading to the conclusion that the indicators under examination are not truly representative of the latent construct (Hair et al., 2006).

### **3.9.7 Discriminant Validity Analysis Results and Discussion**

Table 3.12 reports that the results of the discriminant validity of the executive L&D measure, based on the CR and the VE values. CR, which assesses the internal reliability of a construct was computed from outputs from the structural equation model as suggested by Hair et al. (1998, 2006), and a rule of thumb is that estimates equal to or above 0.7 represent good reliability (Hair et al., 2006).

VE, a measure of the total amount of variance in the indicators accounted for by the latent variable was computed to establish discriminant validity. Generally, high VE values are produced when the indicators are truly representative of the latent construct (Hair et al., 2006), and values above 0.5 represent adequate reliability.

As depicted in Table 16, all the four executive L&D constructs exceeded both the 0.7 cut-off for CR and 0.5 for VE, thus confirming adequate discriminant validity of the measure. In addition, the fact that all the VEs for the constructs reported for this study were greater than 0.70, implies that more than 70% of the variance of the indicators can be accounted for by the latent variables.

**Table 3.12:** Discriminant Validity Results.

<b>Name of Construct(s)</b>	<b>Composite Reliability</b>	<b>Variance Extracted</b>
Experiential L&D	0.829	0.851
Strategic L&D	0.730	0.776
Structured L&D	0.764	0.801
Participative L&D	0.762	0.799

While discriminant validity was supported in the initial computation of the CR, the overall outcome for the experiential L&D construct (0.710) was marginally close to the 0.7 cut-off. However, by eliminating the item (ExpE2), the overall VE was significantly improved to (0.829). Accordingly, item ExpE2 was excluded from the final measure of executive L&D.

**Table 3.13:** Inter-item and Item-total Correlation between Observed Items of Executive L&D Measure.

	Mean	S.D	StraT1	StraT2	StraT3	StraT4	ExpE1	ExpE3	ExpE4	ExpE5	StruC2	StruC4	SelD2	ParT2	ParT3	NetW2
StraT1	5.12	1.841	(.946)													
StraT2	5.58	1.522	.596	(.947)												
StraT3	5.31	1.622	.564	.567	(.947)											
StraT4	4.60	1.873	.642	.590	.541	(.948)										
ExpE1	4.89	1.797	.543	.514	.423	.528	(.948)									
ExpE3	5.19	1.713	.584	.507	.444	.605	.617	(.947)								
ExpE4	4.57	1.884	.576	.527	.515	.667	.586	.644	(.947)							
ExpE5	4.80	1.854	.487	.495	.421	.567	.534	.568	.590	(.947)						
StruC2	4.95	1.856	.269	.342	.353	.453	.328	.296	.385	.413	(.948)					
StruC4	4.59	1.975	.385	.370	.370	.557	.398	.462	.458	.472	.648	(.946)				
SelD2	4.71	1.807	.398	.356	.341	.509	.339	.394	.487	.408	.636	.704	(.948)			
ParT2	4.22	1.984	.408	.396	.377	.547	.390	.382	.417	.514	.483	.592	.575	(.947)		
ParT3	4.49	1.977	.440	.406	.381	.558	.390	.489	.569	.539	.496	.554	.624	.703	(.946)	
NetW2	4.28	1.965	.412	.405	.406	.541	.442	.443	.597	.534	.549	.525	.640	.651	.675	(.947)

In addition, according to Cho (2006), if the inter-item correlations between items within one factor are higher than those between items measuring different factors, the measurement scale can be considered as having adequate discriminant validity. Table 3.13 presents the squared inter-item correlations among the observed variables in the executive L&D measurement scale. From the results, the correlation score between two items within the same factor is higher than that between items from different factors, e.g. the squared correlation between StraT1 and StraT4 (0.642) is higher than the correlation score related to StraT1 and StraT4. Hence, it can be concluded that discriminant validity of the executive L&D measurement is justified.

In sum, based on the results of the EFA and CFA (phases 1 and 2) as well as the discriminant validity analysis, there is sufficient empirical evidence that the 4-factor, 14-item, executive L&D measure is based on reasonably sound and well-founded statistical and theoretical rigour.

## **Data Analysis Part 2 – Effects of executive L & D on organisational performance**

### **3.10 Ordinal Regression Analysis**

Multivariate statistical techniques can be used to investigate the quantitative effects of independent constructs on dependent variables. However, specification of the statistical model and the selection of the appropriate technique is an important component of the analysis phase of the research. Accordingly, the following section will elaborate on the multivariate statistical modelling employed to examine the effects of executive L & D in relation to the organisational performance measures.

Specifically, the regression models that deal with the ordinal variable will be discussed. In this particular instance, the dependent organisational performance variable is classified as ordinal, given that the categories representing a firm's success are ranked from lower 20% to upper 20%, but the distance between adjacent categories remains unknown.

Often, ordinal dependent variables are treated as an interval, resulting in misleading outcomes and interpretations (Long, 1997). To prevent these anomalies from occurring in this study, the appropriate regression technique was adopted to cater for the specific characteristics of ordinal data.

Ordinal dependent variables, and the study of how an ordered response variable depends on a set of regressors (independent variables), have been widely discussed in existing econometric and statistical literature (e.g. Long, 1997; Fuks and Salazar, 2008). One way to model such data is to assume that the ordered response is the discrete version of a continuous latent variable for which a linear regression model holds (Hosmer and Lemeshow, 1989; Long, 1997). Following existing literature, there are different approaches for estimating the ordinal logistic model (Fuks and Salazar, 2008; Long, 1997): proportional odds (1), partial proportional odds (2) and generalised logit (3). The ordinal logit model – also called the proportional odds model (POM) - is the most widely used latent ordinal regression model.

The fundamental assumption underpinning the ordinal logistic model with proportional odds is that the relationship between each pair of groups of the dependent variable is the same, i.e. the coefficients that describe the association between the smaller categories versus the higher ones (or vice-versa) are the same. This assumption is regularly referred to as the assumption of ‘parallel lines’ (Hosmer and Lemeshow, 1989; Long, 1997). An additional assumption is that the disturbance has a standard logistic distribution with the cumulative distribution function, implying that this model is non-linear.

Logistic transformation of this non-linear model results in the ‘logit’ equation. Generally, the ordinal logit model is interpreted in terms of the odds ratio of cumulative probabilities (Long, 1997). Accordingly, this model is regularly referred to as the proportional ‘odds’ model and, in the statistical literature, this ordered logit regression model is discussed as an extension of the ordinary logistic model (McCullagh, 1980).

### **3.10.1 Goodness of Fit and Test of Significance**

In ordinal regression analysis, the goodness of the model fit needs to be investigated, thus allowing statistical inference to be made. In addition, statistical tests are required to test the accuracy and significance of the overall model and each individual coefficient.

The -2 Log likelihood value (-2 LL) reflects the probability that the estimated values fit the empirical data (Hair, 2010). The measure -2LL is also called deviance and is comparable to the coefficient of determination in ordinal least square regressions (OLS). In addition, the Pseudo  $R^2$  Nagelkerke is reported. There is no precise measure of determination in ordered logit regression models. Comparison of the respective Pseudo  $R^2$  Nagelkerke provides an idea about the contribution of one model over and above another, and about improvements in terms of accuracy. To investigate the significance of the overall ordered logit model, the likelihood ratio (LR) Chi-squared test is applied. As suggested in the model theory of regression, a Wald-test is applied to test the significance of each individual coefficient/odds ratio (Hosmer and Lemeshow, 1989; Long, 1997). For both tests, common standards and significance levels are applied to falsify the null hypotheses.

### **3.10.2 Procedures for testing Hypothesis H1: Executive L & D will generate positive effects on organisational performance measures**

Following the recommendations of previous researchers (e.g. Ichniowski et al., 1997; Horgan and Muhlau, 2006) investigating the organisational performance effects of HRM dimensions, based on the ordered categorical data, the ordinal regression procedure was applied to this study. In addition, data collected for each individual item of the executive L & D measure was aggregated and regressed against the organisational performance measures (controlling for the effects of individual, organisational and environmental factors).

In evaluating the effects of executive L & D on organisational performance variables, a four-model ordinal regression procedure was conducted in the following order. First, the individual-level control variables (gender, title and executive experience) were introduced in Model 1, followed by the firm-specific control variables in Model 2. Next, the environmental (regional and industry) effects were examined in Model 3. Finally, in Model 4, the effects of the executive L & D measure were assessed against the organisational performance variables, observing the effects of the Chi-square and the pseudo R-square changes. Comparison of the respective Nagelkerke Pseudo R-squared provided an indication about the incremental contribution of one model over and above another, and this served as a measure of improvements in model accuracy. Furthermore, as suggested in the model theory of logistic and ordinal regression, the Wald-test was applied to test the significance of each individual coefficient/odds ratio (Hosmer and Lemeshow, 1989; Long, 1997). For both tests, common standards and significance levels were applied to falsify the null hypotheses.

Finally, to establish the effects of significant predictors of executive L & D on the organisational performance measures, the exponent of coefficients of significant predictors of variables, and odds ratio (OR), were computed. The odds ratio indicates the degree to which the odds of the organisational performance indicators increase (or decrease) in response to a unit change in the associated executive L & D measure. Generally, an odds ratio of '1' represents no change in the odds after a one unit change in the predictor (executive L & D), a value of '2' implies that the odds of the outcome (organisational performance) are twice as high in response to the predictor,

whereas a value of '0.2' suggests the odds are likely to decrease by four-fifths (or 80%).

### **3.10.3 Procedure for testing Hypothesis H2: Executive L & D effects on organisational performance will vary by sector (service and industry)**

In order to test the hypothesis H3, that the organisational performance effects of executive L & D will differ by service and industry, the data were split by sectors (service n= 149; industry n= 73). Ordinal regression procedures implemented in H1 were repeated for Models 1 – 4, observing differences in the model fit (Chi-square and pseudo R-squared) and the significant predictors. In contrast to H1, the firm sector controls were excluded in Model 3, to avoid duplication of this variable in the analysis.

### **3.10.4 Procedure for testing Hypothesis H3: Executive L & D effects on organisational performance will differ by firm size (SME / Non-SME)**

The procedures employed in H4 are replicated from H3 above, but in this specific case, firm size was excluded as a control variable to avoid duplication of effects in the model. Furthermore, for the purpose of this analysis, SMEs (N= 68) are classified as firms with employees ranging from 0 - 250 and non-SMEs (N=154) represent organisations with over 250 employees.

### **3.10.5 Reliability of Organisational Performance**

The reliability of the organisational performance measurement model is tested by Cronbach's alpha ( $0.908 > 0.7$ , Nunnally, 1978), which is satisfied to indicate the internal consistency among the observed variables. The inter-item and item-total correlation is also adopted to justify the scale reliability (Table 3.15). The coefficients of item-total correlation of all five items are higher than 0.50 (Netemeyer et al., 2003), which means that each item is consistent with the rest of the items on the scale. Regarding the inter-item correlation, all the coefficients are higher than 0.4 (Clark and Watson, 1995). All three indicators show that the reliability of the organisational performance measurement scale is satisfied.

**Table 3.15:** Inter-item and item-total correlation between observed items of organisational performance.

	Mean	S. D	FinP	CustSat	InnovP	EmpE	MSG
FinP	3.54	1.163	1.000				
CustSat	3.69	1.124	.684	1.000			
InnovP	3.45	1.179	.599	.707	1.000		
EmpE	3.22	1.269	.583	.653	.712	1.000	
MSG	3.31	1.172	.703	.701	.647	.673	1.000

### 3.10.6 Common method variance

As already discussed in section 3.6 (Samples descriptions & data collection procedures), the examination of the effects of executive L & D on organisational performance was based on self-reported data collected through the same questionnaire, in the same period of time, and will therefore be subjected to some degree of the common method variance. This is a variance attributed to the measurement method, rather than to the constructs of interest.

This might cause systematic measurement errors and generate further bias of the estimation of the true relationship between theoretical constructs. Consequently, method variance can either inflate or deflate observed relationships between constructs, thus generating Type I and Type II errors (Doty and Gulick, 1998; Podsakoff *et al.*, 2003; Podsakoff and Organ, 1986; Spector, 1994). To mitigate common method problems, design techniques recommended by Podsakoff *et al.* (2003) were followed. This included psychological or methodological separation of measurement, protecting respondent anonymity and reducing evaluation apprehension (focusing on the executive L& D measure without prior notification of the collection of the organisational performance effects).

Another technique used to minimise common methods effects involved improving scale items (applying a 7-point Likert scale to the executive L & D measure, compared with the 5-point scale for the subjective organisational performance variables, where respondents benchmarked their business unit performance against competitors in their primary industry, over the last three years).

Furthermore, the organisational performance measures were anchored in the following order: '1' = lowest 20%; '2' = next 20%; '3' = middle 20%; '4' = next 20%; '5' = top 20%. The executive L & D measures were scaled from 1 = Strongly disagree; '2' = Moderately disagree; '3' = Slightly disagree; '4' = Neutral; '5' = Slightly agree; '6' = Moderately agree; '7' Strongly agree.

Harman's one-factor test and confirmatory factor analysis and post-hoc statistical tests were conducted to test the presence of common method effect. All the 19 variables (14 executive L & D and 5 organisational performance measures) were entered into a principal axis analysis, using unrotated principal components to determine the number of factors that are necessary to account for the variance among the variables. The rule of thumb applied is that if a substantial amount of common method variance is present, either (a) a single factor will emerge from the factor analysis or (b) one general factor will account for more than 50% of the covariance among the variables (Aulakh and Gencturk, 2000; Krishnan et al., 2006; Podsakoff et al., 2003; Steensma et al., 2005). In addition, all 19 executive L & D and organisational performance variables were loaded on one factor to examine the fit of the confirmatory factor analysis model. If common method variance was largely responsible for the relationship among the variables, the one-factor CFA model was expected to fit the data well (Korsgaard and Roberson, 1995; Mossholder et al., 1998; Podsakoff et al., 2003).

### **3.10.7 Results of Common Methods Bias Test**

As specified in section 3.10.6, Harman's one-factor analysis, confirmatory factor analysis and post-hoc statistical tests were conducted to test the presence of common method effect based on the 19 variables (executive L & D and organisational performance measures). These variables were entered into a principal axis analysis, using unrotated principal components to determine the number of factors that were necessary to account for the variance among the variables.

The results of the unrotated principal axis analysis revealed the presence of three distinct factors with Eigen value greater than 1.0, rather than a single factor. The three factors together accounted for 67 per cent of the total variance, which was above the recommended cut-off point of 50%; the first (largest) factor accounted for 22%. Moreover, the confirmatory factor analysis showed that the single-factor model

did not fit the data well,  $\chi^2$  (N=222) = 3.701,  $p=0.000$ , GFI= 0.732; CFI= 0.740; TLI= 0.821; RMSEA = 0.106.

While the above results do not preclude the possibility of common method variance, they do suggest that common method variance is not of great concern and thus is unlikely to confound the interpretations of results in this study. Furthermore, Conway and Lance (2010) recommend that substantial method effects can be ruled out by offering demonstrable construct validity, which is well supported in this study.

## Chapter Four: Results

### 4.0 Introduction

This chapter covers the results of the ordinal regression analyses, examining the relationship between executive learning and development and organisational performance, including the effects of size and sector to confirm hypotheses H1, H2 and H3. A summary of the outcome of the hypotheses developed in Chapter 3, including the significant predictors of executive learning and development associated with the respective organisational performance measures, are presented at the end of each section.

#### 4.1 Results of executive L & D effects on organisational performance (N=222)

**Table 4.1** presents the ordinal regression results for the effects of executive L & D on the composite organisational performance measure. For each regression model, the beta (B), standard estimates (SE), Chi-square, Wald and the Negelkerke R-square are presented. In addition, the important odds ratio (OR), which is an exponential of the beta coefficient (Exp (B)), is computed for each executive L & D variable.

In Model 1, marginal effects of the control variables – gender, title and executive experience – were observed (*Negelkerke R-squared, .059; Chi-square, 12.699; p < .050*). Model 2 produced further contributions over and above Model 1 (*Negelkerke R-squared, .134; Chi-square, 30.091; p < .050*), suggesting that firm age and size generated positive effects on organisational performance. Significant effects of control variables related to executive title and firm size were observed. Specifically, vice-presidents were more likely to predict higher organisational performance compared to their peers (**Beta: 1.354; Wald: 4.824, p=.028**). Firm size effects observed suggest that larger firms with 1,000-5,000 or 5,000-10,000 employees were more likely to predict greater effects of executive L & D on organisational performance, based on statistically significant effects (**Beta: 2.009; Wald: 4.833; p=.028** and **Beta: 2.145; Wald: 4.230; p=.040**, respectively).

Model 3 reported an improvement (*Nagelkerke R-squared*, **.175**; *Chi-square*, **39.922**; **p < .050**) above Model 2. The previous observation that vice-presidents were more likely to predict higher organisational performance, compared to their peers in Model 2, was maintained in Model 3 (**Beta: .632**; **Wald: 5.733**; **p=.017**).

Model 4 reports a significant improvement over and above Model 3, (*Nagelkerke R-squared*, **.452**; *Chi-square*, **120.987**; **p < .050**) and all four variables of executive L & D generated significant effects on the organisational performance measure, in the following order of magnitude: strategic L & D (**Beta: .539**; **OR: 1.71**; **Wald: 5.738**; **p=.017**), structured L & D (**Beta: .411**; **OR: 1.51**; **Wald: 4.390**; **p=.036**), experiential L & D (**Beta: .388**; **OR: 1.47**; **Wald: 3.535**; **p=.042**) and participative L & D (**Beta: .388**; **OR: 1.43**; **Wald: 2.970**; **p=.047**).

For strategic L & D, the odds ratio (1.71) suggests that organisational performance is likely to increase by 1.71, for each unit enhancement in the strategic L & D variable. Likewise, the odds ratio (1.51) related to structured L & D is an indication that organisational performance is likely to increase by 1.51, for each unit enhancement in the structured L & D variable. Similarly, the odds ratio (1.47) associated with experiential L & D suggests that organisational performance is likely to increase by 1.47, for each unit enhancement in the experiential L & D variable. Finally, the odds ratio (1.43) associated with participative L & D suggests that organisational performance is likely to increase by 1.43, for each unit enhancement in the participative L & D variable.

Other control variables, such as gender and experience, produced no noticeable effects on the predictability of executive L & D for organisational performance (Table 4.1).

**Table 4.1:** Ordinal Regression Analysis results – Executive L & D effects on organisational performance (Total Sample, N=222).

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig												
<b>Executive L &amp; D</b>																
Strategic													.539	.222	5.738	.017
Experiential													.388	.226	3.535	.042
Structured													.411	.191	4.390	.036
Participative													.357	.212	2.970	.047
<b>Gender</b>																
Male	.779	1.341	.338	.561	1.084	1.383	.615	.433	.912	1.408	.419	.517	.649	1.448	.201	.654
Female	.423	1.346	.099	.754	.587	1.387	.179	.672	.543	1.411	.148	.700	.461	1.448	.102	.750
<b>Title</b>																
CEO	-.056	.456	.015	.902	.068	.488	.019	.890	.076	.499	.023	.880	-.468	.529	.781	.377
Top Level Executive	-.128	.460	.077	.781	-.034	.484	.005	.943	-.123	.489	.064	.801	-.227	.512	.197	.657
Senior Vice President	.127	.587	.047	.828	.482	.622	.601	.438	.185	.635	.085	.771	.172	.657	.069	.793
Vice President	.806	.583	1.912	.167	1.354	.616	4.824	.028	1.513	.632	5.733	.017	1.047	.666	2.467	.116
Director	-.182	.384	.225	.635	-.172	.399	.185	.667	-.217	.406	.284	.594	-.491	.428	1.316	.251

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
Divisional Manager	-.609	.527	1.335	.248	-.684	.541	1.599	.206	-.561	.552	1.032	.310	-.309	.578	.285	.593
Senior Management	.425	.384	1.231	.267	.576	.399	2.082	.149	.531	.404	1.723	.189	.414	.423	.960	.327
Middle Management	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Executive Experience</b>																
0 - 5 years	-.449	.522	.742	.389	-.618	.544	1.292	.256	-.587	.559	1.104	.293	-.331	.589	.315	.575
5 - 10 years	-.488	.532	.841	.359	-.621	.554	1.254	.263	-.487	.571	.727	.394	-.372	.605	.379	.538
10 - 15 years	-.276	.553	.249	.617	-.482	.578	.696	.404	-.275	.602	.208	.648	.003	.637	.000	.996
20 - 25 years	.327	.650	.254	.615	.279	.674	.171	.679	.537	.692	.603	.438	.323	.735	.193	.661
Over 25 years	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Age (years)</b>																
5-10					-2.228	2.022	1.214	.271	-1.328	2.045	.422	.516	-0.006	2.092	.000	.998
10-20					-2.753	2.041	1.81	.177	-1.862	2.066	.813	.367	-2.242	2.127	.013	.909

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
							9									
20-30					-3.178	2.031	2.447	.118	-2.368	2.050	1.334	.248	-.343	2.104	.027	.870
30-40					-2.641	2.020	1.710	.191	-1.672	2.042	.670	.413	-.078	2.091	.001	.970
40-50					-2.541	1.996	1.621	.203	-1.765	2.014	.768	.381	-.276	2.060	.018	.894
<b>Over 50</b>					0 <sup>a</sup>	.	.	.				.	0 <sup>a</sup>	.	.	.
<b>Firm Size (No of employees)</b>																
0 – 250					-1.081	.844	1.640	.200	-.735	.862	.726	.394	.224	.914	.060	.806
250 – 1,000					-.589	.817	.520	.471	-.240	.831	.084	.772	.684	.877	.609	.435
1,000 – 5,000					-.630	.822	.587	.444	-.405	.832	.237	.626	.831	.887	.877	.349
5,000 – 10,000					2.009	.914	4.833	.028	1.760	.929	3.587	.058	.088	.991	.008	.929
10,000 – 50,000					2.145	1.043	4.230	.040	1.763	1.054	2.799	.094	1.190	1.095	1.181	.277
50,000 – 100,000					.024	.959	.001	.980	.232	.970	.057	.811	.965	1.022	.892	.345
Over 100,000					0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Sector</b>																

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
Industry									.208	.271	.588	.443	.055	.284	.037	.848
Service									0 <sup>a</sup>	.	.		0 <sup>a</sup>	.	.	
<b>Location</b>																
UK									-.385	.415	.862	.353	-.292	.452	.418	.518
US									.468	.410	1.303	.254	.577	.435	1.758	.185
Australasia									-.770	.474	2.637	.104	-.578	.502	1.326	.250
EU									-.039	.430	.008	.927	.319	.454	.493	.482
Africa									0 <sup>a</sup>	.	.		0 <sup>a</sup>	.	.	
Negelkerke R-squared	0.059				0.134				0.175				0.452			
Change in Negelkerke R-squared	-				<b>0.075</b>				<b>0.041</b>				<b>0.277</b>			
Chi-Square	12.724				30.091				39.922				120.987			
Change in Chi-Square	-				<b>17.367</b>				<b>9.831</b>				<b>81.065</b>			
-2 LL	360.686				566.774				588.488				504.447			

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig
	N = 222, df =13, p<.001				N = 222, df =24, p<.001				N = 222, df =29, p<.001				N = 222, df = 33, p<.001			

Notes: B=beta coefficient; SE = standard error.

#### 4.1.1 Summary of results for Hypothesis H1: executive L & D will generate positive effects on organisational performance

Table 4.2 presents a high-level summary and ranking of the significant predictors of executive L & D on organisational performance, with details of the beta (B), standard estimate (SE), significance level (Sig: <.05) and odds ratio (OR) for each variable. Based on the Wald and significance level values, strategic L & D produced the most significant effect, and participative L & D generated the least effect, on organisational performance.

**Table 4.2:** Summary of the significant predictors of executive L & D on organisational performance.

<b>Significant Predictors of Executive L &amp; D on Organisational Performance - N=222</b>					
Executive L & D	B	SE	Wald	Sig	OR (Exp B)
Strategic	.539	.222	5.738	.017	1.71
Structured	.411	.191	4.390	.036	1.51
Experiential	.388	.226	3.535	.042	1.47
Participative	.357	.212	2.970	.047	1.43

Referring back to Table 4.1, the R-square and Chi-square reported from the ordinal regression models indicate a significant increase in magnitude in Model 3 over Model 4 (*change in R-square, .277; change in Chi-square, 81.065; p<.050*). Given the observed statistically significant increases in the magnitude of model fit parameters, hypothesis H1 – that executive L & D affects organisational performance is supported.

## 4.2 Results for the Executive L & D effects on organisational performance (service sector, N=149)

**Table 4.3** presents the ordinal regression results for the effects of executive L & D on the composite organisational performance measure within the service sector. For each regression model, the beta (B), standard estimates (SE), Chi-square, Wald and the Nagelkerke R-square are presented. In addition, the important odds ratio (OR), which is an exponential of the beta coefficient (Exp (B)), is computed for each executive L & D variable.

In Model 1, marginal effects of the control variables – gender, title and executive experience – were observed (*Nagelkerke R-squared*, .116; *Chi-square*, 15.323;  $p < .050$ ). Significant effects of the control variable related to one specific executive title were observed. Specifically, vice-presidents were more likely to predict higher organisational performance compared to their peers (**Beta: 2.098; Wald: 6.424;  $p=.011$** ). Model 2 produced further contributions over and above model 1 (*Nagelkerke R-squared*, .249; *Chi-square*, 31.910;  $p < .050$ ), suggesting that firm age and size generated positive effects on organisational performance. Here too, significant effects of the control variables related to executive title and firm size were observed. As previously observed, vice-presidents were more likely to predict higher organisational performance compared to their peers (**Beta: 2.935; Wald: 10.481;  $p=.001$** ). The observed effects of firm size suggest that larger firms with employees of 5,000-10,000 were more likely to predict greater effects of executive L & D on organisational performance, given the statistically significant effects (**Beta: 1.106; Wald: 1.057;  $p=.035$** ).

Model 3 reported an improvement (*Nagelkerke R-squared*, .374; *Chi-square*, 42.742;  $p < .050$ ) above Model 2. The previous observation, that vice-presidents were more likely to predict higher organisational performance compared to their peers in Model 2, was maintained in Model 3 (**Beta: .632; Wald: 5.733;  $p=.017$** ).

Model 4 reports a significant improvement over and above Model 3 (*Nagelkerke R-squared*, .562; *Chi-square*, 74.466;  $p < .050$ ) and only experiential L & D (**Beta: .608; OR; 1.72; Wald: 4.281;  $p=.039$** ) generated significant effects on the

organisational performance measure. The odds ratio (1.72) associated with experiential L & D suggests that organisational performance for the service sector is likely to increase by 1.72, for each unit enhancement in the experiential L & D variable.

As depicted in Table 4.3, the other variables did not reach statistical significance at  $p < .050$ : strategic L & D (**Beta: .542; OR: 1.72; Wald: 3.738;  $p = .060$** ), structured L & D (**Beta: .306; OR: 1.36; Wald: 1.502;  $p = .220$** ), and participative L & D (**Beta: .070; OR: 1.07; Wald: 0.061;  $p = .805$** ).

The previous observation that vice-presidents were more likely to predict higher organisational performance compared to their peers in Model 3, was maintained in Model 4 (**Beta: 2.738; Wald: 7.288;  $p = .007$** ).

The other control variables, such as gender and experience, produced no noticeable effects on the predictability of executive L & D for innovation performance (see Table 4.3).

**Table 4.3:** Ordinal Regression results – Executive L & D effects on organisational performance (Service Sector, N=149).

	Model 1				Model 2				Model 3				Model 4				
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	
<b>Executive L &amp; D</b>																	
Strategic													.542	.288	3.546	.060	
Experiential													.608	.294	4.281	.039	
Structured													.306	.250	1.502	.220	
Participative													.070	.284	.061	.805	
<b>Gender</b>																	
Male	.718	1.370	.274	.600	1.159	1.448	.640	.424	.804	1.471	.298	.585	.401	1.512	.070	.791	
Female	.375	1.382	.074	.786	.840	1.463	.330	.566	.600	1.485	.163	.686	.494	1.520	.105	.745	
<b>Title</b>																	
CEO	.172	.568	.092	.762	.450	.603	.555	.456	.573	.619	.857	.355	-.060	.644	.009	.925	
Top Level Executive	.757	.580	1.700	.192	.868	.643	1.823	.177	.835	.665	1.578	.209	.334	.688	.235	.628	
Senior Vice President	.575	.689	.696	.404	1.136	.738	2.365	.124	.979	.755	1.681	.195	.789	.773	1.042	.307	
Vice President	2.098	.828	6.424	.011	2.935	.907	10.481	.001	3.194	.935	11.665	.001	2.738	1.014	7.288	.007	
Director	.304	.469	.420	.517	.447	.511	.763	.382	.486	.517	.884	.347	.038	.534	.005	.943	

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
Divisional Manager	-.620	.653	.902	.342	-.492	.688	.512	.474	-.419	.698	.360	.549	.070	.731	.009	.924
Senior Management	.775	.472	2.695	.101	.992	.503	3.882	.049	.921	.510	3.255	.071	.787	.524	2.258	.133
Middle Management	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Executive Experience</b>																
0 - 5 years	-.055	.597	.009	.926	-.624	.643	.942	.332	-.735	.659	1.242	.265	-.443	.680	.425	.515
5 - 10 years	-.361	.618	.342	.559	-.877	.670	1.714	.190	-.891	.681	1.712	.191	-.673	.701	.923	.337
10 - 15 years	.001	.634	.000	.999	-.504	.684	.544	.461	-.523	.707	.547	.460	-.122	.731	.028	.868
20 - 25 years	.402	.822	.239	.625	.240	.902	.071	.791	.250	.919	.074	.785	.220	.951	.054	.817
Over 25 years	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Age (years)</b>																
5-10					-2.673	2.105	1.611	.204	-2.153	2.151	1.002	.317	-.482	2.205	.048	.827
10-20					-3.531	2.135	2.735	.098	-2.949	2.176	1.837	.175	-1.141	2.246	.258	.611
20-30					-4.030	2.116	3.626	.057	-3.547	2.144	2.737	.098	-.974	2.210	.194	.659

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
30-40					-3.846	2.100	3.355	.067	-3.162	2.138	2.188	.139	-.808	2.195	.136	.713
40-50					-3.640	2.064	3.109	.078	-3.175	2.090	2.306	.129	1.399	2.138	.428	.513
<b>Over 50</b>					0 <sup>a</sup>	.	.	.					0 <sup>a</sup>	.	.	.
<b>Firm Size (No of employees)</b>																
0 – 250					.004	.931	.000	.175	-1.111	.993	1.253	.263	-.108	1.048	.011	.918
250 – 1,000					-.404	.938	.186	.997	.233	.951	.060	.807	.969	.994	.951	.330
1,000 – 5,000					1.409	1.094	1.657	.667	-.338	.951	.126	.723	.884	1.012	.763	.382
5,000 – 10,000					2.494	1.183	4.440	.198	-1.240	1.113	1.240	.265	.776	1.190	.425	.514
10,000 – 50,000					1.106	1.076	1.057	.035	2.236	1.210	3.417	.065	1.212	1.245	.948	.330
50,000 – 100,000					0 <sup>a</sup>	.	.	.304	1.225	1.092	1.260	.262	1.709	1.134	2.273	.132
Over 100,000									0 <sup>a</sup>	.	.					.
<b>Location</b>																
UK									-.604	.525	1.323	.250	-.499	.558	.800	.371
US									.096	.532	.033	.856	.331	.565	.345	.557
Australasia									-.959	.612	2.456	.117	-.773	.635	1.480	.224
EU									-.268	.559	.230	.632	-.015	.575	.001	.979
Africa									0 <sup>a</sup>	.	.		0 <sup>a</sup>	.	.	.

	Model 1				Model 2				Model 3				Model 4				
	B	SE	Wald	Sig													
Negelkerke R-squared	0.116				0.249				0.374				0.562				
Change in Negelkerke R-squared					<b>0.133</b>				<b>0.125</b>				<b>0.188</b>				
Chi-Square	15.323				31.91				42.742				73.466				
Change in Chi-Square					<b>16.587</b>				<b>10.832</b>				<b>30.724</b>				
-2 LL	279.463				374.810				381.068				347.275				
	N = 149, df=13 , p<.001				N = 149, df=24 , p<.001				N = 149, df=28 , p<.001				N = 149, df=32 , p<.001				

Notes: B=beta coefficient SE = standard error.

#### 4.2.1 Summary of results for executive L & D effects on organisational performance for the service sector

Table 4.4 presents a summary of the significant predictors of executive L & D on organisational performance for the service sector, with details of the beta (B), standard estimate (SE), significance level (Sig: <.05) and odds ratio (OR) for each variable.

**Table 4.4:** Summary of the significant predictors of executive L & D on organisational performance for the service sector.

<b>Significant Predictors of Executive L &amp; D on Organisational Performance (Service Sector) - N=149</b>					
Executive L & D	B	SE	Wald	Sig	OR (Exp B)
Experiential	.608	.294	4.281	.039	1.84
Strategic	.542	.288	3.546	.060	1.72
Structured	.306	.250	1.502	.220	1.36
Participative	.070	.284	.061	.805	1.07

Based on the Wald and significance level values, for the service sector, experiential L & D (**Wald: 4.281; p=.039**) produced the most significant effect and participative L & D (**Wald: 0.060; p=.805**) generated the least effect on organisational performance.

#### 4.3 Results of the executive L & D effects on organisational performance (industry sector, N=73)

**Table 4.5** presents the ordinal regression results for the effects of executive L & D on the composite organisational performance measure within the industry sector. For each regression model, the beta (B), standard estimate (SE), Chi-square, Wald and the Negelkerke R-square are presented. In addition, the important odds ratio (OR), which is an exponential of the beta coefficient (Exp (B)), is computed for each executive L & D variable.

In Model 1, marginal effects of the control variables – gender, title and executive experience – were observed (*Nagelkerke R-squared*, .151; *Chi-square*, 12.009;  $p < .050$ ). Model 2 produced further contributions over and above Model 1 (*Nagelkerke R-squared*, .293; *Chi-square*, 35.437;  $p < .050$ ), suggesting that firm age and size generated positive effects on organisational performance. Significant effects of control variables relating to executive title were observed. Specifically, top-level executives were more likely to predict higher organisational performance, compared to their peers (**Beta: .923; Wald: 6.770;  $p = .009$** ).

Model 3 reported an improvement (*Nagelkerke R-squared*, .374; *Chi-square*, 49.485;  $p < .050$ ) above Model 2. However, the previous observation that top-level executives were more likely to predict higher organisational performance, compared to their peers in Model 2, was dissipated in Model 3 (**Beta: -2 .739; Wald: 6.178;  $p = .013$** ).

Model 4 reported a significant improvement over and above Model 3 (*Nagelkerke R-squared*, .671; *Chi-square*, 97.016;  $p < .050$ ) and only participative L & D (**Beta: .783; OR: 2.19; Wald: 5.113;  $p = .024$** ) generated significant effects on the organisational performance measure. The odds ratio (2.19), associated with participative L & D, suggests that organisational performance for the industry sector is likely to increase by 2.19 for each unit enhancement in the participative L & D variable.

As depicted in Table 4.5, the other variables did not reach statistical significance at  $p < .050$ : experiential L & D (**Beta: .367; OR: 1.44; Wald: 1.386;  $p = .239$** ) structured L & D (**Beta: .227; OR: 1.25; Wald: 0.980;  $p = .322$** ) and strategic L & D (**Beta: .293; OR: 1.34; Wald: .820;  $p = .365$** ).

The other control variables, such as gender and experience, produced no noticeable effects on the predictability of executive L & D for innovation performance (see Table 4.5).

**Table 4.5:** Ordinal Regression results – Executive L & D effects on organisational performance (Industry sector, N=73).

	Model 1				Model 2				Model 3				Model 4				
	B	SE	Wald	Sig													
<b>Executive L &amp; D</b>																	
Strategic													.293	.323	.820	.365	
Experiential													.367	.312	1.386	.239	
Structured													.227	.229	.980	.322	
Participative													.783	.258	5.113	.024	
<b>Gender</b>																	
Male	.469	.516	.825	.364	.591	.589	1.007	.316	.374	.617	.367	.545	.477	.667	.510	.475	
Female	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	
<b>Title</b>																	
CEO	.463	.811	.326	.568	2.947	1.091	7.297	.060					-2.518	1.056	5.689	.055	
Top Level Executive	1.505	.826	3.316	.069	2.403	.923	6.770	.009	-2.739	1.102	6.178	.013	-1.032	1.706	.366	.054	
Senior Vice President	.264	1.224	.046	.829	1.167	1.480	.622	.430	-2.734	.970	7.943	.005	-.921	1.325	.483	.545	
Vice President	.849	.957	.787	.375	-.295	1.146	.066	.797	-.956	1.562	.374	.541	-1.799	.888	4.103	.487	
Director	1.209	.713	2.873	.090	-1.364	.758	3.238	.072	-.619	1.217	.259	.611	.162	1.205	.018	.073	

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
Divisional Manager	.350	.954	.135	.714	-.343	1.013	.114	.735	-1.612	.806	4.001	.045	-.516	.915	.317	.893
Senior Management	.066	.705	.009	.926	-.377	.793	.226	.634	.398	1.113	.128	.721	0 <sup>a</sup>	.	.	.573
Middle Management	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	-.182	.833	.048	.827	-2.343	1.188	3.888	.
<b>Executive Experience</b>																
0 - 5 years	.717	1.192	.362	.547	.360	1.376	.068	.794	1.096	1.448	.573	.449	.741	1.566	.224	.636
5 -10 years	.187	1.207	.024	.877	.787	1.366	.332	.564	1.630	1.424	1.310	.252	.135	1.545	.008	.930
10 -15 years	.668	1.237	.292	.589	-.156	1.362	.013	.909	.672	1.440	.218	.641	-.332	1.544	.046	.830
20 - 25 years	.881	1.321	.445	.505	1.321	1.406	.883	.347	2.561	1.494	2.938	.087	1.461	1.623	.810	.368
Over 25 years	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Age (years)</b>																
5-10					1.318	.811	2.643	.104	-1.178	.853	1.909		.983	.972	3.623	.057
10-20					-.689	.924	.556	.456	-.794	.951	.697		.473	1.038	.336	.562
20-30					1.447	.930	2.420	.120	-1.155	.939	1.514		.342	1.027	2.369	.124

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
30-40					.514	.703	.536	.464	.542	.725	.559		.756	.803	.050	.823
40-50					0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.		.232	.	.	.
<b>Over 50</b>																
<b>Firm Size (No of employees)</b>																
0 – 250					2.736	1.722	174.331	.882	-1.704	1.782	148.280	.167	-9.610	2.027	93.603	.000
250 – 1,000					4.310	1.669	212.113	.677	-3.264	1.736	179.561	.404	-9.873	2.016	97.138	.000
1,000 – 5,000					-4.492	1.611	231.132	.333	-3.612	1.676	198.452	.218	-10.502	1.941	111.538	.000
5,000 – 10,000					-6.370	1.787	217.679	.453	-5.635	1.859	190.067	.454	-10.202	2.200	92.863	.000
10,000 – 50,000					-2.482	2.246	100.207	.434	-1.813	2.356	85.691	.134	-10.396	2.631	66.140	.000
50,000 – 100,000					-6.771	.000	.	.	-6.037	.000	.	.	-11.344	.000	.	.
Over 50,0000									0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Location</b>																
UK									-1.085	.912	1.415		-431	1.017	.180	.672
US									.768	.831	.854		1.196	.924	1.673	.196

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig												
Australasia																
EU																
Africa																
Negelkerke R-squared	0.151				0.293				0.355				0.671			
Change in Negelkerke R-squared					<b>0.142</b>				<b>0.062</b>				<b>0.316</b>			
Chi-Square	12.009				35.437				49.485				97.016			
Change in Chi-Square					<b>23.428</b>				<b>14.048</b>				<b>47.531</b>			
-2 LL	146.958				161.608				158.708				127.177			
	N = 73, df=12 , p<.001				N = 73, df=22 , p<.001				N = 73, df=26 , p<.001				N = 73, df=42 , p<.001			

Notes: B=beta coefficient and SE = standard error.

### 4.3.1 Summary of results for executive L & D effects on organisational performance for the industry sector

Table 4.6 presents a high-level summary of the significant predictors of executive L & D for organisational performance for the industry sector, with details of the beta (B), standard estimate (SE), significance level (Sig: <.05) and odds ratio (OR) for each variable.

**Table 4.6:** Summary of the significant predictors of executive L & D on organisational performance for the industry sector.

<b>Significant Predictors of Executive L &amp; D on Organisational Performance (Industry Sector) - N=73</b>					
Executive L & D	B	SE	Wald	Sig	OR (Exp B)
Participative	.783	.258	5.113	.024	2.19
Experiential	.367	.312	1.386	.239	1.44
Structured	.227	.229	.980	.322	1.25
Strategic	.293	.323	.820	.365	1.34

Based on the Wald and significance level values, for the industry sector, participative L & D (**Wald: 5.113; p=.024**) produced the most significant effect and strategic L & D (**Wald: .820; p=.365**) generated the least effect on organisational performance.

**Table 4.7:** Comparison of results across sectors and confirmation of Hypothesis H2.

Significant Predictors of Executive L & D on Organisational Performance (Service Sector) - N=149					Significant Predictors of Executive L & D on Organisational Performance (Industry Sector) - N=73				
Executive L & D	Wald	Sig	Change in Chi-square Models 3 & 4	Change in R-square Models 3 & 4	Executive L & D	Wald	Sig	Change in Chi-square Models 3 & 4	Change in R-square Models 3 & 4
Experiential	4.281	.039	<b>0.19</b>	<b>30.72</b>	Participative	5.113	.024	<b>0.31</b>	<b>47.53</b>
Strategic	3.546	.060			Experiential	1.386	.239		
Structured	1.502	.220			Structured	.980	.322		
Participative	.061	.805			Strategic	.820	.365		

In accordance with the data analysis section (3.10.2), the differential effects of the service versus industry sectors were evaluated, based on the values of the Chi-squared and Pseudo R-squared statistical values in Model 4 (Table 4.7). In this particular case, the predictive effects of executive L & D on organisational performance were greater for the **Industry** sector (*Negelkerke R-squared, .31; Chi-square, 47.53; p < .050*) than for the **Service** sector (*Negelkerke R-squared, .19; Chi-square, 30.72; p < .050*). Hence, hypothesis H2, that executive L & D effects on organisational performance will differ by sector (service and industry), is confirmed in this research.

#### **4.4 Results of the executive L & D effects on organisational performance (SME firms, N=68)**

**Table 4.8** presents the ordinal regression results for the effects of executive L & D on the composite organisational performance measure for SME firms. For each regression model, the beta (B), standard estimate (SE), Chi-square, Wald and the Negelkerke R-square are presented. In addition, the important odds ratio (OR), which

is an exponential of the beta coefficient (Exp (B)), is computed for each executive L & D variable.

In Model 1, marginal effects of the control variables – gender, title and executive experience – were observed (*Nagelkerke R-squared, .124; Chi-square, 8.351; p < .050*). Model 2 produced further contributions over and above Model 1 (*Nagelkerke R-squared, .165; Chi-square, 11.349; p < .050*), suggesting that firm age and size generated positive effects on organisational performance. Significant effects of control variables related to executive title were observed.

Model 3 reported an improvement (*Nagelkerke R-squared, .251; Chi-squared, 18.133; p < .050*) above Model 2. Model 4 reported a significant improvement over and above Model 3 (*Nagelkerke R-squared, .432; Chi-square, 37.994; p < .050*) and only participative L & D (**Beta: .751; OR: 2.12; Wald: 2.116; p=.035**) generated significant effects on the organisational performance measure. The odds ratio (2.12) associated with participative L & D suggests that organisational performance for the SME firms is likely to increase by 2.12 for each unit enhancement in the participative L & D variable.

As depicted in Table 4.8, the other variables did not reach statistical significance at  $p < .050$ : strategic L & D (**Beta: .531; OR: 1.70; Wald: 1.287; p=.157**), structured L & D (**Beta: .220; OR: 1.25; Wald: .243; p=.622**) and experiential L & D (**Beta: .367; OR: 1.44; Wald: 1.386; p=.239**).

Other control variables, such as gender and experience, produced no noticeable effects on the predictability of executive L & D for organisational performance (see **Table 4.8**).

**Table 4.8:** Ordinal Regression analysis results - Executive L & D effects on organisational performance (SME firms, N=68)

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wal d	Sig												
<b>Executive L &amp; D</b>																
Strategic													.531	.468	1.287	.157
Experiential													.010	.484	.000	.984
Structured													.220	.446	.243	.622
Participative													.751	.517	2.116	.035
<b>Gender</b>																
Male	.352	.506	.485	.486	.159	.549	.084	.772	.500	.592	.712	.399	.095	.624	.023	
Female	0 <sup>a</sup>															
<b>Title</b>																
CEO	-.404	.748	.292	.772	-.404	.748	.292	.589	-.528	.812	.422	.516	-1.608	.885	3.298	.069
Top Level Executive	-.432	.715	-.432	.365	-.222	.801	.077	.782	-.003	.839	.000	.997	-.718	.884	.660	.416
Senior Vice President	-.100	.779	-.100	.056	.322	1.508	.046	.831	-.556	1.667	.111	.739	-2.250	1.787	1.584	.208
Vice President	.351	1.458	.351	.058	.524	.758	.478	.489	.460	.796	.335	.563	-.282	.836	.114	.736
Director	.523	.716	.523	.534	-.462	1.970	.055	.814	-.582	2.089	.078	.781	-1.462	2.357	.385	.535
Divisional	-.375	1.934	-.375	.087	-.232	.904	.066	.798	-.184	.935	.039	.844	-1.072	1.009	1.128	.288

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig
Manager																
Senior Management	-.199	.871	-.199	.052	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
Middle Management	0 <sup>a</sup>	.	0 <sup>a</sup>	.798												
<b>Executive Experience</b>				.												
0 - 5 years	-1.873	.814	5.300	.054	-1.773	.824	4.625	.052	-1.590	.875	3.299	.069	-1.175	.959	1.500	.221
5 - 10 years	-1.339	.868	2.379	.123	-1.443	.898	2.579	.108	-1.126	.967	1.355	.244	.113	1.088	.011	.917
10 - 15 years	-1.600	1.025	2.434	.119	-1.726	1.061	2.646	.104	-1.657	1.175	1.987	.159	-1.036	1.305	.631	.427
20 - 25 years	-1.157	1.003	1.330	.249	-1.076	1.021	1.112	.292	-1.501	1.138	1.739	.187	-.658	1.230	.286	.593
Over 25 years	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Age (years)</b>																
5-10					1.222	1.203	1.033	.309	1.415	1.235	1.312	.252	-1.175	.959	1.500	.666
10-20					.969	1.368	.502	.479	1.271	1.406	.817	.366	.113	1.088	.011	.584
20-30					.062	1.357	.002	.963	.365	1.420	.066	.797	-1.036	1.305	.631	.997
30-40					1.410	1.347	1.095	.295	1.861	1.377	1.828	.176	-.658	1.230	.286	.352
40-50									0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig
<b>Over 50</b>																
<b>Firm Size (No of employees)</b>																
0 – 250					0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.				
250 – 1,000																
1,000 – 5,000									-.179	.800	.050	.823	.232	.879	.070	.792
5000 – 10,000									.814	.851	.913	.339	1.520	1.011	2.259	.133
10,000 – 50,000									.506	.887	.326	.568	.341	.959	.126	.722
50,000 – 100,000									-1.277	.806	2.511	.113	-.882	.905	.951	.330
Over 100,000									0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Location</b>																
UK									-.179	.800	.050	.823	.232	.879	.070	.792
US									.814	.851	.913	.339	1.520	1.011	2.259	.133
Australasia									.506	.887	.326	.568	.341	.959	.126	.722
EU									-1.277	.806	2.511	.113	-.882	.905	.951	.330
Africa									0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
Negelkerke R-squared	0.124				0.165				0.251				0.432			
Change in					<b>0.041</b>				<b>0.086</b>				<b>0.181</b>			

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wal d	Sig												
Negelkerke R-squared																
Chi-Square	8.351				11.349				18.133				37.994			
Change in Chi-Square					<b>2.998</b>				<b>6.784</b>				<b>19.861</b>			
-2 LL	106.767				167.364				163.353				146.265			
	N = 68, df =11 , p<.001				N = 68, df =16 , p<.001				N = 68, df =20 , p<.001				N = 68, df =24 , p<.001			

Notes: B =beta coefficient and SE = standard error.

#### 4.4.1 Summary of results for executive L & D effects on organisational performance for the SME firms

**Table 4.9** presents a high-level summary of the significant predictors of executive L & D on organisational performance for SME firms, with details of the beta (B), standard estimate (SE), significance level (Sig: <.05) and odds ratio (OR) for each variable.

**Table 4.9:** Summary of the significant predictors of executive L & D on organisational performance for SME firms

<b>Significant Predictors of Executive L &amp; D on Organisational Performance (SME) - N=68</b>					
Executive L & D	B	SE	Wald	Sig	OR (Exp B)
Participative	.751	.517	2.116	.035	2.12
Strategic	.531	.468	1.287	.157	1.70
Structured	.220	.446	.243	.622	1.25
Experiential	.010	.484	.000	.984	1.01

Based on the Wald and Sig level values, for the SME firms, participative L & D (**Wald: 2.116; p=.035**) produced the most significant effect and experiential L & D (**Wald: 0.000; p=.984**) generated the least effect on organisational performance.

#### 4.5 Results of the executive L & D effects on organisational performance (Non-SME firms, N=154)

**Table 4.10** presents the ordinal regression results for the effects of executive L & D on the composite organisational performance measure for non-SME firms. For each regression model, the beta (B), standard estimate (SE), Chi-square, Wald and the Nagelkerke R-square are presented. In addition, the important odds ratio (OR), which is an exponential of the beta coefficient (Exp (B)), is computed for each executive L & D variable.

In Model 1, marginal effects of the control variables – gender, title and executive experience – were observed (*Nagelkerke R-squared*, **.103**; *Chi-square*, **15.717**; **p < .050**). Model 2 produced further contributions over and above Model 1 (*Nagelkerke R-squared*, **.129**; *Chi-square*, **19.967**; **p < .050**), suggesting that firm age and size generated positive effects on organisational performance. Significant effects of control variables related to executive title were observed. In Model 2, executive experience of 20-25 years was more likely to predict higher organisational performance than other periods of experience (**Beta: .986**; **Wald: 4.999**; **p = .025**).

Model 3 reported an improvement (*Nagelkerke R-squared*, **.251**; *Chi-square*, **18.133**; **p < .050**) above Model 2. However, the previous observation in Model 2 (that executives with 20-25 years' experience were more likely to predict higher organisational performance compared to their peers) was dissipated in Model 3 (**Beta: 2 .086**; **Wald: 3.083**; **p = .056**).

Model 4 reports a significant improvement over and above Model 3 (*Nagelkerke R-squared*, **.432**; *Chi-square*, **37.994**; **p < .050**). Three variables of executive L & D generated significant effects on the organisational performance measure, in the following order of magnitude: experiential L & D (**Beta: .539**; **OR: 1.71**; **Wald: 9.225**; **p = .002**), strategic L & D (**Beta: .554**; **OR: 1.71**; **Wald: 4.358**; **p = .037**), structured L & D (**Beta: .797**; **OR: 2.22**; **Wald: 3.469**; **p = .043**). The odds ratio (1.74) associated with experiential L & D suggests that organisational performance for the non-SME firms is likely to increase by 1.74, for each unit enhancement in the experiential L & D variable. Similarly, the odds ratio (1.71) associated with strategic L & D suggests that organisational performance for the non-SME firms is likely to increase by 1.71, for each unit enhancement in the strategic L & D variable. The odds ratio (1.74) associated with structured L & D suggests that organisational performance for the non-SME firms is likely to increase by 1.74, for each unit enhancement in the structured L & D variable. However, participative L & D failed to reach statistical significance as a predictor of organisational performance in the non-SME firms (**Beta: .156**; **OR: 1.17**; **Wald: .358**; **p = .550**).

Other control variables, particularly gender, produced no noticeable effects on the predictability of executive L & D for organisational performance (see **Table 4.10**).

**Table 4.10:** Ordinal Regression analysis results – Executive L & D effects on organisational performance (Non-SME firms, N=154).

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig	B	SE	Wal d	Sig
<b>Executive L &amp; D</b>																
Strategic													.554	.265	4.358	.037
Experiential													.797	.262	9.225	.002
Structured													.422	.227	3.469	.043
Participative													.156	.260	.358	.550
<b>Gender</b>																
Male	.910	1.348	.455	.500	1.158	1.375	.709	.400	1.270	1.419	.801	.371	1.063	1.464	.527	.468
Female	.475	1.356	.122	.726	.615	1.375	.200	.655	.911	1.415	.414	.520	.948	1.455	.424	.515
<b>Title</b>																
CEO	.401	.784	.261	.609	.224	.799	.078	.780	.071	.815	.008	.931	-.591	.858	.475	.491
Top Level Executive	-.342	.643	.282	.595	-.159	.662	.058	.810	-.262	.675	.151	.698	.298	.727	.169	.681
Senior Vice President	.239	.653	.134	.715	.211	.665	.101	.751	-.044	.678	.004	.948	-.127	.708	.032	.858
Vice President	.671	.599	1.255	.263	.880	.618	2.026	.155	.961	.637	2.276	.131	.982	.675	2.117	.146
Director	-.586	.473	1.532	.216	-.560	.482	1.353	.245	-.685	.493	1.930	.165	-.646	.518	1.555	.212

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
Divisional Manager	-.689	.560	1.515	.218	-.726	.566	1.643	.200	-.717	.582	1.519	.218	.045	.613	.005	.942
Senior Management	.525	.435	1.458	.227	.573	.446	1.650	.199	.542	.450	1.450	.229	.571	.477	1.432	.231
Middle Management	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Executive Experience</b>																
0 - 5 years	.851	.753	1.276	.259	1.027	.776	1.753	.185	1.263	.811	2.423	.120	.764	.855	.800	.371
5 -10 years	.684	.761	.808	.369	.988	.792	1.558	.212	1.276	.823	2.406	.121	.436	.864	.255	.614
10 -15 years	.934	.771	1.466	.226	1.083	.795	1.857	.173	1.631	.839	3.780	.052	1.029	.882	1.360	.243
20 -25 years	1.716	.939	3.336	.068	2.205	.986	4.999	.025	2.086	1.008	3.083	.056	1.382	1.060	1.700	.192
Over 25 years	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Age (years)</b>																
5-10					-.736	1.941	.144	.705	.141	1.973	.005	.943	1.962	2.050	.916	.338
10-20					-1.261	1.923	.430	.512	-.485	1.958	.061	.804	1.420	2.050	.480	.489
20-30					-1.377	1.916	.516	.472	-.875	1.938	.204	.652	1.354	2.019	.450	.503

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig	B	SE	Wald	Sig
30-40					-.830	1.895	.192	.661	.059	1.920	.001	.976	1.680	1.990	.713	.399
40-50					-.846	1.882	.202	.653	-.089	1.900	.002	.963	1.389	1.969	.498	.480
<b>Over 50</b>					0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
<b>Firm Size (No of employees)</b>																
0 – 250					.499	.333	2.253	.133	.482	.336	2.052	.152	.322	.359	.803	.370
250 – 1,000					0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
1,000 – 5,000																
5,000 – 10,000									-.660	.518	1.623	.203	-.513	.565	.825	.364
10,000 – 50,000									.398	.487	.667	.414	.206	.532	.150	.698
50,000 – 100,000									-.843	.591	2.034	.154	-.674	.633	1.130	.288
Over 100,000									.559	.540	1.071	.301	.651	.584	1.243	.265
Africa									0 <sup>a</sup>	.	.	.	0 <sup>a</sup>	.	.	.
Negelkerke R-squared	0.103				0.129				0.193				0.513			
Change in Negelkerke R-					<b>0.026</b>				<b>0.064</b>				<b>0.32</b>			

	Model 1				Model 2				Model 3				Model 4			
	B	SE	Wald	Sig												
squared																
Chi-Square	15.717				19.967				31.072				102.161			
Change in Chi-Square					<b>4.25</b>				<b>11.105</b>				<b>71.089</b>			
-2 LL	276.432				395.920				404.095				345.718			
	N = 154, df =13 , p<.001				N = 154, df =19 , p<.001				N = 154, df =23 , p<.001				N = 154, df =27 , p<.001			

Notes: B = beta coefficient and SE = standard error.

#### 4.5.1 Summary of results for executive L & D effects on organisational performance for the non-SME firms

Table 4.11 presents a high-level summary of the significant predictors of executive L & D on organisational performance for the non-SME firms, with details of the beta (B), standard estimate (SE), significance level (Sig: <.05) and odds ratio (OR) for each variable.

**Table 4.11:** Summary of the significant predictors of executive L & D on organisational performance for non-SME firms.

<b>Significant Predictors of Executive L &amp; D on Organisational Performance (Non-SME) - N=154</b>					
	B	SE	Wald	Sig	OR (Exp B)
Experiential	.554	.265	9.225	.002	1.74
Strategic	.554	.265	4.358	.037	1.74
Structured	.797	.262	3.469	.043	2.22
Participative	.156	.260	.358	.550	1.17

Based on the Wald and significance level values, for the non-SME firms, experiential L & D (**Wald: 9.225; p=.002**) produced the most significant effect and participative L & D (**Wald: .358; p=.550**) generated the least effect on organisational performance.

**Table 4.12:** Comparison of results across firm size and confirmation of Hypothesis H3.

Significant Predictors of Executive L & D on Organisational Performance (SME) – N=68					Significant Predictors of Executive L & D on Organisational Performance (Non-SME) - N=154				
Executive L & D	Wald	Sig	Change in Chi-square Models 3 & 4	Change in R-square Models 3 & 4	Executive L & D	Wald	Sig	Change in Chi-square Models 3 & 4	Change in R-square Models 3 & 4
Participative	2.116	.035	<b>0.18</b>	<b>19.86</b>	Experiential	9.225	.002	<b>0.32</b>	<b>71.09</b>
Strategic	1.287	.157			Strategic	4.358	.037		
Structured	.243	.622			Structured	3.469	.043		
Experiential	.000	.984			Participative	.358	.550		

In accordance with the data analysis section (3.10.3), the differential effects for SMEs versus non-SMEs were evaluated, based on the values of the Chi-square and pseudo R-squared statistical values in Model 4 (Table 4.12). In this particular case, the predictive effects of executive L & D on organisational performance were greater for non-SMEs (*Nagelkerke R-squared*, **.32**; *Chi-square*, **71.09**;  $p < .050$ ), compared to SMEs (*Nagelkerke R-squared*, **.18**; *Chi-square*, **19.86**;  $p < .050$ ). Hence, hypothesis H3, that executive L & D effects on organisational performance will differ by firm size (SME / non-SME), is confirmed in this research.

#### 4.6 Conclusions and summary of hypotheses

The purpose of this chapter was to present the quantitative research results of the present study. The chapter first explored the data set and the properties of the scales used. The relationships between variables were examined through ordinal regression analysis models. In terms of the control variables, no statistically significant differences were observed across gender and no geographical location differences emerged. The results confirm that all three hypotheses – H1, H2 and H3 – are valid; a summary of the hypotheses is presented in Table 4.13.

**Table 4.13:** Summary of results for Hypotheses H1, H2 and H3.

<b>Hypothesis</b>	<b>Description</b>	<b>Results</b>
H1	Executive L & D will generate positive effects on organisational performance	supported
H2	Executive L & D effects on organisational performance will differ by industry sector (service and industry)	supported
H3	Executive L & D effects on organisational performance will differ by firm size (SME / non-SME)	supported

## **Chapter Five: Discussion**

### **5.0 Introduction**

In this chapter, the discussion concerns the results, findings, and conclusions emerging from the hypotheses tested in Chapter Four; it is organised in three main parts. Part One is dedicated to discussion of the results related to the effects of executive learning and development on organisational performance. Part Two discusses the impact of firm sector as a moderator. Finally, the impact of firm size as a moderator is discussed in Part Three.

#### **5.1 Part One: Discussion of Results – Executive L & D effects on organisational performance (Total Sample, N=222)**

In this research, executive learning and development is specified as a four-dimensional, 14 item measure, underpinned by exploratory, confirmatory and discriminant validation of two different samples of executives (N=150 and N=222). The measure encompassed the strategic, experiential, structured and participative domains of learning and development. In addition, the dependent variables utilised consisted of composite organisational performance measures (finance, market share, innovation, employee engagement and customer service), reflecting wider stakeholder goals.

The hypothesised link between executive learning and development, and organisational performance, was grounded on a number of inter-related theoretical underpinnings: the resource-based view (RBV), and human capital, dynamic capability and resource dependency theories. Based on ordinal regression analysis, hypothesis H1, that executive L & D will generate positive effects for organisational performance, is confirmed. This outcome was based on the observation of the change in magnitude of model fit parameters (pseudo R-squared and Chi-square), as well as significant levels of specific executive learning and development measures.

The results support the notion cited in the literature review that the human capital theory offers theoretical justification for the link between executive L & D and organisational performance (Rastogi, 2002; Mayo, 2001). The observed effects of executive L & D on organisational performance can be explained through theories of social capital (Nahapiet and Ghoshal, 1998) and job demand resource (Demerouti et al., 2001a, 2001b). As executives engage in learning and development (situated within their internal and external networks), they gain greater access to new resources (Sparrowe et al., 2001), which can be deployed to offer better support and resources to subordinates (Edmondson, 1999; Van Der Vegt and Bunderson, 2005; Van Emmerik et al., 2011). As employees gain better support and resources from executives, they generate creative solutions and products (Shore and Coyle-Shapiro, 2003; Shore et al., 2005; Yukl et al., 2009) leading to greater customer satisfaction (Babbar and Koufteros, 2008; Maddern et al., 2007) and enhanced organisational performance effects.

Empirically, several researchers have reported positive effects of training and development (considered to be a source of human capital) for organisational performance (e.g. Bae and Lawler, 2000; Bae et al., 2003; Carlson et al., 2006; Fey and Bjorkman, 2001; Harel and Tzafrir, 1999; Katou and Budhwar, 2006; Laursen and Foss, 2003; Panayotopoulou et al., 2003; Richard and Johnson, 2001; Rodwell and Teo, 2005; Rodriguez and Ventura, 2003; Sels et al., 2006; Tessema and Soeters, 2006; Tzafrir, 2005). More specifically, Hitt et al. (2001) found direct and moderating effects of human capital with strategies (i.e. service diversification and geographic diversification) on organisational performance in professional service firms.

Furthermore, the results confirm the link between the resource-based view and organisational performance (Barney and Arkan, 2001; Barney, 2001). The resource-based view posits that executive skills embody a high degree of inimitability and constitute a crucial component of organisational human capital and tacit knowledge (Barney, 1991; Barney and Arkan, 2001; Barney, 2001; Castanias and Helfat, 2001). Hence, the effective deployment of the tacit 'knowledge' resources derived from executive learning and development can increase firm effectiveness in ways that

competitors are unable to replicate, thereby providing economic rent (competitive advantage). Several researchers have conducted empirical testing of the resource-based view in the last two decades, with positive results. For example, Henderson and Cockburn (1994) measure the value, rarity and imitability of competence, which impact on research productivity in pharmaceutical firms. In the context of Spanish manufacturing firms (over 10 employees), Esteve-Perez and Manez-Castillejo (2008) confirm that the firm's strategy that develops specific assets (e.g. advertising, and creating research and development policy) could enhance its ability to adapt to the environment, and improve its survival prospects. Ray et al. (2004) observed that intangible and socially complex capabilities contribute to customer service performance. More importantly, Newbert (2007) reported that the enhancement of core competence contributes to competitive advantage and firm performance.

In addition, the results confirm the notion that executive L & D as a dynamic capability generates organisational performance effects. It has been noted in the literature review that learning mechanisms enhance dynamic capabilities and shed light on the evolution of dynamic capability within organisations (Zott, 2003; Zollo and Winter, 2002). Moreover, a definition of executive learning and development cited this as a source of dynamic capability (Espedal, 2005). Drawing on the knowledge-based view (e.g. Griffith et al., 2006; Liao et al., 2009), it was conjectured that knowledge resources can generate dynamic capabilities, and that learning serves as the bridge between knowledge resources and the creation of dynamic capabilities (Van der Heijden, 2004). The SECI model (Nonaka and Takeuchi, 1995) was postulated as the process of converting the knowledge resources of executive L & D into organisation performance, moving through the four non-linear steps of socialisation, externalisation, combination and internalisation (SECI), to synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001).

Moreover, the results confirm the notion that there is a link between resource dependency and organisational performance. As discussed in the literature review, directors can provide critical links to resources that a firm needs to survive and prosper (Pfeffer and Salancik, 1978). Combining the resource dependency and the

knowledge view of the firm, it can be argued that organisations capable of acquiring critical operational knowledge faster than competitors can achieve a competitive advantage (Chen and Lin, 2004; Zahra and George, 2002). Consequently, as executives become adept at acquiring and combining knowledge from external sources through informal and formal learning, they will create an enabling environment for the production of innovative services and products, which can generate positive organisational performance effects (Hsiao et al., 2011). From the organisational knowledge creation perspective, the conversion process between tacit (individual) and explicit knowledge (Nonaka and Takeuchi, 1995), based on socialisation, externalisation, combination and internalisation (SECI), synthesises individual learning into objective and socially shared knowledge (Nonaka et al., 2001). This creates a knowledge spiral across the organisation, which can be applied to generate innovative services and products (Wang and Ahmed, 2002; Narver et al., 2004; Mavondo et al., 2005).

Empirical evidence supporting the notion that dimensions of learning and development significantly affect organisational performance is documented by a number of configurational SHRM theorists (e.g. Bae and Lawler, 2000; Bae et al., 2003; Carlson et al., 2006; Fey and Bjorkman, 2001; Harel and Tzafrir, 1999; Katou and Budhwar, 2006; Laursen and Foss, 2003; Panayotopoulou et al., 2003; Richard and Johnson, 2001; Rodwell and Teo, 2005; Rodriguez and Ventura, 2003; Sels et al., 2006; Tessema and Soeters, 2006; Tzafrir, 2005). Consequently, this observation served as an important basis for undertaking further research to examine the effects of executive learning and development on organisational performance measures.

The results of this study also lend support to previous empirical evidence reporting positive effects of ambidextrous learning on organisational performance (Prieto et al., 2009; Uotila et al., 2009; Bodwell and Chermack, 2010; Luzon and Pasola, 2011; Lee and Huang, 2012). This is because the four-dimensioned executive learning and development measure utilised in this research covered a broad range of formal and informal learning and development indicators.

Among all the predictors of executive learning and development, the strategic dimension, in particular, produced the greatest impact, given that it was associated with market share, customer satisfaction and innovation performance measures. It can be recalled that strategic learning and development is an amalgamation of four indicators: strategising (taking into account ethical, holistic, current and future implications); maintaining awareness of business environment changes and their implications on the organisation; maintaining close links with customers in order to understand, attract and satisfy them more effectively than competitors (resulting in the creation of differentiated, high added-value products and services); and embedding new initiatives and changes by taking account of inter-functional and cross-organisational impact and effects).

This outcome highlights the significance of strategic learning and development, and underpins the need for executives to maintain closer contact with customers and to maintain awareness of the competitive landscape, in order to understand customer requirements. This will in turn enable executives to allocate appropriate resources across their organisation to create superior products and services, which are likely to enhance customer experience and satisfaction (Babbar and Koufteros, 2008; Maddern et al., 2007).

The positive effects of strategic learning and development on performance corroborate the results of previous research (e.g. Buzzell and Gale, 1987; Chang and Singh, 2000; Laverty, 2001; Goddard et al., 2005). It has been theorised that profitability is enhanced through learning effects (Al-wugavan et al., 2008; Besanko et al., 2005; Liu and Yang, 2009). It is also expected that organisations focusing on market-driven learning will tend to generate new products, which will enhance both competitive advantage and market share (Sinkula et al., 1997; Li et al., 1999). According to Sinkula (1994), market-driven learning entails the development of market knowledge, which potentially influences organisational performance. It is expected that developing new products is likely to result in greater customer satisfaction, which will in turn generate customer loyalty for an organisation (Jones and Suh, 2000; Bennett and Rundle-Thiele, 2004; Keiningham et al., 2003; Yeung et al., 2002), leading to greater market share performance. On the other hand,

dissatisfied customers might be inclined to transact business with competitors (Barlow and Mail, 2000), resulting in shrinking market share performance for affected organisations. Therefore, based on the foregoing theorisations, the link between strategic learning and development and performance is confirmed, especially as the indicators of strategic learning and development include items related to gaining insight from customers and the wider competitive landscape (market-driven), in order to develop superior products and services.

The positive effects of strategic learning and development on organisational performance corroborate previous observations by Carmeli and Tishler (2006), who report positive effects of managerial skills on market share change. These observed positive effects of strategic learning and development could be explained by Bandy's (2003) service synergy model and knowledge management theory. According to the service synergy model, there is a theoretical link between strategic knowledge assets, business processes and the capacity to generate exceptional customer service performance (Bandy, 2003). Thus, the positive effects of strategic learning and development on organisational performance may be explained as follows. As executives interact more frequently with customers and intensify their knowledge of the external business environment, they acquire tacit knowledge (Guchait et al., 2011). Tacit knowledge, according to Nonaka (1994), is deeply rooted in individual action, commitment, and involvement in specific circumstances. Herrgard (2000) defines tacit knowledge as the unarticulated knowledge acquired through individual processes such as experience, reflection, internalisation, or individual talents. In other words, the strategic learning and development arising from customer interactions enable executives to acquire tacit knowledge, which can be exploited within the organisation (with executive peers and employees) to develop superior services and products and, therefore, superior customer satisfaction performance (Tzokas and Saren, 2004; Babbar and Koufteros, 2008; Maddern et al., 2007; Tontini and Silveira, 2007). Previous studies have confirmed the impact of knowledge management practices on customer satisfaction and organisational performance exemplified by the development of strong customer relationships (Marques and Simon, 2006; Pathirage et al., 2007). Thus, based on Bandy's (2003) service synergy model and the knowledge management theory, the strategic learning

and development effect on customer satisfaction performance reported in this research has theoretical support.

The positive effects of strategic learning and development on customer satisfaction might also be attributable to the effects of double-loop learning generated as executives produce solutions to problems identified through close customer interactions (Argyris and Schon, 1978, 1996). This knowledge can be diffused across organisational functions (Mezias and Starbuck, 2003), enabling employees to become more adept at responding rapidly to customer needs, leading to enhanced customer satisfaction and performance effects (García-Morales et al., 2009).

In addition, the positive effects of strategic learning and development on organisational performance can be explained through the SECI model of knowledge creation (Nonaka and Takeuchi, 1995). As executives generate knowledge by engaging in socialisation and interaction with customers, the resulting knowledge can be combined with competitor insights (tacit knowledge) at the individual level. Such tacit knowledge can subsequently be externalised through dialogue (with peers and employees) resulting in the creation of explicit knowledge (Ambrosini and Bowman, 2001). The resulting explicit knowledge can then be shared or diffused within the organisation. At this point, employees can internalise and experiment with the knowledge to develop innovative solutions and products (Byosiere and Luethge, 2008), resulting in superior innovation performance (Tontini and Silveira, 2007).

The effects of participative learning and development on organisational performance may be explained through the social capital (Nahapiet and Ghoshal, 1998) and job demand resource theories (Demerouti et al., 2001a, 2001b), as follows. According to social capital theory, networks of relationships generate valuable resources, and provide members with 'collectively-owned capital', which can be exploited for organisational benefits (Nahapiet and Ghoshal, 1998). Adler and Kwon (2002) posit that the presence of higher-level social capital is likely to enhance team-learning behaviours. As executives engage in participative learning and development (situated within their network), they gain greater access to new resources in terms of information and guidance related to the effective performance of their work

(Sparrowe et al., 2001). Executives can then deploy the social capital gained through participative learning and development to offer better support and resources to subordinates (Edmondson, 1999; Van Der Vegt and Bunderson, 2005; Van Emmerik et al., 2011). As employees benefit from the better support and resources from executives, they can employ it to generate creative solutions and products (Wang et al., 2005; Yukl et al., 2009), which can result in greater customer satisfaction (Babbar and Koufteros, 2008; Maddern et al., 2007) and eventually translate to organisational performance (Shore and Coyle-Shapiro, 2003).

In this research, experiential learning and development generated positive effects on performance, and there is theoretical support for this. Experiential learning and development, in this study, is an amalgamation of four indicators: 1) risk taking, venturing into unknown territories and experimenting with new ideas to drive efficiencies in processes and cost reduction; 2) amending established organisational practices in pursuit of greater efficiency and effectiveness; 3) learning quickly from past experiences, thus permitting growth, change, adaptation, and creative problem-solving; and 4) participating in cross-functional activities and stretch assignments, such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, to broaden job scope and competencies. The impact of experiential learning and development on innovation performance may be attributed to the effects of organisational knowledge creation processes (Grant, 1996; Leiponen, 2006; Taminiau et al., 2009) and the leader-member exchange (Dansereau et al., 1975; Graen and Cashman, 1975).

The organisational knowledge creation view of the firm, involving the conversion processes between tacit (individual) and explicit knowledge (Nonaka and Takeuchi, 1995) based on the socialisation, externalisation, combination and internalisation (SECI) model, helps to synthesise individual learning into objective and socially shared knowledge across the organisation (Nonaka et al., 2001). Thus, as executives enhance their capabilities through experiential learning, the acquired knowledge can be converted into shared-knowledge through dialogue with peers and subordinates.

The leader exchange process further explains the connection between experiential executive learning and development, and performance. Employees are likely to receive increased support and guidance from executives because of the greater self-awareness derived from experiential learning and development processes. As a result, employees are likely to reciprocate with greater motivation and experimentation of new ideas thereby, creating channels for more innovative services and products (Nasution and Mavondo 2008). This line of thought has empirical support, as Liao et al. (2010) recently found a statistically significant relationship between leader-member exchange and employee creativity. Experience-based knowledge is considered important in the development of tacit knowledge, which in turn, drives innovative and competitive advantage (Byosiere and Luethge, 2008). This view corroborates the findings of this research.

In addition, some researchers (e.g. Ju et al., 2006; Zhang et al., 2004), have suggested that knowledge and learning are instrumental in determining innovative capabilities at the individual and organisational levels, and such innovative capabilities can influence organisational stability in dynamic markets (Lee and Tsai, 2005). This view is supported by the outcome of this research. The results from this research also lend support for the knowledge-based theory (Huang and Newell, 2003; McEvily and Chakravarthy, 2002; Wang et al., 2004) that organisational knowledge assets developed through learning and development generate positive firm performance (e.g. Rosenkopf and Almeida, 2003; Agrawal et al., 2009; Tzabbar, 2009).

In this research, participative learning and development was found to generate positive effects on organisational performance. This outcome may be explained by the leader-member exchange (Dansereau et al., 1975; Graen and Cashman, 1975). Based on social exchange, and leader-member exchange, theory, it can be argued that effective executive learning and development can generate increased employee commitment, and hence result in organisational performance effects. Thus, by engaging in participative learning and development activities, executives can increase the capacity to provide employees with access to a wide range of resources and support. As employees recognise the value of new resources and support, they

are likely to reciprocate through higher levels of commitment (Colquitt et al., 2005) and better performance (Coyle-Shapiro and Shore, 2007; Lee, 2008; Tse and Lam, 2008), resulting in positive effects for employee engagement performance. The reverse is likely to hold true, in that employees might perceive inferior resources and minimal support from executives as justification to reciprocate with lower levels of commitment, which would therefore lead to lower employee engagement.

The effects on performance of structured executive learning and development through education have been emphasised by Djellal and Gallouj (2007), and this is replicated in this research. The results suggest that the human capital originating from external sources (such as the market, universities and research centres) and other sources (conferences, fairs, exhibitions, magazines, and associations) impacts on organisational performance. This outcome supports the call for an integrated measure of executive L & D, encapsulating both formal and informal dimensions.

Finally, indicators of strategic, experiential and participative learning and development closely reflect informal learning practices, and this confirms early predictions that executives are more likely to engage in informal, rather than in formal and structured, learning (Brown, 2006). Specifically, Brown (2006) reports that senior managers in the UK have developed a strong preference for informal development mechanisms such as networking with peers, group problem solving, presentations/lectures and coaching. This outcome also corroborates previous studies reporting positive effects of informal learning on organisational performance (e.g. Thach, 2002; Peterson and Millier, 2005). Thach (2002) reported a 60 per cent increase in perceived managerial effectiveness following the incidence of executive coaching. Peterson and Millier (2005) also cited the positive influence of coaching on middle and executive managerial performance, leading to a positive return on investment by the sampled organisation.

## **5.2 Part Two: Discussion of Results Related to Sector Differences (Service versus Industry)**

The view that learning orientation is likely to differ across industrial sectors (e.g. Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006), discussed in the literature review chapter, is confirmed in this research. Based on a study examining the learning orientations of 300 manufacturing and service firms, Sadler-Smith et al. (2001) suggested that manufacturing firms were more likely to advance an active-learning orientation, compared with their service counterparts. In contrast, some researchers (e.g. Lien et al., 2006; Bhatnagar, 2006) consider learning orientation to be far more crucial to the operation of service firms. Although the above-mentioned studies report statistically significant differences between manufacturing and service firms with respect to learning orientation, this outcome is not universally supported, given that others (e.g. Jamali et al., 2009; Comb et al., 2006) observed no variance in the learning orientation between service and manufacturing firms.

In this study, statistically significant differences in learning orientation, as well as the performance effects of the learning and development indicators between the service and industry sectors, were observed. The overall model fit for the industry sector was much better, compared with the service sector. This is an indication that the predictive effect of executive learning and development on organisational performance was better for the industry sector than for the service sector.

The observed superior organisational performance impact of executive learning and development in the industry sector might be attributable to the adaptation of the service logic by industry firms, which drives executives' learning orientation towards delivering better customer satisfaction, which, in turn, drives organisational performance (Vargo and Lusch, 2006). As indicated by Vargo and Lusch (2006), many manufacturing firms have found a competitive advantage through the adoption of a service-dominated orientation, but many firms typically characterised as service

organisations have found themselves at a competitive disadvantage by adopting a logic focusing on output management.

The differential predictors of executive learning and development on performance may be attributed to the unique characteristics of services (intangibility, heterogeneity, perishability and simultaneity of production and consumption), which differentiate them from physical products, thus limiting the replication of innovation models across sectors (Sundbo, 1997, 2009; Tether and Hipp, 2002; Tether, 2005).

The results shown in **Table 4.4** suggest that service organisations are likely to draw upon experiential and strategic executive learning and development to drive organisational performance. For example, Sundbo (1997, 2009) stresses that organisational learning and experience is an important source of information for generating innovation in the service sector. This view confirms the positive effects of experiential learning and development on service firms observed in this research. Furthermore, customers, competitors and market dynamics effects have been found to be among the important success factors for innovation and organisational performance in the service industries (Vargo and Lusch 2006; Lusch et al., 2007; Pires et al., 2008). Thus, service organisations interested in driving superior performance will have to devote more resources towards the dimensions of experiential and strategic learning and development, to develop the capacity within their organisation to differentiate their services from competitors.

In terms of the industry sector, participative and experiential executive learning and development predicted the highest organisational performance effects, highlighting the importance of these dimensions to this particular sector. Thus, service organisations seeking to maximise innovation performance through executive learning and development need to engage in multiple dimensions in order to become effective at service innovation.

Based on the above discussion, the hypothesis H3, that the effects of executive learning and development on organisational performance will differ by service and industry sectors, is fully supported.

Differences in the learning orientation and performance effects of executive learning and development by sector might relate to the dissimilar attribution of value propositions across sectors. For example, whilst industry sector firms generate value by producing tangible innovative products that are delivered to the customer, in the service sector, greater integration of customer experiences may be required to create value (Firat and Venkatesh, 1995). This could require greater executive proximity to customers to understand their unique preferences in the service sector, compared to the industry sector. As a result, the capacity of executives in the service sector to engage in other forms of learning and development situated in the wider competitive environment might be limited, as they focus more effort in driving greater value to customers through co-created value configurations.

The above outcome highlighting the different predictors of executive learning and development across sectors is supported elsewhere. Thompson et al. (2001) found that, in contrast to manufacturing firms where organisational learning enabled the production of tangible goods, the learning emerging from service firms might be construed as an integral part of the unique service value proposition delivery process.

Whilst the variable performance effects of executive learning and development across service and industry can be considered in isolation, there may be other factors contributing to this phenomenon, outside the scope of this study. According to empirical research exploring profitability decomposition, there is evidence of considerable and persistent intra-industry and inter-firm differences in profitability growth. Generally, such investigations have focused on whether the sources of profitability lie at the industry or the firm level (e.g. Schmalensee, 1985; Wernerfelt and Montgomery, 1988; Powell, 1996), with results indicating that roughly 20% of the variance in firm performance is attributable to industry factors, and the residual variances are attributable to firm level dynamics and effective deployment of resources.

Building on this discourse, Rumelt (1991) decomposed the variation in business unit profitability into 'stable industry' and 'stable business unit' effects, based on the same data source utilised by Schmalensee (1985) and Wernerfelt and Montgomery

(1988), and observed that long-term industry effects accounted for only 8% of the observed variance, but that stable business unit effects contributed 46%.

Subsequently, McGahan and Porter (1997) took into account both manufacturing and service industries in a study, and reported that industry factors account for 19% of variance in profitability at the firm level. In principle, whilst acknowledging the industry influences on organisational performance, this evidence is far stronger for effective deployment of resources, which include executive capabilities. Therefore, it can be conjectured that the results obtained, depicting the superior performance of the industry sector, are not solely due to industry dynamics, but might be a reflection of the effective deployment of executive learning and development dimensions in this sector, compared to the service sector.

Accordingly, the view held by strategic management researchers, that profitability stems from resources, capabilities and initiatives unique to firms (Barney, 1991; Teece et al., 1997; Teece 2007; Winter, 2003) is supported in this research. In other words, the resource-based approach (postulating that firm profitability is not so much determined by ‘industry factors’, but rather stems from firms’ ability to develop unique competences and capabilities to drive cost reduction, high-quality services and products better than competitors) is validated in this study (Teece et al., 1997).

As indicated in the literature review chapter, the dynamic capability theory offers support for the notion that executive learning and development can generate unique sources of sustained competitive advantage, which may be firm-specific and difficult to imitate (Nelson, 1995; Teece, 2007).

### **5.3 Part Three: Discussion of Results Related to Firm Size Differences**

Overall, the hypothesis that the organisational performance effects of executive learning and development will vary by firm size (SMEs versus non-SMEs) is supported in this study. It is, therefore, reasonable to suggest that the results reflect the ramifications of the resource-based view and resource dependency theories. This outcome corroborates previous research related to innovation differences by firm size, where the performance of SMEs lagged behind larger firms, due to limited financial resources and the inability to recruit specialised staff (e.g. Vossen, 1998).

In terms of organisational performance, the model for the non-SMEs exhibited superior fit compared to the SME firms, suggesting that the predictive effects of executive learning and development on performance were comparably better for non-SMEs than for SME firms. Furthermore, whilst only participative executive learning and development statistically predicted effects on organisational performance for the SMEs (that is, variables approached statistical significance), for their non-SME counterparts, experiential, structured and strategic learning and development attained statistical significance. Hence, the differential performance effects of executive learning and development by firm size were established mainly on the superior model fit observed for the non-SME firms.

The predictive effects of executive learning and development on organisational performance were comparably better for non-SME firms. Furthermore, strategic and experiential learning and development exhibited positive significance as predictors of market share performance for non-SMEs, contrasting with the SMEs, where only participative learning and development exhibited significance as a predictor of market share performance.

In essence, this result suggests that SMEs are more likely to drive organisational performance through greater participative executive learning and development, whilst non-SME firms are expected to rely on experiential, strategic and structured executive learning and development to drive superior performance effects.

The observed differential effects of the executive learning dimensions for SMEs (as against non-SMEs) could be attributed to factors relating to firm size in the adaptation and implementation of knowledge management processes arising from the learning and development dimensions (Desouza and Awazu, 2006; Wong and Aspinwall, 2005). SMEs have special characteristics (management structure, systems and procedures) that differentiate them from non-SMEs, and such unique characteristics are likely to influence all activities in the life cycle of knowledge – from acquisition, organisation, storage, dissemination/transfer, to effective application in order to generate intended organisational outcomes (Supyuenyong et al., 2009).

For instance, SMEs might have a greater propensity to adopt simple planning and control systems, and informal rules and procedures, which can facilitate effective dissemination of knowledge across the organisation (Lim and Klobas, 2000; Macpherson et al., 2003). Therefore, based on the outcome of this research, SME managers can leverage participative executive learning and development to drive organisational performance by becoming adept at sharing tacit knowledge among executives and employees (Nonaka and Takeuchi, 1995; Desouza and Awazu, 2006). Organisational performance has been found to improve where organisations encourage frequent dialogue and interaction across all levels of the organisation (Limpibunternng and Johri, 2009; Martin and Ernst, 2005), which underpins the benefit of encouraging executives in SME firms to engage in participative L & D.

The effects of experiential, structured and strategic executive learning and development on performance for non-SME firms may be attributable to the extra resources available to executives in larger firms (McAdam and Reid, 2001). This extra resource advantage could offer executives greater opportunities, the capacity to interact more often with customers and engage in a wider range of development dimensions, which can be leveraged to generate superior products, thereby producing positive effects on organisational performance (Babbar and Koufteros, 2008; Maddern et al., 2007; Caemmerer and Wilson 2010).

Participative learning and development was the most significant predictor of performance for SMEs. This might be due to the proximity of key members of SME management, which enables such learning to occur (Lant and Mezias, 1992). Larger organisations, due to resource availability, can deploy more sophisticated L & D to generate organisational performance effects (Belkhdja et al., 2007).

Whilst smaller firms are often considered to have some advantages in terms of innovation generation capabilities, due to inherent flexibility and lack of inertial constraints (Sorescu et al., 2003), at the same time, they may be disadvantaged by insufficient resources and the capacity to respond rapidly to multiple challenges arising from the external environment (Chandy and Tellis, 2000; Chandy et al., 2003). This may be compounded by the slack effects associated with resource dependency, applicable to the executive L & D context, given that larger firms may have the extra resource capacity to deploy more sophisticated development approaches when environmental changes occur (Mole et al., 2004). Thus, the superior effects of executive learning and development on the performance of non-SME firms can be attributed to the resource constraints that SMEs encounter in terms of limited investment in cost-intensive learning dimensions, reinforcing the notion that firm size is indicative of resource capacity and dependency ramifications (Cao et al., 2009; Hillman, 2005; Hillman et al., 2007; Bowden and Isch, 2013).

As discussed in the literature review, the differential learning orientation attributable to firm size is corroborated by previous research. Here, it has been evidenced that SMEs generally lack the internal structures, routines and procedures which larger organisations utilise to absorb and transform knowledge in order to produce tangible and intangible organisational outcomes (Zahra and George, 2002; Van Den Bosch et al., 2003).

In addition, SMEs might often lack the managerial, entrepreneurial and technical skills required to identify and absorb new knowledge (Yli-Renko, Autio, and Sapienza, 2001). Moreover, given the skewed influence of owner-managers within smaller organisations, characterised by reluctance to delegate power and share knowledge, and autocratic and defensive management behaviours, there is a

tendency for these factors to impede SMEs from effectively deploying learning and development dimensions (Jones, 2003). In addition, some commentators have indicated that firm size has a significant effect on learning orientation (e.g. Belkhdja et al., 2007). Specifically, Bierly and Daly (2007) reported that smaller firms were more likely to learn more often from suppliers, while larger firms learn more from partnership and consultants.

Moreover, Westhead and Storey (1997) intimate that training in small firms is different from that of their larger counterparts, with the latter likely to depend on externally-provided training and the former on informal mechanisms. According to Westhead and Storey (1997), because of resource constraints, small firms depend on informal work-related training and knowledge, and some SMEs will possibly lag behind larger counterparts in the adoption of emerging knowledge and technologies, which can result in diminishing competitive advantage for such firms over time (Mole et al., 2004).

However, large firms can encounter limitations in executive learning and development, arising from the complexities of organisational structures, which can result in slower transformation of learning processes, whilst smaller firms can disseminate and embed knowledge faster, due to the greater proximity of managers (Lant and Mezias, 1992).

## **Chapter Six: Conclusions**

### **6.0 Introduction**

This chapter concludes the research by addressing the fulfilment of the research objectives. Subsequently, the research contributions, implications for practice, limitations, and the implications for future research are presented.

### **6.1 Achievement of objectives**

This research was advanced with three main objectives, the first of which was to develop an integrated measure of executive learning and development, taking account of formal and informal domains. This was achieved with cognisance of the wider executive characteristics, trends in executive development, and various models of executive development, leading to the four-dimensional executive learning and development measure (strategic, structured, experiential and participative), espoused as a broad measure that allows effective assessment of executive learning and development across sectors and firm size.

Overall, the hypothesis that the effects of executive learning and development on organisational performance will vary by firm size (SME versus non-SMEs) is supported in this study. It is therefore, reasonable to suggest that the results reflect the ramifications of the resource-based view and the resource dependency theories. This outcome corroborates previous research related to innovation differences by firm size, where the performance of SMEs lagged behind larger firms, due to limited financial resources and the inability to recruit specialised staff (e.g. Vossen, 1998).

In this study, statistically significant differences between the service and industry sectors were observed in learning orientation, as well as in the performance effects of the learning and development indicators. The overall model fit for the industry sector was much better than for the service sector across all the performance indicators. This is an indication that the predictive effects of executive learning and

development on organisational performance were better for the industry sector. This outcome supports the view that learning orientation is likely to differ across industrial sectors (e.g. Hyland et al., 2000; Dymock and McCarthy, 2006; Khadra and Rawabdeh, 2006).

This research aimed to evaluate the possible moderating effects of firm size and sector on the relationship between executive learning and development, and organisational performance. This outcome supports the arguments in the literature review that, based on the resource-based view and the resource dependency theories, smaller firms may lag behind larger firms in performance due to resource constraints and, more specifically, in terms of the deployment of executive learning and development dimensions.

Sector differences were also observed, with the industry firms demonstrating better performance effects of executive learning and development than the service firms. In sum, although significant differences in the executive learning and development orientations emerged, strategic learning and development influenced both service and industry firms, highlighting the importance of this dimension across sectors.

## **6.2 Research Contribution**

The contribution of this work lies in several areas of implementation and empirical analysis. It contributes to the formulation of a comprehensive executive learning and development measure, encapsulating both formal and informal dimensions of the executive/senior management cohort in organisations. Whilst previous researchers (e.g. Mabey and Ramirez, 2005) have focused exclusively on the performance effects of executive development, this research makes a theoretical extension by combining both executive development and executive learning based on Luoma's (2005) model of management development. Accordingly, as individual learning positively correlates with organisational learning, which in turn influences firm performance outcomes (Goh and Ryan, 2008; Jiang and Li, 2008; Lopez et al., 2005), executives can contribute towards the improvement of firm productivity. This research has

helped to draw out the benefits of blended/integrated design of L & D measures, given that all four dimensions – strategic, experiential, participative and structured – contributed in predicting effects on organisational performance. In addition, the amalgamation of executive learning and development dimensions into a broad measure (reflecting ambidextrous learning) offers a unique nexus of both concepts with practical implications.

The moderating effects of firm size/sector on executive learning and development offer evidence for the contingency theory of SHRM. Thus, this research offers an important contribution to the SHRM literature, signifying that the contingency perspective has important ramifications for organisational HRM implementation.

In addition, the moderating effects of the industry sector on executive learning and development confirm the wider debate of the likelihood of differential learning orientation across sectors (Hyland et al., 2000; Dymock and McCarthy, 2006). The moderating effects of firm size on executive learning and development confirmed in this research substantiates the resource-based view and resource dependency theories, postulating that larger firms can derive benefits from economies of scale, whilst their smaller counterparts might be disadvantaged by limited access to critical resources.

The importance effect of strategic competencies on organisational performance has been confirmed in this research. In addition, the positive outcome of executive L & D on the composite performance measure underscores the positive contribution of informal learning to organisational outcomes, given that strategic and experiential learning, which are generally informal in nature, were found to generate statistically significant performance effects.

This research also contributes to the discourse on exploratory factor analysis research, by corroborating the view of previous researchers (e.g. Costello and Osborne, 2005) that oblimin, with maximum likelihood, generates results superior to the varimax rotational models.

In sum, this research, given the observed positive effects of executive learning and development on organisational performance, lends support to a number of theories: RBV, human capital, resource dependency, dynamic capability, and knowledge-based theory.

### **6.3 Implications for Practice**

This study presents some practical implications, especially for the design and implementation of executive learning and development that is aimed at driving positive organisational performance. The findings indicate that both formal and informal executive learning mechanisms generate positive effects for organisational performance. This outcome suggests that organisations need to integrate both formal and informal dimensions in the design and implementation of executive learning and development programmes. Particular emphasis could also be placed on mechanisms that are likely to enhance the acquisition of experiential, participative and strategic capabilities and competencies, given the positive effects of these mechanisms in this research. Therefore, a blended learning approach (Bonk and Graham, 2006; Garrison and Vaughan, 2008; Picciano and Dziuban, 2007; Mitchell and Honore, 2007; Norberg et al., 2011) of executive learning and development, which integrates individual, organisational and wider stakeholder effects, should be pursued by organisations to drive sustainable and superior performance.

Organisations seeking to generate greater returns from executive development activities can utilise the third layer of Luoma's (2005) management development model as good practice to design dimensions. In essence, adopting the integrative approach to executive learning and development, which involves incorporating both formal and informal dimensions, is more likely to generate better organisational performance effects, compared to implementing sporadic and reactive activities.

In addition, the positive effects of executive learning on the composite organisational performance measure suggest that there are merits in evaluating organisational performance from both the financial and non-financial perspectives (e.g. customer

satisfaction, innovation and employee engagement), as postulated by the competing values framework (CVF) developed by Quinn and Rohrbaugh (1981, 1983).

Given that the indicators of strategic, experiential and participative learning and development more closely reflect informal learning practices, this suggests that executives are more likely to engage in more informal than formal and structured learning (Brown, 2006). Thus, organisations can focus more on informal executive learning and development programmes and activities, including networking with peers, group problem solving, presentations/lectures and coaching, to drive superior performance. Furthermore, based on the results, as it appears that investment in performance-oriented executive coaching could lead to improvement in organisational performance (Thach, 2002; Peterson and Millier, 2005), organisations are encouraged to include executive coaching as a component of their executive learning and development programmes.

The results also highlighted strategic executive learning and development as the most significant predictor of organisational performance, which suggests that organisations could include this as an important component of their development programmes to drive superior organisational performance. The rationale for this is due to the positive effects observed in this research, as well as to the greater engagement that is likely to arise from senior managers to development programmes with 'strategic' content (Brown, 2006). Strategic learning and development is an amalgamation of four indicators: strategising, maintaining awareness of business environment changes, maintaining close links with customers and embedding new initiatives and changes. Advancing strategic learning as part of executive development is likely to facilitate the learning transfer to the workplace and eventually drive positive organisational performance (Brown, 2003).

### **Firm Sector**

Differential effects of executive learning and development on specific organisational performance variables, by sector (service and industry), were observed in this research. This highlights the importance of factoring in specific sector effects in the

design of executive learning and development programmes, instead of following generic approaches, which could have limited effectiveness in specific contexts.

For industry sector firms, it might be necessary to build into their executive learning and development programmes the service logic approach, to drive executives' learning orientation towards delivering better customer satisfaction (Vargo and Lusch, 2006). As indicated by Vargo and Lusch (2006), many manufacturing firms have found a competitive advantage through the adoption of a service-dominated orientation.

On the other hand, In the design and implementation of executive learning and development programmes, service sector firms will have to account for the unique characteristics of services (intangibility, heterogeneity, perishability and simultaneity of production and consumption), which differentiate them from physical products (Sundbo, 1997, 2009; Tether and Hipp, 2002; Tether, 2005). Thus, such learning and development programmes will need to reflect greater integration of learning from customer experiences, in order to promote the creation of unique value propositions (Firat and Venkatesh, 1995). This may require executives to increase their proximity to customers to understand their unique preferences and to generate co-created value propositions and services, which can generate positive effects on organisational performance (Thompson et al., 2001).

### **Firm Size**

From the perspective of firm size, the effect of executive learning and development on organisational performance was better for non-SME than for SME organisations. Furthermore, the results suggest that the predictive effects of executive learning and development on organisational performance for the non-SMEs sector was derived from more than one predictor of executive learning and development (experiential, structured and strategic), compared with those for SMEs, where a single predictor was observed. This outcome was attributed to the notion that SME firms may be disadvantaged by resource constraints and the capacity to respond rapidly to multiple challenges arising from the external environment (Chandy and Tellis, 2000; Chandy

et al., 2003). This situation is often compounded by the slack effects, associated with resource dependency, applicable to the executive learning and development contexts, given that larger firms may have the extra resource capacity to deploy more sophisticated development approaches when environmental changes occur, compared to smaller firms (Mole et al., 2004). Consequently, non-SME firms can leverage the superior resource capacity to drive organisational performance by pursuing more blended and ambidextrous executive learning programmes, integrating both formal and informal learning approaches, and should account for individual, organisational and wider stakeholder effects.

On the other hand, due to the resource constraints that SMEs encounter in terms of limited investment in cost-intensive learning, which reinforces the notion that firm size is indicative of resource capacity and dependency ramifications (Cao et al., 2009; Hillman, 2005; Hillman et al., 2007; Bowden and Isch, 2013), SME firms might be inclined to depend more on informal learning activities.

Specifically, this research reported participative learning (informal) as the only significant predictor of executive learning and development on organisational performance for the SME firms. This might be an indication that developing more participative learning behaviour among executives in the SME sector will generate positive organisational outcomes. Thus, it might be necessary for executives in SMEs to encourage and maximise the advantage of the close proximity of key actors to stimulate learning and development processes in order to generate competitive advantage for the firm. Consequently, as team-building processes have been found to be an effective method for improving organisational performance (Bayley et al., 2007), SME firms should explore different avenues to promote participative learning and development among executive in SMEs to enhance firm performance.

Finally, due to resource constraints, SMEs are likely to have limited access to technological and sophisticated HRM support, as explained by the resource-based view and resource dependency theories. To mitigate such constraints, SME firms can enhance their executive learning and development capabilities by engaging in

partnerships with other players in the industry, such as suppliers and even competitors, as this approach is likely to involve less capital investment.

## **6.4 Research Limitations**

Whilst this research has generated some interesting outcomes, it does present some limitations, first of which is the common source data collection, which was partly mitigated by the outcome of Harman's common factor tests and other design dimensions, as previously articulated in the methodology chapter. Another limitation lies in the use of single-item organisational performance indicators, which was partly mitigated by anchoring the performance measures over a three-year period (rather than focusing on a single accounting period) and the amalgamation of these into a composite measure. Furthermore, the utilisation of subjective, rather than objective, measurement of organisational performance constitutes another weakness in the research. In addition, the work could have benefited from further control measures, such as degree of unionisation, which have been found to influence organisational performance. Finally, a longitudinal approach would have helped unearth any time-lag effects of executive learning and development on organisational performance, but this was not possible through the cross-sectional approach adopted for this study. Despite its limitations, the present study helps to illuminate our understanding of the effects of executive L & D on organisational performance. In the following section, some research avenues are presented to suggest further areas of investigation.

## **6.6 Recommendations for Future Research**

This thesis offers some significant contributions on both the theoretical and practical fronts. At the same time, it has paved the way for several avenues for future research on executive learning and development.

Future research can be conducted based on longitudinal research design to capture the dynamic process of executive learning and development on organisational performance over a period of time (Crewell, 2008). Advancing the longitudinal

research approach allows researchers to measure the processes and patterns of change, and to capture information on a continuous basis (Kumar, 2005). This approach can also help to draw conclusions that are more detailed on causal mechanisms and reveal any potential time-lag effects that might exist between the implementation of executive learning and development, and the realisation of firm performance. This approach can also offer insights regarding the speed effects of executive learning and development on different performance indicators.

Future research should also be advanced based on the same constructs but, instead of relying on perceptions of organisational performance, the data could be elicited from existing databases, such as AMEDEUS. In addition, future research should be based on multi-sources of objective organisational performance measures, instead of eliciting data from single-sources within organisations. For instance, customer satisfaction and innovation performance can be collected directly from customers rather than eliciting the entire data set from executives.

Random sampling, instead of the convenience approach, can be advanced in future research, to eliminate the possible bias effects of convenience sampling. Moreover, to eliminate any common methods bias effects, future research should be advanced with the organisational performance data separated from the executive learning and development constructs, although the Harman common method test revealed that common methods issues were not present in this research.

As the results of this research revealed that industry context constitutes a highly relevant moderator, future statistical analyses should examine the external and sector-specific factors beyond the service and industry dimensions, focusing on a specific industry (such as aerospace, car manufacturing or banking) to highlight any unique features of the executive L & D in specific sectors.

Another theme that could be addressed relates to the centrality of the effects of firm size on the relationship between executive learning and development, and firm performance. Further empirical work can be undertaken to validate this outcome under different research environments (nationally, by sector and internationally).

Furthermore, while the results of this research provide insight into relationships at an aggregated level, customised models should be developed and adapted towards the individual firm level. In effect, further research can focus on in-depth case studies and action research, to help open the 'black box' on executive learning and development effects on organisational performance.

Finally, a combined approach, involving both qualitative and quantitative methods could be advanced to draw out some in-depth knowledge and insight on the effects of executive learning and development on organisational performance, to extend the understanding of this subject from both the individual and wider organisational perspectives.

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## Appendix A – Summary of Traditional Measures of Training and Development

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Appleyard and Brown (2001)	The relationship between firm performance – along quality and quantity dimensions – and three components of the employment system: skill development, employee participation in problem solving, and employee collaboration	Continuous training of engineers and technicians within well-functioning team dynamics can result in enhanced performance, demonstrated by lower defect density.	Industrial Relations	<ul style="list-style-type: none"> <li>• Average number of training days for new employees</li> <li>• Number of training days in 3 years</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Wright, Gardener and Moynihan(2003)	Impact of HR practices and organisational commitment on the operating performance and profitability of business units	Organisational commitment and HR practices are significantly related to operational measures of performance, as well as to operating expenses and pre-tax profits.	Human Resources Management Journal	<ul style="list-style-type: none"> <li>• Average number of hours for formal training per annum</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Guest et al. (2003)	The relationship between HRM and performance is explored in 366 UK companies, using objective and subjective performance measures and cross-sectional and longitudinal data	Based on objective measures of performance, greater use of HRM is associated with lower labour turnover and higher profit per employee, but with less productivity. After controlling for previous years' performance, the association ceases to be significant. Subjective performance estimates indicate a strong association between HRM and both productivity and financial performance. The study	British Journal of Industrial Relations	<ul style="list-style-type: none"> <li>• Percentage of staff trained per annum</li> <li>• Number of training days per annum for new employees</li> <li>• Number of training days per annum for experienced employees</li> <li>• Percentage of training associated with present job</li> <li>• Percentage of training associated with future job</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Horgan and Muhlau (2006)	Test that the complimentary effects of high performance HR management system on employee performance is over and above the sum of the effects of five practices	The high performance HR management system is the most effective form of HR management in enhancing. Second, it seeks to demonstrate that this superior effectiveness is in part derived from a complementarity between five HR dimensions (Incentives, Sharing, Guidance, Training and Selectivity).	International Journal of Human Resource Management	<ul style="list-style-type: none"> <li>• Use of internal training</li> <li>• Percentage of staff offered on-the-job training</li> <li>• Percentage of staff offered off-the-job training</li> <li>• Percentage of staff offered funding for further education</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Way (2002)	Examine how high performance work systems (HPWS) are associated with outcomes that are key to the success of small US firms	Within the US small firm sector of the economy, HPWS do not necessarily produce outcomes that exceed the labour costs associated with the use of these systems.	Journal of Management	<ul style="list-style-type: none"> <li>• Percentage of staff offered formal training per annum</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Gelade and Ivery (2003)	Examines the relationships between HRM, work climate and organisational performance in a branch network in a retail bank	Correlations between work climate and performance cannot be explained by dependence on HRM factors. This is consistent with a mediation model in which the effects of HRM practices on business performance are partially mediated by work climate.	Personnel Psychology	<ul style="list-style-type: none"> <li>• Percentage of staff certified as competent in customer service</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Haung (2000)	Examines the different approaches to human resource management (HRM) practices for business, in different performance categories	Organisational performance is significantly related to the management of such human resource functions as planning, staffing, appraisal, compensation, and training and development. Successful firms are often those that adopt a highly effective approach to the management of their human resources.	International Journal of Human Resource Management	<ul style="list-style-type: none"> <li>• Long/short term focus of training and development activities</li> <li>• Managerial involvement in the planning of training and development activities</li> <li>• Team/individual focus on training and development</li> <li>• Value placed on the training development department by the firm</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Rodriguez and Ventura (2003)	Analyses the relationship between human resource management systems and firm performance, using the Miles and Snow typology (1984)	Internal or 'make', human resource system exercises a positive effect on employee turnover and overall firm performance. However, compensation practices associated with this system produce a negative effect on the firm's productivity. There is limited support for the theory that the influence of human resource systems on firm performance is contingent on organisational strategy.	International Journal of Human Resource Management	<ul style="list-style-type: none"> <li>• Emphasis on long term development</li> <li>• Degree of socialisation</li> <li>• Emphasis on training</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Lee and Miller (1999)	Examines how an organisation's commitment to its employees' well-being (OCE) can aid in the profitable execution of its positioning strategies	Dedicated positioning strategies appear to be executed more effectively where organisations exhibit a high level of commitment to their employees; and, conversely, OCE is apt to have a strong impact on ROA only in the context of a dedicated (that is, intensive and thorough) positioning strategy.	Strategic Management Journal	<ul style="list-style-type: none"> <li>• Level of investment in employee education and competence development</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
Faems et al. (2005)	<p>To assess the influence of HRM on financial performance:</p> <p>(1) Determine the relative contribution of different HR domains to organisational performance;</p> <p>(2) Focus on the importance of HRM for small business management;</p> <p>(3) Use bankruptcy prediction models, to optimize the conceptualization of financial performance;</p> <p>(4) Using structural equation modelling, capture the mediating effect of operational performance on</p>	<p>Investment in HR domains such as training and career and performance management has a positive and significant impact on productivity, although this effect does not seem large enough substantially to influence higher profitability levels.</p> <p>313</p>	The International Journal of Human Resource Management	<ul style="list-style-type: none"> <li>• Existence of strategic training plan</li> <li>• Adherence to strategic training plan</li> </ul>

Author(s)	Research Base	Brief Summary	Journal	Measures of learning and development
De Pablos (2004)	Develop a conceptual framework linking human resource management, organisational learning and knowledge management	Human capital, at the individual level has a direct, positive and significant relationship with the creation of a sustained competitive advantage. Human capital leads to an increase in customer benefits by affording organisations the flexibility required to meet changing customer needs, as well as providing them with the innovation needed to achieve leadership in the market.	Journal of European Industrial Training	<ul style="list-style-type: none"> <li>• Level of internal learning</li> <li>• Level of external learning</li> <li>• Radical versus incremental learning</li> <li>• Speed of learning</li> </ul>

## Appendix B – Phase 1 Questionnaire (N150)

### Executive Development & Learning Survey

This survey consists of a broad range of measures designed exclusively to evaluate the learning and development activities of executives and directors. Please allow approximately 10-15 minutes to completion the survey.

#### Part A: Questionnaire

Please circle on the scale the extent to which you agree with the following statements as they apply to your organisation where 1= strongly disagree, 4 = neither agree nor disagree, and 7 = strongly agree.

#### Section 1: Experiential Learning and Development

Questions [Taking risk, experimenting, job challenge, learning situations]		Strongly disagree		Neutral			Strongly agree	
		1	2	3	4	5	6	7
1	Executives in our organisation are encouraged to experiment with new and novel approaches for cost savings and speedier decision making.	1	2	3	4	5	6	7
2	Although our organisation has set working practices, executives can change these in pursuit of greater efficiency if required.	1	2	3	4	5	6	7
3	Executives in our organisation are oriented toward learning from their experiences, thus permitting growth, change, adaptation, and creative problem solving.	1	2	3	4	5	6	7
4	My organisation provides opportunities for executives	1	2	3	4	5	6	7

	to participate in cross-functional projects and stretch assignments, such as re-organisations, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and capabilities.							
5	Executives in our organisation receive support and encouragement from other peers when presenting new ideas and initiatives.	1	2	3	4	5	6	7
6	In our organisation, executives are encouraged to take risks, venture into unknown territories and experiment with new ideas to drive efficiencies in processes and reduce cost.	1	2	3	4	5	6	7

## **Section 2: Structured Learning and Development**

<b>Questions</b> [Specialist skills building courses, professional association seminars and coaching]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		1	2	3	4	5	6	7
7	Our organisation provides communication and problem-solving training and development opportunities for executives.	1	2	3	4	5	6	7
8	Our organisation is highly supportive of executives' attendance at professional society seminars, conferences and programmes to enhance their skills and capabilities.	1	2	3	4	5	6	7
9	Our organisation offers strong support (financial and non-financial) to executives when they pursue work and non-work related self-directed studies.	1	2	3	4	5	6	7
10	Executives in our organisation are offered coaching support to enhance their personal effectiveness, leadership skills and achievement of organisational goals and targets.	1	2	3	4	5	6	7

### **Section 3: Expansive Learning and Development**

<b>Questions</b> [Network ties and reflection]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
11	Executives in our organisation are good at networking with key individuals outside the formal organisational structure and can exchange ideas for mutual benefit.							
12	Our organisation frequently promotes informal social activities for executives to stimulate internal networking, which helps them to forge informal relations.							
13	Executives are encouraged to interact with a wider stakeholder group – competitors, customers, suppliers, universities – to acquire and disseminate information across the organisation.							
14	Executives have the propensity of reviewing key decisions and ideas with peers to gain buy-in, support and feedback.							
15	Executives in our organisation are good at learning from mistakes, and are inclined to initiate new ideas, even when some ideas have been unsuccessful in the past.							

#### **Section 4: Interactive (Participative) Learning and Development**

<b>Questions</b> [Teleconferencing, away days, and special task force assignments]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
16	Executives in my organisation engage in interactive activities on a frequent basis such as conference calls, joint-problem solving, progress review of special projects, inter-functional working groups, etc.							
17	Away days are a regular component of the development process for executives in our organisation and serve as a forum for generating new ideas, solving specific organisational problems and building new skills and capabilities.							
18	Our organisation has established briefings or programmes to help executives to understand cross-organisational operational processes and governance arrangements.							

#### **Section 5: Self-directed Learning and Development**

<b>Questions</b> [Reading specialist books, industry and professional association magazines, distance and e-learning]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
19	Executives in our organisations tend to refer to various sources of information, such as specialist books, industry and professional association magazines, academic articles, to enhance their learning and development.							
20	Executives in our organisation are offered opportunities to develop new skills via company-sponsored distance learning and e-learning programmes.							
21	Our organisation provides a wide range of computer-							

	based learning resources (work and non-work related) aligned to the development needs of executives.							
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### **Section 6: Strategic Learning and Development**

<b>Questions</b> [Business environment, stakeholder, ethical and customer requirements awareness ]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
22	Executives in our organisation think strategically, ethically and holistically, encompassing issues of past, present and future dimensions.	1	2	3	4	5	6	7
23	Executives in our organisation maintain an awareness of business environment changes and their implications for the organisation.	1	2	3	4	5	6	7
24	Executives understand the critical success factors for satisfying stakeholders, and match these with organisational competences and capabilities.	1	2	3	4	5	6	7
26	Executives maintain close links with customers in order to understand, attract and satisfy them more effectively than competitors, by offering differentiated, high added-value products and services.	1	2	3	4	5	6	7
27	Executives embed new initiatives and changes into our organisation by taking account of inter-functional and cross- organisational impact and effects.	1	2	3	4	5	6	7
28	Executives tend to react rapidly to situations or events before they degenerate into critical financial, competitive or leadership difficulties for our organisation.	1	2	3	4	5	6	7

**Section 7: Strategic Alignment of Executive Learning & Development**

<b>Questions</b> [Tailoring, strategic capability and influence of networking information on organisational strategies]		<b>Strongly disagree</b>		<b>Neutral</b>		<b>Strongly agree</b>		
29	Learning and development activities designed for executives are strongly aligned to the short- and long-term strategic goals of our organisation.	1	2	3	4	5	6	7
30	When strategising and implementing functional and operational plans, executives in our organisation integrate, ideas and concepts derived from <u>external network sources</u> (competitors, industry peers, etc.).	1	2	3	4	5	6	7
31	Executives in our organisation acquire a greater proportion of strategic capabilities, ideas and competencies from informal learning and development activities than from formal and structured means.	1	2	3	4	5	6	7

**Part B: Further details**

**About your organisation**

Please indicate the number of employees in your organisation

Less than 100	<input type="checkbox"/>	100 - 1,000	<input type="checkbox"/>	1,000 - 5,000	<input type="checkbox"/>	5,000 - 10,000	<input type="checkbox"/>	10,000- 50,000	<input type="checkbox"/>
50,000 - 100,000	<input type="checkbox"/>	Over 100,000	<input type="checkbox"/>						

Please indicate the approximate age of your firm

5 – 10 years	<input type="checkbox"/>	10 – 20 years	<input type="checkbox"/>	20 – 30 years	<input type="checkbox"/>	30 – 40 years	<input type="checkbox"/>	over 50 years	<input type="checkbox"/>
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Please indicate the geographical location of your organisation

UK	<input type="checkbox"/>	US	<input type="checkbox"/>	Australasia	<input type="checkbox"/>	Africa	<input type="checkbox"/>
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0 – 5 days	<input type="checkbox"/>	5 – 10 days	<input type="checkbox"/>	10 – 15 days	<input type="checkbox"/>	over 15 days	<input type="checkbox"/>
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## About Yourself

(Please provide the following information about yourself)

What is your gender?

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
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How many years of executive management experience do you have?

0-3	<input type="checkbox"/>	5-10	<input type="checkbox"/>	10-15	<input type="checkbox"/>	over 15	<input type="checkbox"/>
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What is your job title/position in your organisation?

CEO	<input type="checkbox"/>	Top Level Executive	<input type="checkbox"/>	Senior Vice President	<input type="checkbox"/>	Vice President	<input type="checkbox"/>	Director	<input type="checkbox"/>
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Thank you for participating in the survey and your response is very valuable to us. If you are interested in receiving a level summary of the survey, please provide your e-mail address below:

<input type="text"/>
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## Appendix C – Phase 2 Questionnaire (N222)

### Executive Development & Learning Survey

You are kindly invited to participate in this survey aimed at assessing executive learning and development in organisations. The primary audience are executives and direct reports with strategic and operational responsibility in organisations. Please allow approximately 10-15 minutes to complete the survey.

#### Part A: Questionnaire

Please circle on the scale the extent to which you agree with the following statements as they apply to your organization, where 1= strongly disagree, 4 = neither agree nor disagree, and 7 = strongly agree.

#### Section 1: Experiential Learning and Development

Questions [Taking risk, experimenting, job challenge, learning situations]		Strongly disagree      Neutral      Strongly agree						
		1	2	3	4	5	6	7
1	Executives are encouraged to take risks, venture into unknown territories, and experiment with new ideas to drive efficiencies in processes and cost reduction.							
2	Executives are encouraged to amend established organisational practices in pursuit of increased efficiency and effectiveness.							

3	Executives in learn quickly from past experiences, thus permitting growth, change, adaptation, and creative problem-solving.	1	2	3	4	5	6	7
4	Executives are given the opportunity to participate in cross-functional activities and stretch assignments such as organisational restructuring, strategic initiatives, merger integrations, acquisitions targeting, etc., to broaden their job scope and competencies.	1	2	3	4	5	6	7

## **Section 2: Structured Learning and Development**

<b>Questions</b> [Specialist skills building courses, professional association seminars and coaching]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
5	The organisation is highly supportive of executive attendance at professional society seminars, conferences, and programmes to enhance their skills and capabilities.							
6	Executives are offered coaching support to enhance their personal effectiveness, leadership skills to facilitate the achievement of organisational goals and targets.							
7	Executives are offered opportunities to develop new skills and competencies via bespoke flexible learning arrangement (including distant learning options) delivered in partnership with external providers.							

### **Section 3: Participative Learning and Development**

<b>Questions</b> [Teleconferencing, away days, and special task force assignments]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
8	Executives engage in regular “away day” programmes which serve as a forum for creating strategic ideas, generating solutions for specific organisational problems, and developing interpersonal capabilities.							
9	The organisation organises regular briefings and activities to help executives understand cross-organisational operational processes and governance structures.							
10	The organisation frequently promotes informal social activities for executives to stimulate internal networking, which helps them to forge informal relations.							

#### **Section 4: Strategic Learning and Development**

<b>Questions</b> [business environment, stakeholder, ethical and customer requirements awareness]		<b>Strongly disagree</b>		<b>Neutral</b>			<b>Strongly agree</b>	
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
11	Executives in the organisation strategise taking into account ethical, holistic, current, and future implications on the business.							
12	Executives maintain an awareness of business environment changes and their implications on the organisation.							
13	Executives maintain close links with customers in order to understand, attract, and satisfy them more effectively than competitors, often resulting in the creation of differentiated, high added-value products and services.							
14	Executives embed new initiatives and changes in the organisation by taking into account inter-functional and cross-organisational impact and effects.							

## Organisational Performance

**Based on the past 3 years' results, how do you rate your organisation's Profitability/Financial performance, compared to peers in your primary industry?**

29	Profitability / financial performance	<b>Lowest 20%</b>	<b>Next 20%</b>	<b>Middle 20%</b>	<b>Next 20%</b>	<b>Top 20%</b>
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**Based on the past 3 years' results, how do you rate your organisation's Customer Satisfaction performance, compared to peers in your primary industry?**

30	Profitability / financial performance	<b>Lowest 20%</b>	<b>Next 20%</b>	<b>Middle 20%</b>	<b>Next 20%</b>	<b>Top 20%</b>
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**Based on the past 3 years' results, how do you rate your organisation's Product/Service Innovation performance, compared to peers in your primary industry?**

31	Product/ Service Innovation performance	<b>Lowest 20%</b>	<b>Next 20%</b>	<b>Middle 20%</b>	<b>Next 20%</b>	<b>Top 20%</b>
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**Based on the past 3 years' results, how do you rate your organisation's Employee Engagement performance, compared to peers in your primary industry?**

32	Employee Engagement Performance	<b>Lowest 20%</b>	<b>Next 20%</b>	<b>Middle 20%</b>	<b>Next 20%</b>	<b>Top 20%</b>
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**Based on the past 3 years' results, how do you rate your organisation's Market Share growth, compared to peers in your primary industry?**

33	Market Share Performance	<b>Lowest 20%</b>	<b>Next 20%</b>	<b>Middle 20%</b>	<b>Next 20%</b>	<b>Top 20%</b>
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**Part B: Further details**

**About your organisation**

Please indicate the number of employees in your organisation

Less than 100	<input type="checkbox"/>	100 - 250	<input type="checkbox"/>	1,000 - 5,000	<input type="checkbox"/>	5,000 - 10,000	<input type="checkbox"/>	10,000- 50,000	<input type="checkbox"/>
50,000 - 100,000	<input type="checkbox"/>	Over 100,000	<input type="checkbox"/>						

Please indicate the approximate age of your organisation

0 – 10 years	<input type="checkbox"/>	10 – 20 years	<input type="checkbox"/>	20 – 30 years	<input type="checkbox"/>	30 – 40 years	<input type="checkbox"/>	over 50 years	<input type="checkbox"/>
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Please indicate the geographical location of your organisation

UK	<input type="checkbox"/>	US	<input type="checkbox"/>	Australasia	<input type="checkbox"/>	Africa	<input type="checkbox"/>
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**About Yourself**

(Please provide the following information about yourself)

What is your gender?

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
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How many years of executive management experience do you have?

0-5	<input type="checkbox"/>	5-10	<input type="checkbox"/>	10-15	<input type="checkbox"/>	20-15	<input type="checkbox"/>	over 25	<input type="checkbox"/>
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What is your job title/position in your organisation?

CEO	<input type="checkbox"/>	Top Level Executive	<input type="checkbox"/>	Senior Vice President	<input type="checkbox"/>	Director	<input type="checkbox"/>	Divisional Manager	<input type="checkbox"/>
Senior Management	<input type="checkbox"/>	Middle Management	<input type="checkbox"/>						

Thank you for participating in the survey and your response is very valuable to us. If you are interested in receiving a level summary of the survey, please provide your e-mail address below:

## Appendix D – Summary of original, revised and new questionnaire items

### Experiential Learning and Development

	New executive L and D item	Origination /source of item
1	Executives in our organisation are encouraged to experiment with new and novel approaches for cost savings and speedier decision making.	‘We promote risk-taking and experimentation in our working methods’ – Spicer and Sadler-Smith (2006)
2	Although our organisation has set working practices, executives can change these in pursuit of greater efficiency if required.	‘We do have set working practices, but we can change these in pursuit of greater efficiency if need be’ – Spicer and Sadler-Smith (2006)
3	Executives in our organisation are oriented toward learning from their experiences, thus permitting growth, change, adaptation, and creative problem solving.	‘We were good at learning from mistakes’ – Rickards et al. (2001)
4	My organisation provides opportunities for executives to participate in cross-functional projects and stretch assignments, such as re-organisations, strategic initiatives, mergers integrations and acquisitions targeting, to broaden their job scope and capabilities.	‘My company provides opportunities for top management team members to participate in crossfunctional projects’ – Lin and Shih (2008)

5	Executives in our organisation receive support and encouragement from other peers when presenting new ideas and initiatives.	‘People here receive support and encouragement when presenting new ideas’ – Chiva (2007)
6	In our organisation, executives are encouraged to take risks, venture into unknown territories and experiment with new ideas to drive efficiencies in processes and cost.	‘People are encouraged to take risks in this organisation’ – Chiva (2007)

### **Structured Learning and Development**

	<b>New executive L and D item</b>	<b>Origination /source of item</b>
7	Our organisation provides communication and problem-solving training and development opportunities for executives.	‘My company provides communication and problem-solving training programs for top management team members’ – Lin and Shih (2008)
8	Our organisation is highly supportive of executives’ attendance at professional society seminars, conferences and programmes to enhance their skills and capabilities.	Item developed based on ideas from Paisey et al. (2007, pp. 380-386), related to leadership development interventions.
9	Our organisation offers strong support (financially and non-financially) to executives when they pursue work and non-work related self-directed studies.	Item developed based on ideas from Paisey et al. (2007, pp. 380-386), related to leadership development interventions.

10	Executives in our organisation are offered coaching support to enhance their personal effectiveness, leadership skills and achievement of organisational goals and targets.	Item developed based on ideas from Boyles (2007, pp. 390-394), related to executive coaching.
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### **Networking-related Learning and Development**

<b>New executive L and D item</b>		<b>Origination /source of item</b>
11	Executives in our organisation are good at networking with key individuals outside the formal organizational structure and can exchange ideas for mutual benefit.	‘Team members were good at mobilizing help from outside the team’ – Rickards et al. (2001)
12	Our organisation frequently promotes informal social activities for executives to stimulate internal networking, which helps them to forge informal relations.	‘My company frequently holds informal social activities for top management team members’ – Lin and Shih (2008)
13	Executives are encouraged to interact with a wider stakeholder group – competitors, customers, suppliers, universities – to gather and disseminate information across the organisation from a centralised hub.	‘People are encouraged to interact with the environment: competitors, customers, technological institutes, universities, suppliers etc.’ – Chiva (2007)
14	Executives have the propensity of reviewing key decisions and ideas with peers to gain buy-in, support and feedback.	‘The views of staff are regularly sought on important strategic and operational decisions’ – Clarke (2005)

15	Executives in our organisation are good at learning from mistakes, and are inclined to initiate new ideas even when they have been unsuccessful in the past.	‘We tended to try out new ideas after things went wrong’ – Rickards et al. (2001)
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### **Participative Learning and Development**

	<b>New executive L and D item</b>	<b>Origination /source of item</b>
16	Executives in my organisation engage in interactive activities on a frequent basis such as conference calls, joint-problem solving, progress review of special projects, inter-functional working groups, etc.	Item developed based on ideas from Miller et al. (2009, p. 100), related to leadership development interventions.
17	Away days are a regular component of the development process for executives in our organisation and serve as a forum for generating new ideas, solving specific organisational problems and building new skills and capabilities. (New)	Item developed based on ideas from Miller et al. (2009, p. 100), related to leadership development interventions.
18	Our organisation established means or programmes to help executives to understand cross-organisational operational processes and governance arrangements.	‘My company establishes rules or programs to help top management team members understand each other’s operation processes and job duties’ – Lin and Shih (2008)

**Self-directed learning and Development**

<b>New executive L and D item</b>		<b>Origination /source of item</b>
19	Executive in our organisations tend to refer to various sources of information such as specialist books, industry and professional association magazines, and academic articles, to enhance their learning and development.	Item developed based on ideas from Miller et al. (2009, p. 100), related to e-learning.
20	Executives in our organisation are offered opportunities to develop new skills via company sponsored distance learning and e-learning programmes.	Item developed based on ideas from Miller et al. (2009, p. 100), related to e-learning.
21	Our organisation provides a wide range of computer-based learning resources (work and non-work related) aligned to the development needs of executives.	Item developed based on ideas from Miller et al. (2009, p. 100), related to e-learning, and Paisey et al. (2007, pp. 380-386).

## Strategic Learning and Development

New executive L and D item	Origination /source of item
22 Executives in our organisation think strategically, ethically and holistically, encapsulating issues of past, present and future dimensions.	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'think strategically and holistically, encapsulating issues of the past, present and the future' (1999).
23 Executives in our organisation maintain an awareness of business environment changes and their implications for the organisation.	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'maintain awareness of environmental changes and their implications' (1999).
24 Executives understand the critical success factors for satisfying stakeholder and match these with organizational competences and capabilities (Thompson and Cole 1999)	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'understand the needs and expectations of stakeholders and manage the organisation to meet those which must be prioritised' (1999).
26 Executives maintain close proximity to customers in order to understand, attract and satisfy them more effectively than competitors with differentiated, high added-value products and services.	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'Get and stay close to customers – to understand, attract and satisfy them more effectively with differentiated, high added-value products and services' (1999).
27 Executives embed new initiatives and changes into our organisations by taking account of inter-functional and cross- organisational impact and effects. (new)	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'Foster internal cross-functional and cross-business synergies through co-operation and sharing' (1999).

28	Executives have the tendency of reacting rapidly to situations or events before they degenerate into critical financial, competitive or leadership difficulties for our organisations (new)	Item developed based on Thompson and Cole's conceptualisation of strategic competencies: 'Avoid business failures by becoming and staying crisis averse' (1999).
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