

DISSERTATION

EXECUTIVE COACHING, CHANGES IN LEADERSHIP COMPETENCIES AND
LEARNING AGILITY AMONGST MICROSOFT SENIOR EXECUTIVES

Submitted by
Scott A. Trathen
School of Education

In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
Fort Collins, Colorado
Fall 2007

UMI Number: 3299787

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 3299787

Copyright 2008 by ProQuest LLC.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest LLC
789 E. Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346

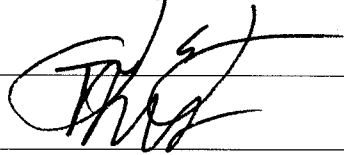
**Copyright by Scott A. Trathen 2007
All Rights Reserved**

COLORADO STATE UNIVERSITY

November 1, 2007

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY SCOTT TRATHEN ENTITLED "EXECUTIVE COACHING, CHANGES IN LEADERSHIP COMPETENCIES AND LEARNING AGILITY AMONGST MICROSOFT SENIOR EXECUTIVES" BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Committee on Graduate Work



Richard W. Feller

Adviser



Department Head/Director

ABSTRACT OF DISSERTATION

EXECUTIVE COACHING, CHANGES IN LEADERSHIP COMPETENCIES AND LEARNING AGILITY AMONST MICROSOFT SENIOR EXECUTIVES

Empirically furthering the body of knowledge regarding executive coaching, this study explored the relationships between changes in leadership competencies and learning agility amongst a sample (N=47) of Microsoft senior executives receiving executive coaching. In doing so this research sought to identify the validity of utilizing learning agility scores as a surrogate measure of an executive's readiness for executive coaching. The executive coaches assessed the learning agility of the senior executives using CHOICES® Architect. The senior executives were found to be learning agile, and the greatest opportunity for development was related to interpersonal skills (People Agility). To measure leadership competencies, scores from a proprietary Microsoft Leadership Competency Model were utilized. Scores across the eleven competencies were measured by the executive and their manager across time (November 2005 and April 2007), from which gain scores were calculated. Both groups identified a decrease in three competencies – the largest associated with the competency Building Organizations, Teams and People. The ordinal learning agility outputs were correlated with the ordinal leadership competency gain scores using Kendall's Tau (N=14). The strongest relationship was identified between People Agility and the change in Building Organizations, Teams and People with a mean correlation value of .485. Of the 110 possible correlations, 49% were found to be greater than .30 and more than a quarter of these were .50 or greater. This demonstrated a meaningful practical significance of the association between changes in leadership competencies and learning agility among those participating in executive coaching. In the event Microsoft chooses to objectively measure the impact of executive coaching by means of improvement in leadership

competencies, learning agility provides a filter to identify with whom executive coaching is best utilized. Executives most able to maximize a return on the executive coaching investment could be identified. The question remains - is learning agility a measure of readiness useful in maximizing executive coaching interventions? Based on the literature review, this is the first study focused on empirically connecting executive coaching, changes in leadership competencies and learning agility and so a definitive answer requires more research. However, the findings are encouraging.

Scott Andrew Trathen
School of Education
Colorado State University
Fort Collins, CO 80523
Fall 2007

TABLE OF CONTENTS

LIST OF FIGURES	ix
LIST OF TABLES	xi
CHAPTER 1 : INTRODUCTION.....	1
Background and Overview	1
Study Rationale.....	4
Statement of the Research Problem	4
Research Purpose.....	5
Research Question	5
Definition of terms	5
Study Delimitations and Limitations	8
Delimitations.....	8
Assumptions and Limitations	8
Need or Significance.....	9
Researcher's Perspective.....	11
Summary of Data Analysis.....	12
Organization of the Remaining Chapters.....	12
CHAPTER 2 : REVIEW OF LITERATURE	14
Introduction	14
Overview of Existing Body of Knowledge	14
The History of Executive Coaching.....	16
Executive Coaching Defined	17
The Value Proposition of Executive Coaching	20
The Executive Coaching Relationship	20
The Foci of Executive Coaching Interventions	21
Executive Coaching Models.....	24
Theoretical Foundations Used in Executive Coaching	25
Types of Executive Coaching.....	26
Career/Life Coaching	27
Strategy Coaching	28
Defining Strategy and Strategy Formulation.....	29
Strategic Management Theories	30
Strategic Management Models	32

Strategy and Organizational Structure	36
The Relationship of Leadership and Strategy.....	37
Coaching for Organizational Change.....	39
Change and Change Management.....	40
Types of Change	41
Change Management Models	43
Roles Required in the Change Management Process.....	47
Coaching for Leadership Development.....	48
Leadership Theory and Types.....	48
Leadership Styles and Development	49
Coaching Executive Leaders/Behavioral Coaching.....	52
Leadership Competency.....	55
Learning Agility.....	57
Synthesis.....	59
CHAPTER 3 : METHOD	61
Research Problem	61
Research Purpose.....	61
Research Question	62
Benefits of Research	62
Research Diagram.....	62
Variables to be Studied	63
Participants and Site.....	65
Consent Process	69
Maintenance of Research Records.....	69
Measures.....	70
Microsoft Leadership Competency Model.....	70
Measurement Validity	73
CHOICES ARCHITECT®.....	73
Measurement Validity	76
Validity and Reliability of Research.....	77
Limitations.....	78
Data Collection Procedure.....	79
Data Analysis.....	84
Summary	85

CHAPTER 4 : RESULTS	86
Purpose of Research.....	86
Research Question	86
Brief Summary of Research Study	86
Results of Analysis	87
Descriptive Statistics – CHOICES ARCHITECT®	87
Descriptive Statistics – Microsoft Leadership Competencies	90
Leadership Competencies as Measured by Participants’ Managers	94
Identifying the Appropriate Correlational Approach.....	98
Correlating the Data.....	101
Overall CHOICES® Scores and Participants Gain Scores	101
Overall CHOICES® Scores and Managers Gain Scores	104
Comparing Overall CHOICES® Scores with Participants and Managers Gain Scores ..	106
CHOICES® Factor 1 Scores and Participants Gain Scores	107
CHOICES® Factor 1 Scores and Managers Gain Scores	108
Comparing CHOICES® Factor 1 Scores with Participants and Managers Gain Scores ..	109
CHOICES® Factor 2 Scores and Participants Gain Scores	110
CHOICES® Factor 2 Scores and Managers Gain Scores	111
Comparing CHOICES® Factor 2 Scores with Participants and Managers Gain Scores ..	112
CHOICES® Factor 3 Scores and Participants Gain Scores	113
CHOICES® Factor 3 Scores and Managers Gain Scores	114
Comparing CHOICES® Factor 3 Scores with Participants and Managers Gain Scores ..	115
CHOICES® Factor 4 Scores and Participants Gain Scores	116
CHOICES® Factor 4 Scores and Managers Gain Scores	117
Comparing CHOICES® Factor 4 Scores with Participants and Managers Gain Scores ..	118
All CHOICES® Scores and Participants Gain Scores	119
All CHOICES® Scores and Managers Gain Scores	121
Summary	122
CHAPTER 5 : DISCUSSION	123
Review of Results	124
Leadership Competencies by Participants.....	124
Leadership Competencies by Managers.....	125
Learning Agility.....	126
Comparing Leadership Competencies and Learning Agility	126

Significance of Findings	133
Implications (For Theory and for Practice).....	135
Recommendations for Future Research	138
Conclusion.....	140
REFERENCES	141
APPENDIX A : LOMINGER LETTER OF CONSENT	152
APPENDIX B : COVER SHEET.....	153
APPENDIX C : EXECUTIVE COACH INSTRUCTIONS FOR RESEARCH	154

LIST OF FIGURES

Figure 1. Burke-Litwin Model of Individual and Organizational Performance	46
Figure 2. Research Design Diagram	63
Figure 4. Summarized Frequencies of Gain Scores of Leadership Competencies, by Managers.	98
Figure 5. Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, by Participants	103
Figure 6. Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, by Managers	105
Figure 6. Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers.....	106
Figure 7. Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, by Participants	107
Figure 8. Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, by Managers	108
Figure 9. Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers.....	109
Figure 10. Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, by Participants	110
Figure 11. Chart Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, by Managers	111
Figure 12. Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers.....	112
Figure 13. Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, by Participants	113
Figure 14. Chart Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, by Managers	114
Figure 15. Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers.....	115

Figure 16. Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competency Measures, by Participants	116
Figure 17. Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competency Measures, by Managers	117
Figure 18. Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competencies, Comparing Participants and Managers	118
Figure 19. Correlations (Kendall Tau) between CHOICES® Scores and Changes in Microsoft Leadership Competency Measures, by Participants	120
Figure 20. Correlations (Kendall Tau) between CHOICES® Scores and Changes in Microsoft Leadership Competency Measures, by Managers	120
Figure 21. Mean Correlation Values (Kendall Tau) between CHOICES® Learning Agility Scores and Microsoft Leadership Competencies	132

LIST OF TABLES

Table 1. Focus of Executive Coaching Interventions.....	24
Table 2. Goldsmith's Eight Steps in Behavioral Coaching.....	54
Table 3. The Leadership Competencies Composing the Microsoft Model	71
Table 4. Microsoft's Leadership Competency Model Scoring System.....	72
Table 5. Example of Proficiency Level Descriptive Narratives for Executive Maturity.....	72
Table 6. CHOICES® Four Learning Agility Factors Defined.....	74
Table 7. CHOICES® Contributing Dimensions to Four Learning Agility Factors	75
Table 8. CHOICES® Item Scoring	76
Table 9. CHOICES® Assessment Distribution and Attrition.....	83
Table 10. Measures of Central Tendency and Variability for CHOICES® Scores	89
Table 11. CHOICES® Mean Scores with Interpretation Guidance.....	89
Table 12. Measures of Central Tendencies and Variability for Microsoft Leadership Competencies as Measured by the Participants	91
Table 13. Measures of Central Tendencies and Variability for Microsoft Leadership Competencies Gain Scores as Measured by the Participants.....	92
Table 14. Measures of Central Tendencies and Variability for Microsoft Leadership Competencies as Measured by the Participants' Managers	95
Table 15. Central Tendencies and Variability for Microsoft Leadership Competencies Gain Scores as Measured by the Participants' Managers.....	97
Table 16. Interpretation of Correlation Coefficient.....	100
Table 17. Kendall Tau Coefficients of Correlation for CHOICES Overall Scores with Changes in Microsoft Leadership Competency Scores as Measured by the Participants	102
Table 18. Kendall Tau Coefficients of Correlation for CHOICES® Overall Scores with Changes in Microsoft Leadership Competency Scores as Measured by the Managers.....	104

Table 19. Interpretation of Correlation Coefficient.....	127
Table 20. Select Associations Across Measuring Party and Leadership Competency.....	129
Table 21. Mean Correlation Values and Interpretation by Measuring Party and Leadership Competency.....	131
Table 22. Aggregated Mean Correlation and Interpretation by Leadership Competency.....	133

CHAPTER 1 : INTRODUCTION

Background and Overview

Organizations need to respond to a myriad of external factors such as global warming, decreasing availability of natural resources, threat of terrorism, pandemic disease, political instability and war, in addition to global market demands in order to preserve their existence. Aside from reacting to external factors, internal factors such as fluid organizational dynamics, aging and illegal workforce populations, leveraging and protecting intellectual capital and managing employee contributions in an increasingly complex world combine to challenge the current state of any organization.

The aforementioned forces complicate the management of organizations, thus encouraging the evolution of management such that change management is no longer limited to the domain of the Human Resources professionals. Astute leadership identifies change as a given in the equation of organizational success, lest their static organization fade into the history books. Such recognition precipitates the willingness and capability to understand the science and art of change management, in order to capitalize on opportunities presented by internal and external factors. Learning how to proactively facilitate meaningful and appropriate levels of change, and the role of leadership therein, is the demarcation point for insightful leaders and the chasm separating “good from great” organizations (Collins, 2001). Successful executive coaches have positioned themselves as capable of fostering growth and development in organizational leadership to be better equipped to lead and embrace change in themselves and their organizations.

A survey conducted by McKinsey (2006) of global executives found 85% identified the business environment as more competitive than five years ago, primarily due to improved

capabilities of competitors – specifically better knowledge or talent. Accordingly, McKinsey (Davis & Stephenson, 2006) identified the emerging need for talent strategies to be as vital as sourcing and manufacturing strategies, to account for the changing economies of knowledge as two of their top ten global macro-economic trends. Combined with the results from the 2005 Bain Management Tool Survey (Rigby & Bilodeau, 2005), wherein 86% of the respondents support the concept that “innovation is more important than cost reduction for long-term success” and it is clear that organizations are feeling the pressure of intensified global competition, both for customers and employees.

The pressure is increasing to develop innovative approaches for gaining and sustaining a competitive advantage during a period in which change is intensifying. These challenges heighten the importance of an organization’s corporate and competitive strategies, as well as the role of leadership in determining how they are developed and the resultant outcomes. Paradoxically, 85% of organizational management spends one hour or less each month discussing strategy and 92% lack reporting on strategic leading indicators (Kaplan & Norton, 2001).

In 2005, The Center for Creative Leadership published a report on how leadership is evolving, considering the views of executives globally (Martin, 2005). The report finds that the demands on leadership are trending towards higher complexity, and when leadership is considered on the aggregate across the organization, “less than half of the respondents believe the expected outcomes of leadership are being met effectively (p. 3).” A key concept the report introduces is “collective leadership” and the responses indicate forward-looking leadership requirements to be “participative management, building and mending relationships, and change management (p. 3)” whereas in the past they were more technically orientated.

In the October 2007 edition of the Harvard Business Review, authors Noel Tichy and Warren Bennis combined on an article entitled, *Making Judgment Calls: the ultimate act of leadership*. Therein they offer judgment as a three stage process (preparation, making the call, execution) which is evolving to include “emotion and human drama”. The authors all suggest four types of knowledge used in guiding judgment (self, social network, organizational, contextual) – the common theme across the knowledge types is the manner in which an executive learns, listens, and coaches employees for results.

Executive coaching is seen both as an investment in organizational talent and a means to mitigate the risks to an organization evolving in the marketplace. Executive coaching is a burgeoning cottage industry, with relatively recent estimates suggesting that between twenty-five and fifty percent of Fortune 500 organizations are using executive coaches resulting in estimates of U.S. corporations spending one billion dollars annually on executive coaching (Palmer, 2003; Sherman & Freas, 2004). Even more recent estimates about the total global coaching marketplace were provided in a 2006 PriceWaterhouseCoopers (PWC) study commissioned by the International Coaching Federation, wherein estimates suggest market sizing at one-and-a-half billion dollars annually. This market size is due in part to the costly nature of executive coaching – with an average instance costing twenty-thousand dollars or more - combined with survey results (N=235) indicating 57 percent of the global respondents are using external coaching at an increasing rate (Farr Associates, 2003; Morgan, Harkins & Goldsmith, 2004). Analysis from the same survey projects an average annual growth rate of 27 percent for external providers of executive coaching.

This market demand is due in large part to indications that coaching produces tremendous return on investment, with 545% and 689% cited, the later and most recent from the esteemed

firm of Booz, Allen & Hamilton (Parker-Wilkins, 2006; McGovern, Lindemann, Vergara, Murphy, Barker & Warrenfeltz, 2001). This coincides with assertions made by Morgan, et al. (2004), citing claims of one hundred-to-one returns on executive coaching, given what they have coined as “disproportionate influence exerted by executives” (p.250) whereby a small increase in the effectiveness of an executive can translate into significant bottom-line impacts for an organization’s balance sheet. The market dynamics, changing views of leadership, and positively viewed impacts of executive coaching are creating an environment wherein a trend is emerging to increase executive coaching investments at lower levels of an organization (Morgan, et al., 2004). Yet, a Personal Decisions Incorporation study is cited by Saling (2005) wherein only 10% of organizations measure effectiveness of executive coaching.

Study Rationale

Executive coaching is increasingly used as a means of developing leaders in Fortune 500 organizations without regard to the quantifying the impacts or outcomes. Given this lack of focus, and a consistent lack of measurement of executive coaching, a case can readily be made for determining an executive’s level of readiness for executive coaching prior to making a sizeable investment in the future of the individual and organization.

Statement of the Research Problem

Fortune 500 organizations are becoming increasingly reliant upon external providers of executive coaching for the purpose of developing their leaders. The foundational elements of this service are still emerging, and although references to significant returns are available, the service is relatively costly. It follows then that organizations should demonstrate jurisprudence in providing executive coaching to those executives that are best suited to capitalize on the

investment. Yet, little mention of the concept of an executive's readiness for executive coaching is available.

Research Purpose

The purpose of this research effort is to further the empirical body of knowledge regarding executive coaching through the exploration of the relationships between measured changes in leadership competencies and learning agility amongst a select group of executives participating in executive coaching at Microsoft. The resulting data may provide a vehicle whereby the use of standardized measures to demonstrate progress and impact of executive is considered more readily.

Research Question

How is learning agility related to changes in leadership competencies in a group of senior executives participating in executive coaching?

Definition of terms

Executive coaching:

Executive coaching is an experiential, individualized, leadership development process that builds a leader's capability to achieve short and long-term organizational goals. It is conducted through one-on-one interactions, driven by data from multiple perspectives, and based on mutual trust and respect. The organization, an executive, and the executive coach work in partnership to achieve maximum learning and impact. (Ennis, Stern, Yahanda, Vitti, Otto, Hodgetts, 2003, p.20)

Career Coaching:

Direct individually focused interpretations of self-appraisal information, career planning activities, and decision-making strategies. Modeling and exposing clients to individuals who have attained success in career decision making and who are successfully engaged in their work and lives are important components of successful career development. (Richard, 2004, p.37, cited in Feller, Russell and Whichard, 2005)

Life Coaching:

“Life coaches assist people to discover what they want in life and unlock their own brilliance to achieve it. Life coaching is about people generating their own answers, not looking outside of themselves for solutions” (Ellis, 1998, cited in Williams & Davis, 2002, p. 1).

Strategy Coaching:

Executive coaches specializing in strategy coaching are typically “hired to be trusted partner of the CEO during the strategy building and deployment process” (Morgan, et al., 2004, p. 190). Such an executive coach is expected to bring experience and outside perspective to the strategy development process (Morgan, et al., 2004).

Strategy:

- a) “making trade-offs in competing” (Porter, 1996, p. 70)
- b) “the match an organization makes between its internal resources and skill, and the opportunities and risks created by its external environment”
(Grant 1991, cited in Halawi, McCarthy & Aronson, 2006, p. 389)

Organizational Change Coaching:

“The object of organizational coaching is to enable people first to see new possibilities for action, especially in terms of how they work and how they work together, and then to initiate conversations that generate aligning” (Addelson, Brumburgh and Chawla, 2005, p.34).

Change:

“To undergo transformation, transition or substitution.”
Merriam-Webster Dictionary (1993)

Coaching for Leadership Development:

“Instill a capability in the leader or leadership team to bring the organization to another level of effectiveness” (Morgan, et al., 2004, p. 30).

Behavioral Coaching:

“Help successful leaders achieve a positive change in behavior: for themselves, their people and their teams” (Morgan, et al., 2004, p. 56).

Emotional intelligence:

“The ability to manage ourselves and our relationships effectively – consisting of four fundamental capabilities: self-awareness, self-management, social awareness, and social skill” (Goleman, 2000, p.80).

Leadership Competency:

- a) “The product of numerous challenging job assignments, exposure to other people, mistakes, setbacks and training experiences” (Spreitzer, McCall & Mahoney, 1997, p. 6).
- b) A competency is any demonstrated characteristic or behavior of a person that differentiates outstanding performance from more typical performance in a given job, role, organization, or culture. (Proprietary Microsoft Publication)

Learning agility:

“The willingness and ability to learn new competencies in order to perform under first-time, tough or different conditions” (Lombardo & Eichinger, 2000, p. 4).

Microsoft’s High Potential Program:

The Microsoft Corporate Bench Program is a centrally-managed, corporate-wide suite of professional development experiences for a select number of Microsoft employees. The programs are focused on expanding and enriching business acumen, management skills, and leadership competencies among identified employees to ensure that Microsoft continues to be a technology industry leader. During the annual performance review process, Microsoft corporate vice presidents select a small subset of people who have the potential for, and strong interest in, making significant contributions as leaders at Microsoft. These individuals are invited to participate in one of several focused professional development experiences, known as high-potential development programs. (Proprietary Microsoft Publication)

Participant:

Microsoft senior executive involved in the high potential program

Study Delimitations and Limitations

Delimitations

This research study is limited to executive coaching, as opposed to the broader field of coaching. The study is designed to focus on a select subset of the senior executive population with Microsoft. This subset is a cohort participating in a succession planning program targeting high potentials, which includes executive coaching. The executive coaches were selected by Microsoft, over half of which have a PhD.

Assumptions and Limitations

Given the difficult nature of accessing a sample of Fortune 500 senior executives that are involved in executive coaching for research purposes, the convenience sample used in this research restrict the ability for findings to generalized beyond the sample with prudence.

As executives in this sample are concurrently engaged in a high potential program, a myriad of extraneous variables could contribute to misleading findings. Since these executives are competing for a finite number of future promotions, their self-assessment on the Microsoft Leadership Competency Model could be biased. In the same vein, the assessment by their managers might also introduce an element of bias into the study – as they are positioning their direct reports to be promoted and thus reap the associated recognition. It is assumed that both the participants and managers were truthful in their assessment of their capabilities, and thus these measures were valid. Also, it is assumed that manager scores were provided by the same person across the span of time. As this study involves archival data, it is assumed the researcher was provided valid data, and it appropriately corresponds to participants in this study.

It is assumed that the executive coaches recruited for this study were truthful in their assessment of the learning agility of the participants, and thus these measures were valid. It is also assumed that the coaches were able to understand the learning agility instrument and were able to

accurately score the executives on the items therein, based on their coaching interventions. Additionally, it is a limitation of this study that only one learning agility score per participant was obtained. It is assumed that the executive coaching interventions that preceded the learning agility assessment positively impacted the participants learning agility. As a majority of the executive coaching is provided by six unaffiliated external providers, one limitation of the study is the possibility of inconsistency in the delivery of these interventions, including approach and quality. It is assumed that all of the executive coaches in this study were providing a specialized form of executive coaching – behavioral coaching.

Need or Significance

Of the available scholarly publications, the focus continues to be on the qualitative aspects of the executive coaching process and is primarily anecdotal and case studies (Crane, 2001; Goldsmith, Lyons, & Freas, 2000; Kilburg, 2000; Dotlich & Cairo, 1999; Hudson, 1999; Leonard, 1999). There exist only a handful of studies intended to empirically demonstrate the efficacy of executive coaching (Collins & Holton, 2004; Douglas & Morley, 2000; Kilburg, 2000). Dr Anthony Grant of the Coaching Psychology Unit at the University of Sydney, Australia suggests “in general the quality of the research is extremely poor” (Sherman & Freas, 2004). Others support this view of the research, Wasylyshyn (2003) identifies a lack of outcome oriented research. On the whole, the process related guidance for executive coaching practitioners is still emerging and a lack of little empirical data exists supporting their efficacy (Blattner, 2005; Kilburg, 2004; Kokesch & Anderson, 2001; Sherman & Freas, 2004; Wasylyshyn, 2003). Kokesch and Anderson (2001) provide the following observation, “Although there has been increased attention in the literature, there is surprising little empirical research on the efficacy of executive coaching. Only seven empirical studies have been reported (p. 39).” For

these reasons, the body of knowledge regarding executive is in dire need of further empirical contributions.

Of the five major types of executive coaching, behavioral coaching is the most widely practiced (Morgan, et al, 2005). Perhaps this is because coaching senior executives nearly always involves addressing interpersonal challenges, as persons in these positions have advanced technical skills associated with senior functional roles (Goldsmith, 2007). In a book co-edited by Goldsmith (Goldsmith & Lyons, 2006), a concept of Situational Leadership is presented; this concept suggests that executive coaches match their approach in coaching to the executive's readiness – "ability and willingness" (p.26).

The Center for Creative Leadership (CCL) has shown that some executives stall in their ability to apply experiential learnings in new situations, and as such are at risk for derailing; in contrast, successful executives actively utilize numerous and varied learning strategies (Lombardo & Eichinger, 2003). These same authors developed a tool to assess learning agility, CHOICES® Architect, and it is proposed that the instrument measures, "non-cognitive personal adaptability" (Eichinger & Lombardo, 2000, p. 13), and the scores are said to be more closely related to promotability and performance than are IQ or personality measures.

When viewed through this lens, there exists an untapped opportunity for the field of executive coaching to address a key gap. Screening executives with a learning agility filter may well yield executives that are more capable of making meaningful behavioral changes based on the executive coaching intervention. In the case of an executive with a developmental opportunity, a plan can be constructed addressing the appropriate vector of learning agility in question as an identified foci of the intervention.

Depending upon the outcome of the research, Microsoft may choose to integrate learning agility concepts into future executive coaching interventions and thus provide benefit to the participants and future participants of similar programs. Additionally, Microsoft may choose to integrate learning agility concepts and measures into the overall measurement system for executives for the purpose of targeting succession planning efforts or broaden the leadership development efforts throughout the company.

Researcher's Perspective

It should be noted that the researcher possesses a distinct bias regarding the research, hence the investment of time, energy and passion therein. Executive coaching is undergoing an evolution, and the researcher desires to increase the rate of change within the field such that either standards of delivery or standards of outcome measures can be widely utilized in demonstrating the inherent value proposition provided by executive coaching.

This bias has roots in previous research on executive coaching outcomes, that was in large part initiated by the researcher while serving as an intern at CCL. This passion continues as the researcher is an on-going participant in Microsoft's attempts to standardize executive coaching approaches used in delivery with Microsoft executives.

While the researcher maintains a belief that the use of learning agility measures, and the associated framework for development, provided by Lominger has merit in assessing and developing executives through executive coaching, this empirical study utilizes statistical methods to calculate the probability of a relationship between changes in leadership competencies and learning agility. As such, these biases do not impact the determination of any existent relationships.

Summary of Data Analysis

This research design is interested in leadership competency as one variable of interest. Specifically, the variable of interest is changes in leadership competency in a group of executives engaged in executive coaching. This will be calculated by comparing a baseline leadership competency measure against an incremental leadership competency measure. The instrument for determining these measures is a proprietary instrument designed and validated by Microsoft itself and the data set is archival. The second variable of interest in this research study is learning agility; scores on a validated instrument measuring learning agility constructs will be utilized. In attempt to answer the research question, longitudinal changes in leadership competency scores will be compared with learning agility scores to explore the resultant relationships. As Microsoft is able to provide archival data on leadership competencies from the executives themselves and their direct manager, the research design will explore the relationships between the scores for the purposes of gaining deeper empirical insight into the identified research question.

Organization of the Remaining Chapters

Chapter 2 provides an overview of the literature on executive coaching. Included is a brief history and definition of executive coaching, the identified value proposition, overview of the executive coaching relationship, foci, theoretical underpinnings and approaches used in the delivery of this service. Additionally, as executive coaching is multi-disciplinary in nature, an overview of the concepts of career/life coaching, strategy coaching, coaching for organizational change and leadership development and behavioral coaching is offered. The chapter also discusses the emerging concept of learning agility and draws a connection to executive coaching

– the same is done with the concept of leadership competency. A brief synthesis and summary close the chapter.

Chapter 3 outlines the methodology utilized to answer the research question. The research question and purpose and research design are offered herein. The variables of interest are discussed - as are the participants, and the measures used in the study inclusive of their reliability and validity and that of the research study. Limitations of the research are also provided. The data collection procedure is detailed, and the data analysis approach is previewed prior to summarizing the chapter.

Chapter 4 provides an overview of the techniques used to analyze the study accompanying the results of the data analysis. This includes appropriate descriptive statistics, and correlational outcomes. Liberal use of tables and graphs are utilized to aid in presenting the results.

Chapter 5 summarizes the study and interprets the results and implications. Meaningful conclusions and practical significance are discussed, and recommendations for future research are offered.

CHAPTER 2 : REVIEW OF LITERATURE

Introduction

This chapter is provided for the purpose of summarizing the available and relevant literature on executive coaching. By doing so, a contextual framework is provided that identifies opportunities to advance the body of knowledge. This framework is inter-disciplinary in nature, as executive coaching by its nature is inter-disciplinary. The researcher suggests the review identifies an opportunity to advance the body of knowledge, forming the foundation for the development of a theory. The purpose of this research is to test the practical significance of the theory.

The review defines executive coaching, describes the executive coaching relationship and foci of the interventions, and theoretical underpinnings of executive coaching in the current state. Five major types of executive coaching are identified (career/life coaching, strategy coaching, coaching for organizational change, coaching for leadership development, and coaching leaders/behavioral coaching) (Morgan, et al., 2004), and the complex constructs comprising each are reviewed for the purpose of providing greater insight into a holistic view of executive coaching. Additionally, the review introduces the novel concept of learning agility, and its relation to executive coaching. The review concludes with a synthesis, wherein the theory grounding this research is proposed.

Overview of Existing Body of Knowledge

In reviewing the body of knowledge, vis-à-vis the available literature on executive coaching, 419 papers were found to be published between 1955 – 2005, excluding books and non-scholarly journals or publications; of these, 344 papers were published since 1996 (Grant, 2005). The researcher conducted a search of various data sources, through electronic access

provided by Colorado State University's Morgan Library on September 17, 2007, to gain the most recent insight into the amount of works published with "Executive Coaching" in the title.

A search of the PsychInfo Database returned 116 results, all were published between 1996 and 2007. PsychInfo is provided by the American Psychological Association (APA) and indexes 2.3 million citations including dissertations (from Dissertation Abstracts International), books, book chapters, and scholarly journal articles. The database includes more than 2,100 journals from 1887 to the present. The same search of Business Source Premier returned 87 results, spanning 1994 to 2007. Business Source Premier offers a full-text search of over 2,300 journals.

The same search terms were used in a search of the ProQuest database comprised of dissertations and theses, and 34 results were returned over the period 2000 – 2007. These findings are confirmed by work presented in a dissertation by Marlanda English (2006); she concluded that there is significantly more non-scholarly work than scholarly work published on executive coaching, by a factor of two.

Of the scholarly work, the focus continues to be on the qualitative aspects of the executive coaching process and is primarily anecdotal and case studies (Crane, 2001; Dotlich & Cairo, 1999; Goldsmith, Lyons, & Freas, 2000; Hudson, 1999; Kilburg, 2000; Leonard, 1999). There exist only a handful of studies intended to empirically demonstrate the efficacy of executive coaching (Collins & Holton, 2004; Douglas & Morley, 2000; Kilburg, 2000). For these reasons, the body of knowledge regarding executive is in dire need of further empirical contributions.

As approximately 80% of the articles on executive coaching have been published in the past ten years, one could readily conclude such an increase in focus and effort on this topic

should yield greater insight. However Grant suggests “in general the quality of the research is extremely poor” (Sherman & Freas, 2004) and others support his view; Wasylyshyn (2003) identifies a lack of outcome oriented research. One of the more prolific authors on the subject of executive coaching, Kilburg (2004), asserts a significant lack of literary focus on the subject and yet another article highlights a lack of conclusive research highlighting efficacy of executive coaching (Blattner, 2005). Recent research indicates as few as ten empirical studies have been published, with mixed results (Saling, 2005). Saling describes these studies and concludes only eight “measured effectiveness by examining changed leadership behavior (p. 4)” of which only one demonstrated a statistically significant impact.

Grant (2007) has more recently portrayed coaching research in an infancy stage, “there is an emerging body of empirical support for the effectiveness of workplace and life coaching” and by doing so expands the scope of his observations beyond executive coaching.

The History of Executive Coaching

Anecdotally, the term coach refers to being transported in a horse drawn vehicle arising in the 1500s (Evered & Selman, 1989). The initial use of the terminology “executive coaching” and the delivery of such interventions to executives is a bit clouded. Tobias (1996) suggests executive coaching was first referenced in 1985. While Peterson (1996) states that Personal Decisions Incorporated offered executive coaching to clients as early as 1981. Regardless of the actual date of inception, executive coaching as an offering in its own right emerged over the past twenty years (Kilburg, 2000).

The first global association dedicated to coaching, the International Coaching Federation (ICF), was established in 1992 (Williams & Davis, 2002). ICF reported membership of 2,122 North American based members in 1999, with a 500% growth rate to over 12,000 members globally in 2007 based on information provided on their website. It is important to note that this

association and others like it are solely focused on executive coaching, and rather support an expanded definition of coaching to include life coaches. Typically a majority of the membership of these associations is life coaches, and these associations provide fertile ground for the myriad of unaccredited coaching education programs that have arisen to fulfill market demand.

Executive Coaching Defined

One of the aspects contributing to the quality of research is the lack of a single, standard and universally accepted definition of executive coaching. As the foundation for this paper, it makes sense to assemble a working definition for executive coaching.

Consensus exists regarding the primary purpose of executive coaching, across a majority of the published works comprising the body of literature, and that is to improve an executive's performance on the job (Anderson, 2001; Collins, 2001; Dotlich & Cairo, 1999; Edelstein & Armstrong, 1993; Jay, 2003; Kilburg, 1996, 2000; Levinson, 1996; Tobias, 1996; Wasylyshyn, 2003; Witherspoon & White, 1997).

Elements of most definitions found in the literature include the following: one-on-one relationship between coach and executive focused on helping the executive develop skills aligned with increasing their business performance and leadership capabilities (Stern, 2004; Ludeman & Erlandson, 2004; Richard, 2003; Hart, Blattner & Leipsic, 2001). Kilburg (2004) suggests three additional elements: the executive coach provides feedback on behavior, possesses business and organizational development knowledge in addition to psychological skills, and executive coaching outcomes should be measurable and sustained behavioral change.

To add clarity, a comprehensive definition of executive coaching from The Executive Coaching Handbook follows.

Executive coaching is an experiential, individualized, leadership development process that builds a leader's capability to achieve short and long-term organizational goals. It is conducted through one-on-one interactions, driven by data from multiple perspectives, and based on mutual trust and respect. The organization, an executive, and the executive coach work in partnership to achieve maximum learning and impact. (Ennis, Stern, Yahanda, Vitti, Otto, Hodgetts, 2003, p.20).

This expanded definition highlights executive coaching as a vehicle for customized leadership development training that is aligned and intended to support the executive's organizational goals and strategies. The individual customization engages executives by acknowledging and honoring their individuality (Sherman & Freas, 2004). Part of the impact of executive coaching results from meeting the executive "where they are at" and facilitating their unique needs to move forward; in doing so the value of the coaching interactions are maximized, reinforcing commitment to the process.

As there is no one widely accepted definition for executive coaching, and those presented are from an academic viewpoint, it is valuable to also consider how executives might define the intervention and thus gain insight into their expectations. The following is from an article published in BusinessWeek Magazine (Macrae, 2002):

Good executive coaching can require a therapist's tools for changing behavior, the evaluation tools of a human-resources professional, the organizational skills and project-management acumen of a consultant, a professor's knowledge of adult learning and development principles, and a sports psychologist's knowledge of the multiple connections between mind and body.

The variability in defining executive coaching is due to the unique and customized nature of the intervention. To support interventions that fit the provided definitions, an executive coach requires knowledge and skill across a vast set of interdisciplinary constructs.

In defining executive coaching in this fashion, there exist similarities and differences between this and other forms of coaching interventions. In perhaps the earliest book on coaching, Gilley and Boughton (1996), introduce the concept of performance coaching. The authors describe performance coaching as “ ‘person-centered’ management” that is delivered via a “series of one-on-one exchanges” between a manager and their respective employees (p.32). The book outlines a process for improving performance (establish performance standards, measure performance, develop and improve performance based on assessing the delta) and describes four phases of performance coaching (training, career coaching, confronting and mentoring). In providing guidance for managers to encourage and model advanced interpersonal skills, it is suggested that employees will exhibit “enhanced commitment and improved productivity” (p. iv) that translates into improved organizational performance. The authors outline an approach that is similar to that used by executive coaches.

The key difference between executive coaching as discussed in this research and performance coaching as offered by Gilley and Boughton, is the relationship between coach and participant. This research primarily focused on a relationship between an external provider of executive coaching and an executive. Performance coaching as defined by the aforementioned authors is delivered within the confines of a reporting relationship within an organization – i.e. manager to employee. A sizable (N=700) recent research (BlessingWhite, 2007) study found nearly 60 percent responded that coaching received from their manager had “slight, little or no impact.” Clearly different dynamics exist in each relationship, and as such the coaching agenda and foci might be significantly different to account for the political ramifications inherent in a direct reporting relationship.

The Value Proposition of Executive Coaching

Based on the continued and projected phenomenal growth in the executive coaching marketplace, it appears that organizations understand the value associated with executive coaching interventions. However few studies have been published citing return-on-investment measures for executive coaching, and the assumptions and calculations within are questionable from a purely financial perspective (Anderson, 2001; Patton, 2001; Peterson & Hicks, 1999; Phillips, 2003). This is due in part to the difficulty in isolating and quantifying the impacts of an intervention like executive coaching.

To this end, in 2003 the Corporate Executive Board published guidance for Fortune 500 organizations regarding executive coaching; the work referenced contributions from forty-five organizations with recognizable brands. Therein they presented the following five “imperatives” to increasing the value contribution of executive coaching: “Identifying ‘best fit’ coaches, Focusing Coaching on Business Needs, Optimizing Executive–Coach Matching, Leveraging Senior Manager Participation, and Managing Coaches to Performance Standards (p. vii).”

The Executive Coaching Relationship

As has been established, the executive enters into partnership with the executive coach to improve their performance. For an executive to empower an executive coach to participate in such an endeavor, trust is paramount and is developed initially by building rapport (Lyons, 2000). As executive coaching relationships typically last from six to twelve months, establishing this rapport early is critical to achieving a successful coaching outcome (Hall, Otazo, & Hollenbeck, 1999; Kilburg, 2000). A study (N=235) commissioned by the editors of *The Art and Practice of Leadership Coaching* was performed by Linkage and found that the executives

with greater organizational responsibilities engaged in executive coaching for a longer average duration (Morgan, et al., 2004)

For executive coaching to be successful, a collaboration must occur between the stakeholders in the process; namely the executive, the Human Resources role sponsoring coaching (representing the organization) and the executive coach (Stern, 2004). The collaboration results in the creation of a triangular relationship and is another important distinction of an executive coaching relationship (Sherman & Freas, 2004). By nature, triangular relationships impact confidentiality and generate conflict. Conflict occurs as the individual goals, desires and objectives of the executive and organization are rationalized to arrive at a common “coaching agenda” (Wasylyshyn, 2003).

This scope of work, or contract, prescribes the areas of focus for coaching interactions and identifies success criteria as those metrics that quantify the degree of impact created through the coaching relationship. It creates a roadmap for the activities, goals and discussions within the process against which progress is benchmarked. Clear establishment and buy-in from all stakeholders on this coaching contract is critical to the executive coaching process.

The additional stakeholders in the process include the executive’s peers and subordinates (Stern, 2004). Their collaboration is vital to the creation of sustained behavioral change, as the environment surrounding the executive must evolve to support and reinforce new behaviors (Lundeman & Erlanson, 2004).

The Foci of Executive Coaching Interventions

The early literature highlights a traditional view on executive coaching - a majority of the participants are either nearing or already derailed (Day, 2000; Dyer, 2002; Hagberg, 1996). Derailment is typically caused by abrasiveness, arrogance and sub-optimal interpersonal skills

(Lombardo, McCauley & Moxley, 1994; McCall & Lombardo, 1983). Executives in this position are overly reliant on their strengths in challenging situations, to the point that these overused strengths become weakness and more suitable alternatives are not considered or acted upon (Lombardo & Eichinger, 1989; McCall & Lombardo, 1983). In essence, such executives are not flexible and agile in responding to new obstacles and experiences.

More recent published articles contend executives engaged in executive coaching are typically described as high-functioning, action oriented individuals that are committed to the process of executive coaching for the purposes of improving their strengths and understanding and building on their weaknesses (Hart, et al. 2001; Ludeman & Erlandson, 2004; Ducharme 2004).

Delineating the focus of the executive coaching process can be facilitated through the use of assessments and instruments in order to accurately identify developmental opportunities (Freas, 2000). The most common reference is the utilization of a 360° feedback tool (Peterson & Millier, 2005; Quick & Macik-Frey, 2004; Stern, 2004; Wasylyshyn, 2003; Anderson, 2002). 360° tools utilize specific feedback from those that regularly interact with the executive to help give perspective on behaviors, communication styles and leadership abilities. This provides a baseline for measuring improvement throughout the course of the executive coaching. Gathering such data alerts those requested participants and stakeholders of the executive's coaching relationship, thus extending the boundaries of confidentiality. Other measurement instruments are mentioned in the literature, including: Watson-Glaser Critical Thinking Appraisal, Myers-Briggs Type Indicator, the Life Styles Inventory, the NEO PI-R, the BarOn Emotional Quotient Inventory, the Learning Styles Inventory (LSI), and the Wagner Enneagram Personality Style Scales (WEPSS) (Wasylyshyn, 2003; Anderson, 2002).

The literature does not portray an exhaustive list of assessments and instruments that could provide value in executive coaching interactions. Personality typing such as Lowry's True Colors approach provide a model that is easy to understand and can be rapidly assimilated (Miscisin, 2001). StrengthsQuest (Clifton & Anderson, 2002) offers assessment and guidance for growth and development grounded in the concept of building from an executives strengths thus emphasizing and valuing their capabilities. Oddly, little mention of the reviewed literature cited the work of Lombardo and Eichinger's Leadership Architect (2003) that provides a comprehensive suite of instruments identifying competencies, their interdependencies, and specific targeted activities for enhancement. As the field of executive coaching matures, so should the use of assessments and instruments that provide true value for the executive and the definition of the intervention.

As with any custom solution, the focus of the process varies based on the individual and the organization. Richard (2003) identifies the following areas of emphasis for executive coaches: stress management, time management, career planning, interpersonal relationship enhancement, and management style and leadership analysis. Kilburg (1996) proposes executive coaching typically centers around: increasing the client's behavior range, flexibility, and effectiveness; improving the client's social and psychological awareness and competencies; increasing the client's tolerance and range of emotional responses; and strengthening the client's hardiness and stress management skills. Executive coaching activity centers on untapped potential with a goal-focused perspective in order to create greater self-awareness that surfaces in future decision making (Hart, et al., 2001).

Wasylyshyn (2003, p.100) surveyed her executive coaching clients (n=87) on the focus of their engagements as presented in Table 1.

Table 1
Focus of Executive Coaching Interventions

56%	Personal Behavior Change Listening, Tact/Diplomacy, Collaboration, Persuasion and Influence, Harsh Self-Criticism, Timidity/Self-Confidence, Shift from Tactical to Strategic, Customer Focus, Stress Reduction, Managing Perception of “Ambition”
43%	Enhancing Leadership Effectiveness Projecting Confidence, Inspiring and Motivating Others, Assimilation into New Role, Increase in Scope
40%	Fostering Stronger Relationships Focus = Cluster of “emotional competence” factors, i.e., Self- Awareness, Self-Control, Attunement to Others, Building Relationships
17%	Personal Development Legacy, Career Management, Life Stage Transition
7%	Work-Family Integration Models for Delivery of Executive Coaching

Executive Coaching Models

The reviewed literature provides some guidance in the delivery of executive coaching in the form of models others have found successful, although again there is no data cited to confirm their efficacy. Wasylyshyn (2003) provides an eight step topology for assessing executive coaching engagements. Stern (2004) offers a structured, though vague, seven-step process. Peterson and Millier (2005) offer insight into a model via an in-depth and longitudinal case study, and Kilburg (2004) suggests eleven stages for the use of psychodynamic interpretation in executive coaching. The model proposed by The Center for Creative Leadership (McCauley, Moxley & Van Velsor, 1998) developed through nearly thirty years of research, prescribes the following five components: the relationship established between executive and executive coach;

the results produced by the relationship; and the three functions facilitated by the coach – assessment, challenge and support (ACS).

On the whole, the process related guidance for executive coaching practitioners is still emerging and a lack of little empirical data exists supporting their efficacy (Blattner, 2005; Sherman & Freas, 2004; Kilburg, 2004; Waslyshyn, 2003). The resultant variety of methods for delivering executive coaching fuels concern about standards, ethics and licensure in the field (Waslyshyn, 2003).

Theoretical Foundations Used in Executive Coaching

Ducharme (2004) authored an article on the use of cognitive-behavioral approaches to executive coaching, and therein references the myriad of different approaches to executive coaching found in the literature. Her summary identified nine theoretical approaches that stem from roots in psychology, including her advocacy for leveraging cognitive behavioral approaches specifically due to its simplicity and proven efficacy with high-performing, non-clinical populations. Such an approach stresses individual change that trickles through the organization as a result of modeling by the executive.

Another theoretical orientation meriting multiple literature citations is a counseling theory developed by Albert Ellis – Rational Emotive Behavior Therapy (REBT) (Sherin & Caiger, 2004; Anderson, 2002). In addition to REBT, Sherin and Caiger's review identifies six more theoretical approaches used in executive coaching incremental to those highlighted by Ducharme. Traditionally, REBT is used to help individuals assess their belief systems with a direct link between irrational beliefs and maladaptive and unhealthy emotional responses. REBT and its emergent corollary Rational Emotive Behavioral Coaching (REBC) are dependent upon the concept of unconditional self acceptance. Both approaches are essentially the same, with

minor modifications in semantics to account for the different usages and populations. For example, REBT addresses “irrational beliefs” while REBC advocates for alterations of “unreasonable or unrealistic expectations” (Sherin & Caiger, 2004). In either case, the theory posits an acceptance of a preferential belief system in place of an absolutist belief system as a precursor to a less emotionally damaging mental state (Ellis, 1972; cited in Sherin & Caiger, 2004).

Considering the theoretical foundations for executive coaching extend theories and approaches that were originally used, studied and tested for application in a counseling setting, there are many similarities in the methods used to deliver both services. The modification of Ellis’ REBT specifically to suit the needs of the executive coaching population (REBC) is rare. Much of the literature on this specific topic suggests the use of established counseling practices with little efficacy data on a specialized population. A few anecdotal cases studies are presented to encourage the growing use in a new field (Ducharme, 2004; Kilburg, 2004; Anderson, 2002; Foster & Lendl, 1996).

Types of Executive Coaching

Morgan, et al., (2004) suggest further clarification regarding executive coaching can be gained through the consideration of five categories: career/life coaching, strategy coaching, coaching for organizational change, coaching for leadership development, and coaching leaders. The authors suggest “behavioral coaching” is the same type of executive coaching as is “coaching leaders”. Additionally, they posit that senior executives desire subject matter expertise, and an executive coach that is a generalist is relegated to coaching individuals lower in an organization. It appears that even at this early stage in the development of executive coaching that differentiation and specialization is demanded by the target market. As these types of

executive coaching are not necessarily mutually exclusive, further exploration about each topic is merited.

Career/Life Coaching

Career and life coaching takes a holistic approach to executive coaching, and considers the implications of career development, personal growth and life experiences as explicitly in scope of a coaching intervention (Morgan, et al., 2004). Career coaching has long been considered planning for career development, and continues to be a global need (Feller, Russell and Whitchard, 2005). The article discusses global and cultural implications of career development and references Richard's (2004) work, which serves as a working definition of career coaching,

Direct individually focused interpretations of self-appraisal information, career planning activities, and decision-making strategies. Modeling and exposing clients to individuals who have attained success in career decision making and who are successfully engaged in their work and lives are important components of successful career development. (p.37)

Life coaching can be defined as by Ellis (1998, cited in Williams & Davis, 2002), "Life coaches assist people to discover what they want in life and unlock their own brilliance to achieve it. Life coaching is about people generating their own answers, not looking outside of themselves for solutions (p. 1)."

Williams and Davis (2002) suggest life coaches seek to develop authenticity in their coaching relationships, across all facets of life. They present a bulls-eye visual model as a tool for assessing levels of satisfaction across the inter-connected areas of: career/life purpose; family and friends (community); finances; romance/intimacy; health/self-care; social/fun; personal/spiritual development; and physical environment.

Unlike other forms of executive coaching focusing on interpersonal issues, this type of coaching typically focuses more on intrapersonal issues. As such, the line can easily be blurred delineating life coaching from counseling.

The literature characterizes counseling as addressing unresolved issues of the past by focusing on a presenting problem, or set of problems, that affect the client's psychological health, interpersonal relationships and behavior patterns (Bluckert, 2005; Hart, et al., 2001). Progress in addressing such issues is typically gathered via a client self-report in counseling, whereas more objective performance data is typically observed, gathered and utilized in executive coaching (Ducharme, 2004). Accordingly, there are many references to the need to refer a client to counseling in the event the primary focus shifts to an agenda traditionally considered the purview of counseling (Hart, et al., 2001; Kodish, 2002; Kilburg, 2004; Wasylyshyn, 2003; Bluckert, 2005).

Citations are readily available that underscore the similarities in the delivery of executive coaching and counseling. Building rapport and establishing trust is core to the success of the relationship, active listening, reframing, silence, empathy, homework, and the use of insightful and strategic questions are common across both (Bluckert, 2005; Ducharme, 2004; Sherin & Caiger, 2004; Kodish, 2002; Hart, et al., 2001).

Strategy Coaching

Executive coaches specializing in strategy coaching are typically "hired to be trusted partner of the CEO during the strategy building and deployment process" (Morgan, et al, 2004, p. 190). Such an executive coach is expected to bring experience and outside perspective to the strategy development process (Morgan, et al., 2004). Executive coaches delivering strategy coaching apply their specialized problem solving capabilities across both the individual and

organizational. Clearly a prerequisite for an executive coach providing this service is a firm grasp of strategy, its formulation, and the underlying theories and models.

Defining Strategy and Strategy Formulation

Much has been written for the purpose of defining strategy. Respected strategy expert, Michel Porter went so far as to commit seventeen pages in order to do so, and presented a concise definition as “making trade-offs in competing” (Porter, 1996, p. 70). This definition can be expanded utilizing Grant’s (1991, cited in Halawi, McCarthy & Aronson, 2006, p. 389) viewpoint, “the match an organization makes between its internal resources and skill, and the opportunities and risks created by its external environment.” Grant introduces the concept of organizational assets as elements for consideration in the trade-off equation aimed at achieving a compelling environmental fit.

Mintzberg (1987a) expands on both and provides a definition using alliteration – strategy is a plan, a ploy, a pattern, a position, and a perspective. Mintzberg’s last element, perspective, introduces yet another strategy component – paradigm. Pragmatically, strategy defines the organization by focusing efforts around a stated direction, thus providing consistency and stability for organizational culture (Mintzberg, 1987b). The commonality across these definitions centers around decisions made by organizations, and each presents a slightly modified sense of what elements are considered in this decision process.

An understanding of the elements considered in the decision process can be facilitated with clarity around the process for strategy formulation. The literature provides a continuum accommodating the various types of strategy formulation (Grant, 2005; Segal-Horn, 2004; Whittington, 2001). At one end is the pervasive view presented in traditional strategy texts - deliberate or planned strategy. In this case, the intended strategy (deliberate or planned) is the

same as the strategy implemented or realized. The other end of the continuum is anchored by a more recent view of strategy formation - emergent. In this case, the realized strategy differs from that of the intended strategy in that it emerges in spite of the strategic intentions.

Mintzberg and Waters (Segal-Horn, 2004) propose eight types of strategies (planned, entrepreneurial, ideological, umbrella, process, unconnected, consensus, imposed) exist along this axis with varying degrees of deliberate and emergent traits. A deliberate or planned strategy typically takes into account a more exhaustive collection of elements via traditional and rational planning approaches in attempt to mitigate implementation risks; such an approach is often associated with organizations making significant capital outlays (Whittington, 2001). Whereas a strategy that is accepted as forming in a more emergent fashion typically considers different, less tangible and less quantifiable elements in the decision process – such as organizational culture and intellectual property. This approach is more often found in emerging industries and knowledge intensive markets (Whittington, 2001). Given the impact and influence that executive coaching can have on an organization's culture, and a consideration of less tangible elements, sound executive coaching can be a critical contributor to executives and organizations successful use of emergent strategies.

Strategic Management Theories

Strategy theories have long been grounded in militaristic endeavors with most advancements occurring over the past forty years. Early focus was on attractiveness or profitability of industries as a means to determine sources of profit opportunities existent in the marketplace. This modernist and objective view leveraged knowledge from economics (supply and demand, price elasticity) and analytical financial tools (break-even analysis, sensitivity modeling, discounted cash flows) in addition to models focused on understanding the

marketplace (SWOT, Boston Consulting Group's Experience Curve and Growth-Share Matrix, Porter's Five Forces Framework) for the purposes of identifying defensible industry-specific opportunities for competitive positioning built on cost or differentiation strategies (Andrews, 1971; Hax & Majluf, 1984; Henderson, 1972; Porter, 1980; all cited in Ghemawat, 1999). As the predominant paradigm in strategy, these approaches gained momentum and enjoyed wide spread usage until Porter's underlying assumptions were called into question.

Porter's inductive framework has survived criticism questioning its analytical rigor, even though results of empirical studies attempting to validate the relationship between industry and profitability are inconclusive; at the least, industry generally offers significantly less explanation for variance in an organization's return on assets than does firm-specific drivers (Halawi, et al., 2003; McGahan & Porter, 1997; Rumelt, 1991; all cited in Grant, 2005). As a result, the utilization of game theory for strategic endeavors increased – and a paradigm shift occurred regarding deterministic factors for competitive advantage.

Grant (Segal-Horn, 2004) suggests that competitive advantage can be more readily sustained when durability, transparency, transferability and replicability are considered in conjunction with an organization's internal resources and capabilities in his resource-based theory of competitive advantage. This shift in perspective from industry as the primary driver of profitability to the leverage of organization assets for the same purpose provided an opportunity for differentiation resulting from intangible corporate assets.

This more interpretative approach to strategy increases the complexity of the construct and begins to incorporate concepts of general systems theory, and social sciences constructs such as culture, in order to identify optimum competitive positioning for an organization (Hatch, 2006). While the organizational ability to internalize the impact of this paradigm shift is

somewhat dependent on a cultural willingness to be inwardly critically reflective, and examine cultural beliefs and assumptions, it is proposed that competitive advantage is more readily gained from intangible assets than tangible assets (Barney, 1995; Hitt, Bierman, Shimizu & Kochlar, 2001, all cited in Halawi, et al., 2006). In many cases, intangible assets include the leadership of an organization, and so competitive advantage gain be gained from an investment in these executives – mostly commonly in the form of executive coaching.

Strategic Management Models

Whittington (2001) provides a framework for understanding four management models for strategy built upon their orientation on the strategy formulation continuum, and the outcome measures (singular – profit maximization and pluralistic) continuum. In doing so, general heuristic categories are created for the purposes of understanding relationships between theories, approaches, and strategic management processes to better comprehend the varying paradigms through which organizations view strategy. Within his model, four groups are proposed: Classical, Evolutionary, Processual, and Systemic and each will be explored based on Whittington's proposed framework.

Prior to exploration of these groups, it is important to “unpack” the outcome measures continuum and understand the basis provided for delineation between the groups to the same degree the strategy formulation continuum was previously discussed. At a simplistic level, the difference is clear; one end is anchored by the singular focus of maximizing profit while the other perspective considers multiple outcomes.

Kaplan and Norton (2001) emphasize such pluralistic focus in their balanced scorecard, targeting four measurements across four outcomes (financial, customer, internal business processes, and learning and growth). Empirical evidence for focusing internally on a human

capital strategy in addition to financial outcomes identifies a 5% improvement in capital efficiency (Cantrell, Benton, Laudal & Thomas, 2006). This demonstrates an empirical link between investment in leadership via executive coaching, and provides key financial outcomes.

Additional support for the pluralistic approach claims a singular focus is myopic and suggests a more holistic approach considering operational and organizational performance outcomes in addition to financial measures (Rajagoplan, et al., 1993; Hart, 1992; Venkatraman & Ramanujam, 1986; all cited in Tegarden, Sarason & Banbury, 2003). The momentum for considering multiple strategic outcomes is increasing, driven in part by emerging paradigms gain in credibility, applicability and analytical data.

The Classicalists are firmly grounded in theoretical assumptions from military history and economics, and operate on the basis that consumers exhibit traits consistent with the concept of rational economic man. As the school of thought most often associated with corporate strategy, it is the prevailing view in most strategy textbooks. Strategy is viewed almost exclusively as the responsibility of organizational leadership; it is formulated in a deliberate fashion separate from the implementation of the same and focused on achievement of a central and specific outcome (profit maximization) over the long run. This top-down approach aligns with Hart's strategic process of command reviewed by Tegarden, et al (2003), and the separate implementation phase appears to parallel Hart's rational process. Whittington characterizes the Classicalists approach as "analyze, plan and command" (2001, p.10).

Evolutionists draw upon Darwin's theory of natural selection and question strategy's impact on the ability for an organization to differentiate in a sustainable fashion due to evolving market dynamics. Instead, the focus is to achieve an ideal environmental fit in the short term that delivers a fleeting market advantage generating profit maximization opportunities. This

perspective holds that investments in long-term strategic planning are useless as it is nearly impossible to predict the market. Rather the preferred strategic formulation process involves a portfolio of initiatives such that those approaches accepted and validated by the marketplace emerge and can be exploited. By advocating an experimental approach to strategy, similarities exist with Hart's generative strategic process (Tegarden, et al., 2003). Evolutionists prefer to operate with a low cost structure, and a high degree of flexibility allowing them to capitalize quickly on market movement (Whittington, 2001).

Processualists adopt a more progressive view created collectively at the American Carnegie School in the 1960s (Whittington, 2001); grounded in the notions that rational action is limited by human cognition and organizations are comprised of a myriad of political coalitions. In this fashion, strategy is a series of political trade-offs that emerge incrementally in support of the desire to deliver just enough profitability to keep stakeholders satisfied (satisfice) as opposed to a pure profit maximization motive (Cyert & March, 1963, cited in Whittington, 2001). Strategy formulation is a continuous process of inward reflection, in attempt to understand the optimal leverage provided by the organizational resources and capabilities. Based on the explicit acknowledgements of political complexity (interpersonal desires and conflicts) and continued inward reflection for the purposes of developing strategy, organizations taking a processualist approach have much to gain from executive coaching.

Influenced by the field of psychology, this approach seeks to exploit renewable internal resources to create sustainable competitive advantage that is chartered by strategic intent (Hamel & Prahalad, 1989). This intent becomes embodied in the culture and climate of the organization that allows for significant degrees of freedom fostering the discovery of incremental strategic modifications during the normal course of business. Psychological ownership of these

discoveries emerges as they become integrated into the shared values of the organization via a series of political negotiations, creating a flexible and adaptive organization (Mossholder, Settoon, Armenakis & Harris, 2000). These integrated shared values provide organizational stability as a buffer from the chaos of dynamic markets (Mintzberg, 1987b). Such a focus on shared values incorporates some of the characteristics identifying Hart's symbolic strategic processes, however the iterative nature by which Processualists view strategy more closely aligns with Hart's transactive classification (Tegarden, et al., 2003). The Processual school of thought is represented by the approach of "staying close to the ground and going with the flow" (Whittington, 2001, p.10).

The Systemic approach promotes strategies that consider the prevalent social system in which the organization operates. Thus, Granovetter's (1985, cited in Whittington, 2001) "social embeddedness concept" fuels the view that social norms, constructs, and expectations are a primary driver of behaviors in the marketplace. As a result, strategies are determined consistent with the social fabric of the environment in which the organization operates. Accordingly, strategic motives are more varied than mere profit maximization.

This approach is globally inclusive of the differences between societal cultures, and their impact on organizational behaviors - such as societal pressures to conform. As a result, sustainable competitive advantage can be created on the basis of congruence between the organizational strategies and behaviors and the expectations of society. In this fashion, society serves as the "implicit control system" in the alignment of organizational shared values and societal values as characterized by Hart's symbolic strategy process (Tegarden, et al., 2003, p.135). "Playing by the local rules" is the summary Whittington provides for the Systemic approach (2001, p.10).

Strategy and Organizational Structure

As described, each of these paradigms views strategy through a different lens. As a result, the organizational structure utilized also differs. Traditionally, strategy has preceded structure; as is the case in Classical and Systemic paradigms. Those that view strategy as emergent (Evolutionary and Processual) leverage more of a flattened hierarchy and have a tendency to empower their organizational contributors in a bottoms-up fashion in terms of strategic innovation.

Aside from the typical structure forms (bureaucracy, vertically integrated, multinational), Mintzberg (Segal-Horn, 2004) presents a structural model ideally suited to innovate in today's knowledge intensive industries – adhocracy. This organizational structure aligns with his postmodern view that structure and strategy are reciprocal, and creates an environment for innovation predicated on intuition and passion. Such is achieved through self-organizing teams comprised of individuals with cross-functional capabilities aligning to address specific needs leveraging action learning.

Executive coaches practicing with a strategy coaching specialization typically provide a value proposition that is in part dependent upon their past experiences in the development and implantation of strategy in organizations. A prerequisite for meaningful executive coaching interventions is the ability to rapidly comprehend the organizational capabilities and the orientation of the executive towards the recent advancements in models and theories. By doing so, the executive coach is positioned as a trusted advisor to assist the executive in their development, and that of the organization, in alignment with the strategy development.

The Relationship of Leadership and Strategy

Organizations are increasingly viewing leadership as a source of competitive advantage (Day, 2000). Past theories on leadership behavior described phenomenon such as leader/follower exchange relationships, the provision of direction and support, and reinforcement behaviors (Shamir, House & Arthur, 1993). Recent advancements in the field center around leaders that are able to convincingly and credibly shift the focus of those being led from self-gratifying interests and behaviors to those benefiting the common good; concisely, an emphasis on shared values. This emergent theory advocates for charismatic leadership, and describes the ability to unleash the organizational power and potential by appealing to morality and shared values through the use of self-confidence, self-sacrifice and inspirational communication.

Shamir, et al (1993) identify three types of change precipitated by charismatic leaders – raising their followers needs to a higher Maslow state, raising followers morality level, and promoting followers capacity to place the needs of the organization ahead of their own – and identify them as “the transformational effects of charismatic leadership.” These changes can manifest themselves in organizational culture, and the flexibility and adaptability therein. Organizations that empower their individual contributors to innovate in a grassroots fashion, and value emergent strategy, need leaders able to articulate the strategic intent of the organization whilst guiding the cultural integration of the resultant incremental strategic changes. Executive coaches providing strategy coaching to charismatic leaders might find opportunity to also practice another type of executive coaching – coaching leaders/behavioral coaching – in the interventions. Professional executive coaches will apprise themselves of such evolutions in the school of thought regarding leadership, and integrate such learnings into their interventions (Grant & Cavanaugh, 2004).

Much as Burke & Litwin segregate elements of their change management model into transformational and transitional categories, leadership can be defined in a similar fashion. In fact, both authors suggest their classification is derived from leadership theory (Burke & Litwin, 1992). At a simplistic level, transactional leadership is most associated with management through the provision of role and task specific guidance combined with management by exception. On the other end of the spectrum, transformational leadership provides intellectual stimulation (creativity), individualized consideration (regard for the individual, their contribution and their development) and charismatic motivation (creating emotional capital and turning it into action) (Seltzer and Bass, 1990). Such leadership capabilities are consistent with the concept of Level 5 leadership advanced by Collins (2001), and originated in Kegan's helix (1994), as precursors to great organizational performance. In that changes in strategy are often implemented using change management approaches, recognition and alignment across all the domains is required increases probabilities of success. An executive coach can assist in providing an outside perspective on the alignment of these domains to improve the chances of success, and requires a comprehensive interdisciplinary foundation in order to do effectively.

While leadership is often viewed as traits possessed by an individual, charismatic and transformative leadership theories suggest a consideration of systems theory and the interrelatedness created by feedback loops. This is not a new concept, Salancik, Calder, Rowland, Leblebici & Conway, presented the relationship between leadership and social systems in 1975 (cited in Day, 2000). What is new is the extension of these ideas to a radical concept of shared leadership (Raelin, 2006).

Viewed in such a manner, leadership becomes a collaborative process exhibited collectively and mutually by all members in an organization (Raelin, 2006). Idealistically

interesting, it is presupposed that all members possess such key leadership determinants as emotional intelligence, warmth, and integrity (Hartman, 1999; Goleman, 1998). Additionally, a case could be made for the inclusion of programmatic executive coaching given the prerequisite of advanced emotional intelligence by the organization as a whole, and to deliver the real time leadership development that enables the success of such a strategically aligned organizational model. In the event an organization had the ability to align a real time leadership development strategy focused on providing appropriate curriculum to enable the members of the organization with self-actualized leadership capabilities, semi-autonomous and self-directed organizational structures would benefit greatly and a case for the use of emergent strategy formulation focused on multiple outcomes could readily be supported.

Coaching for Organizational Change

Addelson, Brumburgh and Chawla (2005) present the following definition of this type of executive coaching, “The object of organizational coaching is to enable people first to see new possibilities for action, especially in terms of how they work and how they work together, and then to initiate conversations that generate aligning”(p.34). To this end, a recent McKinsey Global Survey (2006) found that executives understand that odds of a successful transformation of business performance are in part tied to an ability to raise expectations and pro-actively change the behavior of their people.

Multiple works cite the relationship between an executive’s increased leadership skills and the resultant organizational impact (Gilley & Boughton, 1996; Harris, 1999; Hayes, 1997; Niemes, 2002; Orenstein, 2000; Saporito, 1996; Spear, 2004; Storey, 2003; Von Hoffman, 1999). Addressing behavioral change in executive coaching can be an antecedent for

organizational change, and so a review of the literature on the subject is incomplete without representing the concepts of change and change management.

Change and Change Management

The Merriam-Webster Dictionary (1993) provides fifteen definitions for the verb “change” - the most fitting definition for this study is “to undergo transformation, transition or substitution.” Inherent is the concept of stimuli, either external or internal, that creates the need for change. As change is extended in reference to organizations, the complexity and number of possible external and internal stimuli is dependent upon the size and scope of the system in which the organization operates and is confounded by the number of dynamic interrelated variables. Huber and Glick (1993, cited in Weick & Quinn, 1999) identify the following five sources, or stimuli, that generate the actual triggers for organizational change: the environment, performance, leadership, structure and strategy.

The need for change can be created proactively in anticipation of systemic modifications, or in reaction to the dynamic nature of interconnected systems prompted by one of the aforementioned triggers. Conceptualizing the interrelatedness of organizational stimuli requires a brief introduction of general systems theory. Introduced by Ludwig von Bertalanffy (1968, cited in Kilburg, 2004), essentially the theory posits that a system is composed of mutually interrelated elements (subsystems) all impacting each other and all dependent upon the whole. This is similar to Forrester’s (1958) concept of systems dynamics, dynamic interconnected reinforcing and balancing feedback loops. One of Forrester’s students, Peter Senge (1990), introduced a systems thinking perspective to leadership; this advancement considers an individual’s mental models and their impact on the greater organizational culture and presents a point of leverage for executive coaching interventions. The importance of systems theories to

organizations and change is the provided perspective regarding the magnitude and multidimensional impacts created by isolated changes. In other words, the theoretical equivalents of the ripple effect.

In terms of organization change, these stimuli, or change drivers, are identified by Anderson and Anderson (2001) as falling into one of the following seven categories: environmental forces; marketplace requirements; business imperatives; organizational imperatives; cultural imperatives; leadership and employee behavior; leadership and employee mindset. Aside from exploring the last two which will be addressed in more detail later, categorically defining the stimuli from an organization perspective enhances the understanding of change itself and provides an opportunity to strategically determine which are best addressed in a proactive or reactive form. Reactive response to stimuli affords less opportunity to exert influence, and so although required at times it is less preferred to measured, well-constructed and strategic actions taken proactively to exploit changing conditions. Thus the remaining focus herein will be on proactive efforts to create and implement lasting change via executive coaching, considering these drivers, and aligning with the organizational concept of change management.

Types of Change

An organization can address change in three fashions: developmental, transitional and transformational (Anderson & Anderson, 2001). Developmental change, as the simplest of the three, is an improvement of an existing state or process - essentially an efficiency gain; often this is accomplished through the use of gap analysis.

Transitional change is more complex and substitutes the pre-existing with an entirely new response. Transitional change efforts are typically implemented within a set time scale and can

be managed as project against the designed scope, budget and deliverables to achieve a stated outcome.

The most complex type of organizational change is transformational; it is a radical shift in paradigm producing a new equilibrium. Successful transformational changes are driven by a completely new organizational culture, require new norms and behaviors and result in a new mindset. As opposed to transitional changes, these are undertaken as a philosophical organizational journey to enlightenment, guided by a well-constructed vision. They are long, arduous, and like the pioneers it is difficult to know where you are at and when you will get to your destination. Such difficult journeys create opportunities for experienced executive coaches to act as guides in a manner similar to the role performed by Sacagewa for Lewis and Clark on their famous expedition to the Northwest.

Organizational change can also be typified by duration. Intermittent, discrete, intentional and infrequent change can be labeled episodic, while ongoing, emergent, constant and cumulative change is referred to as continuous (Weick & Quinn, 1999). Episodic change can be viewed as a subset of continuous change; an organization's structure, industry, leadership and cultural maturity are a few key determinants indicating an ability to exist and thrive with the associated high degree of ambiguity commonly associated with continuous change. It should be noted that successfully adopting continuous change requires the adoption of an organizational culture and philosophy that is critically self-reflective, flexible, willing to undertake managed risk, and self-regulating. Successful execution becomes the basis for the organizational strategy that values and recognizes the skill and capabilities of human capital and is lead by enlightened and aware executives.

Executive coaches utilizing the principles of emotional intelligence, can facilitate increased awareness and enlightenment within an executive that trickles down throughout an organization seeking to leverage continuous change. Each distinct type of change leverages different management models and methodologies designed to account for the variance in the complexities.

Change Management Models

In determining the comprehensiveness of a change management model, Dunphy (1996) suggests a measure against five critical properties. These properties can be paraphrased as being representative of organization, providing an analytical framework, clearly outlining the desired state, identification of the change intervention and the definition of the change agent's role. Additionally, each model can be used to varying degrees as a diagnostic tool and a prescriptive guide for planning and managing organizational change by all vested parties, including executive coaches. Understanding a model's capacity for use in this fashion is critical as most organizational change efforts fail due to lack of appropriate diagnosis grounded in real data (Harrison & Shirom, 1999).

The seminal prescriptive model was developed by Lewin (1952) and describes organizational change in three stages: unfreezing, changing and refreezing. Unfreezing describes the energy extended to overcome resistance and gain momentum. Changing can be understood as the activities supporting the intervention to create the desired state. Refreezing is the normative stabilization that occurs as the change becomes embodied in the fabric of the organizational culture.

Lewin's model is associated with his five key assumptions about change: linearity, progressive, goal, disequilibrium, and separateness. Succinctly, change entails the positive and

forward movement into a new and better state that is fostered by the need to maintain equilibrium or balance; his scientific approach to organizational change mirrors views held by physics experts. Gilley and Gilley (2003) suggest Lewin's model is best suited for change intended to provide organizational efficiency gains or episodic change efforts.

A myriad of models have extended Lewin's ideas in attempt to account for greater degrees of complexity and to represent the significance of interconnectedness. One such model is the "7-S Model" and is comprised of the following seven components: strategy, structure, systems, staff, skills, style and shared values (Peters & Waterman, 1982, cited in Kaplan & Norton, 2001). In this model, the first six components are interconnected and centered on shared values, representing the cultural guiding principles. Based on this composition, the model can be used diagnostically and to some extent prescriptively. Peters and Waterman (1982) distinguish the components into two categories hard (strategy, structure and systems) and soft (staff, skills, style and shared values) primarily to delineate the quantifiable differences amongst the variables. It is these "soft" elements that are the domain of an executive coach focusing on organizational change. While this model succeeds in depicting the interconnected nature of organizations, it lacks an explicit representation of external forces. Considering most of the literature is consistent in the messaging that external forces are the primary driver for organizational change, this is a critical limitation of the model and impacts its efficacy for organizations.

In *Strategically Integrated HRD*, Gilley and Gilley (2003) provide a change management model useful for both transforming an organization's Human Resource Department into a more strategic and valuable asset and for use more generally in organizational change initiatives. The authors reference the similarities between their model and Lewin's in the explanation of their seven phase model. This prescriptive model includes the following: communicating the urgency

for change; providing leadership for change; creating ownership and support for change; creating shared vision for change; implementing and managing change; integrating the change into the culture; and measuring and monitoring change. Executive coaching interventions can add value to each of the identified seven phases. The strength of this model is the practical procedural guidance provided, and it is presented by Gilley and Gilley (2003) in conjunction with a ten step process guide to further demystify activities vital to planning and implementing organizational change of all types.

A model born from Lewin's concepts with the express purpose of providing heightened diagnostic capabilities is the Burke-Litwin Model of Individual and Organizational Performance (Burke & Litwin, 1992). Leveraging an open systems model, and accounting for bi-directional feedback loops fostering input-throughput-output, Burke and Litwin provide a basis for gaining insight into cause amongst the variables. The authors of this model furthered the diagnostic capabilities of their model with the development of a 90-item quantitative questionnaire (Di Pofi, 2002).

The model incorporates twelve variables that are categorically defined as either transformational or transactional. The five transformational elements of the model include: external environment, organizational culture, mission and strategy, individual and organizational performance and leadership. These elements are structured around the central concept of leadership, and the model is constructed in a top-down fashion with those at the top exerting a greater influence on organizational change than those at the bottom. Based on this, the ripple effects of executive coaching for organization change are best identified in this model.

Eight elements of the model are classified as transactional, including: management practices, structure, systems (policies and procedures), work unit climate, motivation, tasks and

individual skills, individual needs and values and individual and organizational performance. While the model (depicted in Figure 1) contains twelve elements only one is purposely grouped into both categories – individual and organizational performance. Amongst the three models presented herein, the Burke-Litwin model is unique in its identification of the needs and values of individuals and their role in facilitating organizational change. It is these needs and values that offer foci for executive coaching interventions.

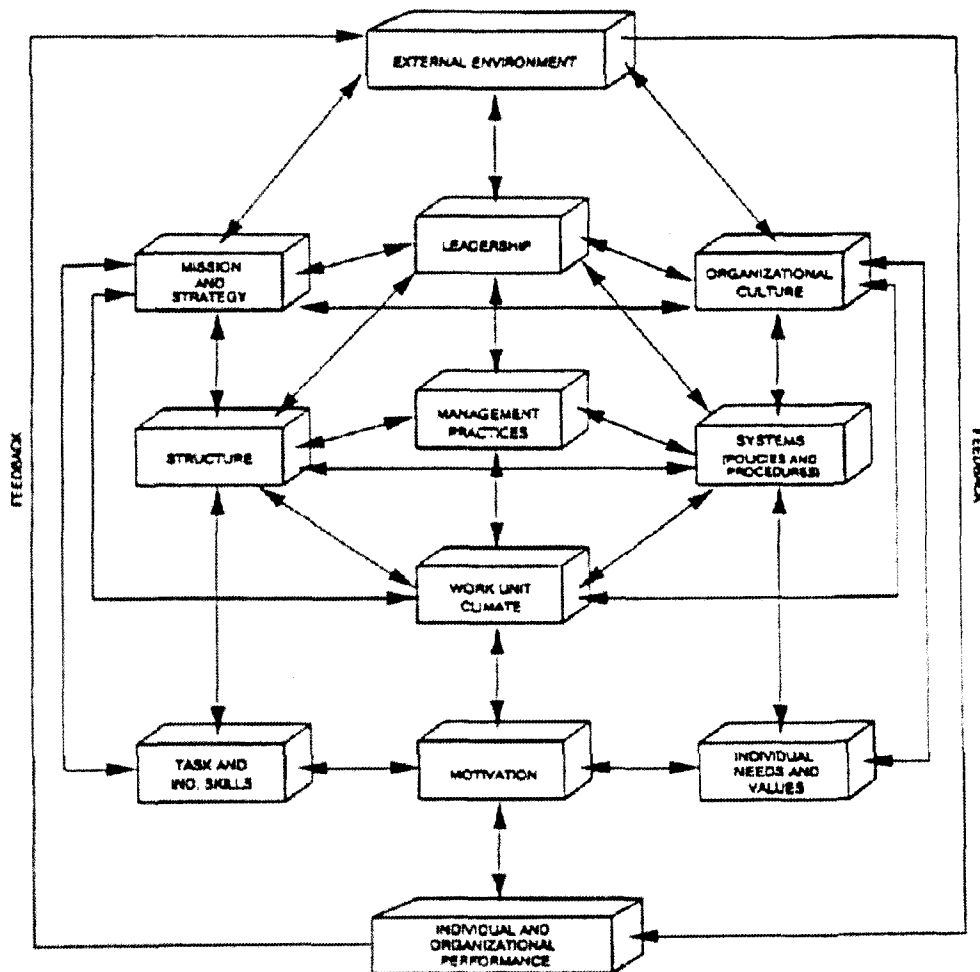


Figure 1. Burke-Litwin Model of Individual and Organizational Performance (Burke & Litwin, 1992)

Roles Required in the Change Management Process

Just as change management models account for various systemic variables and stimuli contributing to an organization's ability to change, it is prudent to consider the roles that are required in order to implement an identified change and that complement the identified process.

Gilley and Gilley (2003) offer practical and actionable advice on six key roles that contribute to transformational change, both for integration of HRD and organizational change. These roles are characterized by degree of impact, and the two that are positioned as making the greatest contribution are the leadership roles of change champion and political navigator. Both roles share responsibility for gaining support for proposed change by communicating the need for the change; essentially delineating the current state from the desired state (Katz & Kahn, 1978, cited in Burke & Litwin, 1992). They also share the leadership responsibility to create readiness for change at individual and organizational levels. Creating such readiness can be accomplished by persuasive communication, active participation and the management of external information (Armenakis, Harris & Mossholder, 1993). In doing so, the foundation for resistance to change is weakened. Executive coaches delivering coaching for organizational change invest the most time and energy with individuals serving in these roles.

In a landmark study, Coch and French (1948) identified three (3) components that contribute to resistance to change (motivation, frustration, we-feeling) and found group participation in decision-making reduces resistance. Group participation facilitates psychological ownership, or buy-in, which is a determinant in an individual's support or resistance to the organizational change effort (Dirks, Cummings & Pierce, 1996). The political landscape of the organization should be considered when identifying the key constituents and thought leaders to be solicited for participation, and doing so is the role of leadership serving as

the political navigator (Gilley & Gilley, 2003). Such decisions include the ramifications on the organizations' system of banking power, the capitalization of the accounts, and the ability of the political navigator to avoid confusing compliance with commitment on behalf of the participants (Zaleznik, 1970, cited in Zaleznik, 1977).

Coaching for organizational change involves the systematic consideration of organizational culture and shared values that are comprised of thoughts and beliefs held by individuals comprising the organization. The internal politics of an organization serve to interconnect and add complexity to change initiatives. As such, it appears that executive coaches with this specialty are engaged for longer durations, and more widely across the organization, than are executive coaches delivering other types of coaching.

Coaching for Leadership Development

Morgan, et al. (2004) suggest executive coaches with this specialty “work to instill a capability in the leader or leadership team to bring the organization to another level of effectiveness (p.30).” Executive coaching focused on leadership development requires a firm understanding of the concepts of leadership, the theories of leadership, and the multiple forms and styles leadership can take in practice. A brief review is provided to ground the reader in key concepts necessary to understand the common parlance of executive coaches specializing in leadership development.

Leadership Theory and Types

Past theories on leadership behavior described phenomenon such as leader/follower exchange relationships, the provision of direction and support, and reinforcement behaviors (Shamir, House & Arthur, 1993). Recent advancements center on leaders that are able to convincingly and credibly shift the focus of those being led from self-gratifying interests and

behaviors to those benefiting the common good. This emergent theory advocates for charismatic leadership, and describes the ability to unleash the organizational power and potential by appealing to morality and shared values through the use of self-confidence, self-sacrifice and inspirational communication. Shamir, et al., (1993) identify three types of change precipitated by charismatic leaders – raising their followers needs to a higher Maslow state, raising followers morality level, and promoting followers capacity to place the needs of the organization ahead of their own – and identify them as “the transformational effects of charismatic leadership.”

Much as Burke & Litwin (1992) segregate elements of their change management model into transformational and transactional categories, leadership can be defined in a similar fashion. In fact, both authors suggest their classification is derived from leadership theory (Burke & Litwin, 1992). At a simplistic level, transactional leadership is most associated with management through the provision of role and task specific guidance combined with management by exception (Seltzer & Bass, 1990). On the other end of the spectrum, transformational leadership provides intellectual stimulation (creativity), individualized consideration (regard for the individual, their contribution and their development) and charismatic motivation (creating emotional capital and turning it into action) (Seltzer & Bass, 1990). Just as transactional organizational change can be considered a subset of transformational organizational change, Bass (1985) proved that transactional leadership is a subset of transformational leadership.

Leadership Styles and Development

Assuming effective and desirable leadership traits and behaviors are identifiable, what prevents more leaders from acquiring enhanced skills? Current senior executives are under immense pressure to produce results, and are often overwhelmed with information – little of

which is actionable feedback on their leadership style and behaviors. Both Anderson and Anderson (2001) and Gilley and Gilley (2003) present a learning competency model aimed at providing some insight. This four stage model accounts for both competencies and consciousness (starting at unconscious incompetence, then conscious incompetence, next conscious competence and ultimately moving to unconscious competence).

In essence, as leaders take responsibility for understanding their weaknesses and deficiencies and take appropriate learning-based actions to increase their capability they become better leaders. Baume (2004) suggests this model be extended to include a fifth stage – reflective competence. Leaders that mature through this model often undergo a shift in mindset (or mental models according to Senge, 1990) from a self-centered, autocratic and defensive, and directive leadership style towards a more holistic, reflective, democratic make-up (Anderson & Anderson, 2001). In that undertaking transformational organizational change is a decision to embark on a philosophical organizational journey, a leader seeking growth and personal development along these lines embarks on a similar journey towards enlightenment fostered by critically self reflective thoughts and behaviors. Executive coaching can be a productive vehicle to assist leaders in development along these lines.

According to a Harvard Business Review article, 70% of all senior executives exhibit “Alpha Male” characteristics – unemotional and analytical, little regard for people and feelings, with a tendency to shift into challenging, intimating or abusive leadership styles under pressure (Lundeman & Erlandson, 2004). Such leaders fall into the “Driver” category presented by Bolton and Bolton (1996) and have a tendency to seek control and overtly exhibit their assertiveness through directives. For individuals of this type, executive coaching is a means of providing individualized leadership development in a just-in-time fashion; such interventions

focus on change at an interpersonal level, geared towards promoting greater emotional intelligence and awareness, with the executive coaching ascribing the role of change agent (Goleman, 1998).

An outcome of more self-aware leadership is increased levels of feedback seeking within their own organization, thus increasing communication and performance (Levy & Cober, 2002). Executive coaching has been shown to have a tangible and measurable positive effect on organizational performance, and thus provides benefits that extend to more than the leader being coached (Collins, 2001; McGovern, et al., 2001; Parker-Wilkins, 2006). Additionally, leaders that are themselves willing to expend the effort in attempt to evolve into transformational leaders better understand the challenges, hardships and benefits of the journey and are better equipped to lead their organizations on journeys of transformational change in a congruent fashion.

Leaders exhibiting transformational qualities are likely to focus on the long-range organizational measures, and strategically align change initiatives with a clear vision. Prior to embarking on organizational change, transformational leaders seek to understand the organizational readiness for change, and be inclusive in the development of the planned change itself with key internal and external stakeholders. With a predilection towards using a diagnostic model and toolsets, transformational leaders uncover resistance to change and understand the astute political maneuvering needed to gain support for the change.

Whether the organizational change required is developmental, transitional or transformational, leaders of this type have the required social capital to embark on the most appropriate approach depending on the cultural maturity of the organization and the stimulus prompting the change. Such leaders leverage their strengths in persuasive communication to ground the change initiatives in an enhanced set of shared values and perform key roles in

implementing the change itself. The value and vision of the organizational change is expected to be communicated in value-based terms. The positive impact the expected change is anticipated to create at the individual contributor level is emphasized to gain buy-in and psychological ownership for the process. Such change is undertaken in a strategically iterative fashion, and challenges that arise on the journey will be addressed openly and with congruence by leadership. The communication highlights lessons learned and recognizes and celebrates successes achieved along the way. In doing so, it is expected that prospects of successful and lasting change will be increased and a new and improved organization will emerge.

Coaching Executive Leaders/Behavioral Coaching

It is plausible to posit that behavioral coaching is built on a foundation of Goleman's (1998) emotional intelligence, identified by him as "the sine qua non of leadership" (p.36). Emotional intelligence is best defined by Goleman himself, "the ability to manage ourselves and our relationships effectively – consisting of four fundamental capabilities: self-awareness, self-management, social awareness, and social skill." (2000, p. 80). In this published article a strong case is made, and supported by meaningful statistical analysis, that a high degree of emotional intelligence is correlated with increased executive and organizational performance. Additionally, six leadership styles are highlighted along with the guidance that superior leaders demonstrate characteristics of various styles depending upon the situation. Impactful behavioral coaching considers how best to help executives expand their repertoire of styles or improve aspects of these styles to increase their flexibility in response.

Peltier (2001) identifies two uses of behavioral principals in executive coaching – helping clients better understand change and themselves, and teaching executives how to improve their

own organization. Peltier continues on and highlights the experimental nature of behavioral coaching.

Perhaps the most famous and widely recognized executive coach is Marshall Goldsmith; he has been recognized as the key thought leader in executive coaching circles and was named one of five most influential executive coaches by Forbes as well as “America’s preeminent executive coach” (Morgan, et al., 2004). In *The Art and Practice of Leadership Coaching*, Marshall describes his mission “to help successful leaders achieve a positive change in behavior: for themselves, their people and their teams. (Morgan, et al., p.56).” In the same source, Goldsmith offers that behavioral coaching is the most widely practiced of the five identified types of executive coaching. It appears that Goldsmith’s approach is more tailored, or bespoke, than that of others widely known for the development of key concepts; perhaps such a customized approach is what sets him apart. In Dr Goldsmith’s latest book, *What Got You Here Won’t Get You There* - a New York Times and Wall Street Journal best seller, he describes his job as an executive coaching in the following manner, “to identify a personal habit that is annoying to their co-workers and help them eliminate it – so that they retain their value to the organization” (2007, p. 12). The behavioral focus referenced in the quote, reinforces his stated position that coaching senior executives nearly always involves interpersonal challenges, as persons in such positions have proven technical skills needed to rise to such organizational positions (Goldsmith, 2007).

Goldsmith (2004) advocates the usefulness of cognitive dissonance in behavioral coaching, and has published the following eight steps in the process referenced in Table 2. Consider this process in conjunction with his guidance that an executive coach encourages executives to apologize for their behavior, be open about their efforts to correct the same,

regularly seek progress reports on their changes, and to listen to the responses while reserving judgment (Goldsmith, 2007).

Table 2
Goldsmith's Eight Steps in Behavioral Coaching

-
1. Involve the leaders being coached in determining the desired behavior in their leadership roles.
 2. Involve the leaders being coached in developing key stakeholders.
 3. Collect feedback.
 4. Determine key behaviors for change.
 5. Have coaching clients respond to key stakeholders.
 6. Review what has been learned with clients and help them develop an action plan.
 7. Develop an on-going follow-up process.
 8. Review results and start again.
-

Note: Adapted from Morgan, et al., 2004, p. 60

A key tenet in Goldsmith's work is using "feedforward" in preference to feedback. The delineation is that feedback is oriented towards events of the past and "feedforward" focuses on the opportunity of changing future behavior (Goldsmith, 2002).

In a book co-edited by Goldsmith and Lyons (2006), *Coaching for Leadership*, the concept of "Situational Leadership" is presented. This concept suggests that executive coaches match their approach in coaching to the executive's readiness – "ability and willingness" (p.26). In a similar vein, it is advised that executive coaches to start from a position maintained by the executive (Fitzgerald & Berger, 2002). Useful in understanding an executive's readiness, these authors introduce the PROBE Model for the purposes of "PROfiling Behavior" (p.32) through the use of probing questions targeting executive performance insights.

One of the theoretical underpinnings of the behavioral type of executive coaching is Dr Robert Kegan's constructive-development theory (Fitzgerald & Berger, 2002). Such considers the manner in which the meaning of events and interactions is internalized by individuals, or oversimplified as perspective. Kegan and Lahey (2001) present artful and purposeful use of

language as a means to allow for flexibility in perspective to overcome “immunity to change”. In doing so, they present a framework for executive coaches focused on behavioral coaching to confront assumptions and better understand the beliefs that can prevent the intended change from occurring.

Leadership Competency

Organizations and executive coaches alike are often required to take a meta-concept such as leadership and its development, and simplify these complex constructs into manageable, consumable and actionable contributing elements. Leadership is a complex construct that is most often defined, measured and developed through competency models (Boyatzis, 1982; Lobel, 1991; McCall & Hollenbeck, 2007; Quinn, Faerman, Thompson & McGrath, 1990; Spreitzer, McCall & Mahoney, 1997). Leadership competency is “the product of numerous challenging job assignments, exposure to other people, mistakes, setbacks and training experiences” (Spreitzer, McCall & Mahoney, 1997, p. 6). Over the past thirty years models comprised of these elements have evolved in attempt to categorize characteristics predictive of leadership success (Hollenbeck, McCall & Silzer, 2006). This competency model approach has roots in I/O psychology, a comprehensive review is provided by the authors, and are typically grounded in research (Hollenbeck, et al, 2006). The identification of such competencies “leverage the experience and seasoned insight of leadership incumbents in an organization (Hollenbeck, et al., 2006, p. 402). They summarize the inventory of knowledge, skills and abilities that combine to sketch the profile of an effective leader. Dubois, Karoly and Doubs (1994, cited in Hollenbeck, et al., 2006) present the following consistent competencies: Interpersonal Skills, Communication Skills, Collaboration and Teamwork, Direction and

Motivation of Others, Quality Centered, Resource Management, Problem Solving and Decision Making, Organizational/Occupational Knowledge, Ethics, Self-Direction, and Motivation.

Microsoft took such an approach to identifying characteristics of a successful leader within their organization. To aid in the evaluation of the executive leadership team, the propriety Microsoft Leadership Competency Model was developed. This Model was developed by researching the competencies demonstrated by outstanding leaders across the various lines of business globally. The extensive research identified competencies that contributed to effectiveness and success for leaders that were differentiated by their holistic performance from typical leaders throughout the organization. The outcome is competencies that are behavioral constructs consistent with broad leadership attributes.

Mumford, Campion and Morgeson (2007) conducted an empirical study (N=1023) validating a stratified approach to leadership competencies. The research demonstrated an accretive hierarchy of leadership skills (Cognitive Skills, Interpersonal Skills, Business Skills, Strategic Skills) as consistent across increased levels of organizational responsibility. In doing so, the authors added much needed empirical evidence to further to body of knowledge on leadership competencies.

Leadership competency models serve as foundation of performance appraisals, and provide a framework for leadership development programs and activities. Executive coaches utilize these models implicitly and explicitly in their interventions, and in some cases as an objective measure of the observable success of the interventions.

Learning Agility

The Center for Creative Leadership (CCL) has long focused research efforts on understanding leadership, seeking the best ways to develop this ability, and exploring means to identify leadership traits prior to the actual demonstration of the same. Their past research has included considering the implications of intelligence (IQ) and personality on leadership effectiveness. Yet, IQ has demonstrated to a rather poor indicator of leadership capability and vocational success (Gladwell, 2002). Rather, two studies from CCL indicate that learnings from unique experiences, such as stretch assignments, appear to relate to future ability (McCall, Lombardo and Morrison, 1988; Morrison, White and Van Velsor, 1992; all cited in Lombardo & Eichinger, 2000).

Lombardo (2005) proposes little question exists regarding the future implications of specific experiences shown to improve leadership capability – transitioning across lines of business, projects mission-critical to the organization, managing start-ups or emerging businesses and turning around businesses lacking performance. Additional research identifies a that a wider cross-section of developmental experiences, in conjunction with openness about goals with managers and direct reports and seeking feedback, increase the probabilities of meaningful behavior modifications and improved future performance. (Goldsmith, 2004; Goldsmith & Morgan, 2004; Hazucha, Hezlett & Schneider, 1993; Walker & Smither, 1999).

While this may be true, opportunities to develop skills through these experiences are rare and so organizations have a difficulty in providing development across this meaningful portfolio. And, such experiences are only as valuable as an executive's capability to learn from these situations and then apply these learnings elsewhere. CCL has shown that some executives stall in their ability to apply these learnings in new situations, and as such are at risk for derailing; in

contrast, successful executives actively utilize numerous and varied learning strategies (Lombardo & Eichinger, 2003). Part of the value of these experiences is the opportunity to learn and practice technical skills. Lombardo and Eichinger (2000) suggest such learning is not the same as learning new behaviors or constructing new mental models to consider new problems.

Learning agility takes this one step further and encompasses reuse and adaptability (Eichinger & Lombardo, 2000). This construct, defined by Michael Lombardo and Robert Eichinger (2000), is defined as “the willingness and ability to learn new competencies in order to perform under first-time, tough or different conditions” (p. 4).

Through factor analysis, a learning agility instrument was developed by Lominger International. The initial version was comprised of five agilities – Mental, Personal, Source, Change and Communications; the second version of the same was refined to include four agilities – Mental, People, Change and Results (Lombardo & Eichinger, 2004). This assessment provided the means for ex post facto analysis wherein it was determined learning agility scores were not related to IQ, and much the same when compared with the Big Five personality traits. Alternatively, it is proposed that the instrument measures, “non-cognitive personal adaptability” (Eichinger & Lombardo, 2004, p. 13). The *CHOICES® Architect 2nd Edition Users Manual* (Lombardo & Eichinger, 2003) suggests the CHOICES® scores are more closely related to promotability and performance than are IQ or personality measures.

According to Lominger, people with high learning agility perform well on the following four things:

- “1) They are critical thinkers who examine problems carefully and make fresh connections.
- 2) They know themselves better and are able to handle tough situations deftly.
- 3) They like to experiment and can deal with the discomfort that surrounds change.
- 4) They deliver results in first-time situations through team building and personal

drive.”
 (CHOICES Architect® 2nd Edition Users Manual, p. 117)

The impact of learning agility to executive coaches is two-fold. Much as the aforementioned concept of Situational Leadership considers the readiness of an executive, screening executives with a learning agility filter may well yield executives that are more capable of making meaningful behavioral changes based on the executive coaching intervention. In the case of an executive with a developmental opportunity related to their learning agility, a development plan can be constructed addressing the appropriate vector of learning agility in question.

Synthesis

The comprehensive review cited the available literature on executive coaching, described the executive coaching relationship and foci of the interventions, and presented the theoretical underpinnings of executive coaching in the current state. Five major types of executive coaching were identified (career/life coaching, strategy coaching, coaching for organizational change, coaching for leadership development, and coaching leaders/behavioral coaching), and the complex constructs comprising each were reviewed for the purpose of providing greater insight into a holistic view of executive coaching. Additionally, the review discussed leadership competencies, introduced the novel concept of learning agility, and related both their usage in executive coaching.

Executive coaching is an intervention drawing upon inter-disciplinary concepts and skills to facilitate change at an individual and ultimately the organizational level. Facilitating change involves engaging with the executive at their current state and strategically envisioning the desired future state, while identifying measurable and achievable actions that lead to the future

state. Lasting change can only be facilitated when an executive is willing and able to take the necessary and sometimes difficult steps identified in the intervention. An executive's willingness and ability to engage in the executive coaching intervention is a matter rarely addressed by the current body of knowledge.

Readiness precipitates changes, whether individual or organizational. Readiness dictates an executive's capability to transition insights from executive coaching interventions into applied learning in the course of their work output. Given the increasing rate of change in the workplace, executive coaching provides a point of leverage for those executives able to apply learnings from the interventions into new experiences. In this fashion, executive coaching produces a compounding return when provided to executives that are ready to assimilate the intervention into their experiences to come. The emerging construct of learning agility considers the degree to which an executive can apply learning to new experiences. An agile learner is then best suited to maximize an investment in executive coaching. However, these two concepts – learning agility and executive coaching – are devoid of any connection in the current body of knowledge.

This research effort was conducted to empirically explore the relationship between changes in leadership competencies and learning agility amongst a select group of executives participating in executive coaching. The purpose of this research was to test the practical significance of the proposed theory, drawing a connection between these concepts.

CHAPTER 3 : METHOD

Chapter 3 discusses the research design used to conduct the study and the procedures and the process for collecting the data. The purpose of doing so is to describe the research effort and provide guidance to future research that might chose to replicate the study.

As referenced in Chapter 2, the body of knowledge regarding executive coaching is still emerging. Although the amount of research on this matter is steadily increasing, a key gap still exists as it relates to studies regarding executive coaching with empirical data.

Research Problem

Fortune 500 organizations are becoming increasingly reliant upon external providers of executive coaching for the purpose of developing their leaders. The foundational elements of this service are still emerging, and although references to significant returns are available, the service is relatively costly. It follows then that organizations should demonstrate jurisprudence in providing executive coaching to those executives that are best suited to capitalize on the investment. Yet, little mention of the concept of an executive's readiness for executive coaching is available.

Research Purpose

The purpose of this research effort is to further the empirical body of knowledge regarding executive coaching through the exploration of the relationships between changes in leadership competencies and learning agility amongst a select group of executives participating in executive coaching at Microsoft. The resulting data provides a vehicle whereby the use of standardized measures to demonstrate readiness, progress and impact of executive coaching can be considered.

Research Question

How is learning agility related to changes in leadership competencies in a group of senior executives participating in executive coaching?

Benefits of Research

The primary benefit of conducting such empirical research regarding executive coaching was to fill an identified gap in the existing and emerging body of knowledge.

As a result of the research, Microsoft may choose to integrate learning agility concepts into future executive coaching interventions and thus provide benefit to the participants and future participants of similar programs. Additionally, Microsoft may choose to integrate learning agility concepts and measures into the overall measurement system for executives for the purpose of targeting succession planning efforts or broaden the leadership development efforts throughout the company.

This research uncovered findings of interest to the broader executive coaching community and suggests a more extensive use of standardized instruments for assessing appropriate targets for executive coaching, determining actionable and valueable foci of such interventions, and gauging progress and success of the same.

Research Diagram

For the purposes of summarizing the research design in visual terms, a research diagram is provided on the following page:

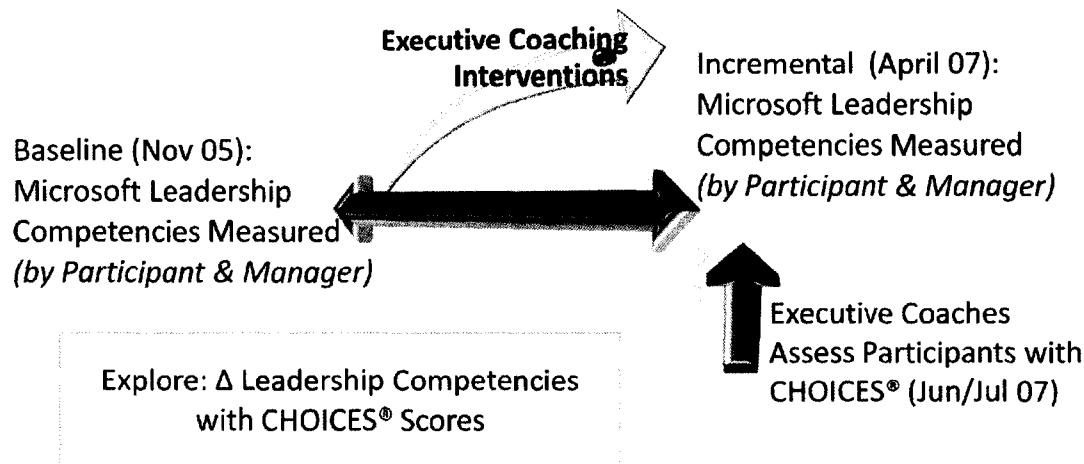


Figure 2. Research Design Diagram

Variables to be Studied

This research design is interested in learning agility as one variable of interest. To assess this capability, scores on a validated instrument measuring learning agility constructs were required. Since no instruments were identified in a search of the Mental Measurements Yearbook, additional resources were engaged to determine a meaningful measurement approach. Dialogue with Dr. Richard Feller referenced the seminal work on learning agility performed by Robert W. Eichinger, Ph.D. and Michael M. Lombardo, Ed.D of Lominger International. Their efforts on the LEADERSHIP ARCHITECT suite of products led to the development of CHOICES Architect® (CHOICES®), a questionnaire specifically developed to measure the construct of learning agility. The paper-based version of CHOICES® consists of 81 items scored on a 5-point Likert scale (0 = Don't Know, 1 = Low, 5 = High); the aggregated output is an Overall learning agility score, and scores on four Factors (Mental Agility, People Agility, Change Agility, Results Agility) contributing to the learning agility construct according to Lominger research (Lombardo & Eichinger, 2003).

The second variable of interest in this research study is leadership competency. Specifically, the variable of interest is changes in leadership competency in a group of executives

engaged in executive coaching. Gaining access to such a select data set is indeed challenging, given the concerns about confidentiality of such individuals. After explaining the intent and purpose of the research design, the researcher's employer (Microsoft) agreed to provide access to a select group of executives currently participating in executive coaching. As a result, the second variable of interest in this study will be calculated by comparing a baseline leadership competency measure against an incremental leadership competency measure. The instrument for determining these measures is a proprietary instrument designed and validated by Microsoft itself and the data set is archival. While this approach suits the intended research study, future access to such data for replication purposes is at most severely limited.

Microsoft's measure of leadership competency considers eleven schools of capability (Cross Boundary Collaboration; Customer Insight; Deep Insight; Creating Business Value; Executive Maturity; Holding Others Accountable; Influence and Impact; Organizational Agility; Building Organizations, Teams, People; Company Commitment; Confidence) measured on a 4-point Likert scale (Proficiency Levels 1 – 4). For the purposes of this study, the baseline measurement was taken in November 2005 and considered two perspectives on the assessment. The executive completed a self-assessment, and the executive's manager scored the executive, resulting in two distinct sets of data for each participant's baseline leadership competency scores. The incremental measure was provided in April 2007, and again includes the executive's self-rating and that of their manager.

In attempt to answer the research question, longitudinal changes in leadership competency scores are compared with learning agility scores to explore the resultant relationships. As Microsoft is able to provide archival data on leadership competencies as scored both by the executives themselves and their direct manager, the research design explored the

relationships across this dimension for the purposes of gaining deeper empirical insight into the identified research question. As the design considered both perspectives, this organizational behavior research follows the guidance from Donaldson and Grant-Vallone (2002), “a minimum of two data sources are needed to help rule out the validity threats of self-report and mono-method bias in business psychology research.”

Participants and Site

One of the challenges impeding the empirical furthering of the body of knowledge regarding executive coaching is programmatic researcher access to executives being coached. This challenge was experienced first-hand by the researcher, working as an intern at The Center for Creative Leadership for the purposes of conducting empirical and results-oriented research on executive coaching interventions. The population of executives is proportionally small when compared against the broader population and given the responsibilities and workload typically accompanying their professional roles, finding time to participate in research regarding an ancillary service is rarely a top priority. Additionally, confidentiality concerns across a rather visible population compound organizational willingness to support programmatic access necessary to facilitate empirical studies. The opportunity to consider the implications of executive coaching with a group of senior executives at a Fortune 500 organization is unique and has the potential to be ground-breaking for the field itself.

After explaining the intent and purpose of the research design, the researcher's employer (Microsoft) agreed to provide access to a select group of executives currently participating in executive coaching. The researcher worked closely with a department within Microsoft's Human Resources Division, People and Organizational Capability (POC) – People Research. A brief overview of these organizations within Microsoft is provided.

The People and Organization Capability (POC) group is one of the Centers of Excellence in Human Resources (HR) at Microsoft. The vision of the POC follows, “Microsoft has a culture in which growing people and organization capability is a strategic lever woven into a fabric of doing business. As a result Microsoft grows great leaders who build strong organizations that produce outstanding results.”

POC is tasked with developing leaders, managers, employees, and organization capabilities to drive positive business change and to deliver sustainable business results. Solutions and services are provided in: Organization Capability and Change, Talent Management, and Leadership and Learning. The solutions are grounded in robust, reliable, and customized research that considers a systemic view and their resources developed the Microsoft Systems Model to serve as a foundation for all their work.

Microsoft’s People Research group is a subset of the POC and is responsible for ensuring Microsoft’s enterprise-wide HR initiatives are based on solid research principles and good practice. In performing its work, researchers in the People Research work with other member of the POC organization, other MS centers of excellence, and business partners in the HR organization. The group is comprised of several industrial/organizational psychologists who employ qualitative and quantitative research methods to:

- Develop leadership and management competencies to underpin other organizational interventions
- Research the core characteristics of successful individuals and teams
- Develop and implement research-based surveys
- Consult on measurement and assessment principles
- Design and maintain stewardship over assessment practices.

Microsoft recently (December 2006) launched a highly selective succession planning program with a stated purpose of grooming 47 senior executives to become the next Corporate Vice Presidents within Microsoft. To provide perspective, Microsoft currently employs roughly 79,000 people and staffs approximately 130 Corporate Vice President positions, equaling .015 percent of the organization.

A key element of this high potential program is the provision of executive coaching for each participant. Given these 47 people have already been identified for participation in the high potential program, convenience sampling will be used to select the participants, and all participants will be included in the sample. In using this sampling approach, no conflict of interest occurred in the selection process. Similarly, since the subjects are predetermined participants in a select program at Microsoft, vulnerable population considerations are not applicable. Nor are inclusion and exclusion criteria.

Microsoft's agreement for participation in this research effort included strict privacy and confidentiality provisions associated with usage of confidential and proprietary archival data. As a result, no demographic information about the participants was made available. It is fair to assume that age and gender vary among this population, although to a degree consistent with that of a distribution of senior executives in a Fortune 500 organization and not necessarily with a distribution of the wider population. There are no known risks to this research, including no physical or psychological trauma or stress, legal, social, economic and or loss of confidentiality risks given the proposed method and the use of archival data.

As the high potential program facilitates the usage of executive coaching, each of the nine provided executive coaches can also be considered tangentially as participants in the research effort. While they are not specifically being measured or compared in the analysis, they

were recruited programmatically to assess the learning agility of the executives being coached. Of these nine, six were external providers and coached a majority of the participants (79 percent).

The sample used in this research study severely impacts generalizability of findings. Perhaps such findings could be extensible to other similar populations – highly select group of upwardly mobile executives – in other similar Fortune 500 organizations. In such a fashion, the participants are representative of the larger population of interest, the target market for executive coaching. Considering this research is concerned with impacts of executive coaching, such a lack of generalizability to the broader population is not relevant. Regardless, this research is intended to be exploratory in nature, and findings will not be portrayed to be applicable outside of the sample studied.

As not all of the learning agility instruments were completed and returned by the participants' executive coaches, it is important to consider if any commonalities existed amongst the group of non-responders. In reviewing the 38 returned CHOICES® instruments, all were provided by external providers of executive coaching. The remaining nine instruments were supplied to executive coaches that are full-time employees of Microsoft, with varying additional responsibilities – i.e. none are full time executive coaches. One executive coach returned two of the provided four instruments and annotated that the two unreturned instruments were assigned to participants that declined executive coaching services. The remaining seven instruments were provided to two executive coaches that did not respond to the research effort entirely. Based on the complete lack of a response by both of these executive coaches, it is difficult to determine if the executive coaching services were indeed provided to these participants, or if the non-response was dictated by other circumstances. It is entirely plausible that the external providers

of executive coaching felt obligated to complete the research effort endorsed by the organization, whereas the full time employees of the same felt no such obligation.

Consent Process

Given the provided protocol, and the participation of Microsoft People Research, this research meets the requires set forth in Sections 116(d)(1)(2)(3)(4) of the code of Federal Regulations, Protection of Human Subjects, to waive consent. This research involves no more than minimal risk to the participants, the waiver will not adversely affect the rights and welfare of the participants, the study can not be practically carried out with such waiver, and the participants will be provided additional pertinent information after participation, as appropriate. Colorado State University's Human Subjects Review Committee agreed with the waiver of consent and requested additionally the participants be provided a letter outlining the possibility and procedure for opting out of the research. This letter was provided to Microsoft People Research for email directly to the participants, such that their identities were not compromised in having this communication sent directly from the researcher.

Maintenance of Research Records

Microsoft solely retains the master electronic copy of the coded data set. Any temporary data files created for analysis by the researcher were destroyed upon completion of the research, with the exception of the Principal Investigator (Dr. Richard Feller) who will retain study data for the required period of a minimum of 3 years upon completion of the study. Microsoft reserves the right to retain the data for its useful life.

Measures

Microsoft Leadership Competency Model

Microsoft has experienced tremendous growth during the organization's thirty years of existence. In assessing the culture in terms of past, presently manifested, and desired future state, rigorous quantitative and qualitative research was conducted. A key tenet of the outcomes was the understanding that evolving Microsoft's culture will impact the value proposition offered by Microsoft. This evolution requires Microsoft consider the value contributions of its employees, and specifically the executive leadership. To aid in the evaluation of the executive leadership team, the propriety Microsoft Leadership Competency Model was developed.

This Model was developed by researching the competencies demonstrated by outstanding leaders across the various lines of business globally. The extensive research identified competencies that contributed to effectiveness and success for leaders that were differentiated by their holistic performance from typical leaders throughout the organization. The outcome was competencies that are behavioral constructs consistent with broad leadership attributes.

The Microsoft model includes eleven leadership competencies, all of which were scored in the baseline and incremental measures used in this research. The competencies are provided in Table 3. The Model groups the eleven competencies into four proprietary clusters, that for competitive reasons will not be discussed in this research.

Table 3
The Leadership Competencies Composing the Microsoft Model

Microsoft Leadership Competencies	Cross Boundary Collaboration Customer Insight & Commitment Deep Insight Creating Business Value Executive Maturity Holding Others Accountable Influence and Impact Organizational Agility Building Organizations, Teams, People Company Commitment (Team Microsoft) Confidence
-----------------------------------	--

Note: Adapted from Proprietary Microsoft Leadership Competency Model Documentation

Each Leadership Competency has an accompanying description within the framework of the model and for measurement purposes. As this model is proprietary in nature, and the competencies not outside the norm of what might be expected, the definition for only one competency is provided. Executive Maturity as defined by Microsoft as:

Executive Maturity is about effectively managing oneself and one's relationships with others especially under conditions of ambiguity, uncertainty and pressure. It is about being the voice of reason and adding perspective to help others gain understanding. On one level, it is about being self aware of one's feelings, thoughts, values, and points of emotional reactivity ("hot buttons"). On another level, Executive Maturity is about having the ability to manage the emotional demands and needs of others, to stand firm and clear in the face of emotional pressure and at the same time stay connected to people. Executive Maturity is also about having the capacity and willingness to change one's self. (Proprietary Microsoft Leadership Competency Model Documentation)

Each competency in the Microsoft Model is measured on a 4-point Likert scale outlined in Table 4.

Table 4
Microsoft's Leadership Competency Model Scoring System

<u>Score</u>	<u>Description</u>
1	Area for Development
2	Demonstrated Competence
3	Strength
4	Extraordinary strength

Note: Adapted from Proprietary Microsoft Leadership Competency Model Documentation

Each of the four proficiency levels is accompanied by multiple descriptive examples adding clarity to the differences in scores. For example purposes, one of the descriptive narratives for each proficiency level of the leadership competency Executive Maturity is presented in Table 5.

Table 5
Example of Proficiency Level Descriptive Narratives for Executive Maturity

<u>Proficiency Level</u>	<u>Descriptive Narrative</u>
1	Is emotionally self-aware; recognizes how his/her own feelings impact behavior
2	Understands the reasons for another's behavior even when that behavior is subtle or complex
3	Consistently maintains self-control and acts appropriately in any situation by monitoring his/her own behavior
4	Recognizes and acts in ways that ensure that others can stay focused and directed when working under stress

Note: Adapted from Proprietary Microsoft Leadership Competency Model Documentation

The competencies are measured programmatically at regular intervals for the population considered in this research using an computer-based software tool. During these measurements, the executive conducts a self-rating which is reviewed in conjunction with an assessment performed by the executive's manager. For the purposes of this research, the baseline measurement by both parties was taken in November 2005 and in the incremental measurement by the same was performed in April 2007.

Measurement Validity

Microsoft People Research conducted analysis to determine the validity of the model measuring Microsoft Leadership Competencies. During the period of interest for this study, test-retest statistical correlations were performed. The mean resulting coefficient of correlation was .71.

The reliability of the model measuring Leadership Competencies was tested by determining the co-variance between these broad leadership attributes and objective executive performance data. The findings were statistically significant (at $p < .01$) with a very sizable N.

CHOICES ARCHITECT®

The Lominger instrument measuring learning agility, CHOICES® is a validated instrument that is copyrighted and available for a fee directly from Lominger. Their usage guidelines prohibit purchase, scoring and interpretation of the CHOICES® instrument without completion of a training course and the resultant certification. For the purposes of this research, the principal investigator Dr. Richard Feller possesses the required certifications and provided the necessary level of supervision for the purchase, usage and scoring of the tool. Additionally, permission to use the Lominger instrument in this study was obtained, and is provided in Appendix A as executed by their Associate Vice President of Research (Kenneth P. De Meuse, Ph.D.).

The instrument was developed in-part due to insight gained in across a series of research efforts conducted at The Center for Creative Leadership. Such analysis included factor analysis, resulting in the identification of the four factors of learning agility contained within the instrument (Lominger & Eichinger, 2003).

The primary output of Lominger's CHOICES® instrument is an Overall learning agility score. Additionally, the assessment identifies four Factors of learning agility. Each Factor is a summed score of a varied number of associated learning agility Dimensions. Each of the 4 factors are identified in Table 6, along with the accompanying Lominger definition.

Table 6
CHOICES® Four Learning Agility Factors Defined

<u>Factor</u>	<u>Description</u>
Mental Agility	Describes people who think through problems from a fresh point of view and are comfortable with complexity, ambiguity, and explaining their thinking to others
People Agility	Describes people who know themselves well, learn from experience, treat others constructively, and are cool and resilient under the pressure of change
Change Agility	Describes people who are curious, have a passion for ideas, like to experiment with test cases, and engage in skill building activities
Results Agility	Describes people who get results under tough conditions, inspire others to perform beyond normal, and exhibit the sort of presence that builds confidence in others

Note: Adapted from *CHOICES® Architect 2nd Edition Users Manual* (Lombardo & Eichinger, 2003)

The CHOICES® instrument identifies scores for 27 Dimensions of Learning Agility, with each dimension comprised of 3 items. According to Lominger, Dimension scores are provided for developmental purposes or general understanding, as the Overall and Factor scores are the only scores with real meaning (Lombardo & Eichinger, 2003). These 27 dimensions are provided for reference in Table 7.

Table 7
CHOICES® Contributing Dimensions to Four Learning Agility Factors

<u>Learning Agility Factor</u>	<u>Contributing Dimensions</u>	
Mental Agility	1. Broad Scanner	5. Easy Shifter
	2. Complexity	6. Essence
	3. Connector	7. Inquisitive
	4. Critical Thinker	8. Solution Finder
People Agility	1. Agile Communicator	7. People Smart
	2. Conflict Manager	8. Personal Learner
	3. Cool Transactor	9. Responds to Feedback
	4. Helps Others Succeed	10. Role Flexibility
	5. Light Touch	11. Self Aware
	6. Open Minded	
Change Agility	1. Experimenter	
	2. Innovation Manager	
	3. Taking the Heat	
	4. Visioning	
Results Agility	1. Inspires Others	
	2. Delivers Results	
	3. Drive	
	4. Presence	

Note: Adapted from *CHOICES® Architect 2nd Edition Users Manual* (Lombardo & Eichinger, 2003)

As was used in this research, the CHOICES ® instrument can be administered in a paper-based form and is composed of 81 ordinal items (behaviors of learning agility) measured on a 5-point Likert scale. An example of an item (#29) on the instrument measuring Mental Agility is: “Can project consequences and how things are connected.” Each item score relates to the following definition provided in Table 8.

Table 8
CHOICES® Item Scoring

<u>Score</u>	<u>Description</u>
0	Don't Know or Can't Rate Clearly
1	Not at all like this person, may be blocked on this item, not do it at all, actively do the opposite or show disregard for this way of behaving
2	Sometimes like this person, but does this less well or less often than most people
3	About like most people
4	Does this better or more often than most people
5	One of the clearest examples of this I've ever seen

Note: Adapted from CHOICES® Questionnaire

The process of scoring these instruments is labor-intensive and involves adding the scores across three items to calculate a raw score for each Dimension. As each Factor is comprised of a varying number of Dimensions, the appropriate number of Dimension scores are added to arrive at the Factor score. The instrument corrects for missing data by calculating the average score for the Factor and multiplying it by the total number of possible items to generate a raw score for the purposes of interpretation. These modified Factor scores are added together to generate the Overall score. As one of the possible responses for each question is "Don't Know", the instructions specifically state that instruments with more than 12 such responses be discarded due to the impacts of accuracy of the approximations used in the scoring process.

Measurement Validity

The research provided by Lominger indicates relatively strong evidence the instrument measures what it is purported to measure (Lombardo & Eichinger, 2003). Two research studies were cited (N=206 and N=217) for which internal consistency measures (Cronbach's Alpha) were reported generally greater than .90 with one mention of a low score of .86. According to Morgan, .90 is acceptable for instruments with three or more possible scores. Test-retest measures

showed equally strong reliability measures, ranging from .81 to .90. Additionally, Lominger was able to test inter-rater reliability and found it be acceptable.

The validity of the CHOICES® questionnaire was found to be statistically significant at the $p > .0001$ level across all of the Factors. Complementing these findings, similar conclusions are validated in a dissertation entitled, “Assessing the Construct Validity of a Measure of Learning Agility”, wherein the author (Connolly, 2001) identified correlations across the four Lominger learning agility factors as high ($r = .80$ to $r = .90$). This was indicative of multicollinearity and supportive of the one factor model for learning agility employed by Lominger. The Lominger research presents data the instrument consistently measures constructs across various groups, including age (Lominger & Eichinger, 2003)

Validity and Reliability of Research

The designed study has low internal validity threats. The threat of maturation of the participants has been highlighted as a limitation and the threat of selection is based on the use of convenience sampling, albeit with little intent to generalize. Medium construct validity threats are attributed to the use of a learning agility instrument with proven construct validity – both by Lominger and subsequent follow-on studies testing the same (Connolly, 2001; Lominger & Eichinger, 2003). Additionally, such construct validity threats are a function of the exploratory research design. While the study has high external validity threats, again the intent is not to make sweeping generalizations based on the findings. In part to address the substantive threat of external validity, guidance from Donaldson and Grant-Vallone (2002) was followed in conducting this research, “a minimum of two data sources are needed to help rule out the validity threats of self-report and mono-method bias in business psychology research (p. 256).”

Limitations

A critical limitation in this study is researcher bias, considering the academic focus of the researcher has been designed to provide the foundation for the delivery of ethical and professional executive coaching. While this bias exists, empirical analysis will determine the relationships within the data thus somewhat diminishing the impact of the stated bias.

As this proposed study utilizes convenience sampling, the outcomes will not be readily generalizable outside of senior executives at Microsoft. For the purposes of this exploratory research, the findings will be related to the participants in the study. Based on the current body of knowledge and a significant lack of supporting empirical data, making generalizations beyond this target would not be either prudent or valuable.

A threat to the validity of the study is the inability to control for extraneous variables occurring prior to the onset of the executive coaching relationship, such as on the job learning, stretch assignments, or mentor/supervisory coaching. Such might produce an increase in the longitudinal leadership competencies which would be incorrectly attributed. Given the environment, and expectations placed upon these senior level participants, it seems nearly impossible to control or account for such threats – rather the approach will be to acknowledge and accept them at face value.

As Microsoft has engaged nine executive coaches - each with varying skills, styles, experience and backgrounds - to provide service to the population in question, variability in the level and quality of service provided in the intervention is a limitation of the study. Considering the high potential of the participants in this research group, and the vast resources available to Microsoft, it is probable that Microsoft has selected highly capable executive coaches with similar styles and capabilities consistent with the Microsoft culture & expectations.

Data Collection Procedure

Based on the organizational contribution of Microsoft's People Research, one of the conditions outlined in their agreement to participate in the research effort was the direct involvement of People Research. In addition to the provision of the actual archival data set, they assisted in providing context to the data to allow for meaningful analysis and findings to be reached. These resources were instrumental in shielding the researcher from the identities and identifying characteristics of the Microsoft executive participants.

Upon receiving the approval to proceed with the research from Colorado State University's Human Subjects Review Committee, People Research randomly assigned a numerical code to each of the executive participants in the high potential program. This code was created, managed and provided by People Research solely for the purposes of data entry for this study. They then cross-referenced the participant with the respective executive coach.

Fifty-five Lominger CHOICES® (2nd Edition) Questionnaires in paper form were provided to Microsoft's People Research department for the purposes of distributing to the executive coaches, following the established procedures to ensure confidentiality of the population. Fifty of the instruments were designated for the population and five additional instruments were provided in the event instruments were lost in transit and/or incorrectly coded or completed. The additional five instruments were returned unused. Forty-seven instruments were actually distributed to the nine executive coaches, reflective of the true population size that was smaller than anticipated due to attrition.

Additionally, People Research was provided with an electronic copy of a set of instructions and a cover sheet. Each instrument was coded on the front cover of the paper instrument with the participants numerical code, and on top of which was stapled a supplemental

cover sheet. The cover sheet and executive coach instructions are provided in Appendices B and C respectively.

The provided set of instructions outlined: the research, detailed the process for the executive coaches, gave the expected timeline for their completion and return of the instruments (four weeks), highlighted the need to remove the supplemental cover sheet upon completion of the instrument, and gave contact information of the researcher. The instructions also referenced the guidance according to Lominger, that each instrument takes approximately 15-20 minutes to complete.

This supplemental cover sheet was provided for the purposes of identifying the executive coaching receiving the instrument, as well as translating the numerical participant code by provision of the participant's name on the cover sheet; in this fashion the person to be assessed was obvious. Further instructions on the same cover sheet requested the executive coach remove the cover sheet prior to returning the instruments for scoring, to ensure that confidentiality and research protocol were followed.

In early May 2007 each executive coach was shipped via overnight mail a package containing one instrument per executive being coached and the executive coaches were instructed to complete the instrument considering their interactions with the identified participant. The package contents varied, from one instrument to a high of ten instruments. Within each package a self-addressed overnight mail package was also provided, for the coaches to use in returning the completed instruments. The return address was directly to Microsoft itself, where a Microsoft resource provided quality control on the research protocol and ensured that all cover sheets containing identifying information were removed prior to delivering the

completed instruments to the researcher. This step was designed in the event the coaches neglected to remove the cover letter containing the participant's name.

Per the agreed approach with Microsoft People Research, the researcher was provided with a list of contact points (email and telephone) for the executive coaches receiving the packages. This did not comprise the identities of the participants, rather provided the means for the researcher to follow-up with the executives coaches to address any unresolved questions and track progress in the return shipment of the packages. During these ten weeks, concluding at the end of July 2007, the researcher was in contact with the identified Microsoft resource to track the receipt of instruments. To facilitate their return, the use of email and/or phone call reminders to the executive coaches was employed. No executive coach received more than three reminders to complete and return the instruments, and hand-written thank you notes were provided to each upon responding with completed instruments.

All of the returned packages arrived outside of the requested timeline of four weeks, and arrived at various times throughout the month of July. All except two of the packages were returned, resulting in seven missing instruments. One package was returned less two of the provided instruments, with an annotation that executive coaching was not provided to the two participants whose instruments were not returned. All of the packages were screened for compliance with the research process, and none of the instruments provided to the researcher contained identifying information.

A total of 38 instruments were returned from seven executive coaches accounting for an 81% return rate. Of the 38 returned instruments, five were purposely left blank and provided with an indication executive coaching was declined by the participant. One participant left the company during the research period, and such was recorded on the blank instrument.

Considering the two instruments identified previously as unreturned, the total number within the population that declined to engage in executive coaching totals seven, or 15 percent of the population. Interestingly, seven unreturned instruments were provided to two executive coaches; both are full-time employees of Microsoft that were readily aware of this research effort and had previously agreed to participate.

Additionally, two instruments were returned by two different executive coaches with the middle page of the three page instrument left blank. As both of these executive coaches also provided completed instruments on other participants, it appears as these instances were simply oversights. Regardless, both instruments were discarded from the population.

Upon receipt of the instruments, the researcher followed the directions for hand-scoring the paper-based questionnaires, under the supervision of a certified user of the instrument. This supervision was provided by the principal investigator of this research, and PhD Committee Chair, Dr. Richard Feller. The remaining 31 Lominger CHOICES® paper-based instruments were reviewed according to manufacturer directions. Per the scoring instructions, the total number of “Don’t Know” responses were counted and in the event twelve or more were present the instrument was discarded. Following this guidance resulted in discarding seven instruments, with a mean of 32 “Don’t Knows” scores recorded; the number of such responses ranged from 13 to 55. These seven were provided by two executive coaches, with one executive coach responsible for five of the seven. This executive coach was provided with ten instruments, one of which was referenced earlier as returned indicating the participant left the company. It is also interesting to note that this same executive coach received three follow-up reminders prior to returning the instruments in late July 2007.

Table 9 is provided to summarize the total number of distributed instruments, and detail the exclusions in arriving at the response rate for this study.

Table 9
CHOICES® Assessment Distribution and Attrition

	<u>Questionnaires</u>	<u>Percent of Distributed</u>		<u>Effective Cumulative Response Rate</u>	
Total Executive Participants	47	100%	(47/47)	-----	
Returned Instruments	38	81%	(38/47)	81%	(38/47)
Declined Executive Coaching	7	15%	(7/47)	66%	(31/47)
Invalid Based on Don't Know responses	7	15%	(7/47)	51%	(24/47)
Discarded - Lacking Gain Scores on Leadership Competencies	10	21%	(10/47)	30%	(14/47)

After ensuring all questions were appropriately marked with only one response, and that such responses were clearly transposed to the scoring sheet, scores were tabulated for the four measured Factors (Mental Agility, People Agility, Change Agility, Results Agility) and an overall score and average rating were calculated for the remaining 24 instruments.

The results were tallied and entered into a Microsoft Excel® spreadsheet and provided to Microsoft People Research. They entered this spreadsheet data into an SPSS® file, and aggregated sanitized baseline and incremental leadership competency scores per the proprietary Microsoft measures. The SPSS® file that contains all the data necessary for the analysis was

provided to the researcher, containing only participant's scores with the corresponding code, i.e. no identifying name, personal data or characteristics.

Data Analysis

Consistent with the purpose of this study, the data analysis explored the relationships apparent in the data. This included a thorough description of the measures of central tendency and variability of the seven data sets: baseline leadership competencies (by participant and manager), incremental leadership competencies (by participant and manager), changes in leadership competencies (gain scores by participant and manager) and the learning agility scores. The primary associations of interest are between the changes in leadership competencies (by participant and manager) and the learning agility scores (Overall and Four Factors).

To determine the extent to which the variables co-vary, correlational statistical techniques will be used. As the variables are all ordinal in nature, a specialized correlational approach was utilized. This approach, calculating Kendall's Tau, was designed for use with ordinal data and accounts for tie scores. The actual computation for this research effort was done utilizing SPSS® software.

As Kendall's Tau is infrequently used, it is important to understand the basis for interpreting this specialized correlation coefficient. Simply stated, the tau value can be interpreted as "the probability that as X increases Y will increase" (Arndt, Turvey & Andreasen, 1999, p.98). Consistent with other tests of correlation, the tau values range from -1 to 1. Additionally, Kendall's tau has been found to be resistant to sample sizes as small as $N=8$ (Arndt, et al, 1999).

Summary

Chapter 3 provided an overview of the research design used to conduct the study and the procedures and the process for collecting the data. This includes a discussion of the participants, the measures used to arrive at the variables of interest, the validity and reliability of the research, identified limitations, and the approach to be taken to analyze the data. This provides guidance to future research that might chose to replicate the study. The following chapter will describe the findings of the statistical analysis.

CHAPTER 4 : RESULTS

This chapter provides the findings and results of the empirical exploration of the relationship between Microsoft's Leadership Competency measures and learning agility constructs, as measured by Lominger's CHOICES® instrument, for a select population of senior executives within Microsoft receiving executive coaching. The purpose of the study is reiterated for clarity, as is a brief summary of the research study, in order to provide the necessary context for the data described herein.

Purpose of Research

The purpose of this research effort is to further the empirical body of knowledge regarding executive coaching through the exploration of the relationships between changes in leadership competencies and learning agility amongst a select group of executives participating in executive coaching at Microsoft. The resulting data may provide a vehicle whereby the use of standardized measures to demonstrate readiness, progress and impact of executive coaching can be considered.

Research Question

How is learning agility related to changes in leadership competencies in a group of senior executives participating in executive coaching?

Brief Summary of Research Study

A select group of 47 executives at Microsoft were identified to participate in a high-potential program as a part of succession planning activities with the express purpose of preparing the participants to enter the ranks of Corporate Vice President at Microsoft. As a part of this program, the participants were provided executive coaches – a majority of which were external providers. These executive coaches were provided the Lominger CHOICES®

Questionnaire (2nd Edition) and asked to score the participants on the learning agility constructs contained therein. This instrument consists of 81 items, each measured on a 5-point Likert scale (Don't Know; 1 – “Low”; 5 – “High”); the output is five primary scales (Overall, Factor 1 – Mental Agility, Factor 2 – People Agility, Factor 3 – Change Agility, Factor 4 – Results Agility). These scores are to be considered in conjunction with a series of data points about the participants leadership capabilities as measured by a proprietary instrument used by Microsoft.

The Microsoft Leadership Competency measures include ratings selected by the participants and their managers in a baseline (November 2005) and incremental (April 2007) fashion. The aforementioned changes in the respective scores across the 4-point Likert scale (Proficiency Level 1 – 4), as measured over time, provide the variable of interest for exploring the relationships with learning agility.

Results of Analysis

The resulting data set was analyzed predominately through the use of Statistical Package for the Social Sciences (SPSS®), version 15.0 for Windows purchased in the Graduate Pack. To make accommodations for the operating system on the computer being used for analysis, the researcher followed the instructions provided by SPSS® for the installation of the Vista Hot Fix (SPSS15VistaHotFix.exe) to ensure application compatibility.

Descriptive Statistics – CHOICES ARCHITECT®

The first set of variables to be discussed are derived from the Lominger CHOICES® Questionnaire. The group means are provided for the Overall and Factor average scores and Total (raw) scores as they best provide a consolidated view into the data on learning agility. For this sample, N=14.

The Overall average score ($M=3.96$, $SD=.45$) is distributed in a negatively skewed fashion and thus is not symmetrical. As the Overall Total (raw) score ($M=321.50$, $SD=36.64$) is derived from the average score, the expected similarities in the distribution are apparent.

Factor 1 (Mental Agility) is also negatively skewed ($-.950$) in both the average score ($M=4.12$, $SD=.36$) and Total (raw) score ($M=99.07$, $SD=8.61$). Factor 2 (People Agility) is the most normally distributed of all the provided scores across with the lowest relative average score ($M=3.79$, $SD=.44$) in relation to the Total (raw) score ($M=125.21$, $SD=14.67$). Factor 3 (Change Agility) average score ($M=3.98$, $SD=.52$) is closest to the Overall average mean and is relatively negatively skewed in both the average and Total (raw) scores ($M=47.71$, $SD=6.20$). Factor 4 (Results Agility) is the most negatively skewed (-1.45) of all of the scores across both the average ($M=4.16$, $SD=.82$) and Total (raw) scores ($M=49.36$, $SD=11.02$), yet has the largest relative range and mean considering the average scores. Additionally, Factor 4 exhibits a leptokurtic distribution (2.13), indicating more data lies in the central part of the distribution. For ease of interpretation, these scores are provided in Table 10 on the following page.

Table 10
Measures of Central Tendency and Variability for CHOICES® Scores

<u>CHOICES® Output</u>	<u>Average</u>		<u>Total (raw)</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Overall	3.96	.45	321.50	36.64
Factor 1 (Mental Agility)	4.12	.36	99.07	8.61
Factor 2 (People Agility)	3.79	.44	125.21	14.67
Factor 3 (Change Agility)	3.98	.52	47.71	6.20
Factor 4 (Results Agility)	4.16	.82	49.36	11.02

To provide perspective and context on the mean scores, interpretation guidance from the Lominger CHOICES® Percentile Chart/Research Scale is provided in Table 11 based on the Total (Raw) scores. As is represented, the mean scores all fall within the 75th to 90th percentile range, with the exception of Factor 1 (Mental Agility) for which the mean falls within the 90th to 95th percentile of scores.

Table 11
CHOICES® Mean Scores with Interpretation Guidance

<u>CHOICES® Output</u>	<u>Mean</u>	<u>Percentile Score (Range)</u>
Overall	321.50	75 th -90 th (301 – 321)
Factor 1 (Mental Agility)	99.07	90 th -95 th (95 – 101)
Factor 2 (People Agility)	125.21	75 th -90 th (121 - 130)
Factor 3 (Change Agility)	47.71	75 th -90 th (44 - 49)
Factor 4 (Results Agility)	49.36	75 th -90 th (47 - 52)

Moving forward, as the Microsoft Leadership Competencies are measured on a 4-point Likert scale, the average scores from the CHOICES® instrument will be primarily discussed, and the relationship across the average and total (raw) scores is consistent.

Descriptive Statistics – Microsoft Leadership Competencies

The second set of variables to be discussed are derived from the proprietary Microsoft Leadership Competency Model. The data series has two key dimensions – measuring party and time. In the first instance, the same eleven competencies are measured on a 4-point Likert scale by both the participant and their direct manager. Additionally, the baseline measures reflect an assessment taken in November 2005 and an incremental measure was taken in April 2007. This results in four distinct sets of data that will be summarized, in addition to considering the characteristics of the calculated gain scores across the identified dimensions.

Leadership Competencies as Measured by Participants

Table 12 summarizes the descriptive statistics of the raw data of the baseline measure of the Microsoft Leadership Competencies, as self-rated, across a sample with $N=14$. The highest mean score is associated with Company Commitment (Team Microsoft) ($M = 3.57$, $SD=.64$) while the lowest mean score within the series is Customer Insight and Commitment ($M = 2.71$, $SD= .91$). Nearly all of the variables demonstrate some degree of negative skewness, with the largest non-symmetrical variables being Deep Insight (-1.09), Company Commitment (Team Microsoft) (-1.30) and Organizational Agility (-1.72). Additionally, Building Organizations Teams & People (-1.19), Confidence (-1.19) and Executive Maturity (-1.51) are platykurtic as indicated by their associated coefficient of kurtosis. The leptokurtic variables in this data set are Deep Insight (2.05) and Organizational Agility (6.50) and in both instances the data is clustered tightly above the mean – even moreso for the later.

Table 12

Measures of Central Tendencies and Variability for Microsoft Leadership Competencies as Measured by the Participants

<u>Microsoft Leadership Competency</u>	<u>Fall 2005</u> <u>M (SD)</u>	<u>Spring 2007</u> <u>M (SD)</u>
Cross-Boundary Collaboration	3.21 (.70)	3.00 (.68)
Customer Insight & Commitment	2.71 (.91)	2.71 (.83)
Deep Insight	3.07 (.83)	2.86 (.77)
Create Business Value	2.79 (.89)	2.64 (.84)
Executive Maturity	3.07 (.83)	3.07 (.73)
Holding Others Accountable	2.86 (.95)	2.71 (.83)
Impact and Influence	2.93 (.73)	2.79 (.70)
Organizational Agility	3.00 (.68)	3.00 (.39)
Building Organizations, Teams & People	3.29 (.83)	3.00 (.96)
Company Commitment (Team Microsoft)	3.57 (.65)	3.50 (.65)
Confidence	3.29 (.83)	3.36 (.75)

As represented in Table 12, the variable with the largest mean score for the Leadership Competencies (N=14) as measured by the participant in April 2007 is Company Commitment (Team Microsoft) (M = 3.42, SD= .67). This variable also demonstrated the same characteristic for the baseline measurement. The lowest mean score was associated with the Create Business Value competency (M = 2.64, SD=.84). Amongst this data set, Organizational Agility (6.50) could be considered leptokurtic, and the coefficient of skewness indicates a normal distribution (.00).

As this study is interested in exploring the relationship between changes in leadership competencies and learning agility amongst a sample of executives participating in executive coaching, the measures of central tendency and variability summarize the calculated gain scores (N=14) in Table 13. The modest differences between the central tendency measures can be seen in Table 13 across eight of the eleven variables. The distribution characteristics of the gain scores varies widely, and so the coefficients of skewness and kurtosis have been included in the table for reference.

Table 13

Measures of Central Tendencies and Variability for Microsoft Leadership Competencies Gain Scores as Measured by the Participants

<u>Microsoft Leadership Competency</u>	<u>M (SD)</u>	<u>Skewness</u>	<u>Kurtosis</u>
Cross-Boundary Collaboration	-.14 (1.29)	-.19	-1.00
Customer Insight & Commitment	.00 (.39)	.00	6.50
Deep Insight	-.21 (.58)	-2.80	7.68
Create Business Value	-.14 (.54)	-3.74	14.00
Executive Maturity	.00 (.55)	.00	1.33
Holding Others Accountable	-.14 (.36)	-2.30	3.79
Impact and Influence	-.07 (1.21)	1.69	2.62
Organizational Agility	.00 (.39)	.00	6.50
Building Organizations, Teams & People	-.29 (.83)	-3.21	10.56
Company Commitment (Team Microsoft)	-.07 (.48)	-.38	2.92
Confidence	.07 (.27)	3.74	14.00

As the total number of non-zero gain scores is relatively small, to aid in understanding the scores and distributions of the data, Figure 3 provides a summary visual representation of the distribution of scores.

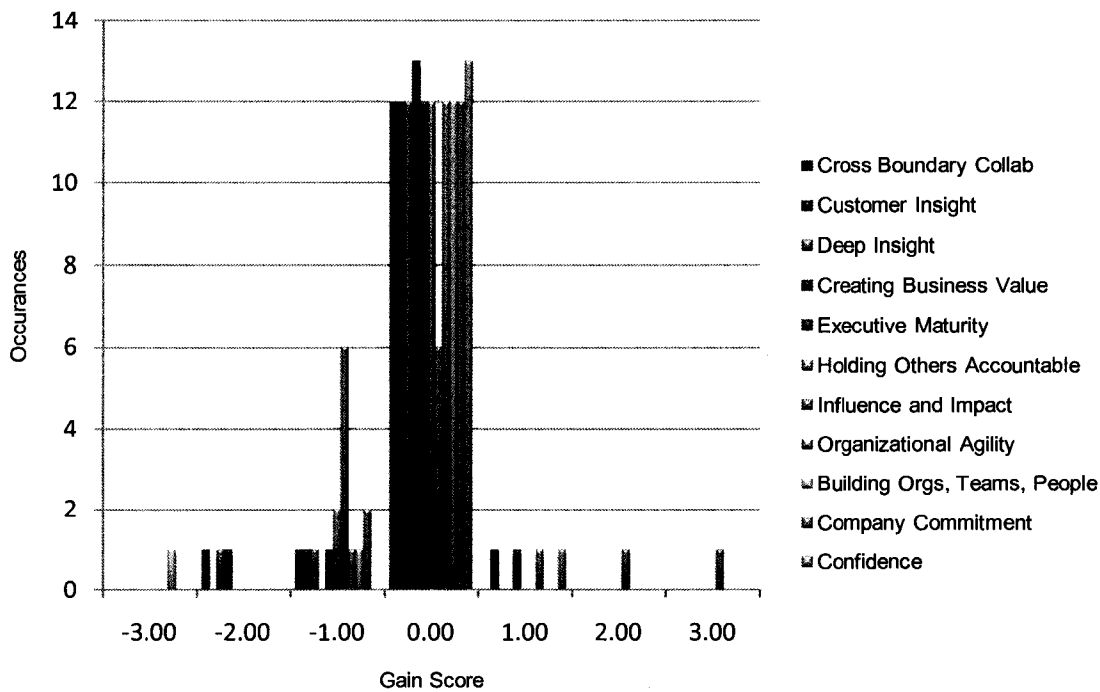


Figure 3. *Summarized Frequencies of Gain Scores by Leadership Competencies and Participants*

Leadership Competencies as Measured by Participants' Managers

To further explore the relationship between changes in leadership competencies and learning agility without the bias that accompanies self-rating, the same leadership competencies across the same time periods as measured by the participants' manager will be considered (Donaldson & Grant-Vallone, 2002; Moorman, & Podsakoff, 1992; Zerbe, & Paulhus, 1987).

In the baseline sample taken in November 2005, N=14 for all variables with the exception of Confidence; due to missing data, N=13. Confidence exhibits the largest mean score (M = 3.38, SD=.77) and Impact and Influence is the smallest mean of the data series (M = 2.21, SD=.58). The mean scores for Deep Insight and Creating Business Value are identical to the mean scores for the same period as scored by the participants. Creating Business Value (-1.57) is the only negatively skewed distribution; Organizational Agility (-1.12) and Holding Others Accountable (-1.51) are platykurtic distributions, in opposition to the leptokurtic distribution of Deep Insight (2.92). The remainder of the measures of central tendency and variability are provided in Table 14.

Table 14

Measures of Central Tendencies and Variability for Microsoft Leadership Competencies as Measured by the Participants' Managers

<u>Microsoft Leadership Competency</u>	<u>Fall 2005</u> <u>M (SD)</u>	<u>Spring 2007</u> <u>M (SD)</u>
Cross-Boundary Collaboration	3.07 (1.00)	3.17 (.94)
Customer Insight & Commitment	3.14 (.95)	3.17 (.72)
Deep Insight	3.07 (.48)	3.08 (.52)
Create Business Value	2.79 (.43)	2.75 (.62)
Executive Maturity	2.77 (.83)	2.58 (1.00)
Holding Others Accountable	3.07 (.83)	3.00 (.74)
Impact and Influence	2.21 (.58)	2.50 (.52)
Organizational Agility	2.86 (.77)	3.00 (.39)
Building Organizations, Teams & People	2.71 (.83)	2.58 (.90)
Company Commitment (Team Microsoft)	3.36 (.75)	3.42 (.67)
Confidence	3.38 (.77)	3.25 (.75)

The measures of leadership competencies from the perspective of the participants' managers taken in April 2007 differ from the baseline data in that 6 of the 11 variables increased slightly in mean scores across the time period for which N=12. As depicted in Table 14, Company Commitment (Team Microsoft) was the highest mean score ($M = 3.42$, $SD=.67$) and Impact and Influence was the lowest ($M = 2.50$, $SD=.52$). Cross Boundary Collaboration (-1.18) was the only distribution in this data series that was negatively skewed. Once again scores for the Deep Insight (2.22) competency were leptokurtic and the only other variable with extreme kurtosis was Impact and Influence (-2.44).

This study is intended to explore the relationship between changes in leadership competencies and learning agility. As such, a gain score was calculated from the manager's perspective of the participant's leadership competencies across the dimension of time by subtracting the baseline scores (November 2005) from the second measure (April 2007). In this fashion, a positive score indicates a net gain in the competency scale for the accompanying variable. Accounting for missing data, the N=12 for all variables with the exception of Confidence (N=11). Given the relatively small sample size, and the non-normal distribution characteristics, the coefficients of skewness and kurtosis are provided alongside the measures of central tendency and variability in Table 15.

Table 15

Central Tendencies and Variability for Microsoft Leadership Competencies Gain Scores as Measured by the Participants' Managers

<u>Microsoft Leadership Competency</u>	<u>M (SD)</u>	<u>Skewness</u>	<u>Kurtosis</u>
Cross-Boundary Collaboration	-.08 (.51)	-.21	2.22
Customer Insight & Commitment	.08 (.79)	1.15	2.73
Deep Insight	-.08 (.51)	-.21	2.22
Create Business Value	.08 (.51)	.21	2.22
Executive Maturity	.09 (.54)	.15	1.86
Holding Others Accountable	.08 (.51)	.21	2.22
Impact and Influence	-.25 (.75)	-1.05	2.06
Organizational Agility	.67 (.79)	.72	-.79
Building Organizations, Teams & People	.08 (.79)	-1.47	4.32
Company Commitment (Team Microsoft)	-.08 (.29)	-3.46	12.00
Confidence	.09 (.30)	3.32	11.00

As the total number of non-zero gain scores is relatively small, and to aid in understanding the scores and distributions of the data, Figure 4 provides a summary visual representation of the distribution of scores.

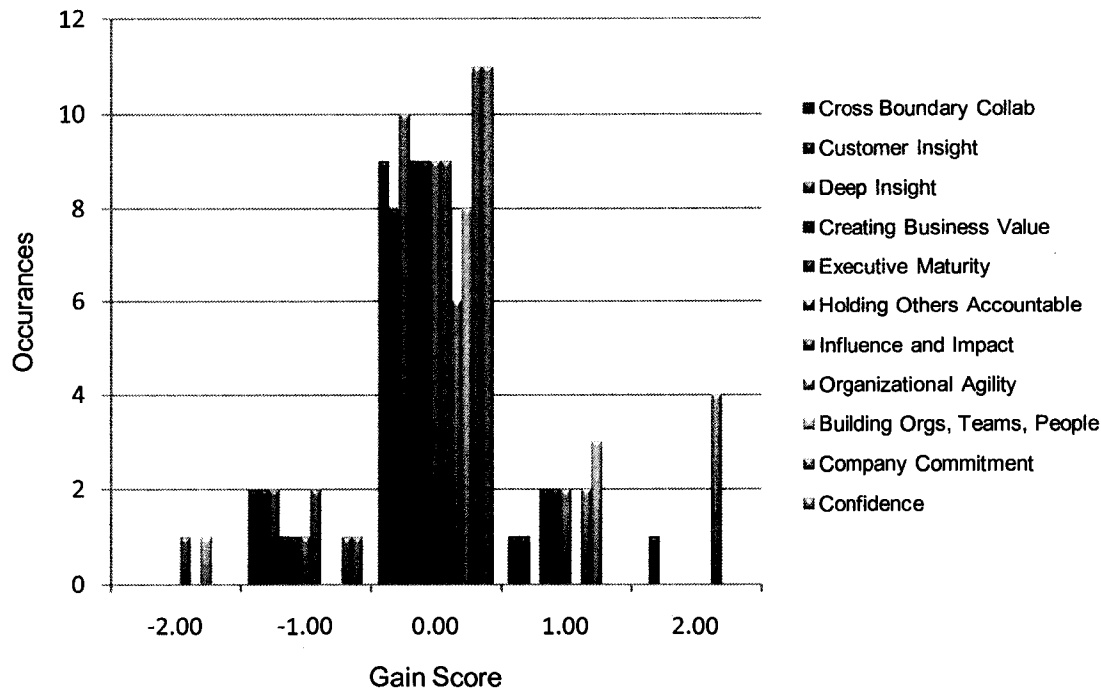


Figure 4. *Summarized Frequencies of Gain Scores of Leadership Competencies, by Managers*

Identifying the Appropriate Correlational Approach

As the intent of this study is exploratory analysis, the intent of the analysis is to measure and describe the apparent relationships between the identified variables. In this case, the variables of interest are the gain scores for Leadership Competencies along with the broad spectrum of learning agility scores from the CHOICES® instrument. In this research design, there was no attempt to manipulate or control the variables – rather to understand any apparent relation amongst them via statistical control. Such design considers all the scores as a group along a continuum, and does not purport to uncover probable causality. Instead the study is

interested in exploring any degree of association between the described variables. It is then appropriate to utilize correlational statistical techniques for the analysis.

The rank order variables of skewed distributions and unequal N suggest the suitable correlational approach to be a non-parametric analysis. Perhaps more importantly, the ordinal variables within this study require a non-parametric approach. This is typically addressed through the use of Spearman rho, which is calculated and interpreted in a manner consistent with Pearson r values. This is consistent with the guidance provided by Morgan, Gilner and Harmon (2005), wherein Spearman rho or Kendall tau are suggested for samples that are not normally distributed. Morgan, et al. (2005) suggest Kendall's tau as the appropriate measure for cases in which different participants have the same score – as is the case in the gain score variables in this study. Arndt, Turvey and Andreasen (1999) reinforce this finding and further suggest that Kendall tau is the recommended approach due to the provision of a tighter confidence interval, even in small sample sizes ($N=8$), whilst allowing for a clearer interpretation than Spearman rho. And so, Kendall's tau is the statistical approach employed for the remainder of this analysis. Simply stated, the tau value can be interpreted as “the probability that as X increases Y will increase” (Arndt, et al, 1999, p.98). Consistent with other tests of correlation, the tau values range from -1 to 1.

Determining the intersection between the coefficient of correlation and the meaningful interpretation of the same is both art and science. Such determination of ‘practical significance’ or strength of relationship has long utilized Cohen's guidance. Even more options abound for determining the associational strength, based on the interpretation of the correlation coefficient (Davis, 1971; Hinkle, Wiersma & Jurs, 1979; Hopkins, 1997; all cited in Kotrlik & Williams, 2003). Following the recommended approach, the researcher has chosen to consider the actual

study in the deduction of an appropriate scale defining meaningfulness. As the population studied is a select group of high performing executives at one of the world's largest and most respected organizations, assessing the outcomes with a standardized approach seems to neglect the inherent difference between the research population and the broader population. Similarly, this population scored exceedingly high on the CHOICES® assessment; again representing a significant difference between the population and the normal distribution of expected scores. Such considerations support a modified criteria determining practical significance. For the purposes of this study, the Table 16 provides governance on the application of determining 'practical significance'.

Table 16
Interpretation of Correlation Coefficient

<u>Coefficient of Correlation</u>	<u>Practical Significance Interpretation</u>
.00 - .05	Inconsequential
.06 - .15	Minor
.16 - .30	Moderate
.31 - .50	Considerable
.50+	Principal

Note: Correlation Coefficient represents Kendall's Tau

Correlating the Data

The remainder of this chapter focuses on the provision and interpretation of Kendall's tau correlation coefficients between the meaningful variables for the purpose of exploring any existing relationship. The structure of such discussion will be first to consider the relationship between the Overall CHOICES® score with the gain scores (Participant, Manager), followed by consideration of the CHOICES® Factor scores across the same gain scores.

Overall CHOICES® Scores and Participants Gain Scores

The CHOICES® Overall score demonstrated a principal positive association with three of the variables measuring change in leadership competency as scored by the participant: Impact and Influence (.685), Building Organizations, Teams, People (.524) and Cross Boundary Collaboration (.524). Two correlations can be categorized as moderately positive (Organizational Agility, Company Commitment (Team Microsoft), and two leadership competency measures indicated a moderate negative association, Customer Insight and Confidence. While the association with Executive Maturity is inconsequential, the remaining three variables demonstrate a degree of association that is considerable. These scores and the respective interpretation is provided in Table 17.

Table 17

Kendall Tau Coefficients of Correlation for CHOICES Overall Scores with Changes in Microsoft Leadership Competency Scores as Measured by the Participants

<u>Microsoft Leadership Competency</u>	<u>Kendall's Tau</u>	<u>Interpretation</u>
Cross-Boundary Collaboration	.524	Principal
Customer Insight & Commitment	-.189	Moderate
Deep Insight	.482	Considerable
Create Business Value	.378	Considerable
Executive Maturity	-.032	Inconsequential
Holding Others Accountable	.342	Considerable
Impact and Influence	.685	Principal
Organizational Agility	.231	Moderate
Building Organizations, Teams & People	.524	Principal
Company Commitment (Team Microsoft)	.266	Moderate
Confidence	-.262	Moderate

To provide an alternative and perhaps more intuitive view into the coefficients of correlation between Overall CHOICES® scores and gain scores of the participant, Figure 5 depicts the same data visually.

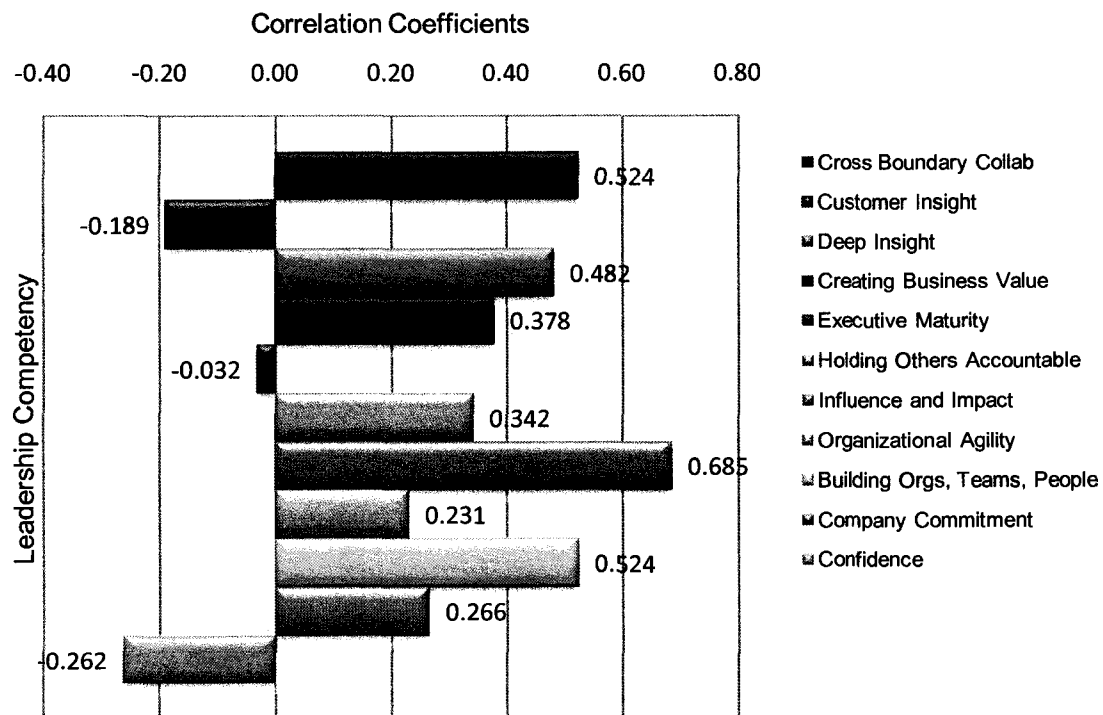


Figure 5. *Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, by Participants*

Overall CHOICES® Scores and Managers Gain Scores

All of the associations between CHOICES® Overall Scores and changes in leadership competencies as measured by the participant's manager were positive. Building Organizations, Teams, People was the highest correlation and with a principal positive tau value (.562). Only Organizational Agility exhibited a score implying an inconsequential relationship, based on the data provided in Table 18. The remaining seven competencies were moderately and considerably associated with the Overall Score.

Table 18

Kendall Tau Coefficients of Correlation for CHOICES® Overall Scores with Changes in Microsoft Leadership Competency Scores as Measured by the Managers

<u>Microsoft Leadership Competency</u>	<u>Kendall's Tau</u>	<u>Interpretation</u>
Cross-Boundary Collaboration	.160	Moderate
Customer Insight & Commitment	.384	Considerable
Deep Insight	.206	Moderate
Create Business Value	.434	Considerable
Executive Maturity	.423	Considerable
Holding Others Accountable	.160	Moderate
Impact and Influence	.304	Considerable
Organizational Agility	.037	Inconsequential
Building Organizations, Teams & People	.562	Principal
Company Commitment (Team Microsoft)	.260	Moderate
Confidence	.341	Considerable

For the purposes of depicting the level of association identified by the calculated Kendall Tau statistic between Overall CHOICES® scores with gains in leadership competencies as scored by the manager, Figure 6 is provided.

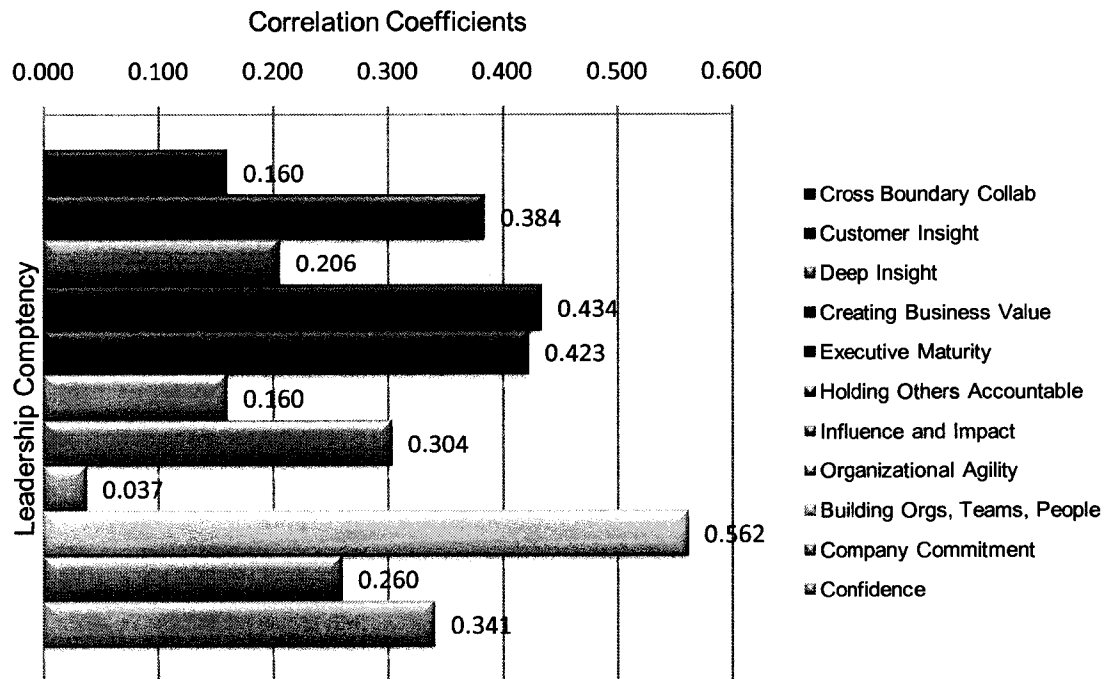


Figure 6. *Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, by Managers*

Comparing Overall CHOICES® Scores with Participants and Managers Gain Scores

As can be seen in Figure 6, the relationship between the Overall CHOICES® scores with the changes in leadership competences as measured by both the participant and manager are not simply summarized. Interpreting the view provided in Figure 6, relative consistency occurs for Creating Business Value, Building Organizations, Teams, People and Company Commitment. Of these, a principal relationship is indicated between changes in leadership competency and Building Organizations, Teams, People. The other two aforementioned variables can be categorized as consistently considerable in terms of strength of relationship. Large discrepancies exist in relation to Customer Insight, Executive Maturity, Influence and Impact and Confidence.

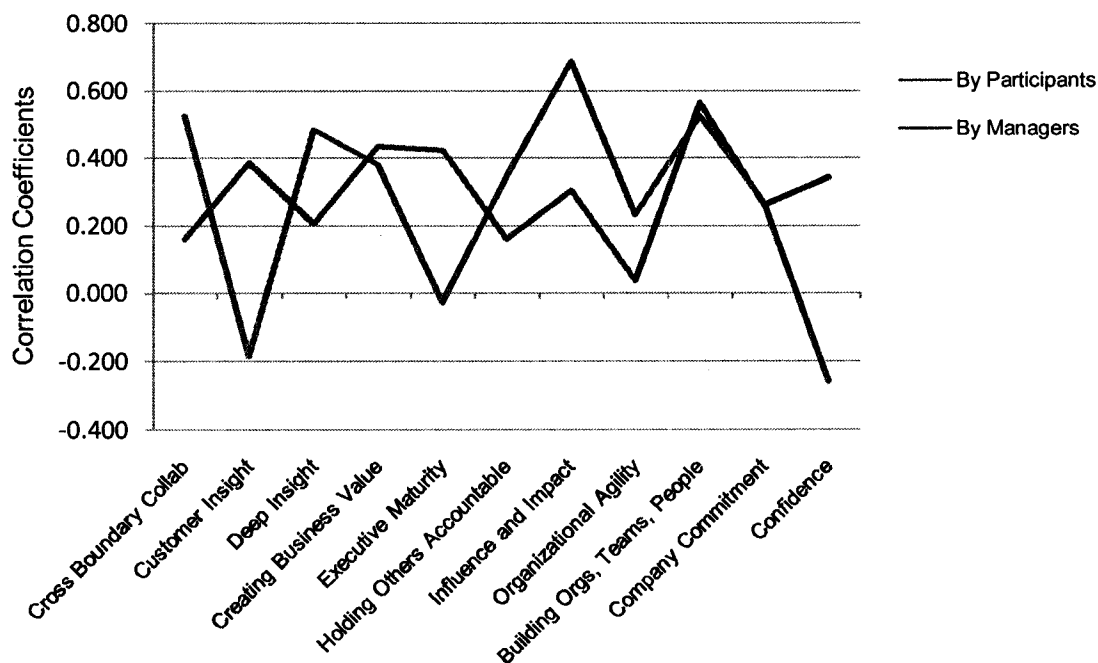


Figure 6. Correlations (Kendall Tau) between CHOICES® Overall Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers

CHOICES® Factor 1 Scores and Participants Gain Scores

Lominger's CHOICES® Factor 1 measures mental agility across a cluster of 8 learning agility dimensions. When correlated with the calculated gain scores measured by the participant, Deep Insight was the only positive principal association. Four variables demonstrated considerable positive strength of relationship, and three were moderate in nature. Interestingly, two considerable negative correlations (Customer Insight & Commitment and Confidence) and one moderate negative correlation (Executive Maturity) were apparent. These scores, and their associated values are depicted in Figure 7.

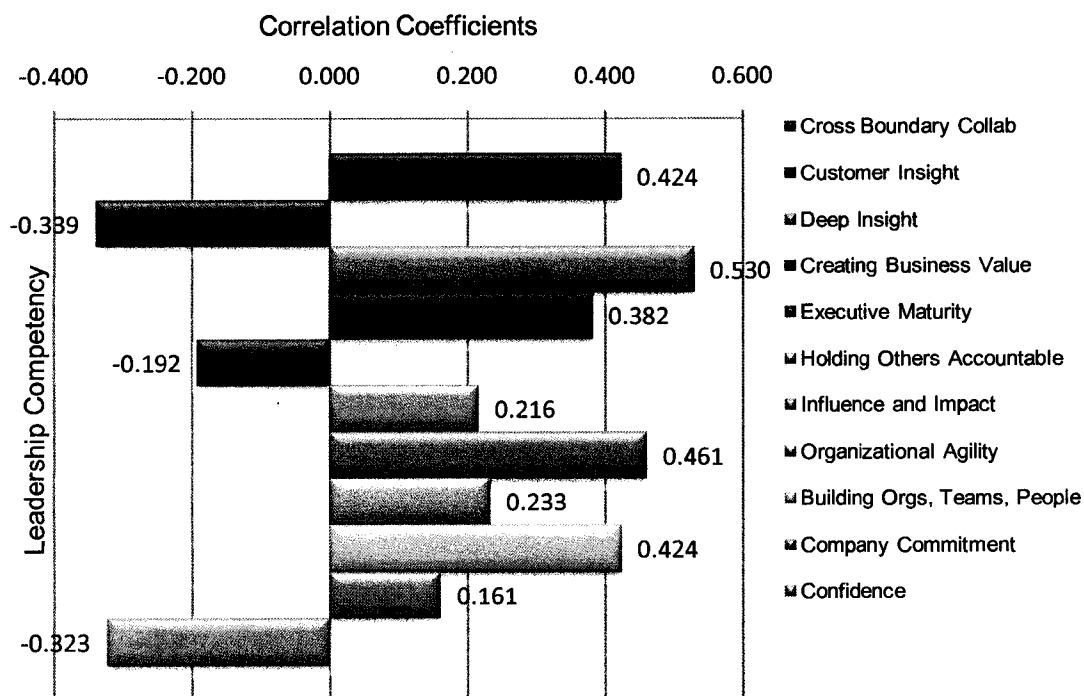


Figure 7. *Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, by Participants*

CHOICES® Factor 1 Scores and Managers Gain Scores

The strongest demonstrated relationship amongst these variables was for Executive Maturity, suggesting a considerable correlation. Three were moderately correlated. Of the remaining six variables with a positive Kendall Tau value, four were minor associations, and two were inconsequential. Holding Others Accountable demonstrated the only negatively correlated relationship, typified as minor. These scores, and their associated values are depicted in Figure 8.

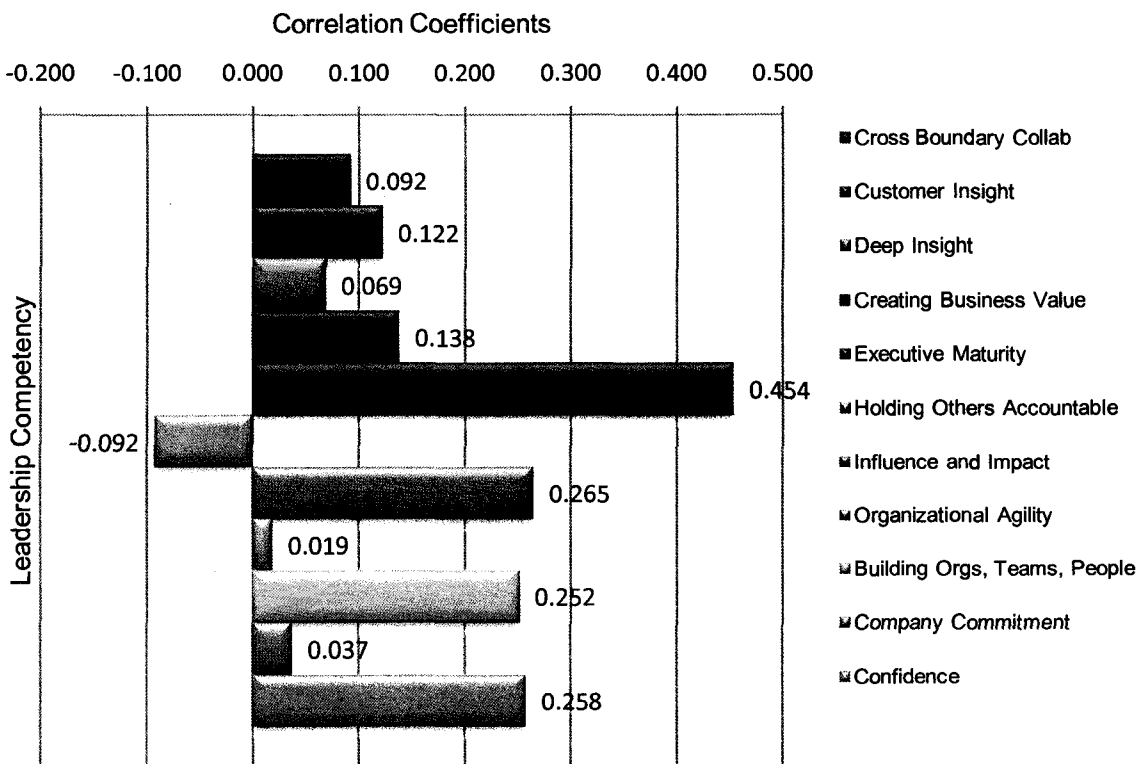


Figure 8. *Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, by Managers*

Comparing CHOICES® Factor 1 Scores with Participants and Managers Gain Scores

In comparing the leadership competency scores by both participant and manager with CHOICES® Factor 1 scores, a few variables demonstrate divergence while a few others suggest a consistent pattern. Such divergence is observable to varying degrees for Cross Boundary Collaboration, Customer Insight, Deep Insight, Confidence and Executive Maturity – for which the largest variance occurs. The differences between Holding Others Accountable, Influence and Impact, Organizational Agility, and Building Organizations, Teams, People begins to depict a pattern with a rather consistent increment ranging from .1 - .2. Such delta could be explained by average difference in scores between the two groups found by Microsoft of .20. These scores, and their associated values are depicted in Figure 9.

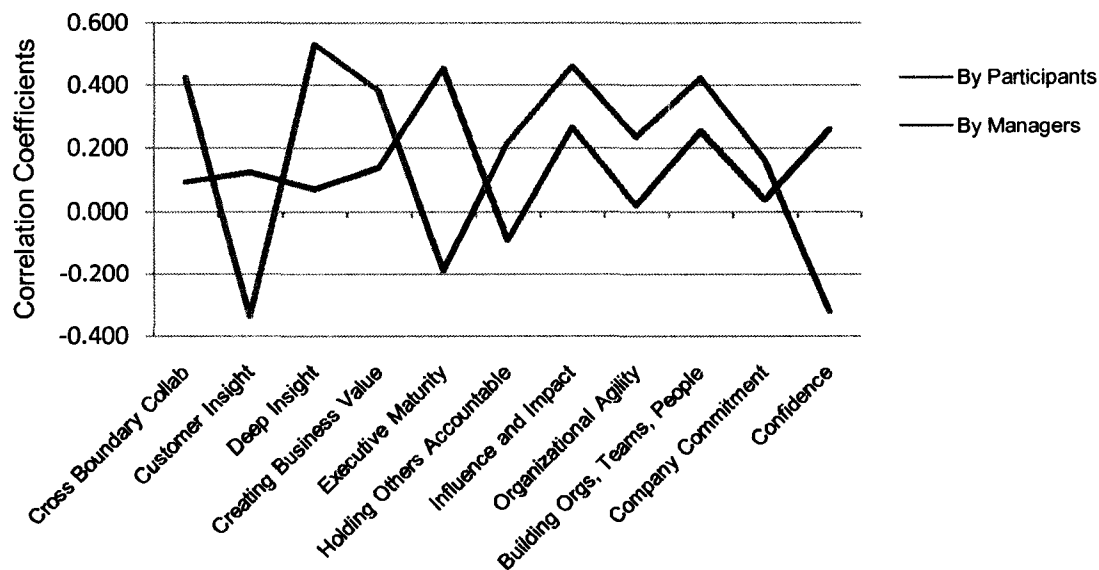


Figure 9. *Correlations (Kendall Tau) between CHOICES® Factor 1 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers*

CHOICES® Factor 2 Scores and Participants Gain Scores

Lomingers's CHOICES® Factor 2 measures people agility across a cluster of 11 learning agility dimensions. The only positive principal association was with the competency Influence and Impact. When correlated with the calculated gain scores measured by the participant, six competencies (55 percent) demonstrated considerable positive strength of relationship. Executive Maturity was perfectly inconsequential. Interestingly, two considerable negative correlations (Customer Insight and Confidence) and one moderate negative correlation (Executive Maturity) were apparent. These scores, and their associated values are depicted in Figure 10.

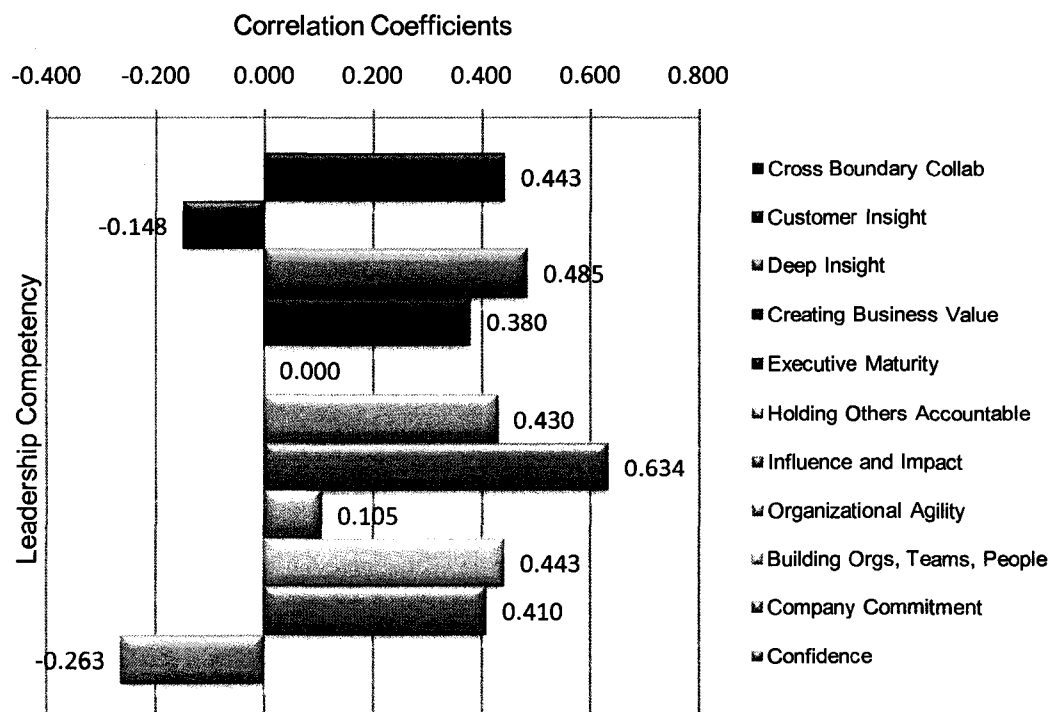


Figure 10. *Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, by Participants*

CHOICES® Factor 2 Scores and Managers Gain Scores

Amongst this set of data, two correlations were observed producing a principal degree of relationship, Creating Business Value and Building Organizations, Teams, People. Given the population considered in this research, the later demonstrated a remarkable correlation coefficient of .713. Five other variables showed a considerable relationship, thus sixty-four percent of the correlated variables were either principally or considerably related. Three were moderate in terms of strength of relationship, with Organizational Agility resulting in a minor degree of relatedness. These scores, and their associated values are depicted in Figure 11.

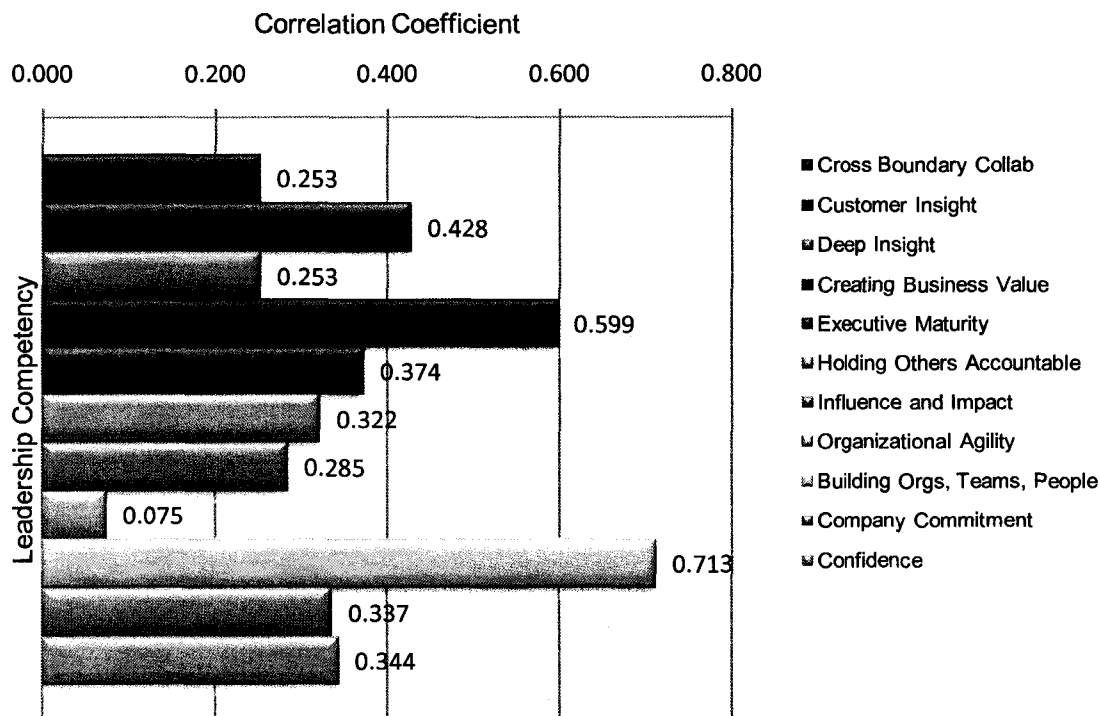


Figure 11. *Chart Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, by Managers*

Comparing CHOICES® Factor 2 Scores with Participants and Managers Gain Scores

The relationship between these two data sets correlated with the CHOICES® Factor 2 scores is more widely varied than the previous comparisons. Virtually identical scores across the scoring dimension for Organizational Agility and Company Commitment indicate consistency in relation to CHOICES® Factor 2 – People Agility. Cross Boundary Collaboration, Deep Insight, Creating Business Value, Holding Others Accountable, and Building Organizations, Teams, People are within a range $\pm .20$. Extreme divergence is apparent regarding Customer Insight and Confidence, and lesser so for Executive Maturity and Influence and Impact. These scores, and their associated values are depicted in Figure 12.

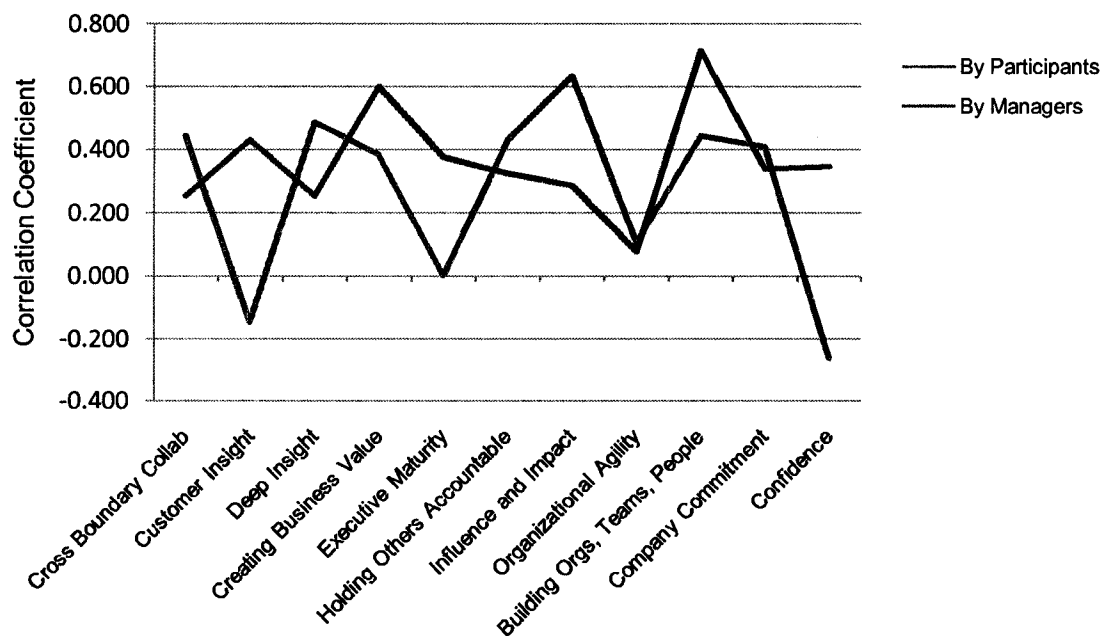


Figure 12. *Correlations (Kendall Tau) between CHOICES® Factor 2 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers*

CHOICES® Factor 3 Scores and Participants Gain Scores

Lominger's CHOICES® Factor 3 measures change agility across a cluster of four learning agility dimensions. In this case, three positive principal associations were identified (27 percent) - Influence and Impact, Building Organizations, Teams, People and Cross Boundary Collaboration. Four variables showed a considerable degree of association, with one moderately relevant finding. Again, Executive Maturity was inconsequential. The remaining two variables (Customer Insight and Confidence) were again negatively correlated to the moderate degree. These scores, and their associated values are depicted in Figure 13.

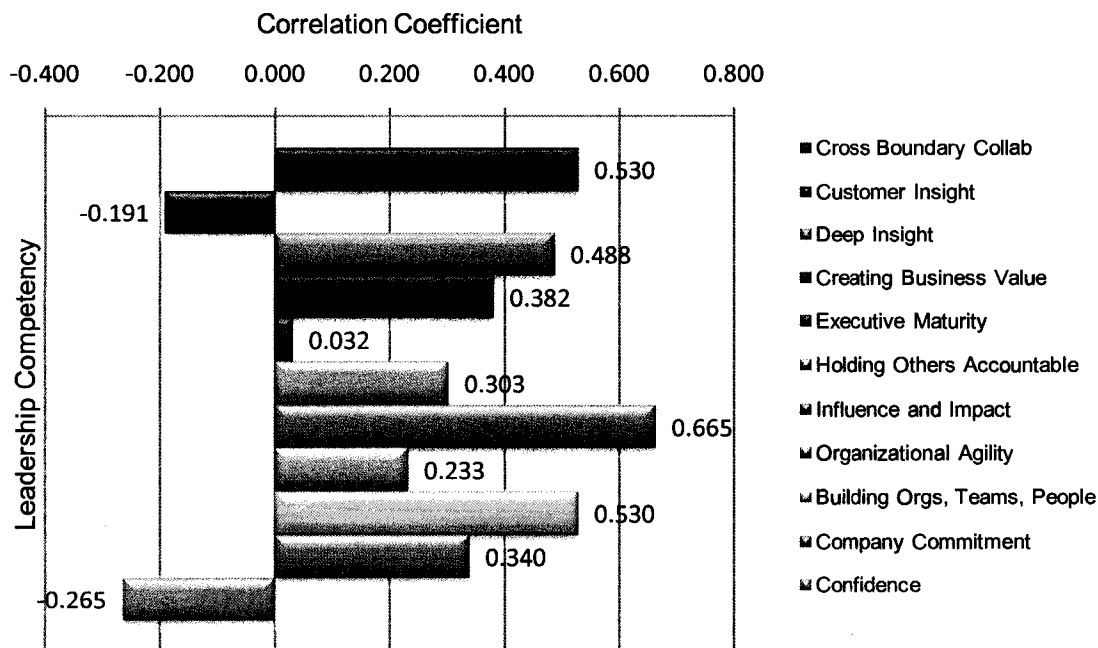


Figure 13. *Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, by Participants*

CHOICES® Factor 3 Scores and Managers Gain Scores

Three variables are considerably correlated when considering the CHOICES® Factor 3 scores with the gain scores as measured by the participant's manager. Five variables exhibit a moderate degree of association, with Creating Business Value (.299) narrowly missing the cutoff for the stronger category of considerable. Confidence is a minor association, Organizational Agility is perfectly inconsequential and Holding Others Accountable is the only negative relationship to a minor degree. These results are depicted in Figure 14.

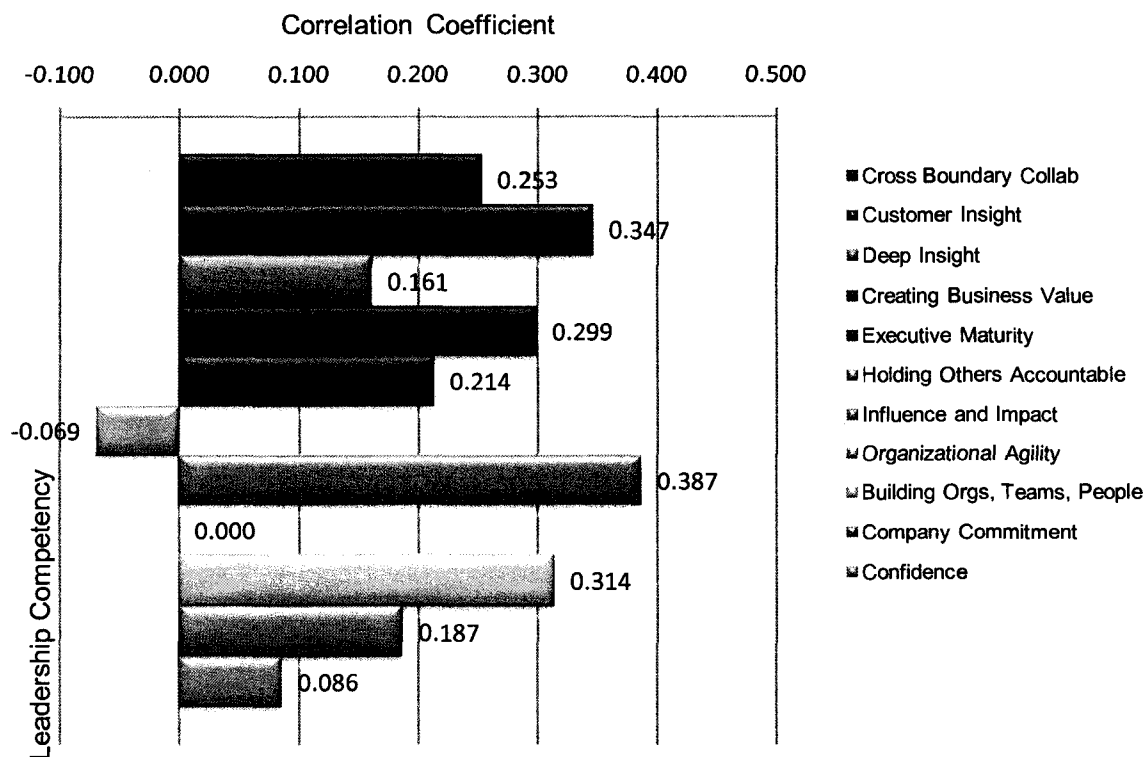


Figure 14. *Chart Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, by Managers*

Comparing CHOICES® Factor 3 Scores with Participants and Managers Gain Scores

In a fashion similar to the comparison between coefficients of correlation with CHOICES® Factor 1, a pattern seems to emerge across the following variables correlated with Factor 3 (Change Agility): Holding Others Accountable, Influence and Impact, Organizational Agility, Building Organizations, Teams, People and Company Commitment. In this case, the difference appears to be more consistent across the first four aforementioned variables with the manager scores being the lesser of the two. Again, as was seen regarding Factor 1, there is near agreement on the Kendall Tau values for Creating Business Value across the samples. A marked difference occurs for Customer Insight and Confidence variables, as has been seen before. These scores, and their associated values are depicted in Figure 15.

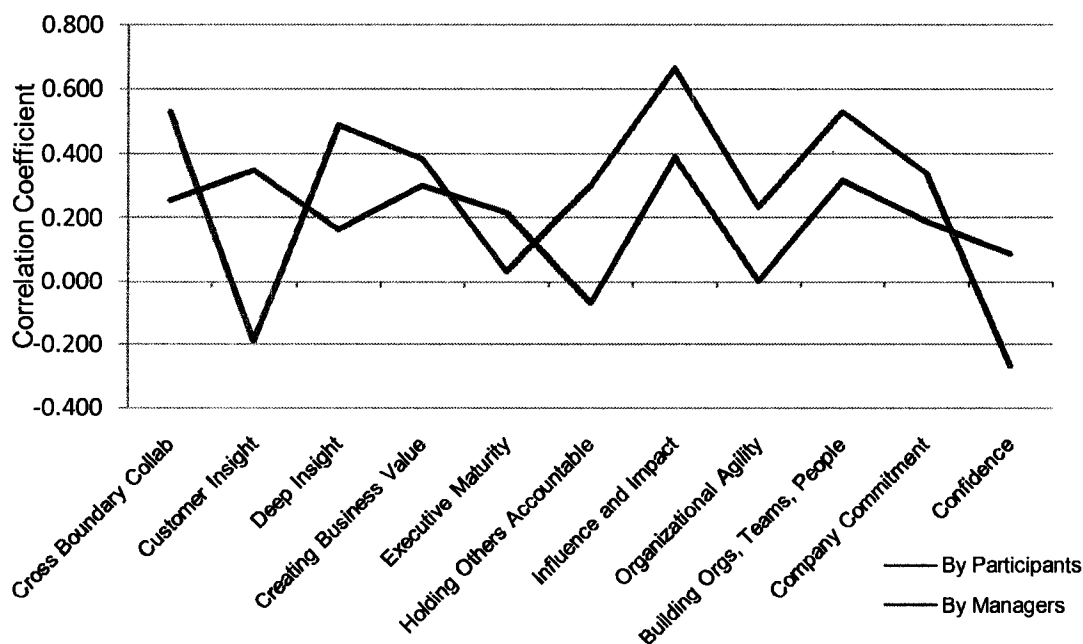


Figure 15. *Correlations (Kendall Tau) between CHOICES® Factor 3 Scores and Changes in Microsoft Leadership Competency Measures, Comparing Participants and Managers*

CHOICES® Factor 4 Scores and Participants Gain Scores

Lominger's CHOICES® Factor 4 measures results agility across a cluster of four learning agility dimensions. Again, three positive principal associations were identified (27 percent) - Influence and Impact, Building Organizations, Teams, People and Cross Boundary Collaboration. Two changes in competencies were considerably associated with CHOICES® Factor 4 scores, and three were moderately associated with the same. Once again, Executive Maturity was very nearly perfectly inconsequential. Continuing the theme, Customer Insight and Confidence demonstrated a negative association; this time at a minor level. The associated values are depicted in Figure 16.

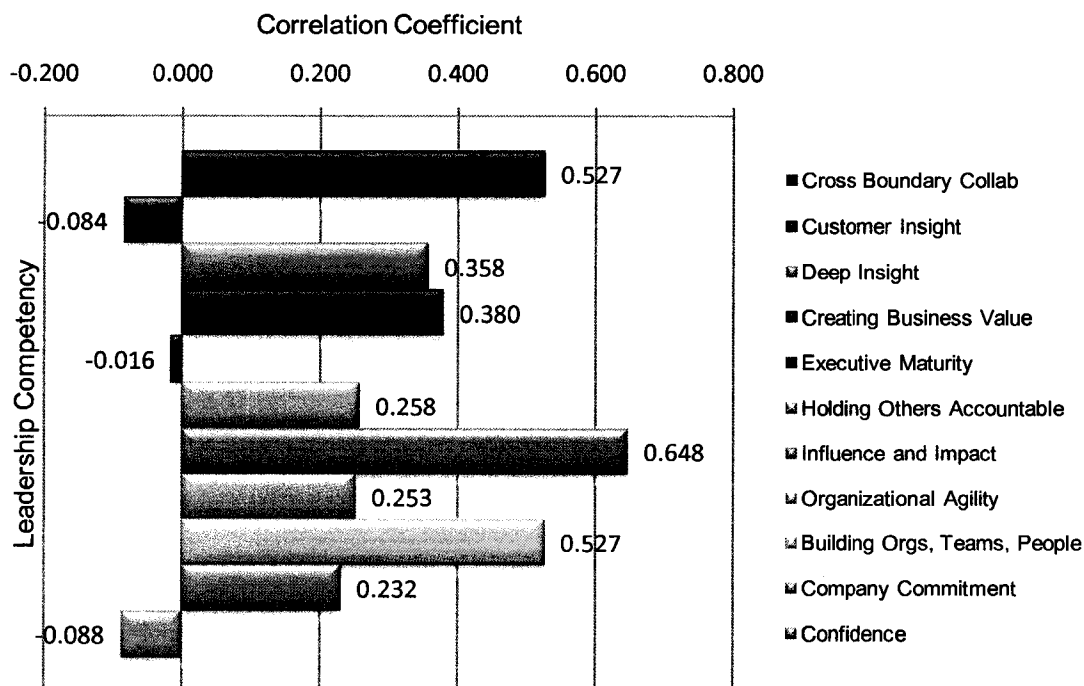


Figure 16. *Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competency Measures, by Participants*

CHOICES® Factor 4 Scores and Managers Gain Scores

Results Agility (CHOICES® Factor 4) as correlated with calculated gain scores measured by managers, resulted in principal associations related to Building Organizations, Teams, People and Executive Maturity. Customer Insight and Confidence are high considerable relationships with Factor 4 - .469 and .430 respectively. Three other variables are also considerable in terms of strength of relationship. In this case, 55 percent are either principal or considerable in nature. Two variables are minor correlations and two are inconsequential. These results are depicted in Figure 17.

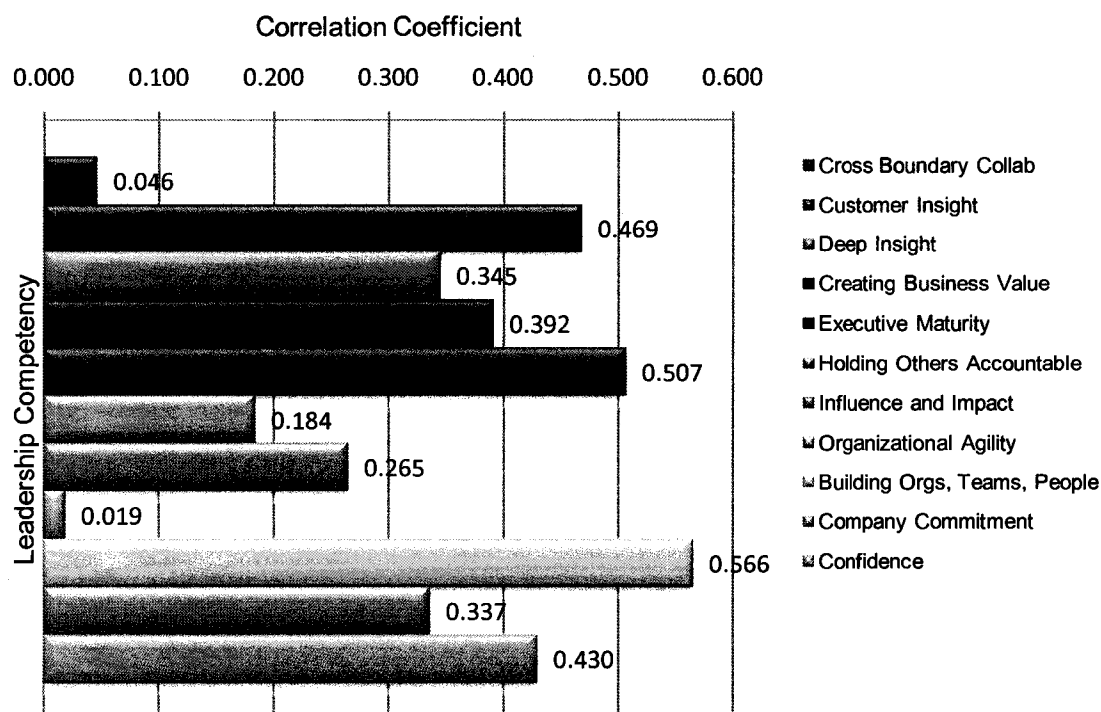


Figure 17. *Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competency Measures, by Managers*

Comparing CHOICES® Factor 4 Scores with Participants and Managers Gain Scores

Aside from the consistency across correlations with gain scores by participant and manager with CHOICES® Factor 4 scores for Deep Insight, Creating Business Value, Holding Others Accountable and Building Organizations, Teams, People, the remainder of the scores varied widely. Although the consistency does indicate the principal strength of association for Building Organizations, Teams, People; and a considerable relationship for Deep Insight and Creating Business Value. Again, a wide discrepancy has been observed across Cross Boundary Collaboration and Confidence. A marked discrepancy is also apparent between Customer Insight and Influence and Impact as it relates to Factor 4 measuring Results Agility. These findings are depicted in Figure 18.

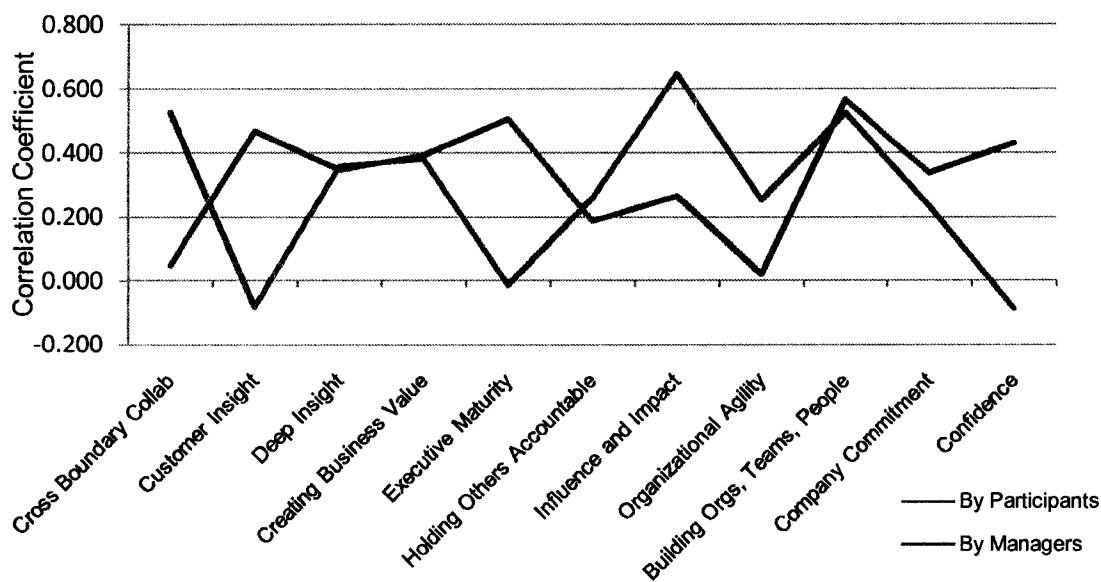


Figure 18. *Correlations (Kendall Tau) between CHOICES® Factor 4 Scores and Changes in Microsoft Leadership Competencies, Comparing Participants and Managers*

All CHOICES® Scores and Participants Gain Scores

For the purpose of summarizing the relationships between the participant gain scores on Microsoft's Leadership Competency measures with the CHOICES® scores, Figure 19 provides an aggregated view of the data. Thematically, the association between these sets of data are strongest for Influence and Impact. Cross Boundary Collaboration, Building Organizations, Teams, People and Deep Insight all show a mix of considerable and principal findings across the board. Creating Business Value is consistently considerably associated. Holding Others Accountable and Company Commitment (Team Microsoft) appear at a glance to be more varied, spanning moderate to considerable results. Organizational Agility is almost consistently clustered to the level of moderate associations. All except one of the scores for Executive Maturity are inconsequential. Confidence is nearly completely considerably negatively correlated with the learning agility measures. Customer Insight is generally more moderately associated, albeit in a negative direction.

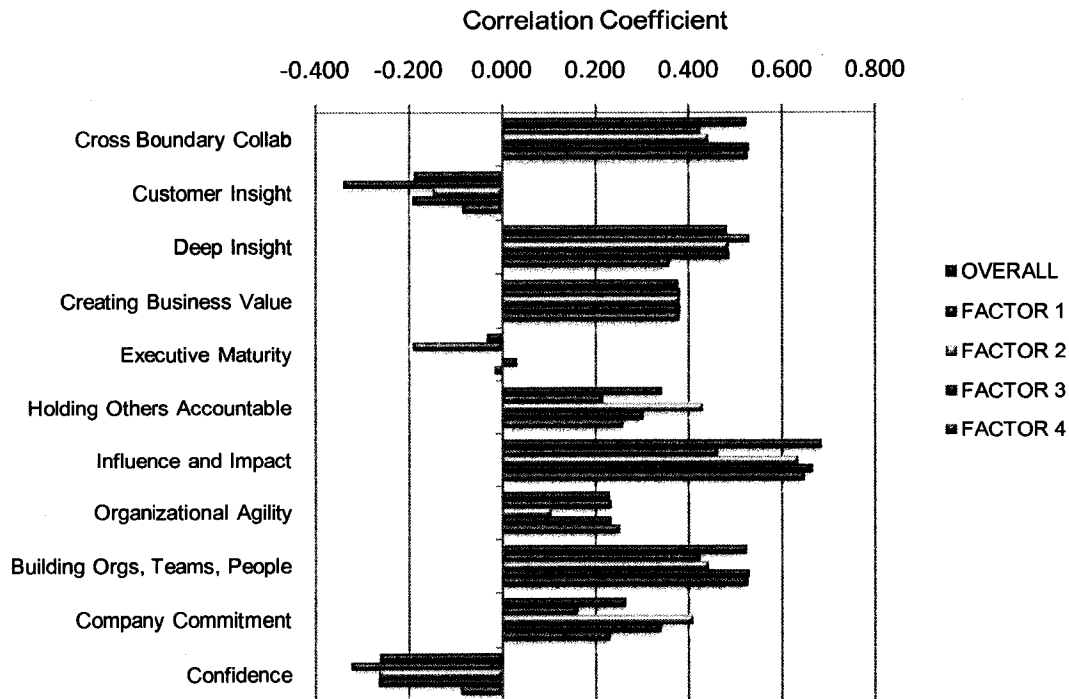


Figure 19. Correlations (Kendall Tau) between CHOICES® Scores and Changes in Microsoft Leadership Competency Measures, by Participants

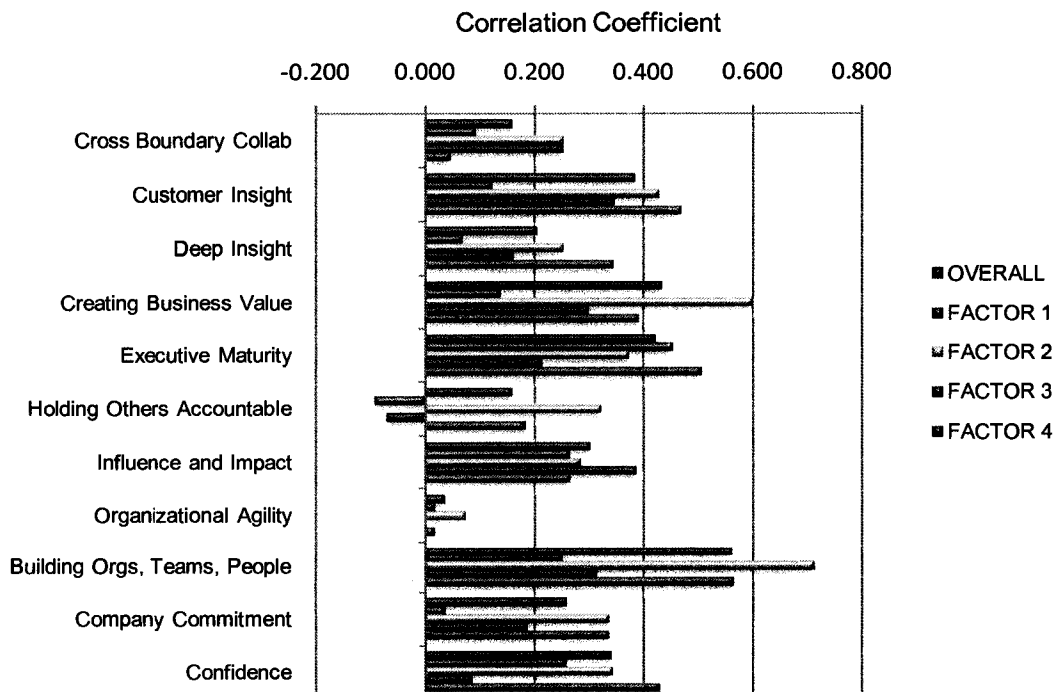


Figure 20. Correlations (Kendall Tau) between CHOICES® Scores and Changes in Microsoft Leadership Competency Measures, by Managers

All CHOICES® Scores and Managers Gain Scores

As depicted in Figure 20, the correlational coefficients between manager gain scores and all of the CHOICES® scores are more varied than the same for the participant gain scores. Generally speaking, four leadership competency variables (Building Organizations, Teams, People, Executive Maturity, Customer Insight and Creating Business Value) straddle the principal and considerable degrees of association. In a similar vein, four variables (Deep Insight, Influence and Impact, Company Commitment and Confidence) demonstrate relative consistency at the considerable level of ‘practical significance’. Thematically, moderately strong associations can be seen for Cross Boundary Collaboration. Organizational Agility seems to be inconsequential in relationship to learning agility amongst the population as measured by managers. Holding Others Accountable is widely varied and as such is inappropriate for such summary categorization.

Summary

The findings and results of the empirical exploration of the relationship between Microsoft's Leadership Competency measures and learning agility constructs, as measured by Lominger's CHOICES® instrument, for a select population of senior executives within Microsoft receiving executive coaching are provided in this chapter. To provide context, a brief summary of the research study is reiterated. The findings presented herein provide the foundation for the conclusions and recommendations discussed in Chapter 5.

CHAPTER 5 : DISCUSSION

The body of knowledge regarding executive coaching is evolving, and this evolution occurs as gaps in the body of knowledge are identified and addressed. This research was designed and conducted to empirically address the identified knowledge gap associated with understanding an executive's readiness for executive coaching. Exploring readiness for executive coaching was addressed by examining relationships between leadership competency measures and learning agility measures in a population of Microsoft senior executives participating in executive coaching. Analysis of these relationships identified findings of interest presented in this chapter.

An element critical to this analysis is the drawing of a logical connection between executive coaching, the development of leadership competencies and learning agility. Executive coaching is a one-on-one relationship between coach and executive focused on helping executives develop skills aligned with increasing business performance and leadership capabilities (Stern, 2004; Ludeman & Erlandson, 2004; Richard, 2003; Hart, Blattner & Leipsic, 2001). Leadership is a complex construct that is most often defined, measured and developed through competency models (Boyatzis, 1982; Lobel, 1991; McCall & Hollenbeck, 2007; Quinn, Faerman, Thompson & McGrath, 1990; Spreitzer, McCall & Mahoney, 1997). Leadership competency is "the product of numerous challenging job assignments, exposure to other people, mistakes, setbacks and training experiences" (Spreitzer, McCall & Mahoney, 1997, p. 6). Learning agility is "the willingness and ability to learn new competencies in order to perform under first-time, tough or different conditions" (Lombardo & Eichinger, 2000).

Thus executive coaching can be considered as a customized leadership development process, targeted at improving leadership performance and competencies. Learning agility then

provides the means to assess the degree to which executives can learn and apply competencies outside of the executive coaching interventions. Or, executives that are agile learners are by definition more open to insights fostered through the executive coaching interventions. In this fashion, learning agility measures an executive's readiness for executive coaching.

Review of Results

Leadership Competencies by Participants

The Microsoft Leadership Competency Model consisted of 11 consistent competencies across the measured periods. According to the measures provided by the participants, the competency scoring highest in each period was Company Commitment (Team Microsoft) ($M=3.57$ and $M=3.50$), noting the slight negative trend over time. This negative trend was also apparent across six of the other competencies (Cross-Boundary Collaboration, Deep Insight, Create Business Value, Holding Others Accountable, Impact and Influence, and Building Organizations, Teams and People). This decrease in leadership competencies over time validates the increasing trend of complexity, and the general lack of focus on developing and improving leadership capabilities within organizations (Collins, 2001; Davis & Stephenson, 2006). Mean scores for three competencies remained exactly the same (Customer Insight and Commitment, Executive Maturity, and Organizational Agility). According to the participant scores, the only competency indicating an increase over the time period was Confidence.

One of the variables of interest in this study is the change in leadership competency, or calculated gain score by participant per competency over time. Viewed on the whole, the range of exhibited gain scores measured by the participant was from negative three to three. Within this range, a total of twenty-six responses were non-zero scores representing nearly seventeen percent of the total number of responses. Of the participant gain scores, Building Organizations,

Teams and People reflected the largest absolute mean score value, $M = -.29$. This indicates scores on this competency decreased over the time spanning the two measurements, and was the largest decrease amongst all of the competencies as measured by the participants.

Leadership Competencies by Managers

These same eleven competencies were scored by the participant's manager during the same time periods. In contrast to the scores provided by the participants, six of the competencies mean scores increased over time from the manager's perspective (Cross-Boundary Collaboration, Customer Insight and Commitment, Deep Insight, Impact and Influence, Organizational Agility, and Company Commitment (Team Microsoft)).

The largest increase was associated with Impact and Influence ($M = 2.21$ and $M = 2.50$, respectively) for a relative improvement of over thirteen percent. The remaining five competencies decreased over the time period, with the second largest decline related to Building Organizations, Teams & People. This decline was nearly five percent in relative terms. Thus both the participants and managers agreed that behaviors associated with this competency were decreasing over time.

Based on the available literature regarding self-reporting, the bias trends towards overstatement (Donaldson & Grant-Vallone, 2002; Moorman, & Podsakoff, 1992; Zerbe, & Paulhus, 1987); yet in the case of this sample the participants indicated a majority of the leadership competencies decreased over time whilst the managers suggested a majority increased over time. It is plausible that the manager's perceptions and measures of the competencies were more accurate, and the participants were understating the same due to overestimation of capabilities of the peer-group (Moore & Cain, 2007). In terms of trends in gain scores, the participants and managers agreed that demonstration of the following three competencies

decreased over time: Creating Business Value, Holding Others Accountable, and Building Organizations, Teams, People. Aside from these three, the respective groups disagreed on the improvement or lack thereof on the remaining competencies across the time scale.

Considering the calculated gain score by manager per competency over time, the range of gain scores was from negative two to two, and thirty-three scores were non-zero scores. This represents more than twenty-one percent of the total possible responses. Of the manager gain scores, the largest absolute mean score was associated with Organizational Agility ($M=.67$).

Learning Agility

Within the sample ($N=14$), learning agility scores measured by the Lominger CHOICES® instrument were generally high. The Overall mean score (321.50) was nearly exactly at the 90th percentile mark as interpreted by the Lominger research scale. The Mental Agility Factor (Factor 1) mean score (99.07) was the highest ranking factor, and was in the upper tenth of the possible range of scores (90th (95) – 95th (101)). The mean scores of the remaining factors (People Agility, Change Agility, Results Agility) were interpreted in the upper quartile (75th – 90th): People Agility ($M=125.21$); Change Agility ($M=47.71$); Results Agility ($M=49.36$). Of these, Factor 2 measuring People Agility was the lowest relative mean score based on the interpretation guidance provided by Lominger.

Comparing Leadership Competencies and Learning Agility

The meaningful CHOICES® learning agility outputs (Overall, Factors 1-4) were correlated with the eleven competencies in the Microsoft Leadership Competency Model as measured by both the participant and manager. The Kendall Tau correlational technique was utilized due to the ordinal variables used in the study. For the purposes of this study, Kendall's Tau was interpreted as a value indicating the probability of the leadership competency score

increasing as the learning agility score increases (Arndt, et al, 1999). To aid in understanding the practical significance of the Kendall Tau values, a bespoke interpretation classification was presented. This is reiterated in Table 19.

Table 19
Interpretation of Correlation Coefficient

<u>Coefficient of Correlation</u>	<u>Practical Significance Interpretation</u>
.00 - .05	Inconsequential
.06 - .15	Minor
.16 - .30	Moderate
.31 - .50	Considerable
.50+	Principal

Note: Correlation Coefficient represents Kendall's Tau

The previous chapter provides the detailed output of the data analysis. For the purposes of the discussion in this chapter, a summary view is provided. In doing so, the patterns apparent across the identified relationships can be highlighted. The patterns that influence the practical significance of this research are clustered towards either end of the spectrum of the interpretation classification.

The eleven leadership competencies were correlated with the five meaningful outputs available from the CHOICES® instrument (Overall, Factors 1 – 4). As the competency measures were reviewed by both participant and manager, two sets of eleven gain scores were considered. In this regard, the total number of Kendall Tau values was fifty-five by participant and fifty-five by manager.

Of the fifty-five possible correlations between learning agility scores and leadership competencies measured by participant, thirty-one were either identified as principal or considerable relationships, accounting for fifty-six percent of the possible outcomes. Eleven were found to be of principal strength of association; this represents twenty percent of the total

possible outcomes. Twenty relationships were found to be of considerable strength, accounting for thirty-six percent of the total possible outcomes. In other words, more than half of the correlations were greater than .31, and one out of five was greater than .50.

When the leadership competency scores measured by manager were compared with the learning agility scores, twenty-three of the possible fifty-five associations were either principal or considerable representing forty-two percent of the total possible associations. In this case, four principal associations and nineteen considerable relationships were found.

Viewed in total, the data analysis considered a total number of 110 Kendall Tau values indicating the strength of the association between the variables. Of these 110 values, fifty-four were classified as either considerable or principal relationships. This is a rather remarkable forty-nine percent of the total possible outcomes. Of these, fifteen relationships were principal in nature (28%), and thirty-nine were interpreted as considerable (72%). It should be noted, that two of the considerable relationships indicated a negative relationship. For the purposes of aiding in understanding these findings, Table 20 provides a visual view of the aforementioned summary.

Table 20
Select Associations Across Measuring Party and Leadership Competency

Leadership Competency	Principal Association		Considerable Associations		Totals
	P	M	P	M	
Cross-Boundary Collaboration	3		2		5
Customer Insight			*1	4	5
Deep Insight	1		4	1	6
Creating Business Value		1	5	2	7
Executive Maturity		1	2	3	6
Holding Others Accountable				1	1
Impact and Influence	4		1	2	7
Organizational Agility					0
Building Orgs, Teams, People	3	3	2	1	9
Company Commitment			2	2	4
Confidence			*1	3	4
Totals	11	4	20	19	54

Note: P=Participants, M=Managers

* indicates a negative Kendall Tau value

Table 20 also provides a vehicle to gain insight into the strength of association by leadership competency. Each competency has a total of ten associated Kendall Tau values (five learning agility outputs by participant and five learning agility outputs by manager). All of the leadership competencies were found to have a principal or considerable relationship with a learning agility output, except Organizational Agility. In a similar vein, Holding Others Accountable was found to have only one considerable association. Considering these outliers, the mean ($M=4.9$) number of principal or considerable associations per leadership competency was nearly five. Discarding the outliers, the mean ($M=5.8$) across the remaining nine competencies rises to almost six categorized associations. In other words, of the remaining nine competencies nearly 60% of the associations with learning agility were either of principal or considerable strength of association.

As can be seen, the largest number of principal and considerable associations was found in relation to Building Organizations, Teams and People. In this case, out of the ten possible

correlations, nine (90%) were found to be either principal or considerable. These nine were relatively evenly distributed across principal and considerable relationship strength and again across participant and manager. With a mean Kendall Tau value of .485, there is a nearly 50% probability that as an executive's learning agility scores increase, so do the scores on the Building Organizations, Teams and People competency.

The second highest number of meaningfully high correlations was seven (70 percent) for both Creating Business Value and Impact and Influence. Impact and Influence was found to have mostly principal associations, and skewed towards the participant data; the mean Kendall Tau value measuring the correlation between Impact and Influence and learning agility scores was .460. This could be due in part to a self-reporting bias held by the participants reflecting that they were indeed more influential and impactful than was perceived by their managers (Donaldson & Grant-Vallone, 2002; Moorman, & Podsakoff, 1992; Zerbe, & Paulhus, 1987). In the case of Creating Business Value, the relationships were mostly of considerable strength and slightly skewed towards the perspective of the participant. The mean Kendall tau value of .376 was relatively consistent across both groups (Participant Mean = .380; Manager Mean = .372).

Table 21 is provided to position the interpretation guidance in conjunction with the mean scores across the five meaningful learning agility outputs by leadership competency.

Table 21
Mean Correlation Values and Interpretation by Measuring Party and Leadership Competency

<u>Leadership Competency</u>	<u>P</u>	<u>Interpretation</u>	<u>M</u>	<u>Interpretation</u>
Cross Boundary Collaboration	.490	Considerable	.161	Moderate
Customer Insight	-.190	Moderate	.350	Considerable
Deep Insight	.469	Considerable	.207	Moderate
Creating Business Value	.380	Considerable	.372	Considerable
Executive Maturity	-.041	Inconsequential	.394	Considerable
Holding Others Accountable	.310	Considerable	.101	Minor
Influence and Impact	.619	Principal	.301	Considerable
Organizational Agility	.211	Moderate	.030	Inconsequential
Building Organizations, Teams, People	.490	Considerable	.481	Considerable
Company Commitment	.282	Moderate	.231	Moderate
Confidence	-.240	Moderate	.292	Moderate

Note: P=Participants, M=Managers

Figure 21 depicts the mean correlation values for the five meaningful learning agility outputs from CHOICES® for each leadership competency to aid in understanding the relationships identified in the data.

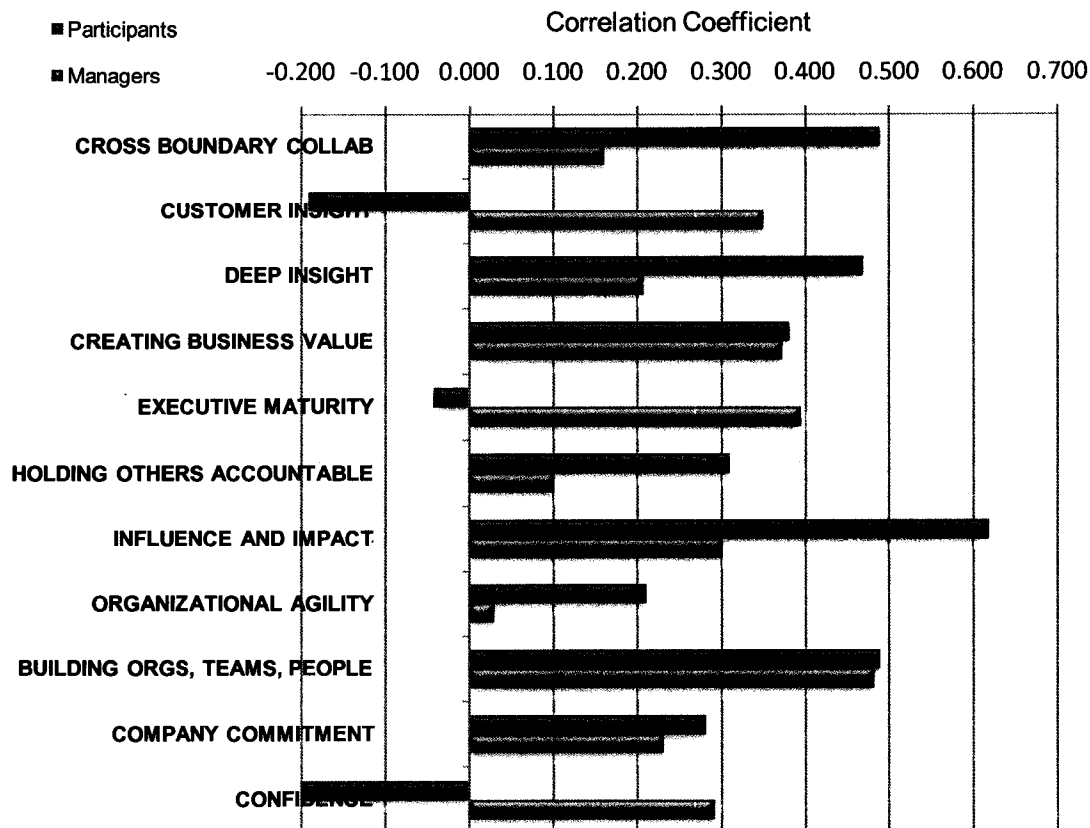


Figure 21. *Mean Correlation Values (Kendall Tau) between CHOICES® Learning Agility Scores and Microsoft Leadership Competencies*

Two meaningful anomalies were found. All of the correlation values between changes in leadership competencies and learning agility measured by participant were negative for Customer Insight and Confidence. This indicates that as learning agility increases there is generally a moderate probability that scores on these competencies mentioned will decrease. When considering the correlations between these two leadership competencies measured by manager and learning agility, all of the found values were positive. As can be seen in Figure 21, consistency across groups is identified in the correlation between learning agility and two leadership competencies: Creating Business Value and Building Organizations, Teams and People.

Table 22 aggregates the mean scores by leadership competency across the two groups (participant and manager) and provides the interpretation guidance indicating the strength of the relationship. Five (45%) of the values are categorized at considerable, three are moderate, two are minor and one is inconsequential. In this case, the mean values include both the participant and manager correlation values and thereby the manager scores moderate the findings observed solely by the participants. This effectively corrects for any self-reporting bias that may exist within the data, and is the recommended approach in organizational behavior research (Donaldson & Grant-Vallone, 2002; Moorman, & Podsakoff, 1992; Zerbe, & Paulhus, 1987).

Table 22

Aggregated Mean Correlation and Interpretation by Leadership Competency

<u>Leadership Competency</u>	<u>Correlation</u>	<u>Interpretation</u>
Cross Boundary Collaboration	.325	Considerable
Customer Insight	.080	Minor
Deep Insight	.338	Considerable
Creating Business Value	.376	Considerable
Executive Maturity	.176	Moderate
Holding Others Accountable	.206	Moderate
Influence and Impact	.460	Considerable
Organizational Agility	.120	Minor
Building Organizations, Teams, People	.485	Considerable
Company Commitment	.257	Moderate
Confidence	.026	Inconsequential

Significance of Findings

In reviewing the CHOICES® learning agility scores of the sample, all of the means were well within the upper quartile of scores per the Lominger research scale, and the lowest relative score was associated with the People Agility Factor. Essentially, the Microsoft senior executives are learning agile, and have opportunity for improvement as it relates to their interpersonal capabilities. For the purposes of this study, the high learning agility scores indicate a capability

for the executives to learn from experience and reapply these learnings elsewhere – or have a strong foundation to build upon with executive coaching interventions. This foundation describes their level of readiness to maximize returns from executive coaching investments.

Coincidentally, amongst the Microsoft leadership competency scores rated by the participants, the greatest variance between the April 2005 and November 2007 scores was a drop in the Building Organizations, Teams and People competency. In relative terms, this drop equated to nearly nine percent. The negative trend for this competency was also represented in scores rated by the manager, reflecting a relative five percent decrease in this instance.

The data provided in the sample indicates rather clearly that changes in this leadership competency exhibit a strong meaningful positive correlation with learning agility. Based on the mean correlation value of .485, the association between changes in Building Organizations, Teams and People and learning agility is the strongest association found in the analysis. Additionally, this principal association is consistently high across measures provided by both the participant and manager. So, if Microsoft is interested in reversing the negative trends related to the Building Organizations, Teams and People competency, learning agility provides a lever for those within this sample. Focusing the executive coaching interventions on increasing the interpersonal capabilities, identified as a developmental opportunity based on the scores of CHOICES® Factor 2 (People Agility), has a very high probability of increasing capability as measured by this competency. The findings indicate that the People Agility factor itself is even more highly associated with changes in Building Organizations, Teams and People than the overall average learning agility score. This very strong mean correlation (.578) is furthered when only the manager's perspective is considered (.713). Across the sample there is a 71%

probability that as People Agility increases, so does competency demonstration visible to the managers.

To the degree Microsoft prioritizes the leadership competencies, and in the event Impact and Influence and Creating Business Value are near the top, again there is a high probability (46% and 38% respectively) that learning agility provides a lever for improvement. This lever can be construed as an indication of readiness for executive coaching aligned with the identified competencies. Based on the empirical findings, generally speaking learning agility in conjunction with executive coaching can be used as a means to improve the identified and measured leadership competencies amongst the sample.

The executive coaching program provides the mechanism for applying this leverage, in a customized leadership development fashion. To facilitate this, Microsoft should consider formally communicating the results of this research to their executive coaching providers and encourage them to comprehend the identified relationships herein. In doing so, Microsoft can programmatically suggest executive coaching foci and agenda inclusive of developing interpersonal skills, such as emotional intelligence capabilities. The prescriptive guidance offers a framework for integration with the customized coaching foci presented by the executives themselves, in order to precipitate behavior mutually beneficial to the executive and organization. The findings indicate a high degree of likelihood that competency scores for Building Organizations, People and Teams, Impact and Influence, and Creating Business Value should also increase.

Implications (For Theory and for Practice)

While there are some contradictions in the findings, and further research needs to be conducted to better understand them, it is important to understand the general findings in relation

to the sample. The sample is comprised of senior executives that have risen to their respective positions in a Fortune 500 organization due in part to their past performance. That is to say that these participants in the high potential program are the best of the best at Microsoft. Statistically speaking, they are considered to be “four standard deviations above the mean”. As a result, the high probability that an increase in learning agility is associated with an increase in leadership competencies appears meaningful. Especially so, when viewed in context of the reported correlations of other complementary constructs; in Goleman’s (2000) Harvard Business Review published article, *Leadership that Gets Results*, references regarding the impact of leadership styles on organizational climate drivers involved correlation values ranging from $-.26$ to $.54$. While there is substantial difference between this study and the referenced Goleman research ($N=3872$), the similar magnitude in indices of correlation suggest this research has begun to identify a meaningful connection between executive coaching, changes in leadership competencies and learning agility. Perhaps future research might expect to see even stronger relationships between changes in leadership competencies and learning agility if a broader cross-section (beyond just the best of the best) of Microsoft was studied.

Without deviating too far from the findings of this research, to the degree that executive coaching is the preferred means towards improvement in leadership competency, and is measured in part through the use of learning agility as the surrogate standardized measure of coaching readiness, results from this study suggest that application of executive coaching more widely across Microsoft could be rather impactful to the organization – empirically speaking. Future research seeking to replicate this study on a wider scale would allow for such a theory to be further validated.

Perhaps more relevant to this study, in the event Microsoft chooses to objectively measure the impact of executive coaching by means of improvement in leadership competencies, learning agility provides a filter to identify where executive coaching is best utilized. Using CHOICES®, Microsoft could assess the broader leadership team for the purposes of identifying developmental opportunities addressable through executive coaching. In this manner, executives most able to maximize a return on the executive coaching investment could be identified for such interventions. Additionally, specific developmental opportunities within the scope of the intervention could be aligned with insights provided from the CHOICES® output.

Microsoft would be well served by increasing the importance placed on understanding and programmatically improving the executive coaching provided across the organization for profitable gain and competitive advantage. Such an approach should be inclusive of the external executive coaching providers, and such should be an explicitly stated condition of future executive coaching engagements with Microsoft. This pre-requisite could yield a cadre of progressively minded executive coaches, and begin to foster a community interested in innovating within the marketplace. Aside from the cache' value of coaching for Microsoft, such an approach might increasingly attract the top executive coaching talent, and thus better position Microsoft executives to create and sustain competitive advantage. If this was successful, such a program might serve to attract top executive talent to Microsoft with the knowledge their development was fostered through an innovative, research-based program.

Other organizations might take note of these findings, and pursue their own research to determine if these findings are applicable to their environment, and thus ultimately on a wider scale.

The question remains - is learning agility a measure of readiness useful in maximizing executive coaching interventions? A definitive answer requires more research. However, the findings suggest an increase in leadership competencies is related to an increase in learning agility, even amongst a population of agile learners scoring on the upper quartile of learning agility. So the application of executive coaching to this population bears objective results, when conducted through the lens of increasing learning agility.

Recommendations for Future Research

This research effort is one study, and based on the literature review, the first study focused on empirically connecting executive coaching, changes in leadership competencies and learning agility. The findings are encouraging within the identified sample. Microsoft would be well served to initiate a similar assessment across a wider scale, to determine if the results replicate. As previously noted, other organizations reviewing this research might find opportunity to understand the implications of these findings in their own environment.

Future research on this same subject would be advised to consider a baseline measure of learning agility at the on-set of executive coaching, such that a gain score of learning agility could be considered in conjunction with a gain score in leadership competencies. By doing so, the impact of executive coaching can be more readily isolated and identified in the confines of the learning agility gain score.

Future researchers should be advised of the resistance encountered in performing this study, and be prepared to encounter similar levels in their own efforts. Organizationally, Microsoft was reluctant for nearly a year to engage in dialogue regarding access to such a population. Perhaps this is due to a desire to keep critical and confidential data controlled; however the researcher also initially encountered resistance from The Center for Creative

Leadership in performing executive coaching research under their guidance and supervision. It is submitted that the current state of the body of knowledge is limited in part to such positions taken by organizations, and that parties interested in furthering the body of work regarding executive coaching be aware of the time and energy needed to overcome objections, and sustain the passion for knowledge through the many periods of silence surrounding requests to conduct similar research.

Experience shows this resistance is not limited to organizations, rather often extends to executive coaches solicited to participate in such research efforts. This study was dependent upon the voluntary participation of executive coaches providing service to the executives comprising the sample. Even though the total investment of their time was purposely limited to less than two hours, and many needed only to invest much less, getting them to actually do so was difficult. Some continually offered excuses, and others completely ignored my communications. Perhaps some executive coaches possess a fear of shining a light into a highly lucrative process that is still somewhat shrouded in mystery, concerned that research findings will systematically codify and structure this offering and reduce their value and ultimately income. Generalizations are typically unfair, and a near equal number of executive coaches in this study (and in previous studies conducted by this researcher) were receptive, open and interested in readily engaging. The purpose of stating these observations is to speak the truth about these experiences and thereby provide a reference point for other pioneers in this field. Fellow travelers be prepared, the journey is long and the course uncharted so take ample supplies to weather to the impending storms.

Numerous authors agree, further empirical research related to executive coaching is needed. It is hoped the findings from this exploratory empirical research fuel further research

considering the empirical relationship between executive coaching, changes in leadership competencies and learning agility.

Conclusion

This exploratory research considered the relationships between executive coaching, changes in leadership competencies and learning agility. The findings indicated strong affinity between the concepts, within the sample studied. This sample was comprised of the best of the best at Microsoft, and found that even these highly talented and successful executives possess room for improvement. Such improvement, facilitated by executive coaching, indicates a substantial probability that leadership competencies improve as learning agility increases – especially those related to interpersonal skills. Thereby, learning agility provides a meaningful empirical filter for the application of executive coaching. When viewed through this learning agility lens, returns on organizational investments into executive coaching can be maximized.

REFERENCES

- Addelson, M., Brumburgh, S. & Chalwa, R. (2005). From fragmentation to aligning: Organizational coaching and ten conversations for organizing knowledge work. *Reflections*, 6(6/7), 25-39.
- Anderson, D. & Anderson, L.A. (2001). *Beyond change management*. San Francisco: Jossey-Bass/Pfeiffer.
- Anderson, J. P. (2002). Executive Coaching and REBT: Some comments from the field. *Journal of Rational-Emotive & Cognitive Behavior Therapy*, 20(3-4), 223-233.
- Armenakis, A.A., Harris, S.G. & Mossholder, K.W. (1993). Creating Readiness for Organizational Change. *Human Relations*, 46(6), 681-703.
- Arndt, S., Turvey, C. & Andreasen, N.C. (1999). Correlating and predicting psychiatric symptom ratings: Spearman's *r* versus Kendall's tau correlation. *Journal of Psychiatric Research* 33(2), 97-104.
- Bass, B.M. (1985). Leadership: Good, better, best. *Organizational Dynamics*, 13, 26-40.
- Baume, D. (2004). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5, 14-37.
- Blattner, J., (2005). Coaching: The Successful Adventure of a Downwardly Mobile Executive. *Consulting Psychology Journal: Practice & Research*, 57(1), 3-13.
- BlessingWhite Home Page (2007). Retrieved September 28, 2007 from <http://www.blessingwhite.com/docDescription.asp?id=198&pid=6&sid=1>
- Bluckert, P. (2005). The Similarities and Differences between Coaching and Therapy. *Industrial & Commercial Training*, 37(2), 91-96.
- Bolton, R. & Bolton, D.G. (1996). *People styles at work: Making bad relationships good and good relationships better*. New York: AMACOM.
- Boyatzis, R.E. (1982). *The competent manager*. New York: Wiley.
- Burke, W.W. & Litwin, G.H. (1992). A Causal Model of Organization Performance and Change. *Journal of Management*, 18(3), 523-545.
- Cantrell, S., Benton, J.M., Laudal, T. & Thomas, R.J. (2006). Measuring the Value of Human Capital Investments: the SAP Case. *Strategy & Leadership*, 34(2), 43-52.
- Clifton, D. O. & Anderson, E. (2002), *Strengthsquest: discover and develop your strengths in academics, career and beyond*. Washington, D.C: The Gallup Organization.

- Coch, L., & French, J. (1948). Overcoming resistance to change. *Human Relations*, 1, 512-532.
- Collins, D. B., & Holton, E. F., III. (2004). The effectiveness of managerial leadership development programs: A meta-analysis of studies from 1982 to 2001. *Human Resource Development Quarterly*, 15(2), 217-248.
- Collins, J. (2001). *Good to great*. New York: HarperCollins Publishers, Inc.
- Connolly, James J. (2001) Assessing the construct validity of a measure of learning agility. Ph.D. dissertation, Florida International University, United States -- Florida. Retrieved February 1, 2007, from ProQuest Digital Dissertations database. (Publication No. AAT 3013189).
- Corporate Executive Board. (2003, May). *Maximizing returns on professional executive coaching*. Washington, DC: Corporate Leadership Council: Research Snapshot.
- Crane, T. G. (2001). *The heart of coaching: Using transformational coaching to create a high-performance culture*. San Diego, CA: FTA Press.
- Davis, I. & Stephenson, E. (2006). Ten Trends to Watch in 2006, The McKinsey Quarterly. Retrieved July 4, 2006 from: [http://e.mckinseyquarterly.com/a/hBELqOMAG8E6\\$AXmEnUAdb4-jgv/mck35](http://e.mckinseyquarterly.com/a/hBELqOMAG8E6$AXmEnUAdb4-jgv/mck35)
- Day, D.V. (2000). Leadership Development: A Review in Context. *Leadership Quarterly*, 11(4), 581-613.
- Di Pofi, J.A. (2002). Organizational Diagnostics: Integrating Qualitative and Quantitative Methodology. *Journal of Organizational Change*, 15(2), 156-168.
- Dirks, K.T., Cummings, L.L. & Pierce, J.L. (1996). Psychological Ownership in Organizations: Conditions Under Which Individuals Promote and Resist Change. *Research in Organizational Change and Development*, 9, 1-23.
- Donaldson, S.I., & Grant-Vallone, E.J. (2002). Understanding self-report bias in organizational behavior. *Journal of Business and Psychology*, 17(2), 245-260.
- Dotlich, D. L., & Cairo, P. C. (1999). *Action coaching: How to leverage individual performance for company success*. San Francisco: Jossey-Bass.
- Douglas, C. A., & Morley, W. H. (2000). *Executive coaching: An annotated bibliography*. Greensboro, NC: Center for Creative Leadership.
- Ducharme, M. J. (2004). The Cognitive--Behavioral Approach to Executive Coaching. *Psychology Journal: Practice & Research*, 56(4), 214-224.

- Dunphy D. (1996). Organizational Change in Corporate Setting. *Human Relations* 49(5), 541-552.
- Dyer, T. J. (2002). Executive development: Outer goals and inner coaching. *Employment Relations Today*, 29(1), 55-61.
- Edelstein, B. C., & Armstrong, D. J. (1993). A model for executive development. *Human Resource Planning*, 16(4), 51-69.
- English, M. (2006). Business print media coverage of executive coaching: A content analysis (Doctoral dissertation, Capella University). *Dissertation Abstracts International* (UMI No. 3216016)
- Ennis, S., Stern, L. R., Yahanda, N., Vitti, M., Otto, J., Hodgetts, W., et al. (2003). *The executive coaching handbook*. Wellesley, MA: The Executive Coaching Forum.
- Evered, R., & Selman, J. (1989). Coaching and the art of management. *Organizational Dynamics*, 18(2), 16-32.
- Farr Associates. (2003). Retrieved July 15, 2007, from <http://www.farr.net/services/services.html>
- Feller, R.W., Russell, M. & Whichard, J.A. (2005). Career Techniques and interventions: Themes from an international conversation. *The Career Development Quarterly*, 54(1), 36-47.
- Fitzgerald, C., & Berger, J. G. (2002). *Executive coaching: Practices and perspectives*. Palo Alto, CA: Davies-Black.
- Forrester, J.W. (1958). Industrial Dynamics - A Major Breakthrough for Decision Makers. *Harvard Business Review*, 36, (4), 37-66.
- Foster, S. and J. Lendl (1996). Eye Movement Desensitization and Reprocessing: Four Case Studies of a New Tool for Executive Coaching and Restoring Employee Performance after Setbacks. *Consulting Psychology Journal: Practice & Research*, 48(3), 155-161.
- Freas, A. (2000). Contributor in M. Goldsmith, L. Lyons & A. Freas (2000), *Coaching for leadership*. San Francisco, CA: Jossey-Bass/Pfeiffer.
- Ghemawat, P. (1999). *Strategy and the business landscape*. Redding: Addison-Wesley.
- Gilley, J.W. & Gilley, A.M. (2003). *Strategically integrated hrd* (2nd ed.). Cambridge: Perseus Publishing.
- Gilley, J.W. & Boughton, N.W. (1996). *Stop managing, start coaching!* Boston: Irwin.

- Gladwell, M. (2002, July 22). The talent myth: are smart people overrated? *The New Yorker* 78(20), 28-33.
- Goldsmith, M. (2007). *What got you here won't get you there*. New York: Hyperion.
- Goldsmith, M. (2006). Where the work of executive coaching lies. *Consulting to Management*, 17(2), 1-3.
- Goldsmith, M. (2004). *Impact of direct report feedback*. Retrieved Sept. 1, 2007, from <http://marshallgoldsmith.com/html/articles/impact.html>
- Goldsmith, M. & Lyons, L. (Eds.) (2006). *Coaching for leadership* (2nd ed.). San Francisco: Pfeiffer.
- Goldsmith, M., Lyons, L., & Freas, A. (Eds.). (2000). *Coaching for leadership: How the world's greatest coaches help leaders learn*. San Francisco: Jossey-Bass Pfeiffer.
- Goldsmith, M., & Morgan, H. (2004). *Increasing leadership effectiveness*. Retrieved Sept. 1, 2007, from <http://marshallgoldsmith.com/html/articles/increasing.html>
- Goleman, D. (2000) Leadership that Gets Results. *Harvard Business Review*, March–April, 78–90.
- Goleman, D. (1998). What Makes a Leader? *Harvard Business Review*, 76(6), 93-102.
- Grant, A.M. (2007) *Workplace, Executive and Life Coaching: An Annotated Bibliography from the Behavioural Science Literature (April 2007)*, Coaching Psychology Unit, University of Sydney, Australia
- Grant, A.M. (2005) *Workplace, Executive and Life Coaching: An Annotated Bibliography from the Behavioral Science Literature (Sept 2005)* Unpublished paper, Coaching Psychology Unit, University of Sydney, Australia.
- Grant, A.M. & Cavanagh, M.J. (2004). Toward a profession of coaching: Sixty-five years of progress and challenges for the future. *International Journal of Evidence Based Coaching and Mentoring*, 2(1), 1-16.
- Grant, R.M. (2005). *Contemporary strategy analysis* (5th ed.). Malden: Blackwell Publishing.
- Hagberg, R. (1996). Identify and help executives in trouble. *HR Magazine*, 41(8), 88-93.
- Halawi, L.A., McCarthy, R.V. & Aronson, J.E. (2006). Knowledge Management and the Competitive Strategy of the Firm. *The Learning Organization*. 13(4), 384-397.
- Hall, D. T., Otazo, K. L., & Hollenbeck, G. P. (1999). Behind closed doors: What

really happens in executive coaching. *Organizational Dynamics*, 27, 39-53.

Hamel, G. & Prahalad, C.K., (1989). Strategic Intent. *Harvard Business Review*, 67(3), 63-76.

Harris, M. (1999). Look, it's an I-O psychologist... no it's a trainer... no it's an executive coach. *TIP*, 36(3), 1-5.

Harrison, M. I., & Shirom, A. (1999). *Organizational diagnosis and assessment: Bridging theory and practice*. Thousand Oaks, CA: Sage.

Hart, V., Blattner, J. & Leipsic, S. (2001). Coaching versus therapy: A perspective. *Consulting Psychology Journal: Practice & Research*, 53(4), 229-237.

Hartman, L. (1999). A Psychological Analysis of Leadership Effectiveness. *Strategy & Leadership*, Fall 1999, 30-32.

Hatch, M.J. (2006). *Organization theory* (2nd ed.). Oxford: Oxford University Press.

Hayes, G. E. (1997). Executive coaching: A strategy for management and organizational development. In A. J. Pickman (Ed.), *Special challenges in career management: Counselor perspectives* (pp. 213-222). Mahwah, NJ: Erlbaum Press.

Hazucha, J. F., Hezlett, S. A., & Schneider, R. J. (1993). The impact of 360-degree feedback on management skills development. *Human Resource Management*, 32, 325-352.

Hollenbeck, G.P., McCall, M.W., Silzer, R.F. (2006). Leadership Competency Models. *Leadership Quarterly* 17(4), 398-413

Hudson, F. M. (1999). *The handbook of coaching: A comprehensive resource guide for managers, executives, consultants, and human resource professionals*. San Francisco, CA: Jossey-Bass.

International Coach Federation Home Page (2007). Retrieved September 24, 2007, from <http://www.coachfederation.org/>

Jay, M. (2003). Understanding how to leverage executive coaching. *Organization Development Journal*, 21(2), 6-19.

Kampa-Kokesch, S., & Anderson, M. Z. (2001). Executive coaching: A comprehensive review of the literature. *Consulting Psychology Journal: Practice and Research*, 53(4), 205-228.

Kaplan, R.S. & Norton, D.P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Boston: Harvard Business School Publishing.

- Kegan, R. (1994) *In Over Our Heads*, Cambridge, MA: Harvard University Press.
- Kegan, R. & Lahey, L.L. (2001). *How the way we talk can change the way we work*. San Francisco: Jossey-Bass.
- Kilburg, R. R. (2004). Trudging toward Dodoville: Conceptual Approaches and Case Studies in Executive Coaching. *Consulting Psychology Journal: Practice & Research*, 56(4), 203-213.
- Kilburg, R. R. (2000). *Executive coaching: Developing managerial wisdom in a world of chaos*. Washington, D.C.: American Psychological Association.
- Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*, 48(2), 134-144.
- Kodish, S. P. (2002). Rational Emotive Behavior Coaching. *Journal of Rational-Emotive & Cognitive Behavior Therapy*, 20(3-4), 235-246.
- Kortlik, J.W. & Williams, H.A. (2003). The incorporation of effect size in information technology, learning, and performance research. *Information Technology, Learning, and Performance Journal*, 21(1), 1-7.
- Leonard, T. J. (1999). *Becoming a coach: The Coach U approach*. Steamboat Springs, CO: Coach U Press.
- Levinson, H. (1996). Executive coaching. *Consulting Psychology Journal: Practice and Research*, 48(2), 115-123.
- Levy, P.E. & Cober, R.T. (2002). The Effect of Transformational and Transactional Leadership Perceptions on Feedback-Seeking Intentions. *Journal of Applied Social Psychology*, 32(8), 1703-1720.
- Lewin, K. (1952). Group decision and social change. In G. E. Swanson, T. M. Newcombe, & E. L. Hartley (Eds.), *Readings in social psychology* (2nd ed.), 459-473. New York: Holt.
- Lobel, S.A. (1991). Global leadership competencies: Managing to a different drumbeat. *Human Resource Management*, 29, pp. 39-47.
- Lombardo, M. (2005) Developing talent: The magic bullets. *Strategic HR Review*, 4(2), 1.
- Lombardo, R.W. & Eichinger, M.M. (2004). Learning agility as a prime indicator of potential. *Human Resources Planning*, (27), 12-15.
- Lombardo, M.M. & Eichinger, R.W. (2003). *CHOICES® architect users manual* (2nd Ed.). Minneapolis: Lominger Limited, Inc.

- Lombardo, M. & Eichinger, R. (2003). *The leadership architect*. Minneapolis: Lominger Limited, Inc.
- Lombardo, M.M. & Eichinger, R.W. (2000). High Potentials as High Learners. *Human Resource Management*, 39:4, 321-330.
- Lombardo, M. M., & Eichinger, R. W. (1989). *Preventing derailment: What to do before it's too late*. Greensboro, NC: Center for Creative Leadership.
- Lombardo, M. M., McCauley, C. D., by, R., Moxley, R. S., Dalton, M. A., & Wacholz, J. (1994). *Benchmarks: Developmental reference points. A manual and trainer's guide*. Greensboro, NC: Center for Creative leadership.
- Ludeman, K. & Erlandson, E. (2004). Coaching the Alpha Male. *Harvard Business Review*, 82(5), 58-67.
- Lyons, L. (2000). Contributor in M. Goldsmith, L. Lyons & A. Freas (2000), *Coaching for leadership*. San Francisco, CA: Jossey-Bass/Pfeiffer.
- Macrae, D. (2002, February). A Better Person Makes a Better Exec. *BusinessWeek*. Retrieved October 13, 2004 from http://www.businessweek.com/careers/content/feb2002/ca20020225_4801.htm
- Martin, A. (2005). *The changing nature of leadership*. The Center for Creative Leadership Research Report. Greensboro, N.C: CCL Press.
- McCall, M. W., Hollenbeck, G. P. (2007). Getting leader development right: competence not competencies. In Conger, J., Reggio, R. (Ed.), *The Practice of Leadership* San Francisco, California: Jossey-Bass.
- McCall, M. W., Jr., & Lombardo, M. M. (1983). *Off the track: Why and how successful executives get derailed* (Technical report no. 21). Greensboro, NC: Center for Creative Leadership.
- McCauley, C. D., Moxley, R. S., & Van Velsor, E. (1998). *The center for creative leadership handbook of leadership development*. San Francisco, CA: Jossey-Bass Business & Management Series.
- McGovern, J., Lindemann, M., Vergara, M., Murphy, S., Barker, L. & Warrenfelz, R. (2001). Maximizing the Impact of Executive Coaching: Behavioral Change, Organizational Outcomes and Return on Investment. *The Manchester Review*, 6(1), 1-9.
- McKinsey (2006, March). Global Survey of Business Executives. *The McKinsey Quarterly*. Retrieved July 4, 2006 from http://www.mckinseyquarterly.com/article_abstract.aspx?ar=1754&L2=21&L3=114&srid=253&gp=0

- Merriam-Webster Dictionary. (2003). Retrieved on July 19, 2006 from <http://dictionary.reference.com>.
- Mintzberg, H. (1987a). The Strategy Concept I: Five Ps for Strategy. *California Management Review*, Fall 1987, 11-24.
- Mintzberg, H. (1987b). The Strategy Concept II: Another Look at Why Organizations Need Strategies. *California Management Review*, Fall 1987, 25-32.
- Miscisin, M. (2001), *Showing our true colors*. Sacramento, CA: True Colors, Inc.
- Moore, D.A. & Cain, D.M. (2007). Overconfidence and underconfidence: When and why people underestimate (and overestimate) the competition. *Organizational Behavior and Human Decision Processes*, 103(2), 197-213.
- Moorman, R. H., & Podsakoff, P. M. (1992). A meta-analytic review and empirical test of the potential confounding effects of social desirability response sets in organizational behavior research. *Journal of Occupational and Organizational Psychology*, 65(2), 131-149.
- Morgan, G.A., Gilner, J.A., & Harmon, R.J. (2005). *Understanding and evaluating research in applied and clinical settings*. London: Lawrence Erlbaum Associates.
- Morgan, H., Harkins, P. & Goldsmith, M. (Eds.) (2004). *The art and practice of leadership coaching*. Hoboken: John Wiley & Sons.
- Mossholder, K.W., Settoon, R.P., Harris, A.A. & Armenakis, S.G. (2000). Emotion During Organizational Transformations. *Academy of Management Review*, Oct. 2000, 783-794.
- Mumford, T.V., Campion, M.A., & Morgeson, F.P. (2007). The leadership skills strataplex: Leadership skill requirements across organizational levels. *The Leadership Quarterly* 18(4), 154-166.
- Niemes, J. (2002). Discovering the value of executive coaching as a business transformation tool. *Journal of Organizational Excellence*, 21(4), 61-69.
- Orenstein, R. L. (2000). Executive coaching: An integrative model (Doctoral dissertation, Rutgers University, 2000). *Dissertation Abstracts International*, B61, 04.
- Palmer, B. (2003). Maximizing Value from Executive Coaching. *Strategic HR Review*, 2(6), 26-29.
- Parker-Wilkins, V. (2006). Business Impact of Executive Coaching: Demonstrating Monetary Value. *Industrial and Commercial Training*, 38(3), 122-127.
- Patton, C. (2001). Rating the returns. *Human Resource Executive*, 15(5), 40-43.

- Peltier, B. (2001). *The psychology of executive coaching: Theory and application*. New York: Informa.
- Peterson, D. B. (1996). Executive coaching at work: The art of one-on-one change. *Consulting Psychology Journal: Practice and Research*, 48(2), 78-86.
- Peterson, D. B., & Hicks, M. D. (1999). Strategic coaching: Five ways to get the most value. *HR Focus*, 76(2), S7-S8.
- Peterson, D. B. & Millier, J. (2005). The Alchemy of Coaching: You're Good, Jennifer, but You Could Be Really Good. *Consulting Psychology Journal: Practice & Research*, 57(1), 14-40.
- Phillips, J. J. (2003). *Return on investment in training and performance improvement programs. Second edition*. Woburn, MA: Butterworth-Heinemann.
- Porter, M.E. (1996), What is strategy? *Harvard Business Review*, 74 (6), 61-79.
- Quick, J. C. and M. Macik-Frey (2004). Behind the Mask Coaching through Deep Interpersonal Communication. *Consulting Psychology Journal: Practice & Research*, 56(2), 67-74.
- Quinn, R.E., Faerman, S.M., Thompson, M., & McGrath, M. (1990). *Becoming a master manager: A competency framework*. New York: Wiley.
- Raelin, J. (2006). Does Action Learning Promote Collaborative Leadership? *Academy of Management Learning & Education*, 5(2), 152-168.
- Richard, J. T. (2003). Ideas on Fostering Creative Problem Solving in Executive Coaching. *Consulting Psychology Journal: Practice & Research*, 55(4), 249-256.
- Rigby, D. & Bilodeau, B. (2005). The Bain 2005 Management Tool Survey. *Strategy & Leadership*, 33(4), 4-12.
- Saling, N.E. (2005). An empirical study comparing the effect of feedback, training and executive coaching on leadership behavior change. (Doctoral dissertation, North Carolina State University). *Dissertation Abstracts International* (UMI No. 3195188)
- Saporito, T. J. (1996). Business-linked executive development: Coaching senior executives. *Consulting Psychology Journal: Practice and Research*, 48(2), 96-103.
- Segal-Horn, S. (2004). *The strategy reader* (2nd ed.). Malden: Blackwell Publishing.
- Seltzer, J. & Bass, B.M. (1990). Transformational Leadership: Beyond Initiation and Consideration. *Journal of Management*, 16(4), 693-703.

- Senge, P. (1990). *The fifth discipline*. New York: Doubleday.
- Shamir, B., House, R.J. & Arthur, M.B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. *Organizational Science*, 4(4), 577-594.
- Sherin, J. & Caiger, L. (2004). Rational--Emotive Behavior Therapy: A Behavioral Change Model for Executive Coaching? *Consulting Psychology Journal: Practice & Research*, 56(4), 225-233.
- Sherman, S. & Freas, A. (2004). *The Wild West of Executive Coaching*. *Harvard Business Review*, 82(11), 82-90.
- Spear, J. (2004, May). Learning to lead at Toyota. *Harvard Business Review*, 82(5), 78-86.
- Spreitzer, G., McCall, M. W., Mahoney, J. (1997). Early identification of international executive potential. *Journal of Applied Psychology*, 82(1), 6-29.
- Stern, L. R. (2004). Executive Coaching: A Working Definition. *Consulting Psychology Journal: Practice & Research*, 56(3), 154-162.
- Storey, M. A. (2003). Bringing head and heart to coaching. *Organization Development Journal*, 21(2), 77-81.
- Tegarden, L.F., Sarason, Y. & Banbury, C. (2003). Linking Strategy Processes to Performance Outcomes in Dynamic Environments: The Need to Target Multiple Bulls-Eyes. *Journal of Managerial Issues*, XV(2), 133-153.
- Tichy, N.M. & Bennis, W.G. (2007). Making judgment calls. *Harvard Business Review*, 85(10), 94-107.
- Tobias, L. L. (1996). Coaching executives. *Consulting Psychology Journal: Practice and Research*, 48(2), 87-95.
- Von Hoffman, C. (1999, January). Coaching: The ten killer myths. *Harvard Management Update*, U9901B, 3-4.
- Walker, A. G., & Smither, J. W. (1999). A five-year study of upward feedback: What managers do with their results matters. *Personnel Psychology*, 52, 393-423.
- Wasylyshyn, K. M. (2003). Executive Coaching an Outcome Study. *Consulting Psychology Journal: Practice & Research*, 55(2), 94-106.
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review of Psychology*, 50, 361-386.

- Whittington, R. (2001). *What is strategy – And does it matter?* London: Thomson.
- Williams, P. & Davis, D.C. (2002). *Therapist as life coach*. New York: W.W. Norton & Company.
- Witherspoon, R., & White, R. P. (1996). Executive coaching: A continuum of roles. *Consulting Psychology Journal: Practice and Research*, 48(2), 124-133.
- Zaleznik, A. (1977). Managers and Leaders: Are they Different? *Harvard Business Review*, 55(3), 67-78.
- Zerbe, W. J., & Paulhus, D. L. (1987). Socially desirable responding in organizational behavior: A reconception. *Academy of Management Review*, 12, 250–254.

APPENDIX A : LOMINGER LETTER OF CONSENT

PERMISSION TO USE THE CHOICES ARCHITECT[®]
INSTRUMENT

March 15, 2007

Mr. Scott Trathen has formal permission from Lominger Limited, Inc. to administer our CHOICES ARCHITECT[®] instrument to collect data for his doctoral dissertation. It is understood that Mr. Trathen will administer the CHOICES ARCHITECT[®] instrument, analyze the data, and interpret the results under the supervision of Dr. Rich Feller (a certified user). It is further understood that the necessary number of questionnaires will be purchased at full price. Finally, it is understood that all intellectual property contained in the CHOICES ARCHITECT[®] questionnaire is owned by Lominger Limited, Inc.

Please sign on the blank line below and return a copy of this page directly to me. Thank you. Obviously, if you have any questions or concerns, do not hesitate to contact me at 952-345-3129 or at kend@lominger.com.

Kenneth P. De Meuse, Ph.D.
Associate Vice President of Research
Lominger International: A Korn/Ferry Company
5051 Highway 7, Suite 100
Minneapolis, Minnesota 55416-2291

APPENDIX B : COVER SHEET

MICROSOFT PEOPLE RESEARCH SUPPLEMENTAL COVER SHEET

Microsoft Executive Coach: _____

THANK YOU FOR YOUR TIME AND PARTICIPATION!

Please Assess: _____

Note: To protect the anonymity of the executive being assessed, please remove and discard this cover sheet prior to returning to Microsoft. Subsequently, the code written on the cover page of the instrument will serve as the identifier for the researcher.

APPENDIX C : EXECUTIVE COACH INSTRUCTIONS FOR RESEARCH

To: Microsoft Executive Coaches
 From: Scott Trathen, Microsoft FTE & PhD Candidate
 Katrina Eckard, Microsoft Research Assistant
 CC: Eric Rait
 RE: Partner Bench Participants Research on Learning Agility

May 8, 2007

During the December off-site in Bellingham, and in a subsequent email from Eric Rait, Microsoft socialized their support of my dissertation research and asked for your participation. As you may recall, this research design is entirely dependent upon your participation and so every effort has been made to minimize your investment. The purpose of this communication is to remind you about the research and your willingness to participate, whilst sharing how to participate.

The research is intended to explore the relationship between learning agility, as measured by a validated instrument (Lominger CHOICES), and leadership competencies (as measured by Microsoft) amongst senior leadership at Microsoft receiving executive coaching (the population consisting of the entire partner bench program). The Lominger CHOICES instrument is a paper-based instrument consisting of 81 behaviors, each scored on a 5 point Likert scale, taking less than 15 minutes to complete.

Once again, you are asked to rate each of the executives you coach with the enclosed learning agility instrument to the best of your ability. Given your interactions with the executives over the course of the past 6 months, you have sufficient insight into complete the tool. Please complete each instrument in its entirety.

To protect the identities of the Partner Bench Program, the researcher worked closely with Microsoft People Research to design a study and approach that shields identities and identifying information entirely. To facilitate this, and make this process easy for you, you will find a number of CHOICES instruments enclosed. Each one has a code written on the cover page of the instrument itself for the purposes of the researcher. Additionally, Microsoft People Research has attached a supplementary cover sheet indicting the executive to be assessed. **Please complete the instrument and discard the supplemental cover sheet upon which the executive's name is provided.**

Once all your provided instruments have been completed, please use the enclosed pre-paid envelope to return the completed instruments to Microsoft. The research design includes a four week period for collection of the aforementioned data; accounting for time these packages will be in transit **please complete and ship your instruments by June 15, 2007.**

In the meantime, should you have any questions about this research please feel free to contact the researcher directly at the below.

Thank you in advance for your time and participation,
 Scott Trathen
strathen@microsoft.com