



University of Maryland University College

UMUC Working Paper Series – Number 2009-007

Leadership Development Using Online Group Executive Coaching

By

Bernard L. Brookes

Graduate School of Management and Technology

bernard.brookes@yahoo.com

January, 2009

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

Abstract

Leadership development initiatives in work settings or in executive MBA programs can use online technology to make executive coaching available to a large number of managers. Previously, the integration of classroom training and challenging work assignments into expanded leadership capability has been facilitated by individual executive coaching or mentoring. This limited the number of potential participants who could access these resources. Now, research on online behavioral interventions suggest that group online executive coaching could be a method of expanding effective leadership development programs to a larger number of participants. This paper presents a model of online executive coaching that integrates findings from leadership research, outcome evaluations of group leadership training programs, research on online behavioral interventions, and the literature on executive coaching.

Key Words: executive coaching, leadership development, online behavioral interventions

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

Introduction

Leadership matters more than ever. Global economic, demographic and cultural changes currently in progress are creating challenges and opportunities that require new ways of thinking. For example, projected resource utilization and environmental effects of the booming economies of China and India, when added to those of developed economies, suggest that new business models will be necessary to sustain global economic growth in the 21st century. In their 1999 book *Natural Capitalism: Creating the Next Industrial Revolution*, Paul Hawken, Amory B. Lovins, and L. Hunter Lovins explore the kind of creative strategic thinking that is required in the 21st century. As auto production, for example, creates about twenty-two thousand pounds of waste materials for each two thousand pound car, one could well argue that the biggest product of our industrialized economies is waste. With the concept of waste equals food, Hawkins and his colleagues show how basic concepts of design and manufacturing must be rethought. In nature, waste equals food because all of the output from each process is used.

William McDonough & Michael Braungart 2002 book *Cradle to Cradle/Remaking the Way We Make Things*, demonstrate with large scale projects in the real world, that products can be designed to yield cost savings, while becoming a net positive for the environment. Examples include a two billion dollar plant designed for Ford, and projects with Nike, the Chinese government, Herman Miller and others.

Business, governmental, and nonprofit leadership will need to perceive and pursue those opportunities, and to help solve these and other challenges to human survival and continued development. Benis (2007) describes leadership as one of the four major threats to world stability, as well as one of the essential solutions. I complete this article on the day following the inauguration Barack Obama as the 44th president of the United States, and the first African American to hold that position; amid a national and global financial crisis as well as a crisis of hope and confidence. He speaks, and appears to have been chosen, as a transformational leader for this time, when a historical shift in the way the world deals with economic, ecological, cultural and other critical challenges is occurring.

There is no denying the importance of the individual leader who occupies the top position with formal power and influence; particularly during a crisis. But the visibility of that individual often obscures the fact that his or her success depends on many others taking the initiative; including both those with formal leadership responsibilities, and those without. Success also requires that formal leaders learn to listen and to follow, as well as to lead. Therefore leadership and followership are roles that shift dynamically in a complex system of interactions among individuals, groups and contexts.

In leadership development, there is a tendency to focus on individual skills and characteristics; including how the individual functions within the context of a team or larger

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

organizational unit. This may be the result of custom and habit, as well as what is most easily done. Leadership development initiatives might be more successful if we can incorporate more of the complex interactions that exist in reality. This article examines how executive coaching in an online group format can be used for leadership development in a corporation, or in a university based executive development program.

To lay the empirical and theoretical foundation for this approach to leadership development, I will first summarize what we know about effective leadership. Then I will examine executive coaching as a method of leadership development. Following this, I will review group approaches to leadership development, and electronic communications and leadership development. Finally, I will describe what an online executive coaching program should look like given the previous reviews.

What Is It That We Develop In Leadership Development?

Research has demonstrated that leadership effectiveness is impacted by personality characteristics, situational variables, and the interaction among them (Avolio, 2007, Bennis, 2007, Hackman, J.R. & Wageman, R. , 2007, Sternberg, 2007, Northouse, 2007, Vroom, 2007, and Zaccaro, 2007). Leadership education should therefore focus on improving the individual's knowledge about, and ability to manage effectively, his/her own approaches to working with others in a variety of situations. It should hopefully also help the individual to select situations in which he or she is likely to be most effective.

As Hogan & Kaiser (2005, p.2) state, "...leadership primarily concerns building and maintaining effective teams: persuading people to give up, for a while, their selfish pursuits and pursue a common goal." This conception of leadership is clarified in transformational-transactional leadership theory. Transformational-transactional leadership theory has received a substantial amount of support in the research literature over the past 20 years, and is the most frequently studied conceptualization of leadership (Judge & Piccolo, 2004). Transformational leadership includes four dimensions: idealized influence (charisma), inspirational motivation, intellectual stimulation, and individualized consideration. The three dimensions of transactional leadership are contingent reward, passive management by exception, and active management by exception.

In their meta-analysis of 87 studies conducted prior to 2003, Judge & Piccolo (2004) found that transformational leadership and one component of transactional leadership (contingent reward) had high levels of validity. They also found that transformational leadership and contingent reward had positive and significant correlations with follower job satisfaction, follower satisfaction with leader, follower motivation, leader job performance, and leader effectiveness.

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

There is also an implicit ethical dimension to transformational-transactional leadership that needs to be made explicit. An essential part what makes transformational-transactional leadership effective appears to be the creation of a sense of trust and perceived justice. In a meta-analysis of 106 studies on leadership and trust, Dirks & Ferrin (2002) found trust to be highly correlated with transformation and transactional leadership, and with distributive, procedural, and interactional justice.

We know something else about the characteristics and behavior of effective leaders. Personality predicts leadership emergence and effectiveness (Hogan & Kaiser, 2005). The Five Factor Model of personality (Big Five) "...brings together over 40 years of research on the emotional, interpersonal, experiential, attitudinal, and motivational style of an individual (Zhao & Seibert, 2006 p. 2). The Big Five traits are emotional stability (neuroticism), extraversion, openness to experience, agreeableness, and conscientiousness. Judge, Bono, Llies, & Gerhardt (2002) performed a meta-analysis of 78 studies conducted between 1967 and 1998, examining the relationship between Big Five traits and leadership. Extraversion was most strongly and positively associated with effective leadership, followed in diminishing strength by conscientiousness and openness to experience. Neuroticism was negatively related to leadership effectiveness at a level of strength similar to openness to experience.

While still relatively new, emotional intelligence (EI) also appears to be a useful construct in determining leadership ability. In a meta-analytic review, Van Rooy, Viswesvaran & Pluta (2005) concluded that the ability model of EI developed by Mayer, Salovey, and Caruso (1999) has been more successful at measuring something distinct from Big Five traits, than has the mixed models of Goleman (1995) and Bar-On (1997). However, Van Rooy et al. (2005) also conclude that both types of models of EI appear to have some validity and utility. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) has demonstrated reasonable reliability (Mayer et al., 2003). The MSCEIT has four dimensions: 1) perceiving emotions accurately, 2) using emotions to facilitate thought, 3) understanding emotion, and 4) managing emotion.

With the growing globalization of economic and political activity, one of the biggest questions since Hofstede's (1980) ground-breaking book is the relationship between culture and leadership. A massive research program called Project GLOBE, involving 170 social scientists from 61 cultures throughout the world, sought to clarify this relationship building on and extending Hofstede's work (House, Javidan & Dorfman, 2001, Javidan & House, 2001). Project GLOBE found that countries vary considerably in the extent to which their populations value assertiveness, a future orientation, gender differentiation, uncertainty avoidance, power distance, individualism/collectivism, a performance orientation, and a humanitarian orientation (Javidan & House, 2001).

In contrast to the cross-cultural differences noted above, Project GLOBE also identified 21 leader attributes universally associated with effective leadership (House et al., 2004) Eight of these attributes are about inspirational and visionary leader attributes; three consist of being

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

trustworthy, just and honest; four are related to team work and communications skills; and others include an excellence orientation, decisiveness, intelligence, administratively skill, and diplomatic skill. These characteristics are to a large extent consistent with the transformation-transactional leadership, Big Five personality traits, and emotional intelligence factors discussed previously. These two sets of results indicate that global leadership development can be based on the core research on leadership, but must also be cognizant of the variation that does exist across cultures.

While leadership research is heavily weighted toward studying the characteristics of leaders, it is generally acknowledged that the reality is more like a system in which leaders, followers and contexts interact in a complex manner. In summarizing contributions to the *American Psychologist* special issue on leadership, Hackman & Wageman (2007, pp. 43-45) proposed four right questions to ask about leadership:

1. Not do leaders make a difference, but under what conditions does leadership matter?
2. Not what are the traits of leaders, but how do leaders' personal attributes interact with situational properties to shape outcomes?
3. Not do there exist common dimensions on which all leaders can be arrayed, but are good and poor leadership qualitatively different phenomena?
4. Not how do leaders and followers differ, but how can leadership models be reframed so they treat all system members as both leaders and followers?

Executive Coaching As a Method for Leadership Development

The easy part of leadership education is academic: teaching about the relevant tools, concepts, history, and research results. The more difficult part is leadership development per se; facilitating changes in attitudes and behavior to more closely approximate those associated with effective leadership. Since ancient times, it has been known that the development of skill, whether in philosophy, science, art or craft is best done through an ongoing relationship. Today, we label those learning relationships as coaching or mentoring. The focus here is on coaching.

Kilburg's 1996 working definition of executive coaching still seems quite applicable today:

“...executive coaching is defined as a helping relationship formed between a client who has managerial authority and responsibility in an organization and a consultant who uses a wide variety of behavioral techniques and methods to help the client achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction and, consequently, to improve the effectiveness of the client's organization within a formally defined coaching agreement.” (Kilburg, 1996, p. 8)

In the same article, Kilburg defined three foci of organizational consultation, and the particular emphasis that distinguishes executive coaching from other consultations. The three foci are the individual executive (executive focus), the organizational systems (system focus) and the relationships and behavioral factors that mediate between executive and system (mediated

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

focus). Kilburg conceptualized executive coaching as dealing primarily with the executive focus, and delving into the other two foci only as they relate to helping the individual to function better within the organization.

Kampa-Kokesch & Anderson (2001) provided a comprehensive review of the literature on executive coaching. They found only seven empirical studies of executive coaching, as the literature consisted primarily of practice-based reports on individual cases, and conceptual discussions. Five ideas found support in their reviews of both empirical and practice-based literatures:

1. Executive coaching helped both the executive and the company.
2. Increased learning occurred in executive coaching.
3. Behavioral changes also occurred in executive coaching.
4. Ninety percent of executive coaches had master's degrees in business or social science.
5. Executive coaches use a variety of approaches (from behavioral to psychodynamic); but all also use 360 degree assessments of some kind.

Executive coaching applies any of the techniques and concepts that have are effective in changing self-awareness and emotional and interpersonal skills to the specific task of helping leaders to become more effective. The most extensively used and well developed models for executive coaching come from the systems and psychodynamic approaches that were previously developed for family and individual psychotherapy (Ducharme, 2004; Kilburg, 1996, 2004). Systems interventions assume that problem symptoms exhibited by an individual, are actually the result of dysfunction in the relationships within the family or other group system of which that individual is a part. Psychodynamic approaches assume the individual has incorporated a lifetime of interpersonal relations and conflicts into mental, emotional and behavioral patterns, some of which are maladaptive. The therapist helps the person to bring the sources of conflict into awareness and resolve them. We also know that that there is a body of research demonstrating effective methods of improving emotional self-management and relationships using cognitive behavior therapy (Burns, 1999). Cognitive behavior therapy is based on the idea that emotions are reactions to thoughts (cognitions). The final major approach to psychotherapy is the humanistic/existential approaches, which focus on helping a person to clarify values by viewing her with unconditional positive regard.

Just as most psychotherapists use a mix of different techniques, executive coaches do not hesitate to use an eclectic approach, applying whichever techniques are most useful to the particular situation. In addition to therapeutic techniques, the executive coach will benefit from keeping in mind issues related to adult development (Axelrod, 2005). Intensive long term case studies of men and women from management and other careers demonstrate patterns of adult development that effect both work and personal lives (Levinson, 1996, Levinson et al., 1978).

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

While using techniques and concepts from psychotherapy, executive coaching differs from therapy in focusing on issues directly related to leadership performance. Hart, Blattner & Leipsic (2001) conducted interviews of thirty masters' and doctoral degreed professionals experienced in the practice of both coaching and therapy. Participants described coaching as more "...goal directed, action based, and outwardly defined" and as a more co-creative process than therapy (Hart et al., 2001, p. 7). Quick and Macik-Frey (2004 p. 6) also distinguished coaching even when focused on deep interpersonal communication from psychotherapy; the goal being to get behind the mask and help "...an authentic person to become an authentic leader..."

Executive coaches usually also have the benefit of obtaining assessments of the client from organizational superiors, peers, and subordinates, in addition to self-assessments. This facilitates a more limited and goal directed process than in psychotherapy. Executive coaches also need to be well-versed in business, political and leadership issues in addition to techniques for emotional, behavioral and interpersonal change (Kampa-Kokesch & Anderson, 2001).

Executive coaching is usually described as a one-to-one process; one person being coached by one professional. However, when considering coaching as part of leadership education and development, a team approach is probably more practical, and also more consistent with our increased understanding of leadership as occurring in the context of team work (Cohen & Bailey, 1997, Riggio et al., 2003).

Group Approaches to Leadership Development

In contrast to the mostly anecdotal nature of the literature on executive coaching, there is a substantial body of empirical research on the effectiveness of group approaches to leadership and management development. Collins & Holton (2004) conducted a meta-analysis of 83 studies of managerial and leadership development programs from 1982 to 2001. Their results showed that managerial and leadership development programs were effective in increasing knowledge, expertise and system outcomes. This confirmed the overall finding of training effectiveness reported in an earlier meta-analysis (Burke & Day, 1986).

The types of interventions used in the studies analyzed by Collins & Holton (2004, p.224) were categorized as: "...problem solving and decision making; strategic stewardship; employee performance; human relations; job and work design; and general management." In the Burke & Day (1986) meta-analysis, the training content were categorized as general management programs, human relations/leadership programs, self-awareness programs, problem solving/decision-making programs, rater training programs, and motivation/values training programs.

In developing a group executive coaching program, we seek to incorporate some aspects of executive coaching, such as 360 degree feedback, into leadership training with a small group of about five executives from different companies. In the context of an Executive MBA program

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

or a corporate leadership development program, it seems reasonable to utilize the demonstrated effectiveness of group leadership training to create a more personalized development experience with some of the techniques of executive coaching. However, we aim to go one step further and also incorporate the benefits of electronic communications, using conference or meeting software; which provides a teleconference bridge and document sharing for synchronous communication. It is therefore necessary to review the use of electronic communications to facilitate leadership development and other behavioral change interventions.

Electronic Communication and Leadership Development

Based on the discussion above, it is clear that leadership development can be conducted effectively in group as well as individual formats. The question now is whether this can be accomplished using electronic communications, rather than in face-to-face meetings. Providing the content of management and leadership training online is now so common in MBA programs and corporations as to not require much discussion. The issue is whether the development of interpersonal and emotion management skills and related behavioral changes, that is usually accomplished in face-to-face executive coaching and groups, can also be done electronically.

We have anecdotal reports that executive coaching using the telephone, instant messaging with voice, and video is becoming more common (Rossett & Marino, 2005, Charbonneau, 2003), but not empirical studies of effectiveness or even frequency of use. We do, however, have a growing body of studies showing that telephone counseling or supervision can be effective with a range of populations including clinicians, people with sleep apnea, smokers with HIV/AIDS, heart failure patients, and lung transplant candidates (Smith, Amrhein, et al, 2006; Smith, Dautz et al, 2006; Vidrine et al., 2006; Wheeler & Waterhouse, 2006; Blumenthal et al., 2006). Studies also show that behavioral counseling over the internet can be effective with obesity and weight loss, jet lag and diabetes (Block, et al., 2004; Tate et al., 2001; Harvey-Berino et al. 2004; White et al. 2004; Lieberman, 2003). These studies suggest that a wide range of behavioral change interventions that are usually delivered face-to-face can be effective using telephone and the internet. It is therefore reasonable to expect that this would also be the case for executive coaching and leadership development.

Online Group Coaching As a Method of Leadership Development

In the context of a corporate leadership development program or an executive MBA program, the purpose of online group coaching is to help executives or managers to expand their repertoire and range of intrapersonal and interpersonal skills, in the areas known to be related to effective leadership. The academic portion of the program can provide them with increased knowledge about leadership theory and organizational behavior, and about management of finances, operations, marketing and technology. Team projects can provide opportunities to integrate that knowledge with their current and past work experiences. But the online executive coaching in small groups of about four or five members, will provide the setting to work on a

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

weekly or bi-weekly basis over a course of several months of the program, on honing self-awareness and interpersonal skills under the guidance of an experienced coach. The small group setting encourages the development of trust and provides peer support as well as peer encouragement in the change process. In addition to receiving feedback from peers on their own development goals, participants also have the opportunity to practice being the coach; which is itself an important skill for leaders.

Each group of a coach and four or five meets weekly or bi-weekly for approximately one hour, using meeting software that enables a voice teleconference as well as document sharing. One of the key elements of executive coaching is assessment, including 360 degree assessment, and feedback (Kilburg, 1996, Kampa-Kokescg & Anderson, 2001). The assessment instruments should relate directly to the components of effective leadership discussed previously; including transformation-transactional leadership, Big Five leadership traits, emotional intelligence, and intercultural skills. Reliable and valid assessment systems are available with competencies that are grounded in leadership research on what produces positive outcomes for an organization (such as in Lombardo & Eichinger, 2001).

Participants take the assessment online prior to beginning coaching sessions. During a feedback session with a coach, participants select a small number of development goals on which to focus. Participants then bring those goals to the group coaching sessions. The first task of the participants in executive coaching is to develop a contract or intervention agreement which establishes the goals, time commitment, methods and confidentiality constraints that will guide their work (Kilburg, 1996).

Within the group context, the coach will encourage openness by helping to create a safe environment; but will also allow each participant to determine how much detail of the individual assessment to share with the group, and when to share it. As Kilburg (1996) describes, another early task of executive coaching participants is to establish a working alliance. It is expected that executive coaching groups will experience the commonly observed small group development stages of forming, storming, norming, performing, and adjourning (Tuckman, 1965, Maples, 1988). The experienced coach will know when and how to intervene, and when to let the group set its own pace and direction. However, the coach should be prepared to provide a very structured approach focusing on goals, competencies, ground rules, homework assignments, and joint assessment of the coaching process; and facilitate turn-taking so that each person participates.

While the established goals and contract set parameters, each group will find its unique path to growth and development for its members. Participants should be encouraged to commit to “homework” assignments, in which they practice new behaviors and approaches in their work settings. They can then report on these activities during subsequent coaching sessions and use discussion of these as impetus to successful behavioral change in pursuant of their development goals.

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

Kilburg (1996) suggests an ongoing evaluation process in which the coach and executive assess the success or failure of each coaching session. In the group executive coaching sessions, the coach should encourage members to assess their progress and their process on a regular basis. This can be done with a simple listing of positives and then areas of improvement of the process at the end of each session.

In addition, the program as a whole should include an evaluation component. As suggested by Collins & Holton (2004), single group pretest-posttest studies are an effective and practical means of evaluating training programs, and also have the benefit of incorporating individual learner differences in response to the intervention. In this single group pretest-posttest model, 360 assessments can be repeated at the end of the coaching to test for improvement by participants on the competencies related to their coaching goals.

Online group executive coaching is a new area where it is not yet established which methods are most effective. In this environment, creativity in trying different approaches, and assessment and documentation of results should be encouraged by practitioners. This will eventually lead to a body of evidence-based best practices. Online group executive coaching can be an opportunity to approach leadership development in a manner that recognizes the complex reality of interactions among leaders, followers and contexts in teams and organizations.

REFERENCES

Avolio, B.J. (2007). Promoting more integrative strategies for leadership theory building. *American Psychologist*, 62, 1, 25-33.

Axelrod, S. D. (2005). Executive growth along the adult development curve. *Consulting Psychology Journal: Practice and Research*. Vol. 57, Issue 2, 118-125

Bar-On, R. (2000). Emotional and social intelligence: insights from the emotional quotient inventory. In R. Bar-On & J. D. A. Parkers (eds.), *The Handbook of Emotional Intelligence* (pp. 363-388). San Francisco: Jossey-Bass

Bennis, W. (2007). The challenges of leadership in the modern world. *American Psychologist*, 62, 1, 2-5.

Block, G., Block, T., Wakimoto, P. & Block, C. H. (2004). Demonstration of an e-mail worksite nutrition intervention program. *Prevention of Chronic Disease*. Vol. 1(4)

Blumenthal, J. A., Babyak, M. A., Carney, R. M., et al. (2006). Telephone-based coping skills training for patients awaiting lung transplantation. *Journal of Consulting and Clinical Psychology*. Vol. 74, No. 3, 535-544

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

- Burke, M. J. & Day, R. R. (1986). A cumulative study of the effectiveness of managerial training. *Journal of Applied Psychology*. Vol. 71(2), 232-245
- Burns, D. D. (1999). *The Feeling Good Handbook*. New York: Plume, Penguin Group
- Charbonneau, M. A. (2003). Media selection in executive coaching. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. Vol. 64(1-B), 450
- Cohen, S. G. & Bailey, D. E. (1997) What makes teams work: group effectiveness research from the shop floor to the executive suite. *Journal of Management*. Vol. 23, No. 3, 239-290
- Collins, D. B. & Holton III, E. F. (2004). The effectiveness of managerial leadership development: a meta-analysis of studies from 1982 to 2001. *Human Resource Development Quarterly*. Vol. 15 No. 2
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*. Vol. 87, Issue 4
- Ducharme, M. J. (2004). The cognitive-behavioral approach to executive coaching. *Consulting Psychology Journal: Practice and Research*. Vol. 56, Issue 4, 214-224
- Goleman, D. (1998). What makes a leader. *Harvard Business Review*, 76(6).
- Hackman, J.R. & Wageman, R. (2007). Asking the right questions about leadership. *American Psychologist*, 62, 1, 43-47.
- Hart, V., Blattner, J. & Leipsic, S. (2001). Coaching versus therapy: a perspective. *Consulting Psychology Journal: Practice and Research*. Vol. 53, Issue 4, 229-237
- Harvey-Berino, J., Pintauro, S., Buzzell, P. & Gold, E. C. (2004). Effect of internet support on the long-term maintenance of weight loss. *Obesity Research*. 12:320-329
- Hawken, P., Lovins, A.B., & Lovins, L. H. (1999). *Natural Capitalism: Creating the Next Industrial Revolution*. New York: Little, Brown & Company, Inc.
- Hogan, R. & Kaiser, R. B. (2005). What we know about leadership. *Review of General Psychology*. June Vol. 9, No. 2, 169-180
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P. W., & Gupta, eds. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Thousand Oaks, CA: Sage Publications, Inc.

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

- House, R., Javidan, M., & Dorfman, P. (2001). Project globe: an introduction. *Applied Psychology: An International Review*. 50(4), 489-505
- Javidan M., & House, R. J. (2001). Cultural acumen for the global manager: lessons form project globe. *Organizational Dynamics*. Spring. Vol. 29 Issue 4, 289-305
- Judge, T. A., Bono, J. E., Llies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of Applied Psychology*. Vol. 87, 765-780
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*. Vol. 89, Issue 5
- Kampa-Kokesch, S., & Anderson, M. Z. (2001). Executive coaching: a comprehensive review of the literature. *Consulting Psychology Journal: Practice and Research*. Vol. 53, Issue 4
- Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*. Vol. 48, Issue 2
- Kilburg, R. R. (2004). When shadows fall: using psychodynamic approaches in executive coaching. *Consulting Psychology Journal: Practice and Research*. Vol. 56, Issue 4
- Levinson, D. J. (1978). *The Seasons of a Man's Life*. New York: Ballantine Books
- Levinson, D. J. (1996). *The Seasons of a Woman's Life*. New York: Ballantine Books
- Lieberman, D. Z. (2003). An automated treatment for jet lag delivered through the internet. *Psychiatric Services*. 54: 394-396
- Lombardo, M. M. & Eichinger, R. W. (2001). *The Leadership Machine*. Lominger International, A Korn/Ferry Company.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0 *Emotion*. Vol. 3, No. 1, 97-105
- McDonough, W., & Braungart, M. (2002). *Cradle To Cradle/Remaking the Way We Make Things*. New York: North Point Press, A Division of Farrar, Straus and Giroux
- Northouse, P. G. (2007). *Leadership: Theory and Practice* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Quick, J. C., & Macik-Frey, M. (2004). Behind the mask: coaching through deep interpersonal communication. *Consulting Psychology Journal: Practice and Research*. Vol. 56, Issue 2, 67-74

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

Riggio, R. E., Riggio, H. R., Salinas, C. & Cole, E. J. (2003). The role of social and emotional communications skills in leader emergence and effectiveness. *Group Dynamics: Theory, Research, and Practice*. Vol. 7, No. 2, 83-103

Rossett, A., & Marino, G. (2005). If coaching is good, then e-coaching is....*Training +Development*. November

Smith, C. E., Daut, E. R., Clements, F., Puno, F. N., Cook, D., Doolittle, G. & Leeds, W. (2006). Telehealth services to improve nonadherence: a placebo controlled study. *Telemedicine Journal and e-Health*. Vol. 12(3) 289-296

Smith, J. L. et al. (2007). Providing live supervision via teleconferencing improves acquisition of motivational interviewing skills. *American Journal of Drug and Alcohol Abuse*. Vol. 33(1), 163-168

Sternberg, R.J. (2007). A systems model of leadership: WICS. *American Psychologist*, 62, 1 34-42.

Tate, D. F., Wing, R. R. & Winett (2001). Using internet technology to deliver a behavioral weight loss program. *The Journal of the American Medical Association*. Vol. 285, No. 9

Van Rooy, D. L., Viswesvaran, C., & Pluta, P. (2005). An evaluation of construct validity: what is this thing called emotional intelligence? *Human Performance*. 18(4), 445-462

Vidrine, D. J. (2006). A randomized trial of a proactive cellular telephone intervention for smokers living with HIV/AIDS. *AIDS*. Vol. 20(2), 253-260

Vroom, V.H., & Jago, A.G. (2007). The role of the situation in leadership. *American Psychologist*, 62, 1 17-24.

Wheeler, E. C., & Waterhouse, J. K. (2006). Telephone interventions by nursing students: improving outcomes for heart failure patients in the community. *Journal of Community Health Nursing*. Vol. 23(3), 137-146

White, A. W., Martin, P. D., Newton, R. L. et al. (2004). Mediators of weight loss in a family-based intervention presented over the internet. *Obesity Research*. 12:1050-1059

Zaccaro, S.J. (2007). Trait-based perspectives of leadership. *American Psychologist*, 62, 1 6-16.

UMUC Working Paper Series – Number 2009-007
Leadership Development Using Online Group Executive Coaching

Zhao, H. & Seibert, S. E. (2006). the big five personality dimensions and entrepreneurial success: a meta-analytical review. *Journal of Applied Psychology*. Vol. 91, Issue 2