

**Executive Coaching & Multisource Feedback: An Evidence-Based Practice?**

Ryan E. Smerek  
Denison Consulting  
121 West Washington Suite 201  
Ann Arbor, MI 48104  
rsmerek@denisonculture.com

Nathalie Castaño  
Wayne State University  
Psychology Department  
5057 Woodward Ave, 7th Floor  
Detroit, MI 48226  
Nathalie.Castano@wayne.edu

Lindsey Kotrba  
Denison Consulting  
lkotrba@denisonculture.com

Ashley Guidroz  
Denison Consulting  
aguidroz@denisonculture.com

Daniel R. Denison  
International Institute for Management Development  
Chemin de Bellerive 23  
Lausanne Switzerland 1001  
+41.21.618.0311  
[denison@imd.ch](mailto:denison@imd.ch)

**Executive Coaching & Multisource Feedback: An Evidence-Based Practice?**

Abstract

This study investigates the influence of coaching and multi-source feedback (360-degree surveys) on perceptions of managerial behaviors at two points in time in a large-scale government agency. We test whether individuals in a new supervisor training program (N=237), who received extensive one-on-one coaching improve significantly on twelve leadership skills and practices, and if so, from whose perspective (e.g. boss, peers, direct reports, and self-perspective). These findings suggest that structured coaching sessions with multisource feedback improve perceptions of managerial behaviors from a boss, peer, and direct report perspective. We also explore the theoretical mechanisms that are hypothesized to explain behavior change, including implementation intentions (Gollwitzer, 1999) and action planning.

### **Executive Coaching & Multisource Feedback: An Evidence-Based Practice?**

With millions of dollars spent each year on multisource feedback surveys and executive coaching, little empirical work has examined the effect of the feedback and coaching over time (Feldman & Lankau, 2005). Within a context where executive coaching has been called the “Wild West” of management and leadership development (Sherman & Frea, 2004), and leaders in the field have pronounced we are “trudging toward Dodoville” (Kilburg, 2004a), we examine the claims for the benefits of multisource feedback and executive coaching. By assessing behavior change over time by multiple rater groups (e.g. boss, peer, direct report, and self), we add to the increasing knowledge of how multisource feedback and executive coaching affect leadership development.

In their review of executive coaching outcomes, Feldman and Lankau (2005) conclude that, “The presumed outcomes of executive coaching are changes in managerial behaviors with presumed increases in organizational effectiveness. However, rigorous empirical investigations of the outcomes associated with executive coaching are far outnumbered by the practitioner articles purporting benefits” (834). We specifically address this call by examining whether participants change on twelve leadership behaviors after receiving multisource feedback and coaching. We contribute to the emerging literature of this field by presenting quantitative evidence of its effectiveness and by explaining the cognitive mechanisms that are theorized to account for this change. This study complements the evidence from client satisfaction and coaching practice surveys (Bono et al., 2009; Hooijberg & Lane, 2009; Kombarakam, et al., 2008; Liljenstrand & Nebeker, 2008) and the wealth of in-depth case studies (e.g. Peterson & Miller, 2005) by presenting evidence in a pre-post test design. We begin with a review of prior research on the impact of coaching and multisource feedback on leadership development that

utilizes a pre-post test design with a multi-source feedback instrument. We then more closely examine the model of leadership effectiveness that serves as the theoretical grounding for assessing leadership behaviors in this study.

*Evidence of Behavior Change through Multisource Feedback & Coaching*

As past research has shown, conducting follow-up activities such as training and coaching is critical to the successful implementation of multisource feedback (MSF) (Atwater, Brett, & Charles, 2007; Atwater, Waldman, & Brett, 2002; Brutus & Derayah, 2002). The coaching and formal training that follow MSF assist the interpretation of the results, facilitate goal-setting, and help initiate conversations with a focal manager’s social network. It also creates a more supportive environment for behavior change (Faction, et al., 1998). A supportive environment, interpretation-facilitation, and goal-setting are hypothesized to lead to behavior change and empirical studies have found evidence in support of these hypotheses.

To offer a brief overview of the empirical work that has been published, Table 1 summarizes past studies that have used ratings on multisource feedback surveys to measure change over time with coaching or training as an intervention. Only five studies were found that met our inclusion criteria of using multisource feedback at two points in time with a coaching/training intervention.

-----  
Insert Table 1 about Here  
-----

For example, Hazucha, Hezlett, & Schneider (1993) found that managers who participated in a training program or other developmental activities were more likely to improve on “overall skill ratings.” Seifert, Yukl, and McDonald (2003), examined the impact of feedback

facilitation and MSF reports on behavior change. Individuals who received both feedback facilitation and a MSF report exhibited positive change on two core influence tactics (consultation and collaboration) while there was no change for a comparison group. Likewise, Luthans and Peterson (2003) found that a combination of multisource feedback and coaching had a positive effect on self-awareness, with self-awareness defined as the discrepancy between self and other ratings. In their self-ratings, however, managers did not increase significantly on the three measured factors (behavioral competence, interpersonal competence, and personal responsibility); they did increase over time as rated by “others” on behavioral and interpersonal competence (Luthans & Peterson, 2003). Finally, Smither and colleagues (2003) found that managers who worked with a coach (for 5-7 hours) were more likely to set specific goals and to solicit ideas for improvement from their supervisor. Furthermore, managers with coaching improved more than other managers in terms of direct report and supervisor ratings on a composite measure of leadership (Smither et al., 2003). In contrast to this evidence, Rosti and Shipper (1998) did not find behavioral change on thirteen skills and practices after managers received 24 hours of management training.

Past studies have also asked coaching participants if they have experienced sustained behavior change (e.g. have become better at building relationships), with 63 percent indicating they had improved in exhibiting this behavior (Wasylyshyn, 2003). Finally, Smither, London, and Reilly (2005) in their meta-analysis found that multisource feedback led to improvements on behavior changes, objective performance measures, and subordinate attitudes. The largest effect sizes were found on the impact of the perceptions of direct reports and bosses. The corrected mean effect size was .15 for both direct reports and bosses, while the corrected mean effect sizes for peers and self-ratings were .05 and -.04, respectively (Smither, et al., 2005).

As is clear, previous research offers evidence that MSF and coaching are associated with changes in leader behavior over time. Why add to this list of studies? First, we add to the burgeoning evidence that practitioners can reference in support of the efficacy of their work. Second, we expand the theory of behavior change through concepts that emerged in follow-up interviews with participants of the coaching and multisource feedback. We introduce a model of leadership effectiveness that clearly links to the organizational effectiveness literature (Denison, 1990). This model contributes theoretically-derived behaviors that are linked to improving the effectiveness of organizations (Denison & Mishra, 1995). Finally, we contribute a study that is specific to the public sector in judging the efficacy of leadership development efforts.

*The Denison Theory of Leadership Effectiveness*

In this study, we used the Denison model of leadership effectiveness as the basis for our multisource feedback intervention (Denison, 1990). It was chosen for its comprehensiveness, theoretical grounding, and link to organizational effectiveness. The four dimensions of behavior that are measured in the model are involvement, adaptability, mission, and consistency. Each of these four dimensions contains three distinct but interrelated behaviors (see Figure 1 for a visual model).

-----  
Insert Figure 1 about Here  
-----

The involvement trait derives from the human relations model of organizational effectiveness (Likert, 1961; McGregor, 1960; Scott, 2003) and stresses that an effective leader:

- 1) *empowers people* by having decisions made at the lowest level possible and ensuring employees have the necessary resources to do their jobs;
- 2) *builds a team orientation* by

knowing how and when to use teams to solve problems and acknowledging and celebrating team accomplishments (Hackman, 2002); and finally, an effective leader 3) *develops organizational capability* by knowing how to utilize the diversity of the workforce, develop his/her people, and build employees' skills. These behaviors stress the importance of un-tapping human potential and are concerned with expanding behavioral repertoires to respond to change.

The adaptability quadrant stresses the organization as an "open system," in which to survive and prosper, work behaviors must be flexible and oriented to the external market. These behaviors are demonstrated by a leader who 1) *creates change* by encouraging creative thinking and challenging the status quo and unproductive work practices; 2) *promotes organizational learning* by examining mistakes and accepting criticisms (Senge, 1990); and 3) *emphasizes customer focus* by responding quickly to customer feedback and ensuring co-workers have an understanding of customer preferences. These behaviors stress the external dependency on customers and the need to continually adapt to changing environmental conditions.

Third, the rational goal model of organizational effectiveness is articulated by the mission trait. These behaviors stress the need for leaders to have a stable, clear direction and external-orientation. Behaviors described by this quadrant include 1) *creating a shared vision* that is communicated and translated into daily activities; 2) *defining a strategic direction* that helps allocate resources and keeps the organization competitive. Finally, effective leadership is defined as 3) *setting goals and objectives* that establish high standards and are aligned with the strategy and vision. These behaviors focus on the long-term, external positioning of the organization vis-à-vis its competitors.

Finally, an effective leader is determined by processes that promote consistency, stability, and an integrated workforce. Effective leaders promote consistency through several behaviors,

including 1) *defining core values* by doing the “right thing” even when it is unpopular, demonstrating ethical behavior, and articulating fundamental beliefs that are non-negotiable; 2) *working to reach agreement* by incorporating diverse points of view when making decisions, promoting constructive discussions, and being willing to compromise. Finally, effective leaders facilitate social integration through 3) *managing coordination and integration* by using informal networks to get things done, building relationship with people of all levels, and working cross-functionally (Denison, Hart, & Kahn, 1996).

As one can see there is a tight linkage between the attributes of organizational effectiveness and the leadership behaviors needed to create such an organization. The Denison theory of leadership effectiveness is also multi-faceted and complex, offering a broad-array of behaviors that promote organizational effectiveness. The diversity of behaviors it describes offers advantages over more holistically-measured leadership effectiveness (e.g. How effective would you rate your leader or manager?). It therefore allows greater specificity in seeing improvement and more concrete language to motivate change among managers.

## **METHODS**

### *Participants*

The sample used in this research is of 237 leaders at a large public agency who took a 360-degree feedback survey—the Denison Leadership Development Survey (DLDS)—at two points in time. All participants in the sample were new supervisors at a large government agency with 44 percent of the sample being female and 56 percent being male.

*Logistics of Coaching and Multisource Feedback*

The following section offers a brief logistical description of the coaching and multisource feedback experience. The surveys were given between the first quarter of 2005 through the third quarter of 2007. At Time 1, each manager received their multisource feedback in a report that contained graphical representations of their scores based on peers, direct reports, bosses, and self-ratings as shown in Figure 1. Raters were chosen based on having the potential opportunity to observe the focal manager's performance on all twelve dimensions (Rothstein, 1990). In the feedback reports, the focal manager saw the skills they needed to improve as well as skills considered strengths. Because the data were collected from multiple sources, leaders could see how perceptions differed by rater group—peers, direct reports, and bosses. The feedback experience either confirmed preexisting notions of one's skills and behavior, or became a “rude awakening” that fostered active thinking about areas for improvement (Louis & Sutton, 1991). The multisource feedback survey was conducted strictly for developmental purposes and not for evaluation, with the results being confidential unless an individual wanted to share the results with their supervisor. This process ensures that honest and constructive feedback is more likely to be given to supervisors (Toegel & Conger, 2003).

One reason the multisource feedback process has become a popular is that the feedback is difficult to refute. If the results are less positive than expected, it is hard to explain away an aggregated numerical assessment because there is little ambiguity to exploit to construct a positive view. Thus, our “psychological immune system” cannot explain away and rationalize the results (Gilbert, et al., 1998). The greater credibility of the results makes it more likely to lead to behavior change. Feedback that comes from only one individual can be easily dismissed as coming from a “disgruntled” coworker or unfair boss (Hazucha, Hezlett, & Schneider, 1993).

If we are rejected by one judge we can rationalize the negative feedback as an idiosyncratic judgment, but if we are rejected by a jury it is unambiguous and more likely to lead to deeper processing and behavior change (Gilbert, et al., 1998).

Second, feedback reports can vary in their clarity of results, especially if only the mean score on a behavior index is provided. In our study, the focal manager's percentile was reported compared to a database of over 8,651 leaders that have been surveyed using the instrument. Therefore, while a 5.3 on a seven point scale can be open to interpretation, a 10<sup>th</sup> percentile ranking is more definitive. The percentile score is especially needed when respondents face negative scores. As is often the case, when we are presented with disconfirming evidence of our skills, a higher standard of evidence is needed to bring about change; this higher standard of evidence is provided by percentiles.

After receiving their DLDS scores, supervisors received 4-6 hours of one-on-one coaching to help further interpret their multisource feedback results from bosses, peers, and direct reports. The coaches helped identify patterns, establish behavioral goals, and develop and implement an action plan. A goal of the coaching program was to keep the recipient focused on self-development rather than perceiving the results as a threat to self-esteem (DeNisi & Kluger, 2000). Typically, coaching sessions were 1-hour, in-person or by telephone, and were not conducted more frequently than once every 2 weeks, and not less than once monthly. These coaching sessions were meant to facilitate deeper-level processing of the results.

During the first session, the coach and supervisor interpreted the feedback results and developed an action plan. Managers considered two key leadership behaviors to target for development. For the second session, the coach helped identify stakeholders to provide ongoing feedback. Between sessions, managers discussed leadership goals with their boss and enlisted

their support in providing ongoing advice. For the third and fourth coaching sessions, participants reviewed the implementation of their action plans and discussed the ongoing feedback received from stakeholders. In addition to coaching, supervisors completed 24-hours of online courses, covering such required topics as situational leadership, managing change, partnering for results, and optimizing team performance.

After completing all coaching sessions and before re-taking the DLDS, managers completed individualized, self-development electives. These electives were targeted specifically toward the behavioral goals identified by the new supervisor and his or her coach. Learning activities included attending formal classroom training, participating in peer coaching, receiving informal or formal mentoring, attending leadership seminars or conferences, or shadowing a leader. At the end of this period, one year from the original completion of the DLDS, each new supervisor participated in a second multisource survey.

### *Measures*

The Denison Leadership Development Survey was chosen for its comprehensive nature in assessing leadership behaviors. The survey is comprised of 96-items that are rated on a seven-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7). The 96 items measure the twelve indices that are reported. This comprehensive diagnosis of leadership skills and practices is diagramed in Figure 1.

While past studies have usually relied on global variables of leadership behavior (Smither, et al., 2005), this research more clearly defines twelve leadership behaviors using the DLDS. In addition to examining only a broad variable of leadership, past research has often combined rater perceptions into a single score (Rosti & Shipper, 1995). Finally, a common bias

of examining the outcomes of coaching has been to measure a short-term affective response to coaching, rather than an assessment of behavioral change over time (Feldman & Lankau, 2005). Our measurement design and approach is meant to overcome these limitations through a more comprehensive, longitudinal assessment of leadership behaviors.

#### *DLDS Validation*

Validation of the DLDS has been completed in prior studies (see Denison, Neale, & Kotrba, n.d.). Results from these studies show that Alpha coefficients for traits ranged from .87 to .94, and alpha coefficients for indexes ranged from .95 to .97, indicating acceptable levels of internal consistency for all twelve indices and four traits of the DLDS (Nunnally, 1978). While internal consistency reliabilities calculated across rater groups are high, when investigating the reliability of 360-degree feedback instruments, it is important to examine the reliability of ratings for each rater source.

Means, standard deviations, and internal consistency estimates of reliability for each of the twelve indices and four traits of the DLDS were also examined by rater group (see Table 3). Cronbach's alpha for the traits for each rater were greater than .90. For the indices, Cronbach's alpha ranged from .76 to .91 for self ratings, from .86 to .94 for boss ratings, from .88 to .95 for direct report ratings, and from .88 to .94 for peer ratings. Thus, alpha coefficients all generally exceeded recommended standards for internal consistency, though a few estimates calculated using self scores are slightly lower than one would like to see for scales utilized in applied settings (i.e., estimates upwards of .80 and closer to .90 would be preferred (Nunnally, 1978). In general, consistent with other multi-rater instruments, we found internal consistency reliabilities

for self-ratings to be slightly lower than those for other rater groups (e.g., Posner, & Kouzes, 1993; Kets de Vries et al., 2004).

## RESULTS

To examine the effects over time of multisource feedback and coaching, multivariate analysis of variance was performed on the twelve indexes of the DLDS to investigate whether there were differences between raters at Time 1 and Time 2. The within-subjects IVs were rater and time (whether the questionnaire was completed before or after receiving coaching). Using the Wilks' criterion, the combined DVs were significantly affected by both rater,  $F(36, 127) = 8.56, p < .001$ , and time  $F(12, 151) = 3.52, p < .001$ , but not by their interaction,  $F(36, 127) = .98, p > .05$ . Thus, these results show that there were mean differences in leader's ratings on the leadership indexes (e.g., having a vision, empowering others, etc.) associated with the rater (boss, peer, direct report, self) and time. The results reflect a partial  $\eta^2 = .62$  for the effect of rater and a partial  $\eta^2 = .11$  for the effect of time on leadership scores. Given the significance of this multivariate test, we were then interested in knowing which of the dependent variables were different by both rater and time. To do this, we examined the univariate  $F$ 's<sup>1</sup>.

Table 2 displays both the multivariate and univariate results for both rater and time. The univariate  $F$ 's for all of the indexes were significant for Rater. These results indicate that different raters evaluated leaders differently on all the indexes of the DLDS. Tukey HSD post hoc analyses were conducted for each index (see means in Table 3). Results reveal that direct reports tend to give significantly lower scores than peers, bosses, and the self on the following

---

<sup>1</sup>Generally, Roy-Bargmann stepdown analyses are the preferred method of examining individual dependent variables when those dependent variables are correlated, as they are in the current study. However, we chose to examine univariate  $F$ 's because there was little basis for establishing a logical ordering on the criterion measures and the interpretation of the stepdown  $F$ 's was difficult (Tabachnick & Fidell, 2001).

indexes: empowers people, builds a team orientation, develops organizational capability, defines core values, works to reach agreement, manages coordination and integration, and creates change. Direct reports also tend to give significantly lower ratings than peers and bosses, but not the self on the indexes: promotes organizational learning, emphasizes customers, creates a shared vision, defines strategic direction and intent, and defines goals and objectives. Finally, the leaders' own ratings (i.e., self) tend to be significantly lower than peers and bosses on the following indexes: promotes organizational learning, emphasizes customers, creates a shared vision, defines strategic direction and intent, and defines goals and objectives.

-----  
Insert Table 2 about Here  
-----

The univariate F's for all the indexes were significant for Time as well. These results indicated that there were differences in all the indexes depending on whether the questionnaire was completed before or after coaching. Main effect comparisons were conducted for each index (see means in Table 3). Results revealed that after coaching, scores on all indexes tend to be significantly higher.

-----  
Insert Table 3 about Here  
-----

## **DISCUSSION**

With millions of dollars spent and hundreds of hours administering multisource feedback surveys and coaching, empirical evidence is needed to determine their utility. The gains found among managers in this study offer growing support for the value of multisource feedback and

one-on-one coaching by discerning the significant improvements made in a program at a large-scale government agency.

Our results show that coaching had a significant effect on leadership ratings on the twelve indices measured by the DLDS. In other words, after going through one-on-one coaching sessions, the leaders improved on all the characteristics an effective leader must have. The results also showed that different raters evaluated the leaders differently. Specifically, direct reports gave their leaders lower ratings than peers and bosses in all twelve indexes. Direct reports also gave lower ratings than the leaders' self ratings in the indices relating to involvement (*empowers people, builds a team orientation, and develops organizational capability*) and consistency (*defines core values, works to reach agreement, and manages coordination and integration*). Finally, results also showed that the leaders rated themselves lower than peers and bosses in indices relating to mission (*creates a shared vision, defines strategic direction and intent, and defines goals and objectives*) and on the indices of *promotes organizational learning and emphasizes customers focus*. There are several implications of these results for implementing multisource feedback surveys and executive coaching.

As Brutus and Derayeh (2002) found in their study of over 100 companies, every organization which failed in its multisource objectives also failed to facilitate a feedback process. In other words, recipients only received the reports in the mail or electronically with no discussion of the results. In this study, however, feedback was one part of a comprehensive training and development program. These findings demonstrate the results that are possible by encouraging and requiring focal managers to participate in developmental activities and discussions based on their multisource feedback. But how exactly does the coaching lead to behavior change among these managers?

There are many ways in which coaching can help change leadership behaviors. Coaching and multisource feedback can spur active reflection of one's behavior leading to self-insight (London, 2002) and that challenge one's theories-in-use (Argyris & Schön, 1978). Coaching also helps the focal manager make sense of the feedback and understand why it is relevant (Weick, 1995). Through the coaching sessions, managers and coaches co-construct explanations for the results which can act as a buffer to threats to self-esteem and offer a springboard into action by maintaining self-efficacy (Bandura, 1977). As Bandura (1977) states, self-efficacy is the most important precondition for behavioral change, since it determines the initiation of coping behavior, which in this case is changing leadership behaviors. In addition, past research on the link between intentions and actual behavior change demonstrates that one's perceived behavioral control or self-efficacy is a critical moderator (Bailey & Austin, 2006; Webb & Sheeran, 2006). Finally, the very coaching practice itself, spurs deliberate practice in the ongoing development of competence as a manager (Ericcson, 2006; Sonnentag, 2000).

Coaches also helped managers develop implementation intentions to respond in effective ways to anticipated situations. These implementation intentions lead to behavior change as regulatory tools in future situations (Gollwitzer, 1999). Gollwitzer (1999) differentiates implementation intentions from goal intentions. A goal intention is "I intend to reach x!" while an implementation intention is "When situation x arises, I will perform response y" (Gollwitzer, 1999). Forming implementation intentions requires people to specify critical cues ahead of time, and it elicits the intended behavior in an automatic fashion once the critical cues are encountered (Gollwitzer & Brandstätter, 1997). These implementation intentions lead to greater cognitive accessibility of the desired behaviors in a given situation (Tversky & Kahneman, 1974). Thus, coaching leads to behavior change by articulating explicit intentions for future behaviors. Focal

manager's can begin to formulate automatic behavior patterns to anticipated cues, such as handling conflict or motivating subordinates.

Similar to implementation intentions, Taylor et al. (1998) compare two types of mental simulations. The first mental simulation is to rehearse each step involved in reaching an envisioned end state. This is contrasted with a second type of mental simulation—often found in the self help literature—which only visualizes the outcome of an end state. Taylor et al. (1998) found that the mental simulation of envisioning the process of reaching an end goal produced progress in achieving those goals while simply envisioning successful completion of an end goal did not. They attribute these results to the regulation of emotion and the effective use of planning and problem-solving capabilities that are engaged while envisioning the step-by-step process needed to reach an end state. The purpose of most coaching programs is to set explicit implementation intentions (i.e. “In the future when x happens, I will do y”), and to mentally simulate the step-by-step process needed to reach an end goal. Therefore, to the extent that both intentions are articulated and step-by-step processes are mentally simulated, behavior change is more likely to occur.

For example, one manager in the program said that with her coach, “We took the developmental themes and translated them into goals and then developed specific action plans for each of them.” These actions plans included specific behaviors for enhancing teamwork. The process of constructing these plans was to simulate the step-by-step processes that would be needed to improve this behavior in the future. In addition to this study, past research has shown that the combined effect of feedback and coaching was found to increase the likelihood of setting specific goals and soliciting ideas for improvement from supervisors (Smither, et al. 2003). Coaches helped focal managers set clear and attainable goals, which should be specific and

attainable (Locke & Latham, 1990), and has been shown in past research to increase productivity (Olivero, Bane, & Kopelman, 1997).

The third way that this intervention (and others like it) can facilitate behavior change is because the survey itself offers a conceptual vocabulary of effective leadership. Many people have not thought about the categories which represent effective leadership, nor have they defined the specific behaviors they will enact given this knowledge. The multisource feedback enriches vocabulary and provides a greater awareness of leadership behaviors (Denison, Hooijberg, & Quinn, 1995; Smither et al., 1995). The process itself cues attention and makes the focal manager more aware of their own behavior and behavioral repertoires associated with effective leadership. For example, one participant said, “The concepts all make perfect sense, but you get caught up in your day-to-day...you don’t pull back and think it through. Having a candid discussion with a coach who has the experience in articulating these concepts to those of us who are subconsciously aware of them but haven’t had those discussions to bring it to the forefront is extremely helpful.” As this manager indicates, in future situations managers are cued to notice more and can respond with a greater variety of behaviors.

As in all research, this study has several limitations. While the limitations could be removed through controlled experiments, unfortunately this is rarely possible in real-world settings. The first limitation is whether the supervisors in this program would have improved regardless of any intervention. That is, if we surveyed them once and then again a year later they would naturally improve because they are “new” supervisors. We think this is unlikely for several reasons. First, no one has ever lost weight by merely standing on a scale. It takes effort, persistence, and deliberate practice to improve, especially to statistically detect this improvement in such a large sample. Second, the participants in this sample have already been supervisors for

up to a year before they administered the DLDS. It is likely that their greatest improvements from simply “learning the ropes” would have already happened in this first year.

Next, we recognize that we haven’t clearly isolated the effects of coaching. Participants also had self-electives that they completed during the second year and perhaps these were more transformative experiences. While we cannot rule this out, the evidence from interviews suggests that MSF and coaching sessions were the catalysts in choosing the self-development electives. Through discussions with their coach and their feedback sessions with peers, bosses, and direct reports (mandated by the coaching process), participants formulated a development plan. Thus, we see the coaching and MSF as the central event within the second year of their program and thus attribute most of the changes seen to its influence.

### *Future Research*

This study brings several questions to mind that deserve further consideration and still present gaps in our knowledge about executive coaching. First, while this research and others has begun to examine the outcomes of coaching (Kampa & White, 2002; Luthans & Peterson, 2003; MacKie, 2007; Smither et al., 2003; Wasylyshyn, 2003), little is known about the implicit and explicit models that coaches use in their practice. Such research would help tame this “Wild West” (Sherman & Frea, 2004); yet we have a provisional understanding of how coaches approach their practice. It may resemble psychotherapy (McKenna & Davis, 2009), a psychodynamic approach (Kilburg, 2004b), appreciative inquiry, challenge-combativeness, cognitive-behavioral therapy (Ducharme, 2004), Rational-Emotive Behavior Therapy (Sherin & Caiger, 2004), or a teacher-homework model. When are some models used and to what effect?

And can we make reasonable generalizations about the relative effectiveness of the various approaches?

Further research is needed to offer a state of the practice overview of coaching models and offer a way forward for researchers to help untangle the challenge of assessment. In this rapidly developing field, there are only two known classifications of approaches to coaching. According to Peltier (2001) there are five main approaches: psychodynamic, behaviorist, person-centered, cognitive-therapy, and systems-oriented. Bono, et al. (2009) compared whether psychologists or non-psychologists were more likely to report that their scientific or philosophical approach was behavior modification, cognitive behavioral, process/facilitation oriented, goal setting, neuro-linguistic programming, psychoanalytic/psychodynamic, and skill training.

But there is little work to help us sort through these various approaches. Along with this question is to explore the origins of these various models. It is likely these approaches derive from a coach's disciplinary background, personality, and training. However, little is known about how these various schools of thought inform the practice of coaching. This research would help companies and executives when they seek to hire coaches. Currently, other than their personal experience, how can an HR director or executive know which approach a coach is likely to take? And, among the various approaches, is there evidence that certain approaches are more effective than others? What are the various "theories of change" that coaches have? We think these areas offer many exciting avenues for future research.

*Conclusion*

In sum, our findings suggest that structured coaching sessions with multisource feedback are change managerial behaviors toward more effective interactions. These results, and the structures needed to implement them, are within the reach of any organization willing to dedicate the time and resources to develop its managers. With millions of dollars spent each year and the hundreds of hours administering multisource feedback surveys, empirical evidence is needed to determine their utility. This research helps discern the improvements made as a result of leadership training and one-on-one coaching, thereby offering burgeoning support for these popular developmental methods.

**REFERENCES**

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.
- Atwater, L. E., Brett, J. F., & Charles, A. C. (2007). Multisource feedback: Lessons learned and implications for practice. *Human Resource Management, 46*(2), 285-307.
- Atwater, L. E., Waldman, D. A., Brett, J. F. (2002). Understanding and optimizing multisource feedback. *Human Resource Management, 41*(2), 193-208.
- Bailey, C., & Austin, M. (2006). 360 degree feedback and developmental outcomes: The role of feedback characteristics, self-efficacy and importance of feedback dimensions to focal manager's current role. *International Journal of Selection and Assessment, 14*(1), 51-66.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review, 84*(2), 191-215.
- Bono, J. E., Purvanova, R. K., Towler, A. J., & Peterson, D. B. (2009). A survey of executive coaching practices. *Personnel Psychology, 62*(2), 361-404.
- Brutus, S., & Derayah, M. (2002). Multi-source assessment programs in organizations: An insider's perspective. *Human Resource Development Quarterly, 13*, 187-201
- DeNisi, A. S., & Kluger, A. N. (2000). Feedback effectiveness: Can 360-degree appraisals be improved? *Academy of Management Executive, 14*, 129-139.

- Denison, D. R. (1990). *Corporate culture and organizational effectiveness*. New York: Wiley.
- Denison, D. R., Hart, S. L., & Kahn, J. A. (1996). From chimneys to cross-functional teams: Developing and validating a diagnostic model. *Academy of Management Journal*, 39(4), 1005-1023.
- Denison, D. R., Hooijberg, R., & Quinn, R. E. (1995). Paradox and performance: Toward a theory of behavioral complexity of managerial leadership. *Organization Science*, 6(5), 524-540.
- Denison, D. R., & Mishra, A. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204-223.
- Denison, D. R., Neale, B., & Kotrba, L. (n.d.). The Denison Leadership Development Survey: The construction and validation of a 360-degree feedback instrument. *Working Paper*. Denison Consulting.
- Ducharme, M. J. (2004). The cognitive-behavioral approach to executive coaching. *Consulting Psychology Journal: Practice and Research*, 56(4), 214-224.
- Ericsson, K. A. (2006). The influence of experience and deliberate practices on the development of superior performance. In K. A. Ericsson, N. Charness, P.J. Feltovich, & R. R. Hoffman (eds.). *The Cambridge handbook of expertise and expert performance*. New York: Cambridge University Press.
- Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54(7), 493-503.
- Gollwitzer, P. M., & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73, 186-199.
- Hackman, J. R. (2002). *Leading teams: Setting the stage for great performances*. Cambridge, MA: Harvard Business School Publishing.
- Hazucha, J. F., Hezlett, S. A., Schneider, R. J. (1993). The impact of 360-degree feedback on management skills development. *Human Resource Management*, 32, 325-351.
- Hooijberg, R., & Lane, N. (2009). Using multisource feedback coaching effectively in executive education. *Academy of Management Learning and Education*, 8(4).
- Facteau, C. L., Facteau, J. D., Schoel, L. C., Russell, J. E. A., & Poteet, M. L. (1998). Reactions of leaders to 360-feedback from subordinates and peers. *Leadership Quarterly*, 9, 427-448.
- Feldman, D. C., & Lankau, M. J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management*, 31(6), 829-848.

- Gilbert, D. T., Pinel, E. C., Wilson, T.D., Blumberg, S. J., & Wheatley, T. P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 75(3), 617-638.
- Kampa, S., & White, S. P. (2002). The effectiveness of executive coaching: What we know and what we still need to know. In R. L. Lowman (ed.), *Handbook of organizational consulting psychology* (pp. 139-158). San Francisco: Jossey-Bass.
- Kets de Vries, M. F. R., Vrignaud, P., & Florent-Treacy, E. (2004). The global leadership life inventory: Development and psychometric properties of a 360-degree feedback instrument. *International Journal of Human Resource Management*, 15, 475-492.
- Kombarakaran, F. A., Yang, J. A., Baker, M. N., & Fernandes, P. B. (2008). Executive coaching: It works! *Consulting Psychology Journal: Practice and Research*, 60(1), 78-90.
- Kilburg, R. R. (2004a). Trudging toward Dodoville: Conceptual approaches and case studies in executive coaching. *Consulting Psychology Journal: Practice and Research*, 56(4), 203-213.
- Kilburg, R. R. (2004b). When shadows fall: Using psychodynamic approaches in executive coaching. *Consulting Psychology Journal: Practice and Research* 56(4), 246-268.
- Likert, R. L. 1961. *New patterns of management*. New York: McGraw-Hill.
- Liljenstrand, A. M., & Nebeker, D. M. (2008). Coaching services: A look at coaches, clients, and practices. *Consulting Psychology Journal: Practice and Research*, 60, 7-32.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- London, M. (2002). *Leadership development: Paths to self-insight and professional growth*. Mahwah, NJ: Lawrence Erlbaum.
- Louis, M. R. & Sutton, R. I. (1991). Switching gears: From habits of mind to active thinking. *Human Relations*, 44(1), 55-76.
- Luthans, F. & Peterson, S. J. (2003). 360-degree feedback with systematic coaching: Empirical analysis suggests a winning combination. *Human Resource Management*, 42(3), 243-256.
- MacKie, D. (2007). Evaluating the effectiveness of executive coaching: Where are we now and where do we need to be? *Australian Psychologist*, 42(4), 310-318.
- McGregor, D. 1960. *The human side of enterprise*. New York: McGraw-Hill.

- McKenna, D. D., & Davis, S. L. (2009). Hidden in plain sight: The active ingredients of executive coaching. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 2(3), 244-260.
- Nunnally, J. (1978). *Psychometric theory*. New York, McGraw – Hill.
- Olivero, G., Bane, K. D., Kopelman, R. E. (1997). Executive coaching as a transfer of training tool: Effects on productivity in a public agency. *Public Personnel Management*, 26, 461-469.
- Peltier, B. (2001). *The psychology of executive coaching*. Ann Arbor, MI: Sheridan Books.
- Peterson, D. B., & Miller, J. (2005). The alchemy of coaching: “You’re good, Jennifer, but you could be really good.” *Consulting Psychology Journal: Practice and Research*, 57(1), 14-40.
- Posner, B. Z., & Kouzes, J. M. (1993). Psychometric properties of the leadership practices inventory – updated. *Educational and Psychological Measurement*, 53, 191-199.
- Rosti Jr., R. T. & Shipper, F. (1998). A study of the impact of training in a management development program based on 360 feedback. *Journal of Managerial Psychology*, 13 (1/2), 77-89.
- Rothstein H. R. (1990). Interrater reliability of job performance ratings: Growth to asymptote level with increasing opportunity to observe. *Journal of Applied Psychology*, 75, 322–327.
- Scott, W. R. (2003). *Organizations: Rational, natural, and open systems*. 5<sup>th</sup> ed. Upper Saddle River, NJ: Pearson Education.
- Seifert, C. F., Yukl, G., & McDonald, R. A. (2003). Effects of multisource feedback and feedback facilitator on the influence behavior of managers toward subordinates. *Journal of Applied Psychology*, 88, 561-569.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization* (1st ed.). New York: Doubleday/Currency.
- Sherin, J., & Caiger, L. (2004). Rational-emotive behavior therapy: A behavioral change model for executive coaching? *Consulting Psychology Journal: Practice and Research*, 56(4), 225-233.
- Sherman, S., & Frea, A. (2004). The Wild West of executive coaching. *Harvard Business Review*, 82(11), 82-90.
- Smither, J. W., London, M. L, Flautt, R., Vargas, Y., & Kucine, I. (2003). Can working with an executive coach improve multisource feedback ratings over time? A quasi-experimental study. *Personnel Psychology*, 56, 23-44.

- Smither, J. W., London, M. L., Reilly, R. R. (2005). Does performance improve following multisource feedback? A theoretical model, meta-analysis, and review of empirical findings. *Personnel Psychology*, 58, 33-66.
- Smither, J. W., London, M. L., Vasilopoulos, N. L., Reilly, R. R., Millsap, R. E., & Salvemini, N. (1995). An examination of an upward feedback program over time. *Personnel Psychology*, 48, 1-34.
- Sonnentag, S., & Kleine, B. M. (2000). Deliberate practice at work: A study with insurance agents. *Journal of Occupational and Organizational Psychology*, 73, 87-102.
- Tabanick, B. B., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.), Boston: Allyn and Bacon.
- Taylor, S. E., Pham, L. B., Rivkin, I. D., & Armor, D. A. (1998). Harnessing imagination: Mental simulation, self-regulation, and coping. *American Psychologist*, 53(4), 429-439.
- Toegel, G. & Conger, J. A. (2003). 360-degree assessment: Time for reinvention. *Academy of Management Learning & Education*, 2(3), 297-311.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.
- Wasylshyn, K. M. (2003). Executive coaching: An outcome study. *Consulting Psychology Journal: Practice and Research*, 55, 94-106.
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132(2), 249-268.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Wilson, C. L., & Wilson, J. L. (1991). *Teams and leaders: A manual for the Clark Wilson Publishing Company and training and development programs*. Clark Wilson Group: Silver Spring, MD.
- Yukl, G., & Tracy, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology*, 77, 525-535.

Figure 1: Denison Model of Leadership Behaviors

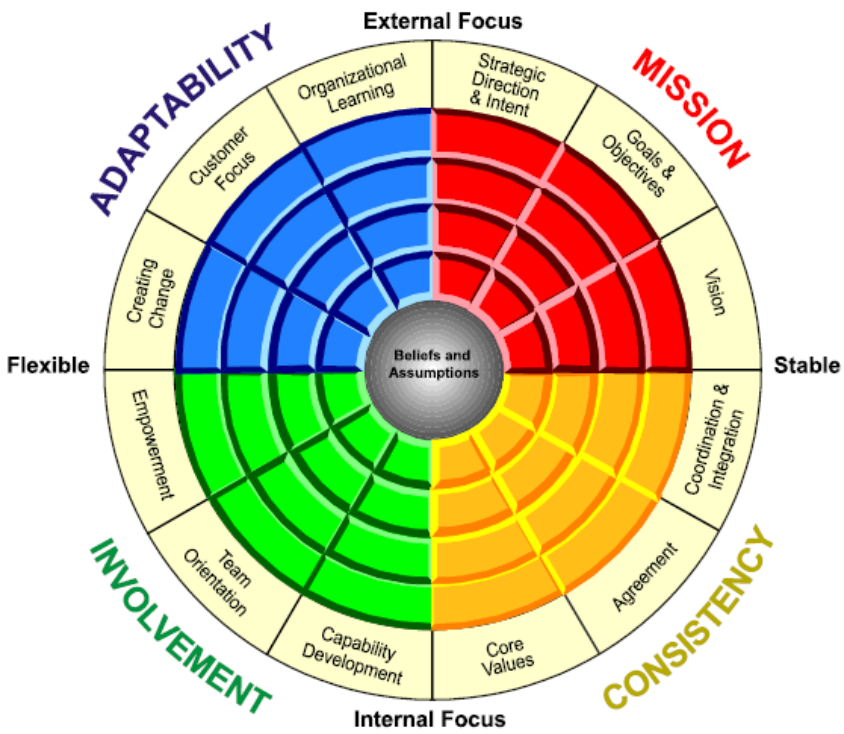


Table 1. Studies that examine multisource rating change over time with coaching/training intervention.

Study	Sample	Time period	Measure	Findings & Intervention
Hazucha, Hezlett, & Schneider (1993)	48 managers	2 years	Management Skills Profile	Those who completed “job rotation, coaching and feedback” and “training programs” had positive and significant correlation ( $r=.26$ and $r=.27$ ; $p<.01$ ) with change from T1-T2 as rated by “others” (341) on average skill rating.
Rosti & Shipper (1998)	Control group (N=26) and experimental group (N=27)	~3 months	Survey of 13 Management Practices (Wilson & Wilson, 1991)	24 hours of management training over 3 months for experimental group. No significant changes seen ( $p<.05$ ) for experimental group on 13 skills.
Luthans & Peterson (2003)	20 managers	~3 months	Managerial Feedback Profile	Managers went from being statistically higher on behavioral competence, interpersonal competence, and personal responsibility at T1 to no difference at T2, and while managers did not increase significantly on the three factors as rated personally, managers did increase over time as rated by “others” on behavioral and interpersonal competence.
Seifert, Yukl, & McDonald (2003)	7 with MSF and training (experimental); 7 with MSF and no training (control); 7 with no MSF and no training (comparison)	3 months	Influence Behavior Questionnaire (Yukl & Tracy, 1992)	Those with MSF and training (3 hours) improved on the influence tactics of consultation and collaboration, but not rational persuasion and inspirational appeals.
Smither, London, Flautt, Vargas, Kucine (2003)	404 received executive coaching; 798 received no coaching	1 year	1 composite measure of 8 items	Managers who worked with a coach (5-7 hours) were more likely to set specific goals and to solicit ideas for improvement from their supervisor. Managers with coaching improved more than other managers in terms of direct report and supervisor ratings on the composite measure.

Table 2: The Effect of Rater and Time on Twelve Indexes of Leadership Skill

Source	MANOVA				Univariate			
	Wilk's $\Lambda$	df1	df2	F	Dependent Variables	df1	df2	F
Rater	0.29	36	127	8.56*				
					Empowers People	2.82	456.08	11.61*
					Builds Team Orientation	2.83	458.11	15.98*
					Develops Org. Capability	2.79	451.32	20.75*
					Defines Core Values	2.84	460.04	26.77*
					Works to Reach Agreement	2.95	478.22	10.36*
					Manages Coordination & Integration	2.90	469.00	8.65*
					Creates Change	2.79	451.95	12.61*
					Promotes Org. Learning	2.78	450.73	6.31*
					Emphasizes Customers	2.70	437.73	11.84*
					Creates Shared Vision	2.76	447.70	16.16*
					Defines Strategic Direction & Intent	2.69	437.44	14.11*
					Defines Goals & Objectives	2.76	447.04	14.04*
Time	0.78	12	151	3.52*				
					Empowers People	1.00	162.00	11.98*
					Builds Team Orientation	1.00	162.00	11.82*
					Develops Org. Capability	1.00	162.00	24.36*
					Defines Core Values	1.00	162.00	15.10*
					Works to Reach Agreement	1.00	162.00	15.49*
					Manages Coordination & Integration	1.00	162.00	11.15*
					Creates Change	1.00	162.00	11.73*
					Promotes Org. Learning	1.00	162.00	15.12*
					Emphasizes Customers	1.00	162.00	22.19*
					Creates Shared Vision	1.00	162.00	24.15*
					Defines Strategic Direction & Intent	1.00	162.00	22.02*
					Defines Goals & Objectives	1.00	162.00	17.90*

Note. \*p < .001;  
N = 238

Table 3. Means for Leadership Indexes by Rater and Time

Dependent Variables	Rater				Time	
	Boss	Peer	Direct Report	Self	Time 1	Time 2
Empowers People	6.103	6.086	5.878	6.146	6.007	6.100
Builds Team Orientation	6.091	6.099	5.841	6.193	6.007	6.105
Develops Org. Capability	5.874	5.965	5.598	5.989	5.784	5.930
Defines Core Values	6.087	6.138	5.835	6.284	6.035	6.138
Works to Reach Agreement	5.913	5.965	5.725	5.986	5.842	5.952
Manages Coordination & Integration	5.999	6.053	5.851	6.095	5.950	6.050
Creates Change	5.918	5.993	5.704	6.011	5.855	5.958
Promotes Org. Learning	5.783	5.937	5.773	5.952	5.807	5.916
Emphasizes Customers	6.050	6.191	5.962	6.225	6.052	6.162
Creates Shared Vision	5.557	5.871	5.584	5.881	5.641	5.806
Defines Strategic Direction & Intent	5.726	6.001	5.724	5.979	5.784	5.931
Defines Goals & Objectives	5.799	6.043	5.737	6.004	5.830	5.962

N = 238