Is Workplace Coaching a Generic or Goal Specific Intervention? An Examination of Predictors of Goal Progress in Workplace Coaching Engagements

A Dissertation
SUBMITTED TO THE FACULTY OF THE
UNIVERSITY OF MINNESOTA
BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Dr. Paul Sackett, Advisor

February 2016

Acknowledgements

I would like to acknowledge and extend my gratitude to the many individuals who have helped me get to this point in my career. I have been fortunate to have the support of so many friends, family, colleagues, and mentors, and without them, I would not be where I am today.

This dissertation would not have been possible without my advisor, Dr. Paul Sackett, and my committee members Drs. Nathan Kuncel, John Campbell, and Louis Quast. First and foremost, thank you, Paul for advising me through the dissertation process and throughout my graduate school experience. Paul relentlessly taught, supported, and advocated for me. Many thanks to my entire committee, your teachings and ideas helped me shape and develop this work. I would also like to thank the remainder of the I-O faculty, Drs. Deniz Ones, and Aaron Schmidt. Thank you for your training and instilling in me the Minnesota tradition of I-O psychology. I am proud to be part of the Minnesota I-O family.

Many thanks to my fellow graduate students. It has been a privilege to learn, struggle, grow, and laugh with so many of you. My experience would not have been the same without you. A special thanks to my cohort, Sarah Semmel, I am so fortunate to have had the opportunity to share the graduate school experience with you.

I would also like to thank my friends and family. To my former roommate and best friend Kelly Russ. Thank you for your support during my transition into graduate school. Without you, I would have probably skipped a few more meals during those years, and I certainly would have had a lot less fun. To my family, thank you for being so understanding of my unusual schedule and frustrated responses to questions regarding the

status of my dissertation. Thank you to my brother, Dr. Timothy Hildebrandt. You modeled the way for me and helped me navigate through this experience. A special thank you to my fiancé, Damon Dunkel. Although you have not always quite understood the doctoral process and experience, you stood by me and believed in me all the way.

Last, but certainly not least, I would like to thank the many others who guided me down this path. Thank you to my undergraduate professors at the College of Saint Benedict for inspiring me to pursue this degree. Thank you to those who supervised me during my many internship experiences. Exposure to the application of I-O psychology truly enhanced my classroom experience.

To all of you, thank you. Your guidance, support, and generosity will not be forgotten.

Abstract

Workplace coaching is a rapidly growing industry. Despite its rapid growth, little formal research has explored how and why coaching relationships produce individual goal progress. The following manuscript proposed and explored two competing theories. One theory is that coaching is a goal specific intervention where successful coaching is contingent upon selecting coaching content that is in accord with individualized coaching goals. Another theory is that coaching is a generic intervention where there are coaching content that are generally associated with coaching goal progress. To explore and evaluate these theories, 351 individuals who had participated in workplace coaching (i.e. "coachees") reported their coaching goals, the activities they participated in to address their goals, and their goal progress. The coachee reported activities were used to create a coaching activity factor structure as well as a coaching activity cluster model. Overall findings suggest that in practice, coaching has a tendency to be applied generically across goals rather than being tailored to each coachee's specific needs. However, results were far from conclusive and should be explored further in more controlled research settings.

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Introduction

Coaching is "the process of equipping people with the tools, knowledge, and opportunities they need to develop themselves and become more effective" (Peterson & Hicks, 1996, p. 14). Nearly 20 years old and this is still a predominant definition of coaching. Although this definition is regarded highly, little is understood about which tools, knowledge, and opportunities best enhance the effectiveness of individuals (MacKie, 2007; Joo, 2005; & Orenstein, 2002). To understand why this gap in the literature exists, it is helpful to conceptualize workplace coaching as occurring in three phases. The first phase involves the initiation of coaching. During this phase, the need for coaching is determined, a coachee is paired with a coach, the logistics of the engagement are established, and the coaching objectives are set. The second phase is the coaching process. The coaching process includes all of the tools, knowledge, and opportunities used to help coachees achieve their objectives. The third and final phase involves program evaluation or determining whether or not coaching was effective. Thus far, the majority of coaching research has focused on phase three with little attention being directed at phases one and two.

Exploration of what occurs during the coaching process (phase two) will facilitate the understanding of how and why coaching works. One critical coaching process question is: Is coaching a goal specific or generic developmental intervention? If coaching is goal specific, then successful coaching is contingent upon matching coaching content to the coaching program objectives. If generic, then there is coaching content that generally relate to successful coaching outcomes. The emphasis of the current project is

to understand whether coaching program content is tailored to the specific objectives of the program or whether coaching program content is generic across an array of objectives.

The Coaching Industry

Coaching as a developmental intervention is becoming commonplace in organizations worldwide. Coaching programs are being offered for a wide range of reasons from facilitating the onboarding process to improving a performance deficit. Between 2007 and 2012, the number of individuals employed as workplace coaches grew from 30,000 to 47,500 (ICF, 2007, 2012). This growth trend is expected to continue as coaching gains esteem globally.

As the executive coaching industry has grown, it has acquired several different uses and meanings. At its conception, the purpose of executive coaching was to serve as an intervention to address employees with major behavioral issues. In 1981, Personnel Decisions International (PDI) developed the Individual Coaching Effectiveness (ICE) program (Peterson, 1993). The ICE program was intended for professionals who needed to immediately change their behavior in order to remain employed. PDI screened and eliminated participants with underlying psychopathological issues so that the ICE program could focus directly on behavioral change. The ICE program was one of the first programs to position coaching as distinctly different than clinical therapy. Within a decade ICE had assisted in changing behavior of over 1,000 professionals.

Over time, coaching has matured from an employee reform intervention into an employee development technique. Coaching now serves a variety of purposes. Coaching is used to help people transition into new roles, adapt to changing environments, acquire

new skills, and enhance job satisfaction (Peterson & Hicks, 1998). While initially coaching was viewed as a form of punishment, it has since become a form of reward that is given to organizations' most valued employees.

The maturation of coaching has produced substantial variability in the meaning and use of coaching. This variability was highlighted in a nation-wide survey of coaching practices conducted by Bono, Purvanova, Towler, and Peterson (2009). Four hundred twenty-eight coaches responded to questions about their training background and various aspects of their practice including: assessment tools utilized, reasons for referral to coach, approaches to coaching, method of communication with coachee, nature of the coaching engagement, and the hierarchical level of individuals being coached. As suspected, the survey revealed that coaches come from a wide variety of training backgrounds and perform their coaching practice using a wide array of techniques

The Bono et al. (2009) survey results suggest that coaches frequently address a variety of coaching topics and use several different activities and assessments to address these topics. Their results indicate that coaches refrain from specializing on a particular topic. For example, it would be rare to encounter a coach that only works with coachees who would like to improve their communication skills. Likewise, coaches use several different activities and assessments in their practices. What is unclear is whether or not coaches are tailoring activities and assessments to match coachee goals. This question will be explored in the present study.

In addition to variability between coach training and practice, organizations often place regulations on how their employees are coached. Providing employees with coaching is an expensive endeavor. Average coaching fees are between $215 and $260

per hour with sessions typically persisting between three to nine months (Bono et al., 2009; Pomerleau, Silvert, WanVeer, Desrosiers, & Henderson, 2010). Not only are coaching sessions costly, they also utilize the time and resources of highly compensated executives (De Meuse, Dai, & Lee, 2009). To justify the cost, organizations often express a need to understand the return on investment (ROI). Quantifying coaching ROI is challenging because coaching influences performance indirectly. This means that coached behaviors (i.e. stress management) may improve other behaviors (i.e. communication, mood, concentration, attention to detail), which subsequently improve the performance of the individual and their team. Determining the ROI of coaching requires the consideration of all potential performance moderators.

One strategy to regulate coaching and reduce its associated costs is to train internal staff to administer coaching (Frisch, 2001). When organizations move to internal coaching, coaches are then employed by the same organization as their coachees. To develop an internal coaching program, organizations often select a preferred coaching model and train their staff to coach in accord with the model. Training programs vary in formality. Some organizations self-develop standards for coaches to follow while others send coaches to specific training programs. Another advantage of internal coaching is the enhanced ability for coaches to provide intra-organizational expertise (Hall, Otazo, & Hollenbeck, 1999). Internal coaches are aware of the dynamics that influence their clients' working environment. Because internal coaches have ready access to their clients' direct reports and managers, they are better able to monitor the progress and make coaching adjustments as needed.

Internal coaching has much to be desired, however there are some potential

drawbacks. The primary drawback is the reduction in confidentiality (Wasylyshyn, 2003; Frisch, 2001; Hall et al., 1999). When internal, all information shared within a coaching engagement resides within the organization and the potential for a confidentiality breach is increased. For many, the ability to privately work through coaching objectives is essential. To enhance regulation and maintain complete confidentiality some organizations require coaches to obtain specific training or certifications before they are eligible to be a coaching provider for their employees.

Workplace coaching has evolved over time and can be interpreted and applied in limitless ways. Because of the large opportunity for interpretation, this investigation of workplace coaching will not restrict the use of a coaching to a specific model or technique. Relevant coaching program details will be collected and considered in analysis. It should be noted that one variation of coaching is team coaching (Hackman & Wageman, 2005). The purpose of team coaching is to help teams make the most effective use of their collective resources. Team coaching is distinctly different than individual coaching because it involves simultaneously addressing behaviors of multiple individuals in order to exponentially improve the team's performance level. Although team coaching may have much to offer work teams, it will not be the focus of the present research.

The following sections will introduce the three phases of coaching and discuss each phase from both generic and goal specific coaching perspectives. First, I will provide and overview of the two coaching perspectives and the three coaching phases.

Two Coaching Perspectives

There are two primary perspectives of coaching: generic and goal specific. A generic perspective of coaching assumes that there are coaching antecedents and content

that predict successful coaching outcomes. This means that if a specific set of antecedents are met and coaching is applied in a specific way, then a standardized set of outcomes should be expected. This perspective leads to a pursuit of antecedents and methods that are associated with a set of positive coaching criteria. Examples of a generic perspective on coaching are prevalent in all phases of the coaching process. For instance, in the initiation phase, research supports that high pre-coaching self-efficacy is associated with success (Stewart, Palmer, Wilkin, & Kerrin, 2008). In the administration of coaching phase it has been found that coachee perception of a strong coach-coachee working alliance is associated with positive coaching outcomes (Haan, Duckworth, Birch, & Jones, 2013). Finally, in the evaluation phase, positive relationships have been observed between the coaching experience and leadership behaviors (Thach, 2002). These research investigations do not control for the moderating effects of coaching objectives or coaching techniques.

Research from the generic perspective is responsible for producing generalizable information about coaching. This perspective can be especially useful when developing general best practices for coaching. It can, however, be limiting. Conceptualizing coaching as a strictly generic engagement diverts attention from the individualized process of coaching. Thus far, examinations of improvement on person-specific goals after coaching have produced some of the strongest observed coaching effects (Peterson, 1993). Neglecting the view of coaching as a goal specific intervention may further stagnate the coaching literature.

The goal specific coaching perspective assumes that each executive coaching engagement is equivalent to an individualized training program. Individuals enter

coaching with specific training needs. Presumably, not all coachees have the same coaching needs, some may like to improve their managerial skills and others may be interested in reducing their workplace stress. If indeed coaching programs parallel individual training programs, then because of the variability in coaching goals, it would be expected that the same variability would be present within coaching interventions. For example, some goals may be best addressed through relationship building and others through role-plays.

Developing a goal specific coaching program closely corresponds with developing an individualized workplace training program. Campbell and Kuncel (2001) discussed universal best practices for individual training interventions. According to Campbell and Kuncel an individual training program should be developed by first determining training needs, second specifying training objectives, third specifying training content, and finally specifying training methods. Each of these training steps can be applied to executive coaching. First, the organization must determine if an employee is eligible for coaching, second relevant stakeholders must set objectives for the intervention, third the content must be developed, and finally the methods of administering the content must be determined.

Campbell and Kuncel's (2001) universal training practices align with the three phases of coaching. In the first phase, coaching needs are identified and objectives are developed based on coaching needs. Coaching needs may be identified in a variety of ways (e.g. performance review, promotion, transition). Relevant stakeholders are responsible for setting coaching objectives (e.g. organization, supervisor, coach, coachee). In phase two, coaches develop intervention content and select coaching

methods to address coachee specific objectives. In the final phase, coachees are evaluated using criteria that are specific to their coaching objectives.

Although these two research perspectives will be discussed separately, they are not mutually exclusive, and in practice, should be applied together. For instance, in the first phase of coaching, general best practices for coach selection should be used in congruence with a coaching needs assessment and coachee goal development. Likewise, a coachee will be more receptive to their individualized coaching program if they perceive their coach as trustworthy. Finally, when evaluating coaching, it is often informative to assess coachee progress on both goal specific objectives and on global performance enhancements. It is clear that both generic and goal specific perspectives facilitate a stronger understanding of how and why coaching works.

Three Phases of Coaching

In the following section I will summarize the existing literature on the three phases of coaching. For reference, the first phase of coaching is the initiation of the engagement where coaching needs are determined, coachees and coaches are paired, logistics are established, and goals are set. Phase two is the actual coaching process. This phase includes all tools, knowledge and opportunities provided to coachees throughout the coaching engagement. The third phase includes the evaluation of the coaching process. Within each literature summary I will discuss the existing literature from both a generic and goal specific coaching perspective.

It should be noted that executive coaching is a field that has long struggled to produce rigorous academic research. Many of the most prominent executive coaching research articles position strong claims based on anecdotal evidence or seasoned

expertise. In fact, a Google Scholar search reveals that the most cited article in the literature neither contains empirical data nor references empirical data but rather is an opinion piece providing advice on how to administer effective coaching (Hall et al., 1999). Although coaches hold many firm beliefs on the ingredients of effective coaching, the following literature summary will focus on empirically supported findings and will refer to anecdotal evidence and untested hypotheses only when necessary.

Phase 1: The initiation of coaching. The first phase of coaching includes the antecedents to the coaching engagement. The antecedents of coaching include several formal practices. To begin a coaching engagement, the need for coaching must be identified, a coach must be paired with a coachee, a formal agreement regarding the timing and logistics of the engagement must be made, and goals must be identified. These formalities set the stage for the entire coaching engagement. Research on the antecedents of coaching have formed two perspectives: generic and goal specific. The generic perspective has fixated on general antecedents that are associated with positive coaching outcomes. Some examples of general antecedents include optimal coach and coachee personality characteristics and organizational support. The goal specific perspective has focused on antecedents that are specific to the needs of individual coachees. Some examples of goal specific antecedents include coaching needs analysis techniques and the goal identification process.

Although these two perspectives are present throughout the executive coaching literature, most of the existing work is in the form of untested hypotheses rather than empirical evidence. The following two sections will explore the coaching antecedents literature from both the generic and goal specific perspectives. Both generic and goal

specific phase one coaching research provide a unique and useful perspective on the coaching process.

Generic perspective. Joo (2005) developed a conceptual framework for successful executive coaching. In this framework, Joo proposes that the antecedents of coaching include coach characteristics, coachee characteristics and organizational support. The following section will discuss these antecedents and their relationships to successful coaching. To bolster the arguments for the use of these antecedents, I will draw from the mentoring and training literatures.

Coach characteristics. Popular press articles suggest that selecting a coach is an important process. A Google search of "Selecting an Executive Coach" yields 289,000 hits. These websites suggest that coaches should be selected based on their experience, chemistry, industry expertise, success stories, confidentiality agreements, psychology training, and several more. Although other related literatures and popular press suggest that the coach selection process is critical to successful coaching, little formal research on this process has been published.

Coach characteristics are often cited as a key determinant of effective coaching. It is understood that there is great variability between coaches (Bono et al., 2009). In addition to coach variability on individual differences variables (i.e. personality and intelligence), coaches also greatly differ in educational background, formal training, and degree of experience. While these differences are often cited as relevant, to date, they have not been formally evaluated.

It has been proposed that there are coach competencies that are related to coach effectiveness. Although these competencies need further research, executive coaches

have put forth many ideas. Bono et al. (2009) asked 428 coaches to report the three most essential competencies for providing effective coaching. The ability to listen (31%), to demonstrate counseling skills (19%), to build relationships (18%), to provide business knowledge (15%), to ask insightful questions (13%), and the possession of personal qualities (i.e. courage, curiosity, and intuition) (12%) were the top six most frequently cited competencies. Bortman, Liberi, and Wasylyshyn (1998) pooled their collective coaching experience to propose 12 core coach competencies including: approachability, comfort around top management, compassion, creativity, integrity and trust, interpersonal savvy, listening, dealing with paradox, political savvy, and self-knowledge.

From the coachee perspective, Leedham (2005) conducted a case study of six individuals who purchased executive coaching. These individuals were asked to rate the factors they considered when selecting their executive coach. Leedham found that prospective coachees placed high importance on their potential coach's experience or "Evidence of having done similar coaching work previously." Although this sample size is extremely small, given the prevalence of this advice, it seems that experience is often considered when selecting a coach. Placing high value on coach experience may be a common practice; however, no research has been conducted examining the relationship between coach experience and successful coaching outcomes.

Scoular and Linley (2006) explored the relationship between coach and coachee personality types and coaching success. One hundred twenty-two individuals were provided with one, thirty-minute coaching session. Coaches and coachees took MBTI and NEO personality assessments. Following coaching, coachees and coaches were asked to assess the coaching relationship. Scoular and Linley found that when coaches and

coachees differed in MBTI temperament, they were more likely to rate the coaching session as successful. All other personality variables were unrelated to the success of the coaching session.

Drawing from the mentoring literature, the extent to which a mentee feels appropriately paired with their mentor has been cited as a key determinant of mentoring program success (Viator, 1999). Allen, Eby, and Lentz (2006) found that simply providing mentees with a voice in the mentor-mentee matching process increased mentee perception of mentoring quality. Wanberg, Welsh, and Hezlett (2003) hypothesize that providing mentees with input in the mentor-mentee matching process increases feelings of ownership and commitment to the mentorship. It is possible that allowing coachees the opportunity to interview their potential coaches provides them with increased ownership and commitment to the coaching engagement. The coach selection process is a topic in need of further exploration.

It is evident that high value is placed on coach expertise and experience; however, how expertise and experience relate to coaching effectiveness remains unclear. Findings within the coaching literature parallel findings within the mentoring literature. Some coach individual difference variables are related to coach engagement success; however, little is understood about how these variables function during coaching.

Coachee characteristics. Joo (2005) proposed that coachee characteristics are antecedents to coaching success. This means that some individuals may be more receptive to coaching than others. This may be because of individual differences that influence how coachees interact with the coaching process.

Stewart et al. (2008) surveyed 110 individuals who had had met with an executive coach for at least seven sessions. Participants completed four personality questionnaires measuring their conscientiousness, openness to experience, neuroticism, and self-efficacy. They also completed a survey that measured the extent to which they applied what they learned in coaching to their job and the extent to which coaching had a general positive impact on their performance. Stewart and colleagues found that high conscientiousness, openness to experience, and self-efficacy along with low neuroticism were all positively related to applying coaching lessons to the job. Additionally, high conscientiousness was positively related to coaching having a general positive impact on the job.

Haan et al. (2013) also examined the relationship between coaching success and coachee personality characteristics. Haan and colleagues examined 156 coach-coachee pairs. Both coaches and coachees reported their MBTI personality types and coachees took a self-efficacy questionnaire. Coachees also rated their perceived effectiveness of the program. Haan et al. found a significant relationship between self-efficacy and perceived coaching effectiveness. No significant findings were reported for the relationship between MBTI coachee type and coaching effectiveness. There were also no significant findings for coach-coachee MBTI pairings and effectiveness ratings. It is worth noting that the MBTI is an ipsative instrument. Ipsative instruments are most appropriately used for development purposes as they produce a rank order of traits within an individual but do not provide enough information to compare rankings across individuals (Hough & Dilchert, 2010). Therefore, the MBTI is not the most appropriate measure to explain the relationship between personality and coaching effectiveness.

Training literature. Because the coaching literature has just begun to pursue the relationship between coachee characteristics and coaching success, I will turn to the training literature to provide hypotheses for characteristics that may be associated with positive coaching outcomes.

Trainee personality characteristics and training outcomes have been subject to much research. Farr, Hofmann, and Ringenbach (1993) found that learning orientation (as opposed performance orientation) was positively related to training motivation. In support of Farr et al.'s findings, Colquitt and Simmering (1998) also found that learning orientation was positively related to learning. Additionally, Colquitt and Simmering found a positive relationship between trainee conscientiousness and subsequent learning. Barrick and Mount (1991) conducted a meta-analysis that examined relationships between the Big Five dimensions of personality and training proficiency. Barrick and Mount found that conscientiousness, openness to experience, and extraversion were positively related to training proficiency. Nearly two decades later, Schmidt, Shaffer, and Oh (2008) meta-analytically concluded that the personality variables conscientiousness and emotional stability were positively related to training performance (r=.27 and r=.15).

The relationship between general mental ability and training performance is complex. In general, higher mental ability is positively associated with training performance (Schmidt et al., 2008; Ree & Earles, 1991). However, this relationship is influenced by the difficulty of the training, presence of goals, and degree of structure within the process (Cronbach, 1975; Kanfer & Ackerman, 1989). The training industry has the potential to capitalize on ability-performance interactions with the development of individualized computer-based training programs (Campbell & Kuncel, 2001).

Similarly, these findings have the potential to influence individualized coaching programs.

The influence of demographic variables (i.e. gender, age, race) on training motivation has also been explored. Findings from these explorations have failed to converge. Mathieu and Martineau (1997) said it best with their comment, "The most consistent findings concerning demographic variables and training outcomes are their inconsistencies" (p. 200). The relationships between demographic variables and training performance are probably not linear and may be moderated by several training program variables.

In sum, more research is needed, but it is reasonable to assume coachee characteristics influence the success of coaching. Preliminary evidence suggests that conscientiousness, openness to experience, emotional stability, learning goal orientation, self-efficacy, and general mental ability are positively related to successful coaching outcomes.

Organizational support. Joo (2005) proposed that organizational support is an integral antecedent to coaching success. Organizational support holds coachees accountable during the coaching process. Gregory, Levy, and Jeffers (2008) also proposed a coaching model that included organizational support. Their model hypothesized that organizational support acts as a catalyst for initiating coaching such that supportive organizations are more likely to suggest or provide coaching in the first place. Similar to the previously discussed coaching antecedents, exploration of organizational support as a predictor of coaching success has been subject to a limited amount of research.

Perception of organizational support is valuable. When employees believe that their organization supports their participation in coaching, they are more satisfied and engaged in their experience. McGovern et al. (2001) found that organizational support was associated with positive coaching experiences. McGovern et al. interviewed 100 individuals from several organizations who had completed a coaching engagement. McGovern and colleagues qualitatively analyzed interview transcripts and found that the way organizations communicate coaching programs to employees contributes to the success or failure of coaching. For example, coachees were more receptive to coaching when their organization pitched coaching as an opportunity for high performers. Other organizations approached coaching with less enthusiasm. At these organizations coaching was viewed as "taboo" or an experience that should be kept private. Coachees who were employed by organizations with a negative view toward coaching reported being less receptive to the process. Similarly, Tansky and Cohen (2001) surveyed individuals who attended a required employee development seminar. The perception of organizational support was positively related to satisfaction with the employee development experience (r=.38).

The mentoring literature echoes the finding of a positive relationship between coaching satisfaction and organizational support. Eby, Lockwood, and Butts (2005) found that satisfaction with mentoring was positively related to the perception of manager support for mentoring. Accordingly, mentees reported fewer problems with their mentor when the perception of manager support was present.

The training literature has a longer history of exploring the positive impact of organizational support. One useful term is organizational climate. Organizational climate

can be used to bundle several variables related to organizational support. Organizational climate includes components of a working environment that encourage employees to use and apply what they learned in training (Tracey, Tannenbaum, & Kavanagh, 1995). Some examples include cues and resources that remind employees of training, opportunities to use training skills, encouragement to use training skills, and feedback for using training skills. Colquitt, LePine, and Noe (2000) meta-analytically investigated a theory of training motivation. Within this investigation they tested the relationship between climate and learning outcomes. Colquitt and colleagues found climate to be positively related to declarative knowledge (r=.14), skill acquisition (r=.18), reactions to training (r=.40), and job performance (r=.26).

The perception of organizational support has a lasting effect on employees. When individuals perceive their organization as supportive of their engagement in coaching, mentoring, or training, they are more likely to react positively to their experience, and more importantly, they are more likely to apply the skills they have acquired.

Research on the generic perspective of the initiation of coaching has explored how coach and coachee characteristics as well as organizational support contribute to the success or failure of a coaching program. Continued exploration of these factors will help organizations design and develop more effective coaching programs. Although these variables have much to offer, they do not facilitate an enhanced understanding of how coaching generates individual change. Next I will turn to the goal specific perspective for an exploration of how individual goals are used to initiate coaching.

Goal specific perspective. From the goal specific perspective, the initiation of coaching should involve identifying coachees that are in need of coaching and

determining the objectives or goals for their coaching engagement. This perspective is concerned with initiating coaching programs that are focused on targeting coachee specific developmental opportunities. Campbell and Kuncel (2001) identified universals of training design. They proposed that all individual training programs should commence with determining training needs and identifying training objectives. These two steps can be directly applied to coaching engagements and are critical for designing a goal specific training program.

Determining coaching needs begins with defining the elements of effective performance. In this context, performance is defined as behaviors or actions that are critical to a current or future job (Campbell and Kuncel, 2001). Effective performance can then be used as a standard for comparison between employee current and desired levels of performance. Identified gaps between current and optimal performance are opportunities for employee improvement and development. Coaching is one tool that can be used to address identified development opportunities.

If resources are unlimited, then a formal needs analysis is the most thorough way to identify opportunities for coaching. There are three steps involved in conducting a needs analysis (Campbell and Kuncel, 2001). First, the critical components of effective performance are identified and described. Second, the components of performance are examined to generate a list of performance component determinants (i.e. the knowledge, skills, and abilities needed to execute each component of performance). Lastly, the determinants that are coachable are extracted from the previous list.

Resources for coaching are rarely unlimited, and typically the majority of the coaching budget is directed toward paying coaches rather than identifying coaching

needs. Instead of a formal needs analysis, coaching needs are frequently determined by performance reviews and 360-degree feedback where lower scores are viewed as opportunities for development or coaching needs (Nowack, 2009; Smither, London, Flautt, Vargas, & Kucine, 2003). Not all performance appraisal systems are created equally. Some appraisal systems may be derived from a formal job analysis and may closely parallel the findings of a formal needs analysis; however, some appraisal systems are developed without attending to the critical components of effective job performance. Poorly developed performance appraisal systems may identify inappropriate or irrelevant coaching objectives.

After coaching needs are identified the objectives for coaching can be selected. Coaching objectives are goals for the coaching engagement, or things that a coachee would like to be able to do or know after coaching that they currently cannot do or do not know. Campbell and Kuncel (2001) strongly recommend using objectives that are clearly defined and stated in explicit terms. Objectives should be observable and the expected level of proficiency should be defined. For example, if a coachee was identified as in need of improved work-life balance, then one coaching objective could be to increase time spent with family by one hour per day and reduce time spent on work by one hour per day. Incremental steps toward one hour less on work and one hour more on family would signal progress toward achieving the coaching objective at the specified proficiency level.

PDI's ICE program serves as an example of how to conduct a coaching needs analysis and then use results to formulate coaching objectives. PDI's ICE program examined the relationship between coaching and behavioral change for 370 professionals

(Peterson, 1993). Behavioral change was measured for each individual based on a set of unique coaching objectives. Coaching needs were identified through a combination of two sources: employer recommendation and the results of a full day assessment process. Professionals were referred to PDI's ICE program because they were identified as in need of development. PDI considered employer recommendations and also conducted their own battery of behavioral, personality, and ability examinations. Coaching needs were then translated into observable job performance specific behaviors. These behaviors were classified as coaching objectives. Some examples include "Accept feedback and criticism openly and non-defensively." and "Let subordinates know when they are doing things well." These objectives were used to build individual coaching programs and subsequent coaching evaluations.

Properly identifying coaching needs and determining coaching objectives are critical steps in the coaching process. Failure to attend to these steps makes it impossible to properly develop a goal relevant coaching program and appropriately evaluate its success or failure. Although coach and coachee characteristics and organizational support may influence coachee receptiveness to coaching and the overall success of the program, they should be considered secondary to needs analysis and objective development.

Summary of phase 1. The generic perspective holds that coach selection, coachee characteristics, and organizational support are valuable steps in the coaching process. The goal specific perspective views needs analyses and goal selection as the two primary components of the first phase of coaching. Both perspectives further the understanding of the antecedents of executive coaching. Although coach and coachee characteristics and organizational support are relevant coaching research topics, they will not be

meaningfully addressed in the present study. The purpose of the present study is to further the understanding of how coachees make progress toward their goals during coaching, and thus the goal specific perspective of the initiation of coaching adds more value to the present study than its generic perspective counterpart. To address the goal specific perspective coachees will be asked to respond to questions pertaining to the development of their coaching goals.

Phase 2: The coaching process. The coaching process includes everything that happens in a coaching engagement from the first coaching session until the last coaching session. The next two sections will discuss the process of coaching from generic and goal specific perspectives. The generic section will include general coaching process techniques that have been linked to coaching engagement success. The goal specific section will include a summary of training research related to designing individualized training programs.

Phase 2 or the coaching process is the phase of primary interest in the present study. A primary goal of the present study is to enhance the understanding of how and why coaching facilitates behavioral change. A focal research question is: are coaching activities generic or are they specific to the coaching goal in question? If specific, then, for optimal coaching, techniques and activities should be selected based on specific coachee goals. If generic, then there are a set of coaching techniques and activities that are generally associated with successful coaching outcomes.

As coaching has grown as an industry, many coaching methodologies have been developed. Sherpa Coaching surveyed 845 coaches and asked them if they conduct their coaching using a published process (Sherpa Coaching, 2014). Twenty-nine percent

reported that they follow a published process. Of the 29% that reported following a published process, 50 unique processes were named. This means that at a minimum there are 50 unique coaching processes and techniques. The subsequent sections will not discuss or evaluate branded coaching techniques, but will instead focus on components of the coaching process that are related to coaching effectiveness.

Generic perspective. Research on generally effective coaching practices frequently examines the relationship between coaches and coachees and coach provided feedback. How coaches interact and relate to their coachees is one critical aspect of coaching engagements. Typically, if coachees perceive this relationship to be strong, then they are more likely to respond positively to coaching (Haan et al., 2013). Another critical component of coaching relationships is feedback provided by coaches and coachee receptivity to coach feedback (Gregory, Beck, & Carr, 2011). These two common coaching factors will be discussed here.

Coach-coachee relationship. Receiving executive coaching requires a coachee to address weaknesses, developmental needs, or vulnerabilities. The process of addressing weak spots can be sensitive and difficult. To best address sensitive areas, it is important for coaches to develop strong working relationships with their coachees. Working relationships between coaches and coachees can be described using the term working alliance. A positive working alliance improves the likelihood of coaching success and is an important element of coaching (Haan et al., 2013).

The formation of a strong working alliance is dependent on three primary factors: coach-coachee goal and task agreement and a strong bond between the two individuals (Bordin, 1979). Bordin concluded that strong bonds are formed from trust and coach-

coachee agreement on the coaching programs' goals and tasks. Haan et al. (2013) examined the working alliance of 156 coach-coachee pairs. They measured perceived working alliance, coach personality, coachee personality, coachee self-efficacy, and a variety of coaching techniques. Haan and colleagues found that coachee perceived working alliance was the strongest predictor of coaching outcomes. Furthermore, they found that the use of multiple coaching techniques strengthened the working alliance and improved coaching outcomes. Interestingly, coach, coachee, and coach-coachee matched personality types were not related to coaching outcomes. Their findings suggest that coach ability to use a varied set of techniques, skills, and approaches is related to a strong working alliance.

Alvey and Barclay (2007) conducted interviews with 27 individuals who had had a coaching experience. They asked former coachees about aspects of their coach-coachee relationship that impacted the level of trust they had in their coaches. Qualitative analyses revealed that confidentiality, coachee readiness, organizational support, coach experience, supportive behaviors, clarity of goals, confirming behaviors, challenging behaviors, and perception of value each facilitated the development of a trusting bond with a coach. Breaches of confidentiality, client unreadiness, organizational stigma, and lack of goal clarity were the strongest derailleurs of coach trust. Alvey and Barclay's findings support Brodin's (1979) theory that trust is closely connected to strong working alliances.

Coachee feedback receptivity. Feedback is intuitively a core component of coaching. Coaches are responsible for both providing feedback and facilitating the interpretation of company provided (e.g. multisource ratings or performance reviews)

feedback. Anecdotal evidence supports the hypothesis that feedback is an essential aspect of coaching. In a list of anecdotally derived best coaching practices, Hall et al. (1999) cite providing honest, realistic, and challenging feedback as a critical aspect of coaching. Joo (2005) hypothesizes that coachee receptivity to feedback is positively related to successful coaching outcomes. Although feedback is often anecdotally discussed as critical to coaching, few have tested the effects feedback in the context of coaching.

Gregory, Levy, and Jeffers (2008) identified feedback as an under-researched, yet critically important, component of coaching. They propose that feedback should be considered from a multidimensional perspective. For example, individual learning orientation, organizational values, coach-coachee relationship, feedback delivery, and feedback utilization opportunities all influence individual feedback receptivity. To elaborate on the work of Gregory et al. (2008), Gregory et al. (2011) used self-regulation concepts and theory to explain the relationship between goals, feedback, and coaching.

Self-regulation theory posits that when individuals have identified goals, they refer to their environment for feedback in order to evaluate the degree of discrepancy between their current and desired goal state (Lord, Diefendorff, Schmidt, & Hall, 2010; DeShon & Gillespie, 2005; Vancouver & Day, 2005). If the environment indicates that their effort is reasonably reducing discrepancies, then individuals are likely to continue on their current path, if not, then individuals are likely to revise their behavior or abandon their goal. Gregory et al. (2011) propose a theory that integrates executive coaching into a self-regulatory feedback loop. Coaches effectively help guide individuals through the self-regulation process by acting as facilitators of coachee goal setting and prioritization and also by providing feedback to help coachees identify discrepancies between current

and desired goal states. Gregory and colleagues suggest that the way coaches provide feedback moderates the relationship between coaching and positive coaching outcomes.

Drawing from feedback theory, Gregory et al. (2011) provide advice to coaches on proper feedback giving techniques. Feedback should be task specific (Kluger & DeNisi, 1996). This means that feedback should be related to the behavior (e.g. Your communication skills need enhancement.) rather than the person (e.g. Your performance needs improvement.). Goals should also be as specific as possible. For example, the comment, "Your communication skills need enhancement." could be specified further by saying, "People sometimes have trouble hearing you; let's work on increasing your voice projection.". Coaches also have the opportunity to help coachees develop the ability to generate feedback about their own behavior (Gregory et al., 2011). Coaches can do this by asking coachees questions such as, "What went right with this exercise?" or, "What would you do differently next time?". Lastly, coaches can encourage coachees to seek feedback from their environment (Levy, Albright, Cawley, & Williams, 1995). Coaches should urge coachees to ask for feedback from supervisors, peers, and direct reports. Coaches can direct coachees on how to approach these individuals and ask about their most recent performance.

Feedback also enters a coaching relationship in the form of 360-degree feedback or performance reviews. Coaches are sometimes given the job of aiding in the interpretation of company provided feedback. A coach can help a coachee interpret feedback and create a development plan to address the feedback. Smither et al. (2003) compared time 1 and time 2, 360-feedback for executives who did and did not receive executive coaching. Smither and colleagues found that executives who received

development coaching were more likely to seek feedback from peers and supervisors. The act of working through 360-degree feedback with an executive coach may promote feedback-seeking behaviors outside of a coaching environment.

The coach-coachee relationship and feedback receptivity are both important aspects of coaching. In the present study, coachees will be asked to describe their coach-coachee relationship by responding to questions regarding their coaches' listening skills, trustworthiness, and communication skills. Coachees will also be asked to rate the extent to which their coaches' feedback helped or hindered their goal progress. The coach-coachee relationship and feedback are considered core, general, components of effective coaching; however, coaching engagements include much more than feedback and a working alliance. During coaching, coachees typically engage in several activities, assessments, and learning opportunities. How these components of coaching work together to produce goal improvement is not yet understood. One possibility is that these coaching components (e.g. role-plays, personality assessments, brainstorming, etcetera) form a hierarchy where some components are stronger predictors of coaching success than others. This perspective aligns with the generic view of coaching where a set of components would be associated with positive coaching outcomes regardless of coaching goals. A competing possibility is that these components are goal specific and should be selected by considering a coachee's individual goals. This perspective aligns with the goal specific view of coaching and will be explored next.

Goal specific perspective. As discussed in the previous section on generic perspective coaching methods, there are several examples of attempts to identify useful coaching techniques. These examples typically focus on behaviors that coaches should

exhibit while coaching (e.g. trustworthiness, empathy, rapport building). Rarely do these discussions assess which coaching activities and instructional methods were selected and used during coaching. This absence of literature prompts the question of: What really happens during workplace coaching? More specifically, which components of the coaching process produce positive change and are these components associated with specific coaching objectives?

The goal specific perspective of coaching techniques assumes that content of coaching should be tailored to specific coachee goals. From a logistics perspective, this means that after coaching goals are established, coaches then proceed with developing coaching content to best address coaching goals. If this is the case, then the relationship between coaching components and coaching success will vary based on the goal in question. Because this is an unexplored area of coaching, I will turn to the training literature.

Campbell and Kuncel (2001) provide expertise on the development of training content and methods in their discussion of the universals of training. They strongly advise trainers to develop training content based on the previously developed training objectives. Training content should mirror training objectives so that it is clear that mastery of training content will result in accomplishing training objectives. Training content will vary in complexity depending on the complexity of the training objectives and the discrepancy between current and desired trainee capabilities.

If the gap between current and desired trainee behavior is large, then training content should scaffold in a way that allows trainees to build their skills and capabilities toward objective achievement. For example, a foundational level of math knowledge (i.e.

subtraction, division, etc.) is necessary in order to compute a single-sample t-test. In other instances attaining a training objective requires executing several behaviors simultaneously (e.g. flying an airplane). For these types of objectives trainers must determine how to most appropriately breakdown and logically order training content.

Some objectives have a clearly identifiable end point where it is easy to distinguish individuals that have achieved an objective from those who have not yet achieved an objective. For example, a quick computational assessment distinguishes individuals who do and do not have the ability to compute a single-sample t-test. For other objectives, identifying achievement is more complicated. For example, it is more difficult to distinguish individuals who have improved their managerial skills from those who have not. When objective achievement is more difficult to identify, research literature and subject matter experts can help develop training content by defining the critical elements of high performance.

The final step in developing a training program is to select training methods that will best deliver training content (Campbell and Kuncel, 2001). Some common examples of training methods include: presentation of information, simulations, and on the job training. Training methods are not training objective or content specific. Each unique training method may be applied to several different types of training. For example, on the job training can be used to train many different tasks from using a cashier's machine to fixing a flat tire. Though methods can be applied in several scenarios, trainers are advised to consider the type of the objective (i.e. knowledge or skill) that is to be trained. If a training objective is knowledge related (e.g. learn a policy or procedure) then methods that present or teach information may be most appropriate; however, if a training

objective involves developing a new skill (e.g. learn to communicate more clearly), then relying on presentation of information as the sole training method would be insufficient. In sum, training methods should be selected through consideration of training objectives and content.

Summary of phase 2. The process of coaching involves providing individuals with tools, knowledge, and opportunities needed to achieve their goals (Peterson, 1993). Although some fundamentally core components (e.g. feedback and working alliance) of this process have been identified, much of what occurs during the process of coaching has been unreported and unexplored. During coaching, coachees typically participate in several different activities (e.g. seminars, assessments, role plays, simulations, etcetera). How and when these activities are used and their relationship to coaching success is not yet understood. Hypotheses from the goal specific perspective would speculate that coaching activities are goal specific and should be selected with consideration of individual goals. Hypotheses from the generic perspective would posit that some activities are generally more useful than others. These hypotheses will be explored and tested in the present study.

Phase 3: The evaluation of coaching. The third and final phase of coaching includes evaluating coaching to determine the effects of the coaching engagement. Although researchers and organizations express great enthusiasm regarding selecting the most appropriate evaluation criteria, in practice coaching is rarely evaluated. In a survey of 55 organizations with established coaching programs, McDermott, Levenson, and Newton (2007) found that only one third of these organizations formally evaluated their programs. Although only one third officially evaluated the effects of coaching, all had

opinions about the impact coaching had on their organization.

A criterion problem. Disagreement in how to formally evaluate coaching has created a criterion problem within the field. A criterion can be thought of as an intervention's dependent variable or measured outcome (Austin & Villanova, 1992). For example, if a scientist were investigating the effects of caffeine on puzzle completion time, puzzle completion time would be the dependent variable or measured outcome of interest. In this example the criterion is easy to define and identify, however when the measured variable increases in complexity the criterion becomes less clear. For example, consider a study examining the effects that a new anti-depressant on participant quality of life. How should the criterion, quality of life, be defined and measured? Is quality of life as simple as ability to perform routine activities? If so, what activities constitute as routine? These questions are the foundation of a research study and must be properly addressed in order to effectively communicate findings.

A criterion problem arises when there is confusion about what constitutes as a successful outcome in a given area of research (Hartnett & Willingham, 1980). Within executive coaching, a criterion problem has continued to stagnate the field's progress because there is little agreement about how to define and measure coaching effectiveness (Joo, 2005; MacKie, 2007; & Kilburg, 2004). This issue has prompted several investigations into the outcomes associated with executive coaching.

Models of evaluation criteria. To explore executive coaching's criterion problem it is useful to consider two models of training evaluation criteria. Kirpatrick (1959, 1996) and Campbell and Kuncel (2001) developed taxonomies of evaluation criteria. Kirkpatrick (1959, 1996) created a hierarchy of training evaluation, which includes a

taxonomy of four different types of training criteria: reaction, learning, behavioral, and results. These criteria may be used to categorize examples of coaching evaluation criteria (Ely et al., 2010). Reaction criteria include perceptions and feelings about the coaching program (Alliger & Janak, 1989; Ely et al., 2010). Learning criteria are comprised of specific declarative or procedural knowledge. Behavioral criteria include job related behaviors. Finally results criteria are measures of the intervention's impact on organizational objectives. Although each of these criteria are often used to evaluate coaching, both reaction and results criteria are difficult to accurately measure and interpret. Kirkpatrick's model of training criteria has been criticized for its inclusion of reaction and results because both are difficult to closely match to training objectives and often produce poorly measured training programs (Campbell & Kuncel, 2001; Alliger & Janak, 1989).

Campbell and Kuncel (2001) define training as, "a planned intervention that is designed to enhance the determinants of individual job performance, when the individual functions independently or as a member of a team" (p. 278). The direct determinants of performance include knowledge, skills, and vocational choice (e.g. high performers have the knowledge, skills, and motivation needed to complete their jobs well). Training indirectly influences direct determinants by equipping individuals with job related knowledge, skill, or vocational choice behaviors. When training is evaluated, it should be evaluated based on the extent to which it influenced the direct determinants of performance.

For clarity, Campbell and Kuncel (2001) further specify training criteria through a taxonomy of capabilities that are potentially trainable. This taxonomy contains four

domains of training criteria including: increase knowledge, increase observable skills, increase problem solving skills, and change attitudes and beliefs. The increase knowledge domain includes increasing information related to procedures, relationship, goals, self, etcetera. Increasing observable skills relates to the use and application of knowledge to accomplish a goal or task. This includes, cognitive, psychomotor, physical, interpersonal, expressive, and self-management skills. Increasing problem solving skills includes enhancing the ability to solve ambiguous problems using both knowledge and skill. Examples of changing attitudes and beliefs include increasing self-efficacy or organizational commitment or reducing racist or sexist attitudes.

When comparing and contrasting the two taxonomies, there are some areas of overlap. The four types of criteria included in Campbell and Kuncel's taxonomy can be categorized using two of Kirpatrick's categories. Campbell and Kuncel's increase knowledge and change attitudes and beliefs align with Kirkpatrick's learning category. Additionally Campbell and Kuncel's increase observable skills and increase problem solving skills align with Kirkpatrick's behavior category. Campbell and Kuncel do not identify any criteria that are in alignment with Kirkpatrick's reaction or results categories. This discrepancy is noteworthy because although reaction and result criteria are problematic, they are frequently used to evaluate coaching.

Reaction information may be collected from coachees, coaches, supervisors, or other relevant stakeholders. Reaction criteria include perceptions of effectiveness, perceptions of coach, satisfaction with coaching relationship, and satisfaction with the coaching process (Ely et al., 2010). Reaction criteria are used when stakeholders are given an opportunity to express their feelings about the coaching program, regardless of

the program's intended goals (Kirpatrick, 1959, 1996). In the Bono et al. (2009) survey of executive coaches, coaches indicated reactions as the most frequently used coaching criterion, where participants or their supervisors are asked to provide their perceptions or feelings of a coaching intervention and/or its outcomes.

Within executive coaching, reaction criteria are almost always positive. In general, individuals enjoy their coaching experience. For example, in a global consumer coaching awareness survey, 85% of coaching consumers reported that they were satisfied with their experience (ICF, 2014). Likewise, in a survey of 286 executives who were recipients of coaching, 86% reported that they would like to participate in a coaching engagement in the future (Smither et al., 2003). In Olivero, Bane, and Kopelman's (1997) examination of coaching, 100% of the 31 participants reported favorable reactions. Kombarakaran, Yang, Baker, and Fernandes (2008) reported that 81% of 114 executive coachees conveyed that their coaching experience met their expectations. Wasylshyn (2003) reported that only six percent of coachees had a negative reaction to the idea of working with a coach.

While reaction criteria often make for great success stories and contribute to the popularity of coaching, they typically do not facilitate the understanding of how or why coaching works. Reaction criteria are difficult to closely match to coaching program objectives and often result in poorly measured programs (Campbell & Kuncel, 2001; Alliger & Janak, 1989). Reaction criteria do not capture how useful a coaching program is at helping coachees achieve their objectives. Reaction criteria are subject to respondents' moods and impressions and are not anchored to the goals of the program. Although reaction criteria are generally positive, these criteria do not provide information

about the effectiveness of the intervention (De Meuse et al., 2009; Feldman & Lankau, 2005).

Similar to reaction criteria, results criteria are frequently used and offer little valuable information. Frequently, results criteria attempt to provide an objective report of intervention outcomes (Kirpatrick, 1959, 1996). In coaching, results criteria may include direct measures of business outcomes, promotions, complaints, or ROI (Bono et al., 2009). Findings from the training literature indicate that results criteria are typically uninformative because they are too many degrees removed from the intervention. When measuring a results criterion, it is difficult to control for all variables that influence the criterion and thus the criterion only captures a small percent of variance accounted for by coaching (Campbell & Kuncel, 2001; Feldman & Lankau, 2005). For example, if an individual's coaching goal was to improve his or her selling techniques, then the results criterion of "improve overall sales performance" could be used as an indicator of success. The problem with this criterion is that sales performance is influenced by selling techniques and many other factors beyond the individual's control such as organizational support, client's budget, turnover within the client's organization, the stock market, or the weather. Selling technique improvement would be better measured by observable concrete behaviors that occur during sales interactions.

Campbell and Kuncel's (2001) taxonomy of capabilities that are potentially trainable and Kirkpatrick's (1959, 1996) learning and behavior criterion categories provide useful insight into evaluating executive coaching. It is reasonable to expect executive coaching programs to have the capability of teaching participants new material and/or teaching participants new behaviors. Both learning (increase knowledge and

change attitudes and beliefs) and behavior (increase observable skills, increase problem solving skills) based coaching objectives are addressable through coaching and measurable before and after coaching such that it would be possible to conclude that the executive coaching intervention caused the change.

Because of the problems with reactions and results criteria, findings associated with these criteria will not be included in the following summaries of coaching evaluation techniques. Instead the following summaries will include discussions of learning and behavioral criteria used for general coaching evaluation techniques (e.g. receiving executive coaching is associated with the subsequent setting of specific goals) and goal specific evaluation techniques (e.g. success measured by improvement on individualized goals) (Smither et al., 2003; Peterson, 1993). The research question of interest in the evaluation phase is: Which evaluation strategy should be used to measure coaching outcomes: generic or goal specific?

Generic perspective. In general, the process of receiving executive coaching may influence individuals in several positive ways. These effects may be personal to the individual (e.g. increased well-being) or they may primarily impact those around them (e.g. enhanced leadership skills). The following will include a summarization of the general effects coaching may have on individuals.

Coaching usually involves discussing development areas and setting goals to address development needs. Actively setting goals and devising a workable plan increases the likelihood that progress will be made toward goal achievement. An auxiliary benefit may be that individuals become better at goal setting after coaching is complete. Many of the criteria that have been linked to benefits of successful coaching

have strong relationships with the goal setting process. For instance those who receive coaching are likely to set more specific goals and experience increased self-efficacy (Smither et al., 2003; Evers, Brouwers, & Tomic, 2006; Baron & Morin, 2009).

Austin and Vancouver (1996) developed a six-dimension theory of goal setting. Goal specificity is one of their six dimensions. Setting specific, rather than general, goals help individuals define acceptable levels of performance, increase the amount of exerted effort, increase persistence, and leads toward strategizing and planning (Locke & Latham, 1990). Five meta-analyses have examined the relationship between goal specificity and performance. Effect sizes from the meta-analyses range from .42 to .80 demonstrating a strong relationship between goal specificity and performance. Most coaching relationships commence with goal setting. For most coaches a large part of their job is to help their coachees set reasonable goals. If coaches have received training in helping their clients set goals, then they are likely aware of the relationship between goal specificity and increased performance. Given the large body of research on goal specificity, it is not surprising that Smither et al. (2003) found a small positive relationship between receiving coaching and subsequent goal specificity (d=.16). Additionally, Kombarakaran et al. (2008) found that, after receiving coaching, managers self-reported an increased ability to define performance goals and business objectives. These findings suggest that through coaching, individuals learn to set more specific goals on their own.

Individuals may also experience an increase in self-efficacy and outcome expectancy as a result of learning to set specific, achievable, goals. Self-efficacy and outcome expectancy are both components of Bandura's (1986) learning theory. Perceived self-efficacy is an individual's belief that they are capable of performing a given task

(Bandura, 1977). A perceived outcome expectancy is the belief that performing a task will result in a specific outcome. The two are closely related, for instance I have self-efficacy if I believe that I can successfully complete a dissertation and I have an outcome expectancy that completing my dissertation will result in receiving a doctoral degree in psychology.

Self-management training involves improving performance by teaching individuals to use strategies such as self-assessment, goal setting, self-evaluation, relapse prevention, and written contracts. Many of these strategies are recommended components of executive coaching interventions (TECF, 2012). Frayne and Geringer (2000) provided self-management training to 60 underperforming salespeople. Compared to a control group, salespeople that underwent self-management training exhibited both improved self-efficacy and outcome expectancy. Measures of self-efficacy and outcome expectancy were taken pre-training, and three, six, nine, and twelve months after training. At each measurement self-efficacy and outcome expectancy improved for the experimental group. These findings indicate that the benefits of self-management training techniques may continue to accumulate over an extended period of time.

Evers et al. (2006) examined the effects of executive coaching on self-efficacy and outcome expectancy. In a controlled study, seventy-eight managers completed an assessment of self-efficacy and outcome expectancy. Thirty of these managers received executive coaching. Coachees were coached using the GROW (Goal setting, Reality, Options, Will power) model. This model allows for the coachee to dictate the content of their coaching depending on their perceived individual needs. The coach serves to guide the coachee through the process. In this experiment, coachees met with their coaches for

one to eight sessions spanning over the course of four months. Upon completion both the control group and the experimental group took the self-efficacy and outcome expectancy assessment for a second time. The experimental group moderately improved on both self-efficacy (d=.33) and outcome expectancy (d=.43).

Baron and Morin (2009) also explored the relationship between executive coaching and enhanced self-efficacy. Seventy-three managers took a self-efficacy assessment before and after they received eight months of coaching sessions. On average, self-efficacy scores significantly improved (d=.77). The relationship between time one and time two self-efficacy scores was moderated by the number of sessions the coachee received, meaning that increased coaching sessions were related to larger increases in self-efficacy. Both the results of Baron and Morin (2009) and Evers et al. (2006) support findings that self-management and goal setting training techniques are related to improvements in self-efficacy and outcome expectancy.

Receiving executive coaching is related to increased leadership behaviors (Nieminen, Smerek, Kotrba, & Denison, 2013; Thach, 2002). Like coaching, leadership is also difficult to define and measure. Leading effectively should not be measured by bottom line outcome measures, but rather should be measured by quantifying behaviors that are critical to a leader's job and within a leader's control (Campbell, 2013). Although this is the preferred measurement technique, it is still common for researchers to quantify leadership ability using general impressions of leader ability or to rate leader ability using generic leader ability competencies. Nieminen et al. (2013) and Thach (2002) used 360-degree feedback to measure leadership effectiveness. Executive coaching was administered between two 360-degree feedback administrations and improvement was

attributed to coaching. Nieminen et al. and Thach used different leadership metrics and both found positive effects. Nieminen et al. measured four leadership competencies (involvement, consistency, adaptability, and mission) and found improvements of roughly a quarter standard deviation (*d*=.22-.23) from time one to time two on each competency. Thach (2002) measured overall impressions of leadership effectiveness. Thach found that impressions of leadership effectiveness improved 55% from time one to time two.

Grant, Curtayne, and Burton (2009) found coaching to have several positive effects on workplace well being. Forty-one executives received coaching pre and post multisource feedback. The sample was randomly divided into two coaching groups. The two groups received coaching in two separate phases such that post-coaching multisource feedback results from the phase one group were compared to pre-coaching multisource feedback scores from the phase two group. Coaching had a significant positive effect on increased resilience, reduced depression, and increased workplace well-being. These findings suggest that coaching may help employees manage and effectively deal with workplace stressors.

Many have investigated general criteria associated with coaching. The process of going through an executive coaching program may have several general positive effects. Coaching may help individuals become more effective goal setters, increase self-efficacy, increase leadership behaviors, and enhance workplace well being. Although this is an impressive list, effect sizes are generally small (around one quarter to one half of a standard deviation). There is evidence to suggest that measuring coaching using individualized criteria may yield much larger effect sizes (Peterson, 1993).

Goal specific perspective. An alternative approach is to evaluate the effectiveness of coaching based on the extent to which individuals accomplished their program goals. For example, if an individual engaged in coaching to improve their communication skills, then the effectiveness of coaching would be determined by the extent to which his or her communication skills improved. Campbell and Kuncel (2001) recommend this criterion selection approach for individual training programs. Smith, Borneman, Brummel, and Connelly (2009) consider this approach and suggest evaluating coaching success based on coaching goal progress. Furthermore, Smith and colleagues suggest that the success of coaching engagements should only be measured by comparing progress of coachees with similar goals. Three studies have included evaluations of generic and goal specific coaching effects (Peterson, 1993; Grant et al., 2009; Orenstein, 2006). Their findings suggest that although coaching engagements may have several auxiliary general benefits, goal specific criteria yield larger coaching effects than generic criteria.

Peterson (1993) measured the progress of 370 executives on both specific and general coaching goals. Progress was measured from three perspectives: self-report, coach, and supervisor. Specific goals were derived from a rigorous pre coaching assessment battery where performance deficits were identified and a coaching program was developed based on the identified coaching objectives. Evaluation items were developed based on the specific coaching objectives. General items asked about the impact of coaching, advancement potential, and overall job effectiveness. Peterson's results revealed average standardized difference scores equal to d=1.54 for goal specific items and d=.85 for general items. These findings indicate that coaching may have

general and specific positive effects on individuals, however greater advances are observed in the goal specific domain.

In a randomized controlled coaching study of 41 executives, Grant et al. (2009) examined the effects of coaching on goal attainment, increased workplace well-being, increased resilience, reduced depression, reduced stress, and reduced anxiety. Goal attainment was measured using their self developed Goal Attainment Scale. The Goal Attainment Scale presented participants with a prepopulated list of statements and instructed them to select two statements to address during coaching. Participants rated their standings on their selected statements before and after coaching. Grant and colleagues found that coaching was significantly related to improved goal attainment (d=1.35), increased workplace well being (d=.42), reduced depression (d=-.51) and reduced stress (d=-.41). Although coaching had several general positive effects on the executives in the sample, the goal attainment effect was substantially larger. On average individuals improved their goal standing by 1.35 standard deviations, which is more than two times larger than the second largest effect, reduced depression, at half of a standard deviation. These findings support the hypothesis that goal specific evaluation criteria produce larger coaching effects than general criteria.

Orenstein (2006) conducted a 360-degree feedback assessment on a single individual before and after coaching. The feedback instrument included items that were specific to the individual's coaching goals and items that addressed the individual's general performance. Twenty people rated the subject both pre and post coaching. Orenstein's results indicate that the individual made more progress on the goal specific items than on the generic items.

Summary of phase 3. Evidence suggests that coaching engagements typically have a positive influence on coachees. Coaching is related to both general positive criteria and progress on coaching specific goals. Although both generic and goal specific criteria may be relevant measures of coaching success, results presented in Peterson (1993), Grant et al. (2009), and Orenstein (2006) generate a strong argument for the superiority of goal specific criteria over generic criteria. When specific goals are addressed in coaching, individuals have a tendency to make progress toward achieving their stated goals. However, what remains unknown is how goal specific coaching works. For example, when a coachee presents with a specific coaching goal, which coaching activities should be selected to best facilitate coachee goal progress? Are there coaching activities that are generally useful to helping coachees achieve their goals, or activities specific to the selected goal? These questions will be addressed in the present study.

Overview of the Present Study

The present study will explore how and why coaching engagements facilitate improvement on specific coaching goals. My primary research question is: What elements of coaching predict goal progress? This question will be addressed by examining progress predictors for coaching in general and coaching at the specific goal level. If findings support examining coaching at the goal specific level, then the goal of this research will be to produce a taxonomy that matches common coaching goals to coaching intervention patterns associated with goal improvement. For example, results may indicate that the goal of stress reduction is best addressed through agenda setting, self-awareness training, and reflection. This taxonomy will be useful to academics and practitioners alike. Practitioners will be able to design coaching programs to best address

the specific goals of the coachee, and academics will be able to thoughtfully design controlled coaching experiments to test the effectiveness of common intervention patterns.

To do this I developed a Coaching Components measure to administer to individuals who have participated in a multi-session workplace coaching program within the last five years. The Coaching Components measure has three primary sections: goals, activities used to make progress toward goals, and progress made toward goal achievement. These sections align with the previously discussed three phases of coaching. For simplicity I will refer to these sections as goals, activities, and goal progress. For the goals and activities sections, participants are presented with a series of several lists and asked to identify items that were present in their coaching experience. These lists were developed through a literature search of hypothesized and concluded findings of effective coaching features.

The data will be primarily analyzed using exploratory factor analysis, cluster analysis, and general linear regression. Currently, the goals section includes 29 goals and the activities section includes 43 activities. As designed, this study will require a very large number of participants in order to reach a power of .80. Using the Green (1991) formula for power of .80 ($n \geq 104+m$), 147 participants for each of the 29 goals are needed. It is reasonable to assume that there are interrelationships within the activities lists. Strong to perfect correlations of independent variables creates an issue called multicollinearity (Thompson & Borrello, 1985). Multicollinearity makes it difficult to properly interpret beta weights in regression analysis. In order to reduce the number of participants needed and reduce the likelihood of multicollinearity, exploratory factor

analyses will be used. Through exploratory factor analyses I will reduce the goals and activities sections into factors of related coaching features.

Coaching interventions often involve addressing multiple goals. As such, the coaching components measure asks participants to identify up to three goals. Because data will be collected retroactively, it is not possible to pair individual goals with their respective activities. However, it is likely that patterns of goals exist within the data (i.e. those who selected goal factor 1 may also have selected goal factor 3). Cluster analysis will be used to identify goal factor patterns. General linear regression analyses will be performed for each goal cluster with goal progress serving as the dependent variable and activities as the independent variables.

Common method bias. The current project will rely on self-report for both the predictor and the criterion. Because all individual participant data will come from a common rater, common method bias is of concern. Raters have a tendency to respond to items in a consistent and socially desirable way. Additionally, ratings are subject to the rater's current mood. These common rater effects have the potential to create artificial covariance between the predictor and the criterion (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

I heavily considered including coachee manager data to eliminate the common rater problem. I generated a list of questions for participants' managers, which would serve to validate participant responses. However, several problems arise when introducing manager reports. First, the informed consent form promises coachees complete anonymity in their survey responses. It is made clear to coachees that this project is being conducted by an outside party that has no affiliation with their organization and no

influence over their employment status. When participants respond to organizational surveys, they have a tendency to respond in appropriate and desirable ways such that their employment status will be positively affected by their responses (Morgeson & Campion, 1997). Anonymity eliminates the advantage of providing socially desirable responses.

Participants will be sourced through a paneling provider. It may have been possible to request manager contact information from the panel participants or through the panel provider. This strategy presented two challenges. First, if managers were solicited through the panel provider, then participant costs would have become insurmountable. Coachee participants cost $14 each and collecting managerial data would have had the potential to double project costs. Although this technique may have been a feasible solution to the common rater problem, it was cost prohibitive. If I requested manager contact information from the panel participants or from the panel provider, then I would have subsequently compromised participant anonymity and increased the likelihood of socially desirable response patterns.

Because of the challenges associated with acquiring manager data, I chose to address common rater bias through survey design. Common rater bias has been reduced through item development and survey design. Raters are less likely to exhibit biased response patterns when items are clear and neutral (Podsakoff et al., 2003). The Coaching Components measure contains questions that are simple and concise. Because some of the coaching activity names can be considered technical jargon, every activity was equipped with a hyperlinked definition. Furthermore, none of the questions in the measure are double-barreled. Demand characteristics are cues to participants to respond

in a particular way (Morgeson & Campion, 1997). For example, if a coachee indicates that they participated in role-plays, they may feel obligated to report that role-plays helped them achieve their goal. To reduce demand characteristics, participants are asked to indicate how much a coaching activity hindered or helped their goal progress on a scale of "-3" to "3". To add clarity, all scale points are labeled with verbal descriptions. Finally, for descriptive questions, participants are able to select a response option of "I don't know or I don't remember".

Bias is also reduced through messages conveyed to participants. Participant anonymity is guaranteed. This guarantee encourages participants to remain candid in their responses, as there are no rewards for providing socially desirable responses (Podsakoff et al., 2003). Additionally, participant instructions assure them that there are no right or wrong answers. They are told to answer to the best of their recollection and if they are unable to remember an answer, then the best thing to do is to select the "I don't know or I don't remember" response option. I recognize that these considerations do not eliminate common method bias, but they are likely to reduce it considerably.

Research questions. It is common practice for individuals to address multiple goals during a coaching engagement. For example, an individual may wish to address their presentation skills and their ability to delegate. The Coaching Components measure asks participants to identify and rate progress on their three most important coaching goals. Because I will be collecting data on past events, it is not possible to isolate and pair individual goals with their respective activities. This makes using coaching activities as predictors of goal progress problematic. However, it is likely that patterns of goals exist within the data (i.e. those who selected the goal of improving presentation skills may also

have selected the goal of improving their ability to delegate). The first research question will investigate coaching goal patterns. The number of goals and activities will first be reduced using factor analysis and then cluster analysis will be used to explore goal and activity factor patterns. Thus I propose research question 1a: Do coaching goals and activities produce interpretable factor structures? Additionally, I propose research questions 1b: Do coaching goals and activities produce meaningful cluster solutions?

Coachees participate in a number of different activities throughout their coaching engagement. What is unknown is whether or not these activities pair with individual coachee goals or if activities are administered at random. For example, is the activity of role-playing used generically across coaching goals or are there specific coaching goals where role-playing is used more frequently? The extent to which coaching activities are paired with individual coaching goals will be used as evidence to support coaching as a goal specific or generic intervention. Thus I propose research question 2: Is coaching a generic intervention?

Research question two will examine the extent to which coaches select coaching activities based on individual coaching goals. Whether or not coaches should be selecting different activities for each unique goal depends on whether or not coaching activities differentially predict coaching goal progress. This means that the extent to which coaching is administered in a goal specific manner is only relevant if coaching activities facilitate goal progress differently across coaching goals. Research question three will investigate which coaching activities positively predict goal progress for unique goals. Thus I propose research question 3: Do coaching activities predict goal progress?

Building off of research question three, my fourth research question will compare and contrast the predictive utility of coaching activities for specific coaching goals versus coaching activities for goal progress in general. More specifically, which scenario explains more variance: coaching activities as predictors of goal progress or coaching activities as predictors of general coaching goal progress? If stronger relationships are observed between coaching activities and specific goal progress compared to general goal progress, then findings would support the goal specific coaching perspective; however, if findings support using coaching activities to predict general goal progress, then support would be generated for the generic coaching perspective. Thus I propose research question 4: Do coaching activities predict specific goal progress better than they predict goal progress in general?

Method

Survey Development

The Coaching Components measure was developed from hypothesized features of coaching effectiveness. These coaching features are the individual components of coaching engagements. Features are divided into the three phases of the coaching experience: goals, activities, and outcomes. First, the measure examines the goals that coachees intended to address throughout their coaching engagement. Coaching goals can be conceptualized as the reason for seeking coaching (e.g. change a behavior or improve communication skills). Goals can be determined by the coachee, coach, manager, organization, or any other relevant stakeholder. The second phase includes the activities performed during the coaching engagement. The general propose of activities are to address the previously identified coaching goals. There are two types of activities, activities performed by the coach (e.g. providing feedback or motivation) and activities performed by the coachee (e.g. journaling or taking assessments). The third phase of the coaching experience is outcomes. Outcomes come in two forms, goal progress and peripheral benefits of coaching (e.g. enhanced job satisfaction or productivity).

To determine the coaching features included in the Coaching Components measure, a literature search was conducted to identify hypothesized coaching goals, activities, and outcomes. Next, a group of I-O graduate students completed a sorting task to identify redundancies. Lastly, redundant features were eliminated and definitions were added for clarity.

Literature Search. Although empirical coaching research is sparse, there are ample theoretical and opinion based publications. The literature was searched for both

hypothesized and concluded findings of coaching features. A Google Scholar search was conducted using the phrases, "executive coaching," "workplace coaching," and "coaching." These phrases were also used to search *Consulting Psychology Journal: Practice and Research, Leadership & Organizational Development Journal,* and *Personnel Psychology.*

The literature search produced 59 coaching goals, 76 coaching activities, and 60 coaching outcomes. Within each list, there were several instances of duplicate features. These duplicates were eliminated, which resulted in 47 coaching goals, 61 coaching activities, and 36 coaching outcomes. These lists can be found in Tables 1, 2, and 3 respectively.

Content Reduction. Duplicate features were removed during the literature search; however, several synonymous features remained (e.g. goals to increase adaptability and increase flexibility). To make the coaching features more accessible to participants, a content reduction task was created.

Procedure. Seven I-O psychology Ph.D. students served as subject mater experts (SMEs) in the content reduction task. The task included seven activities. For each component list (goals, activities, and outcomes), SMEs performed two tasks. First, they read each list and identified coaching features that may require additional explanation for individuals unfamiliar with I-O terminology. Next, SMEs were asked to identify redundant item pairs within each list. Finally, for the coaching activities list, they were asked to sort items into three categories (Coach's Attributes, Coach's Behaviors, and Coachee's Behaviors).

Analysis and Results. Within each list, several components were flagged as items in need of clarification. Specifically, one or more SME identified 41% of the goals, 48% of the activities, and 75% of the outcomes as in need of clarification for those untrained in I-O psychology. To insure that participants fully understand the terminology used in the survey, I decided to add clarifying definitions to every coaching component. Definitions were found in a variety of different types of sources ranging from peer reviewed journal articles to textbooks to blog posts and webpages. The purpose of the definitions was to capture the meaning of the components and present them in a way that could be clearly understood by participants. Definitions can be found Tables 1, 2, and 3.

For the list of coaching activities, raters were asked to sort the activities into three categories: Coach's Attributes, Coach's Behaviors, and Coachee's Behaviors. Seven SMEs sorted 76 activities into one of three categories. To determine the level of agreement between the raters Fleiss' Kappa measure of agreement was computed. Fleiss' Kappa measures agreement for categorical data when both the number of categories and the number of raters exceed two (Fleiss, 1971). Here, there are three categories and seven raters. For Fleiss' Kappa, values range from -1 to 1 with values < 0 indicating agreement is worse than chance and with values equal to 1 indicating prefect agreement. For the coaching activities sorting task, the value of $k = .518$, $p < .01$. This means that after correcting for chance agreement, all seven raters reached unanimous agreement for 51.8% of the items. According to Landis and Koch (1977) this level of agreement is considered "fair to good".

SMEs were also asked to identify sets of redundant list items. Redundancy charts were created to reduce synonymous coaching components (see Figure 1 for an example

redundancy chart). In Figure 1 each cell enclosed by a solid black line represents a group of redundancies identified by a SME. The groups of rows separated by bold black lines and gray scale indicate common themes of identified redundancies. These themes were considered when deciding which components to eliminate from the lists. I made expert judgments to finalize eliminations. A strikethrough line represents eliminated components. In total, 19 goals, 15 activities, and 6 outcomes were eliminated. After these eliminations, 28 goals, 43 activities (22 coach & 21 coachee), and 30 outcomes were included in the final survey.

Building the Coaching Components measure. The online survey design program, Qualtrics, was selected as the survey platform for the Coaching Components measure. Qualtrics is an ideal online survey tool because it is easy to use, offers limitless opportunities for customization, and meets the University of Minnesota's rigorous data security requirements. A full copy of the Coaching Components measure can be viewed in Appendix A. It should be noted that the format viewed in Appendix A is not consistent with the format presented by Qualtrics to participants. Some of the inconsistencies include but are not limited to: page breaks, color, hyperlinks to definitions, and functionality of slider bars and drag-and-drop response formats.[1]

Following the informed consent procedure, participants were asked to respond to a set of demographic questions (e.g. gender, race, and age). Next they were asked to respond to a series of 14 questions that inquire about their employment position at the time of coaching as well as characteristics of their specific coaching program. These

[1] Contact Chelsea Jenson at jens1177@umn.edu for a link to demo the Coaching Components measure.

questions relate to the duration of the engagement, how the engagement was set up, and the initial purpose and parameters of the engagement.

The next set of questions asks participants to identify the goals that they planned to address during their coaching engagement. They were asked to select their goals from a provided list (the list that was generated by the previously described survey content procedure). The list of goals was presented at random so that each participant viewed the goals in a different order. After identifying their goals, they were asked to select their three most important goals.

The following section contains lists of coaching activities. Participants were presented with two lists, one pertaining to their coach's behaviors and another pertaining to their behaviors. For each list participants were asked to identify which of the provided behaviors were used throughout their coaching engagement. These lists were randomized such that each participant saw a different order of coaching activities. The following page then showed the behaviors that they selected from each list and asked them to rate how much each behavior helped or hindered their progress toward one or more of their goals. Participants used a sliding bar to make their ratings. The bar slides from -3 to 3 with -3 indicating the behavior had a strong negative impact on their goal progress and 3, indicating that the behavior had a strong positive impact on their goal progress.

Initially, I intended to break the activities section into three lists (Coach's Attributes, Coach's Behaviors, and Coachee's Behaviors). Upon further review, I decided that the Coach's Attributes section was too subjective. This list was replaced with a set of questions at the conclusion of the survey, which asked participants to rate their coach on several behaviors that the literature has identified as important to a successful coaching

experience. Bono et al. (2009) found that the majority of coaches evaluate coaching effectiveness using coachee ratings of process and outcome satisfaction. Furthermore, McKenna and Davis (2009) cite Tallman and Bohart's (1999) finding that in psychotherapy, the therapeutic relationship accounts for 30% of patient success. That is, if patients perceive their relationship with their therapist to be strong, they are more likely to be successful. McKenna and Davis go on to suggest that the same should be true in coaching relationships. Their suggestion was supported by Haan et al. (2013) who found that the strength of a coachee's perceived working alliance with their coach is a predictor of success. Because of the prevalence and supporting evidence of coachee satisfaction ratings, the choice was made to include nine questions related to the topic. Some of these include: the perception of the coach's listening and communication abilities, participant satisfaction with the coach's expertise, satisfaction with the experience, and willingness to recommend the coach to others.

After the activities section, participants were asked about the outcomes of their experience. First, participants were presented with the goals that they identified at the beginning of the survey. They were asked to rate the progress that they made on their goals. There were six response options ranging from "*No Progress*" to "*Exceeded Goal*." The second part of this section asked participants to identify additional outcomes that were affected by coaching. They were presented with a list of outcomes and then asked to select all that apply. Then they were presented with the outcomes they selected and asked to indicate the extent that they were affected by coaching. This ranges from -3, "*The outcome was very negatively impacted by coachin*g" to 3, "*The outcome was very positively impacted by coaching*." Participants were also presented with a list of several

different organizational rewards and developmental opportunities (e.g. promotion, raise, training). They were asked to identify which, if any, of the listed rewards or opportunities they had received since their coaching engagement was completed.

The final section of the Coaching Components measure included the previously described nine coaching experience evaluation questions.

Three I-O psychology Ph.D. students, who have had a mentoring experience, tested the Coaching Components measure with the purpose of identifying any technical issues and providing a time estimate for survey completion. It is estimated that this survey will take participants between 10 and 15 minutes to complete. The Institutional Review Board (IRB) approved the Coaching Components measure on September 23rd, 2014.

Participants

The Coaching Components measure contains 29 goals and 43 activities (22 coach behaviors and 21 coachee behaviors). As designed, this study will require a very large number of participants in order to reach a power of .80. Using Green (1991) formula for power of .80 ($n \geq 104+m$) where *m* is equal to the number of independent variables, I would need 147 participants for each of the 29 goals. Exploratory factor analysis will be used to reduce the number of goals and activities. Because this project is exploratory in nature, it is difficult to estimate how many goal and activity factors will be produced. I estimate that the data will produce five goal factors and ten activity factors. Participants will select up to three of their most important coaching goals. Because goal factors will not be independent, cluster analysis will be used to assess how factors group together. I hypothesize that the data will produce three clusters. If true, I will need $n \geq 104+m$ or 114

participants for each of the three goal clusters and in total will need 342 participants.

To participate in the present study, individuals must have received a multi-session coaching engagement within the last five years. All participants completed the survey online and received the link via email. All data has been encrypted and collected anonymously.

Individuals were recruited for this study through Qualtrics Panels. Qualtrics Panels partners with over 20 online panel providers to assist in targeting a specific participant pool. Qualtrics Panels recruited participants who were at the managerial or team lead level and above and have had a multi-session coaching experience within the last five years. Qualtrics Panels charged $14 per participant and participants were subsequently rewarded with a variety of incentives (e.g. cash, airline miles, gift cards).

A 50-participant pilot sample was collected three months prior to the larger sample. This was my first experience working with Qualtrics Panels and to be confident in their ability to source individuals that met the participation criteria, I collected a pilot sample. This sample was 48% female and 52% male. The majority of participants were white and between the ages of 40-49. Participants represented a wide range of industries. This sample included substantial variability in goal and activity identification. The pilot sample was promising and after this project was successfully proposed to my dissertation committee, the decision was made to collect the remaining data.

In total, 355 coachees took the Coaching Components measure. Four participants were dropped from the sample because they indicated that they had a close working relationship with their coach prior to their coaching engagement. Coachee participants were 49.3% female and 50.4% male. Demographically, the participant sample was 72.1%

White, 10.5% Hispanic, 8.8% Black, 3.7% Asian, 3.4% other, .9% American Indian, and .3% Native Hawaiian or Pacific Islander. The age of participants varied. The most represented age group (45.3%) was 30-39. The second most frequently reported age group was 40-49 with 25.9%. Seventeen percent of participants reported being between the ages of 50 and 59. The remainder of participants were between the ages of 18-29 (6%), 60-69 (4.8%), and over 70 (.6%).

Analysis

Variable reduction. Before addressing the research questions, the large number of coaching goals and activities was reduced. To reduce the goals and activities, exploratory factor analyses and cluster analyses were performed on the goals and activities lists.

It was reasonable to assume that there are strong interrelationships within the coaching goals and activities lists. Strong to perfect correlations of independent variables creates an issue called multicollinearity (Thompson & Borrello, 1985). Multicollinearity makes it difficult to properly interpret beta weights in regression analysis. In order to reduce the number of participants needed and reduce the likelihood of multicollinearity, factor analyses and subsequent cluster analyses were conducted.

Factor analysis has two main varieties: exploratory and confirmatory. Because this work is exploratory in nature and specific hypotheses about the interrelationships between goals and activities were not specified a priori, exploratory factor analysis (EFA) was selected (Fabrigar, Wegener, MacCallum, & Strahan, 1999). EFA is a data-driven approach and does not require the user to pre determine the number of factors or the factor pattern the analysis will yield. The primary goal of EFA is to reduce a large

number of variables into smaller parsimonious dimensions (Tinsely & Tinsley, 1987). EFAs were conducted for the goals and activities lists.

Before conducting the EFAs, I had to determine the number of factors to extract from the analysis. Extracting too many or too few factors can negatively impact the interpretability of the findings. Extracting too few factors results in a loss of information and may result in measured variables loading onto factors not included in the model (Zwick & Velicer, 1986). Extracting too many factors often produces findings that are difficult to interpret and replicate.

To determine the number of factors to extract, parallel analyses were conducted. Parallel analysis is an alternative to the commonly used Kaiser's criterion and scree tests. Kaiser's criterion is a rule of thumb suggesting that all factors with eigenvalues greater than one should be retained in the model (Kaiser, 1960). Because Kaiser's criterion has a tendency to overestimate the number of extracted factors, scree tests are often used in conjunction with Kaiser's criterion (Velicer & Jackson, 1990). Scree tests can be used to determine the number of factors by evaluating the inflection point on a scree plot (Yong & Pearce, 2013). Scree tests often produce more accurate results than Kaiser's criterion; however inflection points are subject to interpretation and may also over estimate the number of factors (Hayton, Allen, & Scarpello, 2004).

Parallel analysis is conducted by generating random matrices with the same number of observations and variables as the data being examined (Horn, 1965). Principal components analysis is then performed on the random matrices and the resulting eigenvalues are averaged. These eigenvalues are then compared to the eigenvalues of the data in question. The number of eigenvalues from the data sample that are greater than

the eigenvalues from the randomly generated matrix is equal to the recommended number of factors to extract from an exploratory factor analysis (Hayton et al., 2004). Several research examinations of the accuracy of factor extraction techniques have found parallel analysis to be the most accurate technique (Silverstein, 1987; Humphreys & Montanelli, 1975; Zwick & Velicer, 1986).

Because of the exploratory nature of this study, the underlying factor structure is unknown and it was not possible to form a research hypothesis regarding the number of factors that would emerge in analysis prior to data collection. In order to estimate how many participants were needed, I predicted that the EFAs would yield five goals and ten coaching activities. These estimates result in variable to factor ratios of 5.8 and 4.3 respectively. These estimates fall within the recommendation that the number of measured variables should be three to five times larger than the expected number of factors (Fabrigar et al., 1999). Additionally, these ratios were large enough that highly stable factor estimates are expected, even under the circumstances of low communality (MacCallum, Widaman, Zhang, & Hong, 1999).

EFA factor extraction and rotation. The raw goal and activity data are dichotomous (i.e. yes, goal or activity was present in coaching or no, goal or activity was not present in coaching). In order for dichotomous data to be analyzed using most factor analytic program software, the data must be converted to a polychoric correlation matrix. The dichotomous coaching and activity data were converted to polychoric correlation matrices prior to analysis so that factors could be extracted using the maximum likelihood method (Costello & Osborne, 2005).

Factors were rotated to facilitate interpretation. Oblique rotations allow factors to

correlate. Because of this oblique rotations are more accurate and more likely to produce replicable factor solutions than orthogonal rotations when the factors are likely to correlate (Costello & Osborne, 2005). The coaching activity factors were correlated and thus the promax oblique factor rotation was used to interpret factor loadings. Coaching goal factors were uncorrelated and thus the orthogonal variamx rotation procedure was utilized.

Research Question Analyses.

Research question 1: Do goals or activities cluster together?

Typically, coaching interventions involve addressing multiple goals. The Coaching Components measure instructed participants to identify and rate progress on their three most important coaching goals. Because I collected data on past events, it was not possible to isolate and pair individual goals with their respective activities. This is problematic for using coaching activities to predict goal progress. However, it is likely that patterns of goals and activities exist within the data (i.e. those who selected goal factor 1 may also have selected goal factor 3). Cluster analysis is a technique that detects meaningful groups that exist within a data set and was used here to identify patterns of goals and activities (Kaufman & Rousseeuw, 1990). The cluster structures identified in this stage were used in subsequent analyses to identify goal-activity patterns and to predict goal progress.

Different clustering strategies were used for the goal and activity data. The activity data was successfully factored and the factor scores were used to conduct cluster analyses. Factor scores are continuous and thus traditional clustering techniques were appropriate. Because the coaching goals failed to factor, cluster analysis needed to be

performed using the raw dichotomous data, which required an alternative clustering procedure. As such, the clustering procedures for coaching activities and coaching goals are discussed separately.

Clustering Coaching Activities. For continuous data, there are several different clustering techniques. The two most commonly used clustering techniques are hierarchical clustering and k-means clustering. Hierarchical clustering is a connectivity-based technique in which clusters can be derived from a bottom up approach or a top down approach (Kumar, 2000). In top down approaches, data begin as a single cluster and are split into sub clusters based on proximity. Conversely, in bottom up approaches, data begin as individual data points and are merged with one another based on the distance that separates them. This is an iterative approach to clustering and thus the number of clusters does not need to be specified prior to analysis. The K-means clustering technique involves partitioning data points to their nearest cluster center (Kumar, 2000). A primary assumption of this technique is that the number of clusters must be pre-specified (Rai, 2011). Thus, existing theory should be present in order to hypothesize and specify the number of clusters.

Because this is an exploratory study and no research has been conducted to describe different types/categories of coaching activities, it was not reasonable to estimate the number of clusters a priori. Thus, a hierarchical approach was chosen. There are many different methods and distance measurements that can be used to conduct a hierarchical cluster analysis. I chose to use Ward's method with squared Euclidean distance measurement (Mooi & Sarstedt, 2011). This is considered an agglomerative (bottom up) approach. This combination of method and distance measurements was

chosen for several reasons. First, the data met the procedural requirements. Second, Ward's method is an agglomerative approach to hierarchical clustering (Shalizi, 2009). This means that each observation begins as its own cluster and at each step clusters are merged to their nearest neighbor. To merge clusters, the distance between cluster centers is measured using the squared Euclidean distance and cluster mergings that will result in the least amount of within-cluster variance are completed. Finally, this method is used across many disciplines and does not require pre-selecting the number of clusters (Shalizi, 2009).

To determine the number of clusters, I used an *r* package called NbClust. To use this package, the researcher must input the data set and specify the specific clustering technique that will be used to subsequently cluster the data. This statistical package then runs 30 different indices that can be used to predict the optimal number of clusters (Charrad, Ghazzali, Boiteau, & Niknafs, 2014).

Clustering Coaching Goals. Cluster analysis works most effectively with continuous data; however, because the data could not be factored, the original dichotomous (yes – goal was pursued, no – goal was not pursued) data needed to be used. There are two clustering techniques that can be used with dichotomous data: hierarchical and two-step. The hierarchical technique has a tendency to be problematic in that cluster membership is influenced by the order of the cases in the data set and thus was not the chosen technique for this analysis (IBM, 2012).

Alternatively, the two-step method was selected. Two-step cluster analysis gets its name because of its ability to handle both binary and continuous data (Bafadal, 2011). This procedure is also a hybrid between k-means and hierarchical (Mooi & Sarstedt,

2011). It begins by employing a k-means algorithm and then combines clusters using a hierarchical approach. The statistical SPSS program for two-step cluster analysis determines the optimal number of clusters and produces a cluster quality statistic. The cluster quality statistic is called the Silhouette measure of cohesion and separation. This statistic ranges from -1 to 1 with values below .2 indicating that clusters are more cohesive than they are distinct and values above .5 indicating that clusters are discretely separated. A Silhouette statistic of less than .2 indicates poor cluster quality, .2-.5 indicates fair cluster quality, and .5 or above indicates good cluster quality.

Research question 2: Is coaching a generic intervention?

This question was addressed through a series of frequency tables and tests. These analyses depict whether or not there is variability in the use of activities across different goals. The presence of variability is considered to be an indicator that coaching is designed to be goal specific rather than applied generically across goals. These analyses were conducted at three different levels. The first analysis compared the 13 most frequently endorsed goals with all of the coaching activities. The second compared the 13 most frequently endorsed goals with coaching activity factor scores. The third analysis compared the 13 most frequently endorsed goals with coaching activity clusters.

The first and third analyses (raw coaching activities and activity clusters) were conducted using dichotomous data. For example, in the raw coaching activity analysis, individuals either did or did not engage in a coaching activity during coaching. In the activity cluster analysis, individuals either were or were not assigned to a cluster in question.

To conduct these analyses, I created frequency tables crossing coaching goals and

activities. Each cell indicates the number of individuals who pursued a specific activity to address a specific goal (e.g. goal 1 and activity C). To analyze whether or not coaching goals and activities or clusters were paired uniquely, I conducted a series of Cochran's Q-tests. Cochran's Q-test is a non-parametric statistical test that assesses whether the proportion of successes is the same between two or more groups and can be used for *k*-samples of dependent nominal data (Seeger & Gabrielsson, 1968). Each Corchran's Q-test compared the effect of the top 13 coaching goals on each coaching activity and activity cluster. Significant test statistics indicate that the use of the coaching activity or coaching activity cluster in question is used differently across the 13 coaching goals. Non-significant findings indicate that the activity or activity cluster in question is used generically across coaching goals.

Significant test statistics were examined further using chi-square tests for independence. This type of test can be applied to data where there are two categorical variables from the same population. This is ideal for coaching goal and activity comparisons and coaching goal and activity cluster comparisons. Here, there are a series of goals that coachees did or did not pursue and a series of activities that coachees did or did not utilize during coaching. Additionally for the cluster analyses, there are the same series of goals that coachees did or did not pursue and a series of activity clusters that coachees were and were not assigned to.

Chi-square tests for independence were used to determine whether or not a coaching activity was endorsed differently for specific goals then for goals in general. To do this, observed and expected cell frequencies were compared using two-by-two contingency tables. The four cells of the table represent four conditions for each activity

and goal. One being yes, goal was pursued and yes, activity was pursued, two indicating, yes, goal was pursued and no, activity was not pursued, three representing, no goal was not pursued, and yes, activity was pursued, and four indicating, no, goal was not pursued, and no, activity was not pursued. The following formula was used to conduct chi-square tests for independence for each raw activity and each activity cluster.

$$\chi^2 = \sum_{i=1}^{n} \frac{(o_i - e_i)^2}{e_i}$$

Where o_i is the number of observations of cell type i, e_i is the expected frequency of cell type i. This is calculated by multiplying the sum of a cell's column and the sum of the cell's row and dividing it by the total population, n is the number of cells in the table, and Σ is the sum of each cell type (i.e. 1. goal - yes, activity - yes; 2. goal - no, activity - yes; 3. goal - yes, activity - no; and 4. goal - no, activity - no). Degrees of freedom are equal to the number of rows minus one multiplied by the number of columns minus one. For all chi-square analyses the degrees of freedom were equal to one.

The second analysis compared the 13 most frequently endorsed goals with coaching activity factor scores. Factor scores were continuous and thus required a different analytic approach than the previous analyses. To analyze whether or not coaching goals and activity factors were paired uniquely, I conducted five, one-way within subjects analysis of variance (ANOVA) tests. Each ANOVA compared the effect of the top 13 coaching goals on a coaching activity factor. Significant test statistics support the hypothesis that coaching activity factors are used uniquely across goals. Non-significant findings support the hypothesis that coaching activity factors are used generically across coaching goals.

Research question 3: Do coaching activities predict goal progress?

To address this question, separate multiple regression analyses were performed. In each analysis either activity factors or activity clusters served as predictors of goal progress. In total, 12 regression analyses were conducted. First, goal progress was regressed on activity factor scores for each of the top five most frequently endorsed goals. Second, goal progress was regressed on activity clusters for each of the five most frequently endorsed goals. Next, a variable labeled average goal progress was created by averaging participant goal progress for each of their top three goals. Then, for the final two analyses, average goal progress was regressed on the activity factors scores and on activity clusters. Significant regression coefficients indicate that an activity factor or activity cluster predicts progress on a specific coaching goal.

Research question 4: Do coaching activities predict specific goal progress better than goal progress in general?

This question was intended to be addressed by comparing goal specific regression models to the general goal progress regression model. This question was to be analyzed using two techniques; the first would compare the explained variances, and the second would compare the coefficients in the cumulative model to the coefficients in the goal specific models and these comparisons would be tested for significance. These comparisons were not conducted because the proposed regression models were not significant and explained little variance, therefore comparing the models would yield little value.

Results

Descriptive Findings

Prior to describing their goals, activities, and outcomes, participants were asked a number of descriptive questions about their coaching program. The following section will elaborate on the descriptive findings. Although this information is not directly relevant to the research questions, it does facilitate a discussion of what a typical coaching engagement looks like and how it is structured.

Internal versus external coaching engagements. Forty-eight percent of coaching engagements were conducted by an external coach compared to 52% conducted by an internal coach. When an internal staff member conducted coaching, 39% of coachees had met their coach prior to coaching.

Industry representation. Coachees represented a wide range of industries including: financial services, manufacturing, technology, retail, medical, education, engineering, public service, transportation, food, entertainment, legal, and agriculture.

Coaching program structure. Seventy-two percent of coaching engagements persisted for six months or less, with only 8% persisting for more than one year. Forty-six percent reported that their coaching sessions were one hour in length, 16% reported 30-minute sessions, 21% reported 90-minute sessions, and 14% reported 2 hour coaching sessions.

Coaching engagement contracts. Forty-eight percent reported that their engagement included a formal coaching contract. Although only about half of participants reported having developed a formal coaching contract many discussed key contract elements prior to coaching including: purpose of coaching (58%), goals (74%),

timeline (52%), scope of coaching (43%), measures of success (52%), confidentiality agreement (33%), and coaching guidelines (36%).

Goal setting. Eighty percent of participants formally set goals prior to coaching. Multiple individuals were often involved in the goal setting process. Coachees participated in goal setting 73% of the time, managers 46%, organizations 27%, and coaches 57%. Note that although only 80% of the 351 formally negotiated goals prior to coaching, all had goals that were addressed in coaching and thus all 351 participants were included in analysis.

Purpose of coaching. When asked about the purpose of their coaching engagement (participants could identify more than 1 purpose), 54% identified performance coaching, 51% development coaching, 39% career coaching, 24% transition coaching, 23% feedback review.

Outcomes of coaching. Participants were presented a list of possible coaching outcomes (in addition to goal progress). This list was derived from hypotheses discussed in the coaching literature. Participants were presented with 29 different outcomes and asked to identify those that were impacted by their coaching experience and the extent to which they were impacted. On average participants reported an additional seven outcomes. The most frequently reported outcomes were: ability to identify problems, ability to problem solve, career development, goal setting ability, leadership effectiveness, performance, productivity, and self-confidence. Descriptive statistics of these outcomes are presented in Table 4.

In general, coachees reported having very positive coaching experiences. Ninety-two percent reported their coach's listening ability as "good" or "very good". Ninety-four

percent indicated that their coach's ability to communicate was "good" or "very good". Forty-two percent reported that they could "always" trust their coach, while 47% reported that they could trust their coach most of the time. Ninety percent were "satisfied" or "very satisfied" with their coach's knowledge of their work role and 87% were "satisfied" or "very satisfied" with their coach's knowledge of their organization. When asked to rate their coach's level of expertise, 94% were "satisfied" or "very satisfied." Ninety-four percent were satisfied with their coaching experience and 93% were satisfied with their coach. When asked if they would recommend their coach to others, 320 of 351 reported "yes".

Variable Reduction

Coaching Goals. Participants selected all of the goals they addressed during coaching. After identifying their coaching goals, they then noted the top three goals that they primarily focused on during coaching. Before narrowing goals to the top three, each of the 29 goals was endorsed by at least 10% of coachees. Endorsement rates ranged form 10% to 45% with a mean of 25% and a standard deviation of 9%. After narrowing to the top three goals, endorsement rates ranged from 2% to 28% with a mean of 10% and standard deviation of 6%. Table 5 presents the frequency that each goal was endorsed at the overall and top 3 levels of analysis.

For analysis, each participant's top three coaching goals were recorded dichotomously as either present or absent in a coaching engagement. Most programs that compute factor analyses assume that the data matrix is composed of continuous variables. To adjust for this assumption, the data matrix was converted to a polychoric correlation matrix (Lorenzo-Seva & Ferrando, 2006). This procedure makes the data compatible for

an exploratory factor analysis using the minimum residual or maximum likelihood technique.

The factor structure of coaching activities was initially explored using parallel analysis and exploratory factor analysis. Parallel analysis was conducted in *r* using the fa.parallel.poly function. Parallel analysis suggested a six-factor extraction solution. This means that six eigenvalues were greater than the average of the eigenvalues for the random simulation (Horn, 1965). A six-factor solution yields a variable to factor ratio of 7:1, which exceeds the minimum recommendation of 5:1 (Fabrigar et al., 1999). Exploratory factor analysis with maximum likelihood extraction was conducted. Because the factors were not correlated, they were rotated using the orthogonal varimax rotation procedure.

Unfortunately, the rotated 6-factor solution did not produce a factor structure that was conceptually cohesive or informative (See Table 6 for coaching goal items and factor loadings). Of the 28 goal variables, 5 failed to load at least .40 on any of the six factors. Twenty-one of the 23 remaining goals loaded at least .40 on one and only one factor. Together, the six factors explained 46% of the variance. The first factor explained 9% of the variance, the second, third, and fourth factors each explained 8%, and the fifth and sixth factors both explained 7% of the variance. The coaching goal factor structure was further explored using four, five, and seven factor solutions. Upon reviewing results, there was not a predictable pattern of goals that loaded onto each factor. The factor loadings were dominated by "rare goals" or, in other words, goals that were pursued less frequently.

One potential problem I considered was that individuals might have "self-

factored" when selecting their top three goals. This means that when individuals were narrowing their goals down they may have tended to select goals that were distinctly different from each other. To solve for this issue I conducted a factor analysis for all selected goals (as opposed to just the top three), this yielded a two-factor solution that was dominated by one primary factor. This general factor does not help to explain coaching goal patterns.

Next, I identified all goals selected as a top goal by more than 10% of participants. This list included 13 goals. I then factor analyzed those 13 goals. This analysis produced a 2-factor solution that was uninformative (only 29% of the variance was accounted for) and dominated by a single factor. In a final attempt, I factor analyzed goals selected by more than 15% of participants. Five goals met this criterion. Parallel analysis suggested a four factor solution; however, only one eigenvalue was greater than 1. Three of the four factors were dominated by a single coaching goal and the remaining two goals failed to produce a factor loading of .40 or greater on any factor. After numerous attempts, I determined that factor analysis was not appropriate for the coaching goal data.

Cluster analysis. While my initial data analysis plan had been to perform cluster analysis on goal factors, instead I conducted a two-step cluster analysis on the list of the top 5 coaching goals (endorsed by more than 15% of participants), the top 13 coaching goals (endorsed by more than 10% of participants), and the expanded list of 28 coaching goals. The top 5 goals analysis produced a 5-cluster solution of fair cluster quality. Similarly, the top 13 goals analysis produced a 13-cluster solution of fair cluster quality. Upon examining these cluster solutions it was apparent that in each analysis, clusters

were dominated by a single goal rather than groups of goals. Although these clusters are of reasonable quality, these results do not help make sense of coaching goal patterns. The expanded, 29-goal, analysis produced a 3-cluster solution of poor quality. Although the 3-cluster solution is interesting, it is uninformative because the cluster quality is poor. In summary, coaching goals failed to cluster.

In lieu of using coaching goal factors and coaching goal clusters to compare coaching goals and activities, these relationships will be examined using the most frequently endorsed goals. Analyses will be conducted using the top 13 goals (endorsed by more than 10% of participants) or top five goals (endorsed by more than 15% of participants) as variables associated with coaching goals.

Coaching Activities. Like coaching goals, participants endorsed the coaching activities that were present in their coaching engagement. Each of the 43 coaching activities was endorsed by at least 10% of participants with a maximum endorsement rate of 58% (see Table 7). The mean activity endorsement rate was 29% with a standard deviation of 13%. Two activities were used significantly more frequently: coach provided feedback and coach provided advice. No activities were used significantly less frequently. On average, coachees reported using 13 different coaching activities during their coaching engagement.

For analysis, coaching activities were then recorded dichotomously as either present or absent. Most analysis programs cannot readily compute factor analysis with categorical data, thus the data matrix was converted to a polychoric correlation matrix (Lorenzo-Seva & Ferrando, 2006). The factor structure of coaching activities was first explored using parallel analysis and exploratory factor analysis. Parallel analysis was

conducted in *r* using the fa.parallel function. Results of the parallel analysis indicated a five-factor extraction solution. This means that five eigenvalues were greater than the average of the eigenvalues for the random simulation (Horn, 1965). A five-factor solution yields a variable to factor ratio of 8:1, which exceeds the minimum recommendation of 5:1 (Fabrigar et al., 1999). Exploratory factor analysis with maximum likelihood extraction was conducted. As predicted, the activity factors were correlated (See Table 8 for activity factor correlation matrix). To facilitate interpretation, factors were extracted using the promax oblique rotation technique, which allows for factors to correlate.

A rotated 5-factor solution produced a factor structure that reflected five distinct types of coaching activities (See Table 9 for activity items and factor loadings). The five factors are labeled as follows: Verbal interpersonal support and feedback (e.g. "coach provided advice," "coach provided encouragement," "coach provided feedback"), Practice based on multisource ratings (e.g. "reviewed multisource ratings," "facilitated insight development," "established consequences for behavior"), Active practice with video and rehearsal (e.g. "videotaped behavior," "rehearsed behavior," "practiced behavior modification), Evaluation (e.g. "performed work analysis," "took assessments," "used performance data"), and Reflection (e.g. "journaling," "reading assignments," "practiced reflecting").

Of the 43 activity variables, 9 failed to load at least .40 on any of the five factors. The remaining 34 activities loaded at least .40 on one and only one factor. The five factors explained 44% of the variance. The first factor explained 12% of the variance, and the second factor explained 11%, the third and fourth factors both explained 8%, and the fifth factor explained 5% of the variance. Factor scores were conducted using the

regression score method. These scores are standard scores with a mean of zero and a variance equal to the squared multiple correlation (SMC) between items and factors (DiStefano, Zhu, & Mindrila, 2009).

Cluster Analysis. To gain further understanding of coaching activity patterns, I performed cluster analyses on the activity factors. I used a hierarchical cluster approach using Ward's method with a squared Euclidean distance measurement (Mooi & Sarstedt, 2011). The *r* package NbClust was used to specify the number of clusters. NbClust runs 30 different clustering indices and provides each of their recommendations for the optimal number of clusters. Nine indices recommended a three-cluster solution while seven recommended a two-cluster solution. The remaining indices failed to converge on their cluster recommendations. Because cluster analysis requires interpretation and research decision making, I ran four cluster analyses for two, three, four, and five cluster solutions (see Tables 10-13 for factor means and standard deviations for each cluster solution).

The two-cluster (see Table 10) and three-cluster (see Table 11) solutions are very similar. Cluster 1 in both the two-cluster and three-cluster solutions contain identical group membership and thus identical means for each of the five activity factors. This cluster can be best characterized as individuals whose activity pattern failed to align with any activity factor. Cluster two in the two-cluster solution is characterized by activity patterns aligning with all activity factors, as means are high for all of the activity factors. The three-cluster solution mirrors the two-cluster solution by clusters one and three being characterized by lack of alignment with activity factors and full alignment with activity factors. The second cluster in this solution is characterized by alignment with the

behavior modification and active assistance activity factors.

In the four-cluster (see Table 12) solution, cluster one is also described as a lack of alignment with any activity factor and cluster four is described as alignment with all activity factors. Similar to the three-cluster solution, cluster two is described as alignment with the behavior modification and active assistance activity factors. Cluster three includes and activity pattern that aligns most strongly with the reflection activity factor. The five-cluster (see Table 13) solution is similar to the four-cluster solution with the exception of the addition of a fifth cluster which is described as individuals who aligned with the verbal support, evaluation, and reflection activity factors.

Although the NbClust analysis provided support for the three-cluster solution, I decided to retain the four-cluster solution for further analyses. In this cluster solution, cluster one contains individuals that did not align with any activity factor. Cluster two contains individuals that aligned most strongly with the evaluation activity factor. Cluster three is comprised of individuals that aligned most strongly with the reflection activity factor. Cluster four contains individuals that aligned with all of the activity factors. Of the four solutions, the four-cluster solution generated clusters that were most evenly distributed across participants with clusters of 142, 92, 85, and 32 participants. This cluster solution also logically split the clusters from the two and three cluster models. The four-cluster solution will be used in subsequent frequency and regression analyses.

Frequency Analyses

Table 14 presents the frequency analysis of the top 13 most frequently endorsed coaching goals and all 43 coaching activities. This table includes the cell count, Cochran's Q statistic, and Chi-Square statistic for each top coaching goal and coaching

activity combination. This table spans eight pages as there are 13 coaching goals and 43 coaching activities. To facilitate interpreting these findings, I created two summary tables (Table 15 and Table 16). Table 15 presents the coaching goals and their corresponding activities that are paired significantly more frequently with that goal than they are for coaching goals in general. Table 16 presents the coaching goals and their corresponding activities that are paired less frequently with that goal than they are for coaching goals in general.

Cochran's Q tests were run for each of the 43 coaching activities. Results of these analyses are presented in Table 14. Of the 43 analyses, 37 were statistically significant ($p<.01$ for 33 activities, $p<.05$ for four activities). This indicates that most coaching activities were used with differing degrees of frequency across the 13 most commonly endorsed coaching goals. To investigate further, chi-square analyses were performed for each activity and goal combination. This means that 559 chi-square analyses were conducted. Of the 559 analyses, 43 or 7.7% were statistically significant (see Tables 14-16). In this set of analyses, statistical significance is relatively rare as a rate of 5% significance is expected by chance. These findings support the generic coaching perspective.

Table 17 presents the coaching activity factor means and standard deviations for each of the top 13 coaching goals. Five, one-way within subjects ANOVAs were conducted to compare the effects of each activity factor on the top 13 coaching goals. No significant results were found and thus no follow up analyses were conducted. The same five analyses were conducted including just the top five most frequently endorsed coaching goals, no significant findings were observed. At the activity factor level, it does

not appear that activity factors are uniquely paired with common coaching goals. These findings support the generic coaching perspective.

Table 18 presents the frequency analysis of the top 13 coaching goals and the four coaching activity clusters. Table 18 includes the cell frequencies, Cochran's Q statistic, and Chi-Square statistic for each top coaching goal and coaching activity cluster combination. Similar to the coaching goal by raw coaching activity analyses, statistically significant Cochran's Q test statistics were found for three of the four clusters (see Table 18). Although, these findings suggest that cluster assignment varies across coaching goals, at the cluster by goal level Chi-Square analyses, only 1 of the 52 analyses was statistically significant. These results do not support the goal specific coaching hypothesis and lend further support for the generic perspective of coaching.

Regression Analyses

Table 19 shows the multiple regression results of using coaching activity factors to predict goal progress for the top five most frequently endorsed goals and goal progress in general (See Table 20 for correlations). Of the six analyses, only one analysis was statistically significant. Activity factors were moderately strong predictors of team building goal progress (R^2=.24). The significant predictors were evaluation and reflection, such that less use of evaluation activities and more use of reflection activities were associated with goal progress on team building.

Table 21 presents the multiple regression results of using coaching activity cluster assignments to predict goal progress for the top five most frequently endorsed goals and for goal progress in general (See Table 22 for correlations). Here, cluster dummy variables were created where Cluster 1 served as the reference group. None of the six

regression models significantly predicted goal progress.

These findings were unexpected, and as such, several regression assumption tests were run to ensure that no assumption violations suppressed true relationships. Tests for mutlicollinearity, independence, and normality were conducted.

Multicollinearity occurs when there are strong linear relationships between predictor variables (Thompson & Borrello, 1985). This was tested for using the Variance Inflation Factor (VIF). VIF statistics greater than 4.0 suggest that multicollinarity may be influencing the coefficient estimates (Belsley, 1991). VIF scores were calculated for each of the 12 analyses and in all cases test statistics were less than 2.5 indicating that multicollinearity is not impacting coefficient estimates. Multicollinearity was also tested for using the Tolerance statistic. The Tolerance statistic denotes the percent of variance in the predictor that cannot be accounted for by other predictors in the model. Low Tolerance scores suggest the need for further investigation. The rule of thumb is test statistics less than .20 warrant further investigation; here all regression coefficients in the 12 models exceeded .20 indicating that low tolerance is not a cause for concern.

One assumption of regression analysis is that data observations must be independent. Violations of independence occur when observations are serially correlated (Durbin & Watson, 1950). This means that the size of the residual from one case influences the size of the residual for subsequent cases. Tests for independence were conducted using the Durbin-Watson Statistic. This index ranges from zero to four and values near zero or four indicate dependent, rather than independent, relationships. All 12 statistics ranged between 1.8 and 2.3 indicating no serial correlations. The Durbin-Watson test did not identify any violations of independence.

To examine the normality of the data, I plotted the residuals for each regression equation. If data are normal, residuals, or differences between observed and predicted values, should be randomly dispersed around the horizontal axis (Jarque & Bera, 1987). For each regression model, plots were normally distributed around the horizontal axis indicating that a linear model is most appropriate. Additionally, no outliers, skew, or kurtosis was detected.

Given that the data observations and independent variables were not correlated and assumptions of normality were not violated, the findings of the regression analysis support a generic perspective of coaching where coaching activities are unrelated to coaching goal progress.

Goal Progress and Satisfaction Variables. One possibility for these findings could be that satisfaction with the coaching experience is confounding perceptions of goal progress. The correlation matrix presented in Table 23 correlates average goal progress with eight coaching experience satisfaction questions. These correlations range in size between r=.37 and r=.43. Not a single relationship between any goal progress variable and any activity factor or cluster was as strong as the weakest relationship between average goal progress and experience satisfaction.

Discussion

The purpose of the present dissertation was to investigate whether or not workplace coaching is a generic or goal specific developmental intervention. Former coachees reported on their coaching experiences and the data were analyzed to determine whether coaching interventions were developed to address the individual coachee's goals. Large lists of goals and activities that are commonly used in coaching interventions were factored and clustered to identify patterns in coaching. Although coaching goals failed to factor or cluster, factor analyses and cluster analyses were conducted for coaching activities (see Tables 9 and 12 for summaries). Coaching activity factors and clusters were then matched with the use of the top 13 most frequently endorsed coaching goals to examine whether coaching goals and activities were systematically paired. ANOVA and Chi-Square analyses revealed that goals and activities were not uniquely paired (for reference, see Tables 14, 17, and 18). Finally, regression analyses were conducted to determine whether coaching activities predicted goal progress. These analyses revealed that activity factors and clusters do not predict goal progress for specific goals or coaching goals in general (see Tables 19 and 21 for regression summaries). The following discussion will address overall concerns as well as each of these three research questions and how the findings influence the future of workplace coaching research.

Activity and Goal Factors and Clusters

This investigation began with a list of 47 coaching goals and 61 coaching activities, all of which were found as examples of coaching goals or activities in the literature. SMEs were used to eliminate redundancies and narrow the list to 28 goals and 43 activities. These condensed lists are long and difficult to work with from a research

perspective. Efforts to further reduce these lists into factors and clusters of related goals and activities yielded mixed results. The activity list produced five factors and four clusters; however, the goal list failed to produce a meaningful factor structure or cluster assignment.

The coaching activity EFA produced a factor structure of five coaching activities including: Verbal Support and Interpersonal Feedback, Practice Based on Multisource Ratings, Active Practice with Video and Rehearsal, Behavioral Analysis and Evaluation, and Reflection. The verbal support factor includes many things that coaches often do to help their clients including: building rapport, providing advice, encouragement, empathy, and feedback. This factor closely corresponds with rapport building techniques of counselors and therapists. The practice based on multisource ratings factor addresses the review of employee feedback and subsequent practice of workplace behaviors such as communication, nonverbal behaviors, working with emotions, and setting limits. The active practice with video and rehearsal factor involves behavior modification through reviewing video, rehearsing behavior, and role-playing. The behavioral analysis and evaluation factor includes analysis through assessments, observations, and performance data. The reflection factor involves reflecting on behavior through journaling and reading.

The coaching activity factors were then used to form four coaching activity clusters. Each coachee was assigned to one of the four clusters. These clusters outline four general types of coaching activity patterns that were observed in the present sample. These clusters can be labeled as the following: 1 – Lack of alignment with any activity factor, 2 – Strongest alignment with the evaluation activity factor, 3 – Strongest

alignment with the reflection factor, and 4 – Strong alignment with all activity factors. Coachees that are categorized by the first cluster engaged in activity patterns that did not align with any activity factor; specifically they were least likely to align with the verbal and interpersonal support activity factor and the reflection-oriented activity factor. Those categorized by cluster two were likely to align with the action-oriented activity factor and use activities like practice based on feedback, rehearsal, and evaluation. Coachees that were assigned to cluster three were most likely to align with the reflection-based activity factor while failing to align with the interpersonal feedback, rehearsal, or evaluation factors. Coachees assigned to cluster four were likely to align with all coaching activity factors.

This is the first known attempt at providing a cohesive framework for coaching activities. These activity factors and clusters can be used to reduce confusion in the coaching literature. Currently, the literature is inundated with anecdotal exemplars of successful workplace coaching. These anecdotes use varied terminology that does not help users draw parallels across examples. These five factors and four clusters bring a first attempt at organization of coaching activities. Academics can use these frameworks to design and conduct controlled research examining how these factors and clusters relate to coaching goals and subsequent goal progress. Practitioners can use these frameworks when designing interventions. They may use the factors to reduce redundancies or search for alternative activities.

The inability to produce meaningful factor structures or cluster solutions for coaching goals may have occurred for several reasons. The design of the present study may have contributed to this issue. These data were collected retroactively and the types

of goals pursued were not controlled. Participants were asked to identify all of the goals that they addressed during coaching and then, from that list, select their top three most important goals. When the top three-goal list failed to factor, I considered the potential contributing variable that individuals "self-factored" their goal list when narrowing goals. This means that individuals may have tended to select goals that were distinctly different from one another when identifying their top three goals. To address this, I conducted EFAs at for the expanded list of coaching goals. This analysis did not produce meaningful results, but it is possible that self-factoring occurred while individuals were selecting their initial goals. Perhaps individuals identified a goal that most closely represented a group of their goals or an overarching goal that had several related smaller goals. Another possibility is that goal patterns do not exist within coaching interventions. Although this is a possibility, I would recommend that additional investigations be carried out before drawing strong conclusions.

Workplace Coaching: A Generic Intervention

The second research question asked whether or not coaching programs were tailored to address specific coaching goals. Analyses were conducted to see whether coaching activities, activity factors, or activity clusters were paired more or less frequently with the 13 most commonly used coaching goals. These analyses found that, in practice, coaching activities were not systematically paired with coaching goals. These findings support the generic perspective of coaching. This perspective posits that the coaching intervention collectively contributes to goal progress.

Presumably this suggests that there is a set of variables that are associated with successful coaching outcomes regardless of any participant's unique coaching goals. This

was investigated and only two of the 43 activities were used significantly more frequently. These activities were: coach provided feedback (57%) and coach provided advice (58%). Both of these activities load onto Factor 1: Verbal Interpersonal Support and Feedback. Feedback is consistently discussed as a critical component of workplace coaching (Hall et al., 1999; Joo, 2005; Gregory et al., 2008). Gregory et al. (2008; 2011) have discussed the need for additional exploration into the administration of feedback and its relationship with successful coaching. Providing advice has been discussed less frequently than feedback, but can be conceptualized as a supplement to feedback. Feedback is provided in direct response to a behavior where advice can be provided in addition to feedback or can be given independently of an observed behavior with accompanied feedback. Although these findings offer some insight into generic coaching activities, if generic coaching is the dominant approach, it would be expected that the approach would be defined by more than just two activities.

One limitation of this investigation was that coachee's addressed multiple goals during coaching. Without a controlled study where only a single goal is addressed, it is not reasonable to make an affirmative conclusion that coaching interventions are not tailored to match the specific goals of individual coachees. Controlled, single-goal, coaching research studies are a potential avenue of abundant research.

Activities as Predictors of Goal Progress

The third research question examined whether or not coaching activities predicted coaching goal progress. Coaching activity factors and clusters served as predictors of specific and general goal progress in 12 different regression analyses. Findings from this

investigation indicate that both coaching activity factors and clusters do not serve as predictors of goal progress.

Results of these regression analyses do not lend full support for either the goal specific or generic coaching perspectives. To support the goal specific perspective the specific goal progress regression models needed to be significant and to support the generic perspective the general goal progress models needed to be significant.

A potential explanation for these findings is that the true relationships between coaching activities and goal progress were suppressed because the criterion was measured subjectively. Subjective evaluation measures can be vulnerable to halo biases (Landy & Farr, 1980). Halo effects occur when a rater fails to differentiate items, dimensions, or subjects during evaluation (Nisbett & Wilson, 1977). Raters experiencing halo effects tend to make global evaluations about the subject that they are evaluating where every facet of the evaluation is either consistently positive or negative. Coachees in the present study had the tendency to report that they made substantial goal progress if they were extremely satisfied with their coaching experience. These strong correlations suggest that coachees were not objectively evaluating their specific goal progress, but rather were inflating their goal progress ratings in accord with their impressions of their overall experience. In the present study, halo bias may be severely reducing the validity of the goal progress variables (Holzbach, 1978). The validity of criterion data can be improved with objective outcome measures (i.e. performance data or specific measures of goal improvement) and with additional reporting sources (i.e. managers and coaches) (Landy & Farr, 1980). If this study were replicated, additional criterion measures would be a necessary precaution.

Reaction Criteria

Consistent with previous research, the majority of coaching participants reported extremely favorable coaching experiences. Ninety-four percent of participants were satisfied with their coaching experience and 93% were satisfied with their coach. These satisfaction rates are even greater than many previous survey findings where satisfaction levels of 85%, 86%, and 81% were reported (ICF, 2014; Smither et al., 2003; Kombarakaran et al., 2008).

As with all reaction criteria, these ratings do not provide information about how, why, or if workplace coaching causes behavioral change as they are not anchored to the goals of the intervention (De Meuse et al., 2009; Feldman & Lankau, 2005). Despite coaching experiences being viewed with overwhelming participant favorability, coaching program usefulness must be justified by more than just favorability ratings. Coaching initiatives are expensive and utilize the valuable time of leaders within organizations. Participants in the present study represented work levels of managerial and above with a median of 12 direct reports. The most common reported coaching duration was somewhere between one and six months and the most common session duration was one hour. With coaches typically charging between $215 and $265 per hour that equates to being a costly investment (Bono et al., 2009).

Some developmental initiatives draw clear links between the initiative and organizational benefits. For example mandating sexual harassment training to employees not only serves to improve the employee experience, but it also helps an organization divert responsibility in the event of a lawsuit. Investing in more valid employee selection measures can directly increase the general mental ability and conscientiousness of the

workforce. Without more concrete evidence drawing a link between coaching and objective behavioral outcomes, it is difficult to build a sufficient case to justify the cost of a workplace coaching intervention. That is not to infer that workplace coaching is not a valuable investment; however, coaching should be invested in carefully. Goals should be meaningfully selected to address specific training needs and programs should be consistently evaluated for their effectiveness at addressing coaching needs. If a program is not facilitating improvement on pre-specified goals, then the program should be reconsidered.

Limitations

These research findings are limited by two major methodological concerns that the data were collected retroactively and from a single source. This research was conducted through a questionnaire and the structure, administration, and evaluation of coaching were all uncontrolled. Increasing the level of control would have allowed for stronger inferences about how coaching activities cause change in goal standing (Cook, Campbell, & Peracchio, 1990). Additionally, data were collected from only one source, the coaching participant. The opportunity to verify coaching goals, activities, and goal progress through at least one additional source (e.g. coach, manager, or organization), would have increased the validity and reliability of the findings. Furthermore, coachees do not have expertise in coaching or program evaluation and may have been unaware of the specific coaching activities that were used during their experience. Although demand characteristics were minimized in this study and participants had no external motives to inflate their goal progress, they still were likely not the most valid source of goal progress

measurement (Connelly & Ones, 2010). Collecting goal progress information from additional sources also would have increased the validity of these findings.

I propose that a similar study be conducted within a large organization with an existing coaching program. Conducting an internal investigation of coaching would allow for increased control and for collection of data from several different sources including the manager, coach, and coachee. In this scenario, the researcher would have the opportunity to control for several aspects of the coaching engagement including formally defining available coaching goals and activities, formally collecting data from coaches and participants regarding which goals and activities were used, and conducting a formal evaluation on participant goal progress. Of course, findings from this hypothetical study may not be generalizable across every organizational setting; however, they would shed necessary light on the extent to which workplace coaching is a generic or goal specific intervention.

Summary of Findings

In summary, the present study sheds limited light on the primary research question of whether or not workplace coaching is a generic or goal specific developmental intervention. The findings suggest that in practice, coaching has a tendency to be applied generically across goals rather than being tailored to each coachee's specific needs. However, results were far from conclusive and thus I suggest that generic and goal specific coaching continue to be investigated. Future investigations should be conducted in controlled settings where the research has the ability to contribute and manipulate coaching goals and activities as well as oversee the evaluation process.

The major contribution of this work is the addition of a coaching activity factor structure as well as a coaching activity cluster model. These frameworks add much needed organization to the lengthy list of redundant and unclear coaching activities and terminology that exist within the coaching literature. These five activity factors can be used in different combinations to test which factors are most effective in different coaching program designs and with different coaching objectives. Coaching has often been discussed as an art or skill that cannot be readily standardized. The use of the term "art" does not add empirical value, as it does not push the literature toward developing objective coaching practices. Coaching likely will never become a fully standardized intervention, but the addition of common activity terminology will greatly assist in future research efforts.

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Figure 1. Example Redundancy Chart. The groups of rows separated by gray scale and bold black lines indicate common themes of identified redundancies. Each individual cell enclosed by a solid black line represents a group of redundancies identified by a SME. A strikethrough line represents eliminated components.

Facilitated Insight Development ~~Built My Insight~~	Facilitated Insight Development ~~Built My Insight~~	Facilitated Insight Development ~~Built My Insight~~	Facilitated Insight Development ~~Built My Insight~~				
Interpreted My Thoughts and Behavior ~~Analyzed My Behavior~~	Interpreted My Thoughts and Behavior ~~Analyzed My Behavior~~	Interpreted My Thoughts and Behavior ~~Analyzed My Behavior~~ Evaluated Me	Interpreted My Thoughts and Behavior ~~Analyzed My Behavior~~	Interpreted My Thoughts and Behavior ~~Analyzed My Behavior~~			
~~Provided Counsel~~ Provided Advice	~~Provided Counsel~~ Provided Advice Provided Feedback	~~Provided Counsel~~ ~~Provided Challenging Feedback~~	~~Provided Counsel~~ Provided Advice ~~Provided Suggestions For Improvement~~	Provided Feedback ~~Provided Challenging Feedback~~ ~~Provided Suggestions For Improvement~~	Provided Feedback ~~Provided Challenging Feedback~~	~~Provided Counsel~~ Provided Advice	Provided Feedback ~~Provided Challenging Feedback~~

Table 1

Coaching Goals Considered for Coaching Components Measure

Goal	Source(s) (Goal)	Included	Definition	Source (Def)
Build my Competencies	TECF, 2012	No		
Change a Behavior	TECF, 2012; Wasylyshyn, 2003; Haan et al., 2011	Yes	Address and alter a behavior that has been identified as an area that needs improvement.	C. Jenson
Change a Personal Style Behavior	Hall et al., 1999	No		
Change my Appearance	Hall et al., 1999	No		
Ease Transitions	Hall et al., 1999; Joo, 2005	No		
Enhance my Management Style	Bono et al., 2009	Yes	Learn and apply more effective managerial techniques related to decision making, problem solving, planning, organizing, staffing, administration, and the like.	C. Jenson
Enhance my Satisfaction	Peterson & Hicks, 1998	Yes	Improve attitude or emotional state in regards to work.	Landy & Conte, 2006
Enhancing my Leadership Effectiveness	Grant et al., 2009; Wasylyshyn 2003; Bono et al., 2009	No		
Implementing Layoffs	Hall et al., 1999	No		
Improve Ability to Assess Staffing Needs	Hall et al., 1999; Bono et al., 2009	Yes	Monitoring and reviewing information from materials, events, or the environment to detect or assess needs of the staff.	O*Net Online
Improve Ability to Manage Time		Yes	Managing time includes managing one's own time and the time of others.	O*Net Online
Improve Ability to Vary Voice Tone	Hall et al., 1999	No		
Improve Communication Style	Bono et al., 2009; Grant et al., 2009	Yes	Improve ability to successfully deliver verbal messages to those around you.	S. Reyes, 2014
Improve Interpersonal Skills	Hall et al., 1999; Bono et al., 2009; Wasylyshyn, 2003	Yes	Improved social awareness and social skills such as the ability to resolve conflict and foster a spirit of cooperation.	Landy & Conte, 2006
Improve Active Listening Skills	Hall et al., 1999	Yes	Active listening means giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	O*Net Online
Improve Meeting Management Skills	Hall et al., 1999	Yes	Meetings that are managed effectively achieve the meeting's objective, make an efficient use of time, and leave participants feeling that a sensible process has been followed.	Mind Tools, 2014

Table 1 Continued…

Goal	Source(s) (Goal)	Included	Definition	Source (Def)
Improve Mentoring Ability	Bono et al., 2009	Yes	Identifying the development needs of others and coaching, mentoring, or otherwise helping others to improve their knowledge and or skills.	O*Net Online
Improve Writing Skills	Hall et al., 1999	Yes	Writing is defined as communicating effectively in writing as appropriate for the needs of the audience.	O*Net Online
Improve Organizational Effectiveness	Kilburg, 1996	No		
Improve Performance	Joo 2005; Peterson & Hicks, 1998; Haan et al., 2011	No		
Improve Presentation Skills	Hall et al., 1999	Yes	The ability to communicate information and ideas in speaking so others will understand.	O*Net Online
Improve Relationships With External Partners	Hall et al., 1999	No		
Improve Sales or Financial Performance	Bono et al., 2009	Yes	Convincing others to buy merchandise/goods or to otherwise change their minds or actions.	O*Net Online
Improve Strategic Thinking	Bono et al., 2009	Yes	Considering the relative costs and benefits of potential actions to choose the most appropriate one.	O*Net Online
Increase Ability to Plan	Bono et al., 2009	No		
Increase Adaptability		Yes	Flexibility and the ability to adapt to changing circumstances	Landy & Conte, 2006
Increase Behavioral Awareness	Kilburg, 1996	No		
Increase Flexibility	Bono et al., 2009; Kilburg, 1996	No		
Increase Leadership Ability	Grant et al., 2009; Wasylyshyn, 2003; Bono et al., 2009	Yes	Improve ability to interpersonally influence others at work.	Benson & Campbell, 2007
Increase Motivation	Bono et al., 2009	Yes	Increase intensity, persistence, quality, and direction of ongoing behavior.	Landy & Conte, 2006
Increase my ability to Delegate	Bono et al., 2009	Yes	More frequently entrust others to take on my responsibilities.	C. Jenson
Increase Self-Awareness	Grant et al., 2009; TECF, 2012	Yes	Increased awareness of your traits, feelings, and behavior.	Crisp & Turner, 2010
Increase Self-Confidence	Grant et al., 2009	Yes	An optimistic self view.	Benabou & Tirole, 2002)
Increase Team Building	Hall et al., 1999	Yes	Encouraging and building mutual trust, respect, and cooperation among team members.	O*Net Online

Table 1 Continued…

Goal	Source(s) (Goal)	Included	Definition	Source (Def)
Increase Tolerance For Ambiguity	Kilburg, 1996	Yes	Reduce feelings of threat or discomfort when perceiving information as vague, incomplete, fragmented, unstructured, contradictory or unclear.	Norton, 1975
Learn a New Skill	Joo, 2005; Peterson & Hicks, 1998; TECF, 2012; Haan et al., 2011	Yes		
Learn Conflict Management Skills	Bono et al., 2009	Yes	Handling complaints, settling disputes, and resolving grievances and conflicts or otherwise negotiating with others.	O*Net Online
Learn Stress Management	Bono et al., 2009	Yes	Tools or techniques to reduce or remove environmental stressors.	C. Jenson
Make a Career Plan	Hall et al., 1999; Wasylyshyn, 2003	No		
Meet the Job Requirements	Peterson & Hicks, 1998	No		
Plan For Performance Reviews	Hall et al., 1999	No		
Prepare For a Business Change	Hall et al., 1999; Joo, 2005	Yes	Prepare for a major change to the structure of your working environment (i.e. new processes, role, structure, etc.).	C. Jenson
Reduce Work-Life Conflict	Kilburg, 1996; Wasylyshyn, 2003	Yes	Reduced conflict between work and personal demands.	Landy & Conte, 2006
Strengthen Interpersonal Relationships	Hall et al., 1999; Bono et al., 2009, Wasylyshyn, 2003	No		
Validate my Strengths	Hall et al., 1999	No		
Create a Career Development Plan	Hall et al., 1999; Wasylyshyn, 2003	Yes	A career development plan includes a review of where you are in your career, an assessment of where you would like your career to take you, and defined steps/goals to move you toward where you would like to be.	C. Jenson
Improve ability to deliver difficult news		Yes	The ability to convey difficult news clearly, privately, and openly such that the receiver is able to share their emotions and questions with you as they digest the information.	Mind Tools, 2014

Note. Goal = something identified to address during coaching, Source(s) (Goal) = source that identified the goal, Included = Yes, was included in final survey, No, was eliminated from final survey, Definition = goal as defined in the survey, Source (Def) = source of the definition.

Table 2

Coaching Activities Considered for Coaching Components Measure

Activity	Source(s) (Act)	Included	Definition	Source (Def)	Category
Activated My Resources	McKenna & Davis, 2009	Yes	My coach helped motivate me to utilize resources already available in my workplace.	C. Jenson	Coach
Activated My Strengths	McKenna & Davis, 2009	Yes	My coach identified strengths and helped me find ways to utilize them.	C. Jenson	Coach
Analyzed My Behavior	Kilburg, 1996	No			
Built My Insight	Peterson & Hicks, 1998	No			
Built Rapport	Bono et al., 2009; Kilburg, 1996; Passmore & Fillery-Travis 2011; McKenna & Davis, 2009	Yes	My coach created a safe and supportive environment where I was comfortable engaging in authentic dialogue.	Miller, 1999	Coach
Challenged Me	Hall et al., 1999	Yes	To help me reach my goals, my coach encouraged me to do things that required stepping outside of my comfort zone.	Personal coaching, 2014	Coach
Encouraged Me to Be Persistent	Kilburg, 1996; Haan et al., 2011	Yes	My coach encouraged me to remain focused and determined in the face of challenges.	C. Jenson	Coach
Established Consequences For Behaviors	Kilburg, 1996	Yes	My coach helped me to identify the consequences of my behaviors at work.	Miller, 1999	Coach
Evaluated Me	Kilburg, 1996	Yes	My coach formally evaluated my behavior during the coaching engagement.	C. Jenson	Coach
Facilitated Insight Development	Peterson & Hicks, 1998	Yes	My coach helped me to develop a deep understanding of something I have been struggling with.	Customer insights toolkit, 2014	Coach
Held Me Accountable	Bono et al., 2009	No			
Increased My Motivation	Bono et al., 2009; Peterson & Hicks, 1998	Yes	My coach made me want to improve.	Miller, 1999	Coach
Instilled Hope For Change	McKenna & Davis, 2009	Yes	My coach helped me to believe that change/improvement was possible.	C. Jenson	Coach
Interpreted My Thoughts and Behavior	Kilburg, 1996	Yes	My coach tied together multiple messages or events and identified a common theme or pattern.	Lecture notes, 2012	Coach
Interviewed Me	Bono et al., 2009	Yes	My coach performed an initial interview to learn more about my goals, values, fears, strengths, aspirations, weaknesses, and also what my expectations were for the coaching engagement.	Personal coaching, 2014	Coach
Journaling	Kilburg, 1996	Yes	Writing down thoughts or reflections. This may consist of free writing or responding to a question prompted by my coach.	K Ades, 2014	Coachee
Knew the "Unwritten Rules"	Hall et al., 1999	No			

Table 2 Continued…

Activity	Source(s) (Act)	Included	Definition	Source (Def)	Category
Made Action Plans	Joo, 2005	Yes	My coach helped me plan out critical job tasks in the foreseeable future and identify the steps needed to accomplish the tasks.	Leadership effectiveness, 2014	Coach
Performed Work Analysis	TECF, 2012	Yes	My coach analyzed my job to understand the behaviors needed to accomplish tasks.	Landy & Conte, 2006	Coach
Practiced Agenda Setting	Wasylyshyn, 2003	Yes	Practiced setting long or short term agendas that align with workplace goals and objectives.	C. Jenson	Coachee
Practiced Behavior Modification	Bono et al., 2009	Yes	Identified maladaptive behaviors and their precursors; reframed the scenario; learned and practiced alternative behaviors.	Executive vitality, 2014	Coachee
Practiced Brainstorming	Kilburg, 1996	Yes	Practiced generating and listing ideas and possibilities.	C Wesley, 2014	Coachee
Practiced Conflict Management	Kilburg, 1996	Yes	Learned to resolve interpersonal disputes; prepare for challenging conversations; prevent unnecessary conflict; shift the direction of unproductive conversations; and/or manage adverse reactions to conflict.	Cinergy, 2014	Coachee
Practiced Goal Setting	Bono et al., 2009; Passmore & Fillery-Travis 2011	Yes	Practiced setting goals that were specific and challenging yet reasonable to attain.	Lecture notes, 2012	Coachee
Practiced Identifying and Working with My Emotions	Kilburg, 1996	Yes	Practiced identifying emotions and their associated feelings; worked toward reframing thoughts and behaviors associated with those emotions.	Executive vitality, 2014	Coachee
Practiced Interpreting Non Verbal Behaviors	Kilburg, 1996	Yes	Practiced interpreting postures, gestures, facial expressions, and vocal tones.	Leadership coaching, 2014	Coachee
Practiced Limit Setting	Kilburg, 1996	Yes	Practiced identifying personal limitations and then learning how to communicate them to others.	S Shyanne, 2013	Coachee
Practiced Listening	Hall et al., 1999; Haan et al., 2011	Yes	Practices actively listening, hearing, and understanding others.	Bono et al., 2009	Coachee
Practiced Purposeful Conversation	TECF, 2012	Yes	Learned to ask purposeful questions, listen and let the other person explain, notice subtleties, ask probing questions, focus on "we", and/or focus on facts.	M Chute, & A Johnson, 2014	Coachee
Practiced Reconstructing Events	Kilburg, 1996	No			
Practiced Reflecting	Passmore & Fillery-Travis 2011; TECF, 2012	Yes	A process of recalling an event and identifying feelings and their intensity.	Lecture notes, 2012	Coachee
Practiced Relationship Building		Yes	Practiced skills needed to build relationships such as information sharing, positive speech, providing support, writing thank you notes, initiating conversations, involving others in conversations, introducing yourself, etc.	J Garfinkel, 2014	Coachee

Table 2 Continued…

Activity	Source(s) (Act)	Included	Definition	Source (Def)	Category
Practiced Setting and Maintaining Boundaries	Kilburg, 1996	Yes	Practiced identifying stressors and resources to help mitigate stress (i.e. scheduling time for relaxation, reflection, exercise, family, friends, etc.).	Executive vitality, 2014	Coachee
Practiced Simulations	Kilburg, 1996	No			
Practiced Supportive Confrontation	TECF, 2012	Yes	Practiced confronting others by breaking down behaviors seen as disruptive and identifying discrepancies between the ideal and the reality in a supportive manner.	Miller, 1999	Coachee
Practiced Working Relationship Interventions		No			
Provided Advice	Joo, 2005	Yes	My coach provided advice about changing, starting, stopping, or improving a behavior in a nonjudgmental manner.	Miller, 1999	Coach
Provided Challenging Feedback	Hall et al., 1999; Joo 2005; Passmore & Fillery-Travis 2011; Haan et al., 2011	No			
Provided Counsel	Joo, 2005	No			
Provided Empathy	Kilburg, 1996; Haan et al., 2011	Yes	My coach showed warmth, respect, and understanding. I felt listened to.	Miller, 1999	Coach
Provided Encouragement	Kilburg, 1996; Haan et al., 2011	Yes	My coach reassured me when I had doubts during the engagement.	Miller, 1999	Coach
Provided Feedback	Hall et al., 1999; Joo, 2005; Passmore & Fillery-Travis 2011; Haan et al., 2011	Yes	My coach provided nonjudgmental verbal assessments of specific behaviors or skills.	Lecture notes, 2012	Coach
Provided Suggestions For Improvement	Joo, 2005	No			
Received Reading Assignments	Kilburg 1996; TECF, 2012	Yes	My coach provided or suggested reading material to supplement the coaching engagement.	C. Jenson	Coachee
Received Self-Awareness Training	Joo, 2005	Yes	Learned to become more aware of my traits, feelings, and behavior.	Crisp & Turner, 2010	Coachee
Received Skill Training	Bono et al., 2009	Yes	Learned about a new topic area and how to implement it into work.	C. Jenson	Coachee
Reduced Maladaptive Behaviors	Kilburg, 1996	No			

Table 2 Continued…

Activity	Source(s) (Act)	Included	Definition	Source (Def)	Category
Reflected On How To Improve	Hall et al., 1999	No			
Rehearsed Behavior	TECF, 2012	Yes	Practiced reproducing a desired behavior.	Lecture notes, 2012	Coachee
Reviewed Multisource Ratings	Bono et al., 2009; Smither et al., 2003; Wasylyshyn, 2003	Yes	My coach reviewed my feedback to learn about my strengths and weaknesses as an employee.	Strategic team coaching, 2014	Coach
Role Played	Bono et al., 2009; Kilburg, 1996; TECF, 2012; Haan et al., 2011	Yes	I worked with my coach to practice responding to a scenario. This may have occurred by watching a behavior and then modeling it or following instructions to take on a role in a proposed situation.	Lecture notes, 2012	Coachee
Taught Me A New Skill	Bono et al., 2009; Peterson & Hicks, 1998	No			
Taught Me How to Remove Organizational Barriers	Peterson & Hicks, 1998	Yes	My coach taught me to identify road blocks and how to work through them to achieve my business objectives.	C. Jenson	Coach
Took Aptitude Tests	Bono et al., 2009	No			
Took Assessments	Wasylyshyn, 2003; Passmore & Fillery-Travis 2011	Yes	An interest inventory, ability or aptitude test, personality inventory, or some other behavioral assessment was completed as part of the coaching process.	C. Jenson	Coachee
Took Interest Inventory	Bono et al., 2009	No			
Used my Performance Data	Bono et al., 2009	Yes	My coach used information from an assessment of my behavior, interests, or performance to help guide my coaching engagement.	C. Jenson	Coach
Videotaped my Behavior	TECF, 2012	Yes	My coach videotaped my behavior and then used the recording as a teaching tool.	Baum & Gray, 1992	Coach
Provided competent coaching	Hall et al., 1999	No			
Demonstrated knowledge and expertise	Haan et al., 2011	No			
Was flexible with my progress	Hall et al., 1999; Joo, 2005; Passmore & Fillery-Travis 2011; Haan et al., 2011	No			

Note. Activity = something done during the coaching engagement, Source(s) (Act) = source that suggested the activity, Included = Yes, was included in final survey, No, was eliminated from final survey, Definition = activity as defined in the survey, Source (Def) = source of the definition, Category = Coach, performed by the coach, Coachee, performed by the coachee.

Table 3

Coaching Outcomes Considered for Coaching Components Measure

Outcome	Source(s) (Outcome)	Included	Definition	Source (Def)
My Ability To "Be Heard"	Hall et al., 1999	Yes	Assertively stand up for yourself while maintaining respect for others.	National Center, 2013
My Ability To Identify Problems	Hall et al., 1999	Yes	Ability to spot road blocks or things that may be preventing progress.	C. Jenson
My Ability To Interpret Situations	Hall et al., 1999	No		
My Ability To Meet Deliverables	De Meuse et al., 2009	No		
My Ability To Problem Solve	Joo 2005; Hall et al., 1999	Yes	Ability to mentally process and analyze problems to reach a solution.	K Cherry, 2014
My Ability To Think Before I Act	Hall et al., 1999	Yes	Delaying action to allow time to consider the consequences of behavior.	M Klein., 2013
My Attitude	Bono et al., 2009	Yes	Feelings or beliefs that are directed toward specific people, groups, ideas, or components of the job.	Landy & Conte, 2006
My Balance At Work	Joo, 2005	Yes	Balance is felt when there is minimal role overload and/or role conflict (i.e. rarely feeling that the job has unreasonable or conflicting demands).	Landy & Conte, 2006
My Behavior Changed	Wasylyshyn, 2003; Bono et al., 2009; De Meuse et al., 2009; Olivero et al., 1997	Yes	Specific behaviors have changed because of skills learned or insight gained during your coaching experience.	C. Jenson
My Career Development	Grant, 2009	Yes	Your career plan has been altered because of your coaching experience.	C. Jenson
My Goal Progress	Bono et al., 2009; Joo, 2005	No		
My Goal Setting Ability	PDI, 2010	Yes	You are better able to establish goals or targets for further performance improvement.	C. Jenson
My Interpersonal Skills	Hall et al., 1999; Joo, 2005	Yes	Social awareness and social skills such as the ability to resolve conflict and foster a spirit of cooperation.	Landy & Conte, 2006
My Job Satisfaction	Joo, 2005	Yes	Having a positive attitude or emotional state in regards to work.	Landy & Conte, 2006
My Knowledge Of Procedures	Joo, 2005	No		
My Leadership Effectiveness	De Meuse et al., 2009; Wasylyshyn, 2003	Yes	Ability to lead individual's toward a desired outcome.	Landy & Conte, 2006
My Management Skills	Hall et al., 1999; Grant 2009	Yes	Activities that best use the organization's resources to achieve its goals.	Campbell, 2013

Table 3 Continued…

Outcome	Source(s) (Outcome)	Included	Definition	Source (Def)
My Meeting Facilitation Skills		Yes	Facilitate meetings that remain on task, meet expectations, and make an effective use of time.	Mind Tools, 2014
My Patience	Hall et al., 1999	Yes	The capacity to accept or tolerate delay, difficulty, or annoyance without getting angry or upset.	Bernhard, 2013
My Performance	Smither et al., 2003; Joo, 2005	Yes	Actions or behaviors relevant to the organization's goals.	Landy & Conte, 2006
My Presenting Style	Hall et al., 1999	Yes	The ability to match presentation communication to meet the needs of the audience.	C. Jenson
My Productivity	Olivero et al., 1997; Joo, 2005	Yes	The ability to start work, stay on task, and reach completion in a timely manner.	C. Jenson
My Ability to Manage my Emotions	Olivero et al., 1997	Yes	Ability to remain calm and collected during times of stress; frustration; or conflict.	C. Jenson
My Satisfaction With Business Outcomes	Bono et al., 2009	Yes	Having a positive attitude or emotional state in regards to business outcomes.	Landy & Conte, 2006
My Satisfaction With Business Processes	Bono et al., 2009	Yes	Having a positive attitude or emotional state in regards to business processes.	Landy & Conte, 2006
My Self-Awareness	Joo, 2005	Yes	Awareness of your traits, feelings, and behavior.	Crisp & Turner 2010
My Self-Confidence	Bono et al., 2009; Hall et al., 1999; Grant, 2009	Yes	An optimistic self view.	Benabou & Tirole, 2002
My Self-Understanding	Wasylyshyn, 2003; Bono et al., 2009	No		
My Skill Proficiency	Bono et al., 2009	Yes	Automaticity of practiced acts.	Landy & Conte, 2006
My Specific Business Objectives	De Meuse et al., 2009	Yes	Accomplishing or attaining results or outcomes that are desired by the business.	Landy & Conte, 2006
My Tolerance For Ambiguity	Hall et al., 1999	Yes	Tolerance toward feelings of threat or discomfort when perceiving information as vague, incomplete, fragmented, unstructured, contradictory or unclear.	Norton, 1975
My Tolerance For Diversity	Joo, 2005	Yes	Tolerance for differences in demographic characteristics; also includes differences in values, abilities, interests, and experiences.	Landy & Conte, 2006
My Topic Knowledge	Olivero et al., 1997	Yes	A collection of specific and interrelated facts and information about a specific topic.	Landy & Conte, 2006
My Vision For The Future	Joo, 2005	Yes	Takes a long-term view and builds a shard vision with others; acts as a catalyst for organizational change; influences others to translate vision into action.	Vision, 2014
My Work-Life Balance	Joo, 2005	Yes	Little conflict between work and personal demands.	Landy & Conte, 2006
My Workplace Effectiveness	PDI, 2010	No		

Note. Outcome = some result of coaching engagement, Source(s) (Outcome) = source that suggested the outcome, Included = Yes, was included in final survey, No, was eliminated from final survey, Definition = outcome as defined in the survey, Source (Def) = source of the definition.

Table 4

Participant Reported Coaching Outcomes: Endorsement Rates and Ratings

Outcome	*N*	%	Mean	SD
My ability to "be heard"	88	25.07%	1.93	1.06
My ability to identify problems	129	36.75%	2.02	0.96
My ability to problem solve	152	43.30%	2.18	0.82
My ability to think before I act	83	23.65%	2.05	0.80
My attitude	95	27.07%	2.03	0.90
My balance at work	80	22.79%	1.92	0.93
My work-life balance	59	16.81%	1.81	1.05
My behavior changed	56	15.95%	1.87	0.88
My career development	115	32.76%	2.04	0.86
My goal setting ability	110	31.34%	2.16	0.84
My interpersonal skills	95	27.07%	1.96	0.89
My job satisfaction	96	27.35%	2.14	1.11
My leadership effectiveness	141	40.17%	2.14	0.90
My management skills	152	43.30%	2.23	0.81
My meeting facilitation skills	35	9.97%	2.35	0.73
My patience	88	25.07%	1.94	0.96
My performance	155	44.16%	2.13	0.92
My presenting style	78	22.22%	2.12	0.81
My productivity	149	42.45%	2.16	0.85
My ability to manage my emotions	48	13.68%	1.80	1.12
My satisfaction with business outcomes	65	18.52%	1.77	1.30
My satisfaction with business processes	67	19.09%	1.80	1.23
My self-awareness	87	24.79%	2.11	0.80
My self-confidence	124	34.33%	2.24	0.85
My specific business objectives	60	17.09%	2.08	1.10
My tolerance for ambiguity	40	11.40%	1.97	0.97
My tolerance for diversity	41	11.68%	2.08	1.05
My topic knowledge	68	19.37%	2.35	0.79
My vision for the future	59	16.81%	2.09	1.19

Note. N = number of participants that endorsed the outcome. % = percent of the 351 participants that endorse the outcome. Mean = average reported change in outcome due to coaching on a scale of -3 to 3. SD = standard deviation of the average reported change in outcome due to coaching.

Table 5

Coaching Goals Endorsement Rates

Coaching Goal	Percent Endorsed Overall	Percent Endorsed as Top 3 Goal
Change a behavior	10%	2%
Enhance management style	39%	22%
Improve ability to assess staffing needs	23%	9%
Improve ability to manage time	30%	10%
Improve interpersonal skills	24%	7%
Improve active listening skills	24%	9%
Improve communication style	33%	11%
Improve meeting management skills	26%	12%
Improve mentoring ability	23%	9%
Improve writing skills	10%	3%
Improve presentation skills	26%	9%
Improve sales or financial performance	18%	10%
Improve strategic thinking	33%	16%
Increase adaptability	21%	4%
Increase leadership ability	45%	28%
Increase motivation	32%	12%
Increase my ability to delegate	29%	13%
Increase self-awareness	22%	7%
Increase self-confidence	23%	8%
Increase team building	41%	17%
Increase tolerance for ambiguity	13%	2%
Learn a new skill	29%	13%
Learn conflict management skills	35%	15%
Learn stress management	29%	9%
Prepare for a business change	14%	8%
Reduce work-life conflict	16%	6%
Create a career development plan	25%	11%
Improve ability to deliver difficult news	15%	5%

Note. N=351.

Table 6

Standardized Factor Loadings from Exploratory Factoring with Varimax Rotation of 28 Coaching Goal Items

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Change a behavior		0.61				
Enhance my management style	-0.43	-0.41				
Improve ability to assess staffing needs						
Improve ability to manage time					0.73	
Improve interpersonal skills			0.54			
Improve active listening skills				0.45		
Improve communication style				0.59		
Improve meeting management skills				-0.61		
Improve mentoring ability						
Improve writing skills	0.53		0.66			
Improve presentation skills						
Improve sales performance			0.50			
Improve strategic thinking						
Increase adaptability		0.52				
Increase leadership ability			-0.61			
Increase motivation						0.69
Increase my ability to delegate	-0.61					
Increase self-awareness	0.58					
Increase self-confidence				0.44		
Increase team building	-0.49					
Increase tolerance for ambiguity			0.53			
Learn a new skill						-0.61
Learn conflict management skills					-0.79	
Learn stress management						0.68
Prepare for a business change	0.64					
Reduce work-life conflict		0.79				
Create a career development plan				-0.71		
Improve ability to deliver difficult news						

Note. Loadings less than .40 were omitted. $N = 351$.

Table 7

Coaching Activity Endorsement Rates

Coaching Activity	%	Coaching Activity	%
Activated my resources	19%	Journaling	13%
Activated my strengths	44%	Practiced agenda setting	27%
Built Rapport	34%	Practiced behavior modification	21%
Challenged me	53%	Practiced brainstorming	36%
Encouraged me to be persistent	33%	Practiced conflict management	38%
Established consequences for my behavior	13%	Practiced goal setting	47%
Evaluated me	49%	Practiced identifying & working with emotions	17%
Facilitated insight development	21%	Practiced interpreting non verbal behavior	21%
Increased my motivation	41%	Practiced limit setting	17%
Instilled hope for change	15%	Practiced listening	37%
Interpreted my thoughts and behavior	16%	Practiced purposeful conversation	29%
Interviewed me	27%	Practiced reflecting	16%
Made action plans	43%	Practiced relationship building	37%
Performed work analysis	31%	Practiced setting and maintaining boundaries	21%
Provided advice	58%	Practiced supportive confrontation	29%
Provided empathy	16%	Received reading assignments	20%
Provided encouragement	46%	Received self-awareness training	27%
Provided feedback	57%	Received skill training	46%
Reviewed multisource ratings	12%	Rehearsed behavior	20%
Taught me how to remove org. barriers	21%	Role played	33%
Used my performance data	29%	Took assessments	28%
Videotaped my behavior	10%		

Note. N=351. % = the percentage of participants that used the activity during coaching.

Table 8

Coaching Activity Factor Loading Correlation Matrix

	Verbal Support	Active Assistance	Modify Behavior	Analyze Behavior	Reflect
Verbal Support	1.00				
Active Assistance	.53	1.00			
Modify Behavior	.46	.34	1.00		
Analyze Behavior	.41	.37	.32	1.00	
Reflect	-.04	.04	-.03	.04	1.00

Note. $N = 351$.

Table 9

Standardized Factor Loadings from Exploratory Factoring with Promax Rotation of 43 Coaching Activity Items

Coaching Activity	Verbal Support	Active Assistance	Modify Behavior	Evaluation	Reflect
Activated resources		0.45			0.41
Activated strengths	0.50				
Built rapport	0.57				
Challenged me	0.56				
Encouraged me to persist	0.57				
Est. consequences for behaviors		0.64			
Evaluated me				0.56	
Facilitated insight development		0.70			
Increased motivation	0.50				
Instilled hope for change	0.51				
Interpreted thoughts and behavior					
Interviewed me					
Made action plans				0.44	
Work analysis				0.73	
Provided advice	0.80				
Provided empathy	0.65				
Provided encouragement	0.72				
Provided feedback	0.68				
Reviewed multisource rates		0.74			
Taught me to remove barriers		0.48			
Used performance data				0.70	
Videotaped behavior	-0.42		0.93		
Journaling					0.71
Prac. agenda setting					
Prac. behavior modification			0.60		
Prac. brainstorming					
Prac. conflict management					
Prac. Goal setting					
Prac. Identifying emotions		0.63			
Prac. Interpreting non verbal behaviors		0.53			
Prac. Limit setting		0.54			
Prac. Listening					
Prac. Purposeful conversation		0.44			
Prac. Reflecting					0.53
Prac. Relationship building					
Prac. Setting boundaries	0.48				
Prac. Supportive confrontation		0.43			
Reading assignments					0.62
Self-awareness training					
Skill training	0.50				
Rehearsed behavior			0.66		
Role played			0.49		
Took assessments				0.47	

Note. $N = 351$. Loadings less than .40 were omitted. Activity factor names: Verbal Support = Verbal interpersonal support and feedback, Active Assistance = Practice based on multisource ratings, Modify Behavior = Active practice with video and rehearsal, Evaluation = Analyze behavior, Reflection = Reflection.

Table 10

Activity Factor Descriptive Statistics for Two Cluster Solution

	Cluster Number			
	1		2	
Factor	$\bar{X}$	SD	$\bar{X}$	SD
Verbal Support	-0.37	0.63	0.68	0.72
Active Assistance	-0.31	0.49	0.56	0.96
Modify Behavior	-0.29	0.60	0.52	0.93
Evaluation	-0.41	0.57	0.75	0.78
Reflection	-0.06	0.64	0.11	1.18
N	227		124	

Note: N = 351. $\bar{X}$ = Cluster mean. SD = Cluster standard deviation. All Variables of interest are standardized. Activity factor names: Verbal Support = Verbal interpersonal support and feedback, Active Assistance = Practice based on multisource ratings, Modify Behavior = Active practice with video and rehearsal, Evaluation = Analyze behavior, Reflection = Reflection.

Table 11

Activity Factor Descriptive Statistics for Three Cluster Solution

	Cluster Number					
	1		2		3	
Factor	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Verbal Support	-0.37	0.63	0.67	0.64	0.71	0.94
Active Assistance	-0.31	0.49	0.55	0.80	0.58	1.31
Modify Behavior	-0.29	0.60	0.53	0.86	0.52	1.13
Evaluation	-0.41	0.57	0.81	0.76	0.60	0.81
Reflection	-0.06	0.64	-0.46	0.70	1.75	0.61
N	227		92		32	

Note: N = 351. $\bar{X}$ = Cluster mean. SD = Cluster standard deviation. All Variables of interest are standardized. Activity factor names: Verbal Support = Verbal interpersonal support and feedback, Active Assistance = Practice based on multisource ratings, Modify Behavior = Active practice with video and rehearsal, Evaluation = Analyze behavior, Reflection = Reflection.

Table 12

Activity Factor Descriptive Statistics for Four Cluster Solution

	Cluster Number							
	1		2		3		4	
Factor	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Verb Support	-0.13	0.59	0.67	0.64	-0.77	0.45	0.71	0.94
Active Assistance	-0.41	0.42	0.55	0.80	-0.13	0.56	0.58	1.31
Modify Behavior	-0.11	0.66	0.53	0.86	-0.58	0.32	0.52	1.13
Evaluation	-0.29	0.53	0.81	0.76	-0.62	0.57	0.60	0.81
Reflection	-0.30	0.51	-0.46	0.70	0.34	0.62	1.75	0.61
N	142		92		85		32	

Note: N = 351. $\bar{X}$ = Cluster mean. SD = Cluster standard deviation. All Variables of interest are standardized. Activity factor names: Verbal Support = Verbal interpersonal support and feedback, Active Assistance = Practice based on multisource ratings, Modify Behavior = Active practice with video and rehearsal, Evaluation = Analyze behavior, Reflection = Reflection.

Table 13

Activity Factor Descriptive Statistics for Five Cluster Solution

	Cluster Number									
	1		2		3		4		5	
Factor	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Verbal Sup	-0.13	0.59	-0.77	0.45	0.67	0.64	1.95	0.36	0.36	0.72
Act Assist	-0.41	0.42	-0.13	0.56	0.55	0.80	2.41	0.76	0.07	0.92
Mod Behav	-0.11	0.66	-0.58	0.32	0.53	0.86	1.80	0.48	0.16	1.00
Evaluation	-0.29	0.53	-0.62	0.57	0.81	0.76	0.96	0.62	0.51	0.84
Reflection	-0.30	0.51	0.34	0.62	-0.46	0.70	1.24	0.33	1.89	0.60
N	142		85		92		7		25	

Note: N = 351. $\bar{X}$ = Cluster mean. SD = Cluster standard deviation. All Variables of interest are standardized. Activity factor names: Verbal Sup = Verbal interpersonal support and feedback, Act Assist = Practice based on multisource ratings, Mod Behav = Active practice with video and rehearsal, Evaluation = Analyze behavior, Reflection = Reflection.

Table 14

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Activated my Resources		Activated my Strengths		Built Rapport		Challenged Me		Encouraged me to be Persistent		Established Consequences		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	15	0.05	36	0.23	27	0.05	37	1.07	25	0.00	9	0.25	77
2	15	1.72	22	0.71	24	2.34	32	0.42	20	0.31	4	2.26	56
3	18	0.34	48	1.20	34	0.03	61	4.60*	34	0.30	14	0.10	98
4	12	0.00	31	1.94	28	5.76*	37	2.62	19	0.00	9	0.22	59
5	11	0.02	24	0.08	20	0.54	30	0.50	18	0.12	9	0.83	52
Endorsed by > 10%													
6	9	0.69	15	0.04	9	1.21	19	0.02	10	0.28	5	0.03	35
7	14	7.19*	16	0.09	13	0.00	24	1.71	8	2.58	4	0.30	38
8	8	0.09	14	2.80	11	1.58	19	1.61	14	0.00	10	4.17	43
9	7	0.00	21	4.64*	10	0.36	20	0.48	15	2.32	3	0.68	34
10	9	0.07	18	0.00	14	0.00	16	3.78	13	0.01	10	4.91*	41
11	8	0.05	22	1.25	22	7.21**	20	0.60	17	1.39	2	3.08	42
12	11	0.67	17	0.68	15	0.00	23	0.02	14	0.01	5	0.18	44
13	6	0.34	19	1.16	9	1.47	22	1.02	13	0.24	6	0.38	36
X^2	16.24**		54.87**		50.78**		72.34**		36.66**		23.83*		
n_a	67		146		112		175		107		44		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Evaluated Me		Facilitated Insight Development		Increased my Motivation		Instilled Hope for Change		Interpreted my Thoughts		Interviewed Me		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	39	0.00	20	1.32	27	2.13	16	3.46	10	1.01	23	0.25	77
2	27	0.14	15	1.22	25	0.16	6	0.70	10	0.06	14	0.24	56
3	54	1.21	20	0.06	47	1.87	17	1.07	15	0.20	26	0.09	98
4	29	0.05	13	0.03	23	0.31	8	0.03	5	3.51	16	0.01	59
5	27	0.05	14	1.18	23	0.10	9	0.46	16	8.76**	22	6.62*	52
Endorsed by > 10%													
6	18	0.02	8	0.06	14	0.08	6	0.26	7	0.30	7	1.15	35
7	24	2.77	7	0.21	20	1.90	1	4.77*	5	0.39	18	8.34**	38
8	19	0.78	9	0.00	17	0.15	11	5.15*	10	1.52	9	1.12	43
9	13	2.27	6	0.30	16	0.36	6	0.35	6	0.02	8	0.32	34
10	18	0.81	7	0.49	22	2.50	7	0.30	10	1.98	10	0.25	41
11	23	0.36	8	0.14	15	0.84	5	0.22	7	0.00	11	0.05	42
12	26	1.52	5	2.98	16	0.72	8	0.63	4	2.12	10	0.62	44
13	25	5.83*	8	0.02	19	1.84	4	0.33	3	2.04	9	0.14	36
X^2	56.54**		32.69**		45.56**		34.51**		25.84*		38.64**		
n_a	166		70		139		47		55		91		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2= test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Made Action Plans		Performed Work Analysis		Provided Advice		Provided Empathy		Provided Encouragement		Provided Feedback		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	36	0.23	23	0.25	45	0.00	15	0.43	36	0.00	45	0.00	77
2	27	0.40	18	0.00	37	1.65	11	0.33	28	0.33	35	0.48	56
3	41	0.37	30	0.17	66	4.64*	22	2.91	50	1.14	64	2.77	98
4	26	0.00	18	0.10	34	0.02	12	0.56	29	0.20	36	0.21	59
5	25	0.34	17	0.01	34	1.26	11	0.75	27	0.73	34	1.26	52
Endorsed by > 10%													
6	20	2.59	18	6.62*	22	0.33	6	0.00	17	0.07	19	0.27	35
7	20	1.19	11	0.21	17	3.28	5	0.45	20	0.65	23	0.08	38
8	17	0.47	21	6.26*	26	0.09	10	1.36	21	0.11	26	0.09	43
9	18	1.13	16	3.82	24	2.33	4	0.74	12	1.92	25	3.59	34
10	22	1.64	12	0.19	22	0.43	6	0.19	20	0.10	24	0.00	41
11	18	0.05	10	1.56	27	0.70	5	0.89	20	0.02	27	0.70	42
12	21	0.23	11	1.21	27	0.19	11	2.29	16	2.10	24	0.30	44
13	18	0.52	8	0.19	20	0.13	3	2.16	20	1.33	22	0.13	36
X^2	30.83**		30.64**		75.28**		41.12**		55.43**		65.32**		
n_a	146		106		192		56		153		192		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Reviewed Multisource Ratings		Taught me to Removed Org Barriers		Used my Performance Data		Videotaped my Behavior		Practiced Journaling		Practiced Agenda Setting		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	11	0.57	14	1.22	23	0.02	5	0.84	13	1.53	25	0.88	77
2	4	1.43	11	0.38	21	2.26	5	0.00	6	0.26	19	1.07	56
3	13	0.23	25	0.58	20	5.20*	5	2.72	8	2.66	25	0.52	98
4	5	0.79	20	5.04*	19	0.32	3	1.41	7	0.05	22	2.89	59
5	6	0.01	14	0.60	13	0.52	9	5.00*	9	1.14	12	0.82	52
Endorsed by > 10%													
6	5	0.22	5	1.62	12	0.49	2	0.55	4	0.06	8	0.57	35
7	3	0.65	9	0.02	12	0.12	8	7.38*	5	0.01	9	0.45	38
8	8	2.16	13	1.55	12	0.04	3	0.27	6	0.06	13	0.09	43
9	5	0.30	4	2.62	18	10.36**	4	0.32	4	0.03	12	0.92	34
10	4	0.20	10	0.07	9	1.18	5	0.54	5	0.01	8	1.77	41
11	4	0.25	6	1.98	10	0.67	4	0.01	7	0.66	9	1.11	42
12	4	0.37	8	0.62	9	1.87	4	0.00	5	0.09	16	1.64	44
13	5	0.16	10	0.57	10	0.04	3	0.03	5	0.05	10	0.01	36
X^2	20.19		41.07**		23.09*		11.37		12.72		37.12**		
n_a	39		75		96		30		42		93		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Practiced Behavior Modification		Practiced Brainstorming		Practiced Conflict Management		Practiced Goal Setting		Practiced Identifying Emotions		Practiced Interpreting Non-Verbal Behaviors		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	17	0.12	23	1.89	31	0.02	34	0.12	9	1.83	14	0.30	77
2	10	0.33	23	0.62	17	2.37	25	0.04	11	0.42	18	5.77*	56
3	18	0.45	40	1.14	49	6.42*	46	0.06	15	0.20	24	1.46	98
4	7	3.40	20	0.21	26	0.62	29	0.31	8	0.52	12	0.00	59
5	16	3.84	24	2.50	32	12.54**	24	0.00	15	6.53*	15	2.74	52
Endorsed by > 10%													
6	7	0.01	13	0.01	9	3.12	21	3.14	5	0.17	7	0.00	35
7	11	1.80	14	0.00	17	0.49	18	0.04	11	4.62*	8	0.01	38
8	10	0.20	15	0.05	19	0.45	21	0.17	5	0.92	7	0.51	43
9	7	0.00	18	4.44*	12	0.28	20	2.55	2	3.20	7	0.00	34
10	14	5.19*	16	0.13	19	0.91	15	1.64	11	3.44	10	0.47	41
11	10	0.29	17	0.33	17	0.02	21	0.33	7	0.00	6	1.10	42
12	2	8.05**	13	1.05	12	3.18	18	0.51	2	5.41*	4	3.98*	44
13	4	2.25	15	0.47	10	2.33	17	0.03	8	0.88	7	0.02	36
X^2	31.89**		37.52**		82.09**		40.48**		28.78**		41.19**		
n_a	68		120		130		151		55		67		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Practiced Limit Setting		Practiced Listening		Practiced Purposeful Conversation		Practiced Reflecting		Practiced Relationship Building		Practiced Setting & Maintaining Boundaries		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	10	1.16	30	0.27	25	0.75	12	0.02	28	0.50	25	7.04*	77
2	10	0.03	27	4.01*	16	0.00	11	0.63	23	0.04	8	2.12	56
3	19	0.55	37	0.10	39	8.62**	17	0.16	40	0.06	29	5.29*	98
4	9	0.16	23	0.20	15	0.35	7	0.96	29	2.61	13	0.01	59
5	7	0.55	24	2.50	19	1.92	3	4.89*	24	1.04	14	1.04	52
Endorsed by > 10%													
6	9	2.10	17	2.47	6	2.52	9	2.67	14	0.00	5	1.23	35
7	4	1.28	20	4.84*	12	0.19	6	0.00	17	0.43	6	0.85	38
8	3	3.53	12	1.57	12	0.01	5	0.74	18	0.09	7	0.82	43
9	4	0.74	10	0.82	11	0.27	4	0.53	17	1.64	7	0.02	34
10	6	0.19	14	0.11	12	0.01	11	3.98	18	0.33	8	0.12	41
11	9	0.66	14	0.21	11	0.13	6	0.12	16	0.06	14	3.93	42
12	9	0.42	11	2.89	8	2.69	7	0.00	8	9.92**	6	1.89	44
13	6	0.00	8	3.54	10	0.01	5	0.15	12	0.71	7	0.11	36
X^2	27.17**		54.45**		67.82**		29.94*		47.22**		61.99**		
n_a	56		120		94		53		131		71		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities												
	Practiced Supportive Conversation		Received Reading Assignments		Received Self-Awareness Training		Received Skill Training		Rehearsed Behavior		Role Played		
Goal	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_{ag}	X^2	n_g
Endorsed by > 15%													
1	19	1.40	14	0.47	22	0.02	35	0.49	18	0.35	27	0.12	77
2	16	0.07	8	1.82	20	2.01	31	1.11	9	0.98	12	4.37*	56
3	34	1.41	18	0.57	30	0.49	46	0.22	22	0.18	40	3.42	98
4	17	0.06	8	2.38	13	1.26	25	1.24	10	0.70	17	0.69	59
5	22	4.38*	14	1.32	15	0.02	21	1.81	20	11.40**	22	2.19	52
Endorsed by > 10%													
6	11	0.03	9	0.53	14	2.82	21	1.92	5	1.06	10	0.42	35
7	13	0.35	11	1.65	10	0.06	19	0.02	13	4.54	15	0.70	38
8	15	0.54	11	0.63	16	2.10	24	0.94	9	0.00	13	0.23	43
9	10	0.01	7	0.00	5	3.31	18	0.24	11	2.96	12	0.06	34
10	17	2.88	5	2.18	11	0.03	19	0.13	11	0.97	18	2.31	41
11	13	0.02	8	0.11	6	4.47*	17	1.38	9	0.01	15	0.11	42
12	15	0.39	13	2.25	8	2.41	31	9.41**	6	1.65	15	0.01	44
13	5	5.04*	7	0.06	11	0.14	17	0.05	4	2.37	9	1.29	36
X^2	40.66**		17.71		46.39**		40.3**		37.58**		54.86**		
n_a	99		69		92		161		69		110		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 14 Continued…

Chi-Square Tests Comparing use of each Activity by Goal to the Total Population Use of each Activity

	Coaching Activities		
	Took Assessments		
Goal	n_{ag}	X^2	n_g
Endorsed by > 15%			
1	17	1.90	77
2	17	0.15	56
3	20	4.25*	98
4	18	0.18	59
5	21	4.47*	52
Endorsed by > 10%			
6	10	0.00	35
7	10	0.08	38
8	13	0.09	43
9	12	0.92	34
10	10	0.35	41
11	11	0.10	42
12	17	2.69	44
13	11	0.10	36
X^2	15.47		
n_a	93		

Note: Total $N = 329$. ** = $p < .01$ * = $p < .05$. $df = 1$ n_{ag} = number who selected both the activity and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_a = number identifying activity. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 15

Summarized Results of Chi-Square Tests Between the Raw Coaching Goals and Activities used more Frequently

Goal	**Activities Used Significantly (p<.05) More Frequently**							
Enhance my management style	Prac setting & maintaining boundaries							
Improve my strategic thinking	Prac interpreting non verbal behaviors	Prac listening						
Increase my leadership ability	Challenged me	Provided advice	Prac conflict management	Prac purposeful conversation	Prac setting & maintaining boundaries			
Increase my team building	Built rapport	Taught me to remove org. barriers						
Learn conflict management	Interpreted my thoughts & behavior	Interviewed me	Videotaped my behavior	Prac conflict management	Prac identifying & working with my emotions	Prac supportive confrontation	Rehearsed behavior	Took assessments
Improve my ability to manage time	Performed work analysis							
Improve my communication style	Activated my resources	Interviewed me	Videotaped my behavior	Prac identifying & working with my emotions	Prac listening			
Improve my meeting management skills	Instilled hope for change	Performed work analysis						
Improve my sales or financial performance	Activated my strengths	Used performance data	Prac brainstorming					
Increase my motivation	Established consequences for behaviors	Prac behavior modification						
Increase my ability to delegate	Built rapport							
Learn a new skill	Received skill training							
Create a career development Plan	Evaluated me							

Table 16

Summarized Results of Chi-Square Tests Between the Raw Coaching Goals and Activities used less Frequently

Goals	**Activities Used Significantly (p<.05) Less Frequently**			
Enhance my management style				
Improve my strategic thinking	Role played			
Increase my leadership ability	Used my performance data	Took assessments		
Increase my team building	Practiced behavior modification			
Learn conflict management	Practiced reflecting			
Improve my ability to manage time				
Improve my communication style	Instilled hope for change			
Improve my meeting management skills				
Improve my sales or financial performance				
Increase my motivation				
Increase my ability to delegate	Received self-awareness training			
Learn a new skill	Practiced behavior modification	Practiced identifying and working with my emotions	Practiced interpreting non verbal behaviors	Practiced relationship building
Create a career development Plan	Practiced supportive confrontation			

Table 17

Means and Standard Deviations of Activity Factor Scores for each Coaching Goal

	Coaching Activities Factors										
	Verbal Feedback		Active Assistance		Behavior Mod.		Evaluation		Reflection		
Goal	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	n_g
Endorsed by > 15%											
1	-.12	.76	-.09	.84	.03	.83	.03	.82	.00	.83	77
2	.02	.88	.05	.75	.02	.85	-.04	.87	.18	.98	56
3	-.09	.84	-.04	.79	.00	.81	.07	.77	-.01	.89	98
4	-.03	.90	.17	.90	.15	1.0	-.01	.99	.04	.78	59
5	-.23	.82	-.03	.81	-.02	.79	.03	.84	.04	.78	52
Endorsed by > 10%											
6	.11	.99	.01	.81	-.04	.81	-.05	.88	-.08	.73	35
7	.20	.86	-.03	.65	.06	.65	.15	.94	-.19	.98	38
8	.11	.89	.07	.86	-.23	.66	-.06	.80	-.04	.84	43
9	.17	.79	-.02	.88	.10	.96	.12	1.04	-.05	.93	34
10	-.12	.69	-.17	.53	-.08	.82	-.06	.72	-.01	.82	41
11	-.01	.96	.15	.86	.11	.96	-.11	.79	.03	.82	42
12	-.05	.68	-.28	.60	-.04	.86	-.18	.69	.09	1.01	44
13	-.07	.62	-.08	.72	.04	.98	-.04	.78	-.09	.92	36

Note: N = 329. All Variables of interest are standardized. $\bar{X}$ = mean, SD = standard deviation, n_g = number identifying a goal as a top 3 goal. Activity factor names: Verbal Feedback = Verbal interpersonal support and feedback, Active Assistance = Practice based on multisource ratings, Behavior Mod. = Active practice with video and rehearsal, Evaluation = Evaluation, Reflection = Reflection. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 18

Chi-Square Tests Comparing use of each Cluster by Goal to the Total Population Use of each Activity

	Activity Cluster								
	Cluster 1		Cluster 2		Cluster 3		Cluster 4		
Goal	n_{cg}	X^2	n_{cg}	X^2	n_{cg}	X^2	n_{cg}	X^2	n_g
Endorsed by > 15%									
1	33	0.19	21	0.11	18	0.02	5	1.01	77
2	19	1.29	16	0.26	14	0.04	7	0.75	56
3	45	1.56	23	0.41	22	0.19	8	0.26	98
4	17	4.23*	17	0.33	19	2.64	6	0.05	59
5	21	0.00	11	0.71	15	0.79	5	0.00	52
Endorsed by > 10%									
6	15	0.07	9	0.00	9	0.06	2	0.63	35
7	16	0.03	13	1.57	6	1.59	3	0.12	38
8	19	0.25	9	0.62	10	0.02	5	0.28	43
9	13	0.10	10	0.25	7	0.24	4	0.24	34
10	16	0.06	9	0.37	12	0.71	4	0.01	41
11	18	0.09	10	0.10	9	0.18	5	0.35	42
12	22	1.81	6	3.95	12	0.30	4	0.01	44
13	18	1.44	9	0.02	7	0.46	2	0.71	36
X^2	49.21**		28.78**		27.8**		9.01		
n_c	142		92		85		32		

Note: N = 329. ** = $p < .01$ * = $p < .05$. n_{cg} = number assigned to both the cluster and the goal. X^2 = Chi-square test statistic. n_g = number identifying a goal as a top 3 goal. X^2 = test statistic for Cochran's Q test. n_c = number assigned to cluster. Activity cluster names: Cluster 1 = Activity pattern failed to align with any activity factor, Cluster 2 = Activity pattern aligned most strongly with evaluation factor, Cluster 3 =Activity pattern aligned most strongly with reflection activity factor, Cluster 4 = Activity pattern aligned with all activity factors. Goals: 1 = Enhance my management style, 2 = Improve my strategic thinking, 3 = Increase my leadership ability, 4 = Increase team building, 5 = Learn conflict management, 6 = Improve my ability to manage time, 7 = Improve my communication style, 8 = Improve meeting management skills, 9 = Improve sales or financial performance, 10 = Increase motivation, 11 = Increase my ability to delegate, 12 = Learn a new skill, 13 = Create a career development plan.

Table 19

Multiple Regressions of Coaching Activity Factor Predictors of Coaching Goal Progress

	Average Goal Progress		Management Style		Strategic Thinking		Leadership Ability		Team Building		Conflict Management	
	B	β	B	β	B	β	B	β	B	β	B	β
Constant	4.66**		4.81**		4.58**		4.68**		4.58**		4.67**	
Verbal Support	-.03	-.03	.14	.11	.04	.05	-.14	.12	.39	.37	.07	.07
Active Assistance	-.02	-.02	.10	.08	.11	.10	-.18	.14	-.13	-.12	.19	.19
Modify Behavior	-.09	-.09	-.05	-.04	.12	.13	.07	.06	.06	.06	-.11	-.11
Evaluation	.04	.04	-.02	-.02	-.13	-.14	.02	.01	-.41**	-.42	.16	.16
Reflect	-.03	-.03	.26	.22	.19	.23	-.01	-.01	.36*	.29	.01	.01
R^2	.01		.06		.10		.04		.24		.07	
N	351		77		56		98		59		52	

Note. *p<.05, **p<.01. Management Style = Goal to enhance management style, Strategic Thinking = Goal to improve strategic thinking, Leadership Ability = goal to increase leadership ability, Team Building = Goal to increase team building, Conflict Management = Goal to learn conflict management skills, Verbal Support = Factor 1 -Verbal interpersonal support and feedback, Active Assistance = Factor 2 - Practice based on multisource ratings, Modify Behavior = Factor 3 - Active practice with video and rehearsal, Evaluation = Factor 4 - Evaluation, Reflection = Factor 5 - Reflection.

Table 20

Correlation Matrix of Activity Factor and Goal Progress Variables

	1	2	3	4	5	6	7	8	9	10
1. Verbal Support										
2. Active Assistance	.46									
3. Modify Behavior	.42	.29								
4. Evaluation	.34	.28	.26							
5. Reflect	-.10	-.04	-.08	.01						
6. Average Goal Progress	-.06	-.05	-.09	.00	-.02					
7. Management Style	.12	.10	.00	.03	.20	.00				
8. Strategic Thinking	.01	.08	.10	-.13	.24	-.04	.70			
9. Leadership Ability	-.16	-.18	.00	-.07	.02	.04	.84	.63		
10. Team Building	.13	.04	.14	-.28	.25	-.14	.69	.38	.37	
11. Conflict Management	.13	.18	.01	.16	.03	-.25	.76	-.45	.76	.80

Note. N=351. Verbal Support = Factor 1 -Verbal interpersonal support and feedback, Active Assistance = Factor 2 - Practice based on multisource ratings, Modify Behavior = Factor 3 - Active practice with video and rehearsal, Evaluation = Factor 4 - Evaluation, Reflection = Factor 5 – Reflection, Management Style = Goal to enhance management style, Strategic Thinking = Goal to improve strategic thinking, Leadership Ability = goal to increase leadership ability, Team Building = Goal to increase team building, Conflict Management = Goal to learn conflict management skills.

Table 21

Multiple Regressions of Coaching Activity Cluster Predictors of Coaching Goal Progress

	Average Goal Progress		Management Style		Strategic Thinking		Leadership Ability		Team Building		Conflict Management	
	B	β	B	β	B	β	B	β	B	β	B	β
Constant	4.61**		4.61**		4.32**		4.82**		4.59**		4.43**	
Cluster 2 Dummy	.20	.09	.20	.09	.31	.18	-.26	-.11	-.18	-.08	.48	.24
Cluster 3 Dummy	.28	.12	.28	.12	.47	.26	-.23	-.10	-.01	-.01	.31	.17
Cluster 4 Dummy	.79	.20	.83*	.20	.83*	.35	-.07	-.02	.41	.13	.37	.14
R^2	.01		.01		.06		.02		.03		.06	
N	351		77		56		98		59		52	

Note. Note. *p<.05, **p<.01. Management Style = Goal to enhance management style, Strategic Thinking = Goal to improve strategic thinking, Leadership Ability = goal to increase leadership ability, Team Building = Goal to increase team building, Conflict Management = Goal to learn conflict management skills, Cluster 2 Dummy = Dummy coding for cluster 2 or activity pattern aligned most strongly with evaluation factor, Cluster 3 Dummy = Dummy coding for cluster 3 or activity pattern aligned most strongly with reflection activity factor, Cluster 4 Dummy = Dummy coding for cluster 4 or activity pattern aligned with all activity factors.

Table 22

Correlation Matrix of Activity Cluster and Goal Progress Variables

	1	2	3	4	5	6	7	8
1.Cluster 2 Dummy								
2. Cluster 3 Dummy	-.38							
3. Cluster 4 Dummy	-.19	-.18						
4. Average Goal Progress	.00	-.04	-.10					
5. Management Style	.02	.06	.17	.00				
6. Strategic Thinking	.00	.12	.25	-.04	.70			
7. Leadership Ability	-.08	-.06	.01	.04	.84	.63		
8. Team Building	-.11	.00	.15	-.14	.69	.38	.37	
9. Conflict Management	.16	.06	.06	-.25	.76	-.45	.76	.80

Note. N=351. Cluster 2 Dummy = Dummy coding for cluster 2 or activity pattern aligned most strongly with evaluation factor, Cluster 3 Dummy = Dummy coding for cluster 3 or activity pattern aligned most strongly with reflection activity factor, Cluster 4 Dummy = Dummy coding for cluster 4 or activity pattern aligned with all activity factors, Management Style = Goal to enhance management style, Strategic Thinking = Goal to improve strategic thinking, Leadership Ability = goal to increase leadership ability, Team Building = Goal to increase team building, Conflict Management = Goal to learn conflict management skills.

Table 23

Correlation Matrix of Average Goal Progress and Satisfaction Variables

	1	2	3	4	5	6	7	8
1. Average goal progress								
2. Listening	.38**							
3. Communication Ability	.42**	.50**						
4. Trust	.37**	.55**	.39**					
5. Work Knowledge	.43**	.53**	.52**	.48**				
6. Organization Knowledge	.42**	.48**	.42**	.47**	.56**			
7. Expertise	.39**	.59**	.48**	.53**	.57**	.53**		
8. Experience	.41**	.55**	.47**	.55**	.54**	.56**	.62**	
9. Overall Satisfaction	.43**	.54**	.53**	.55**	.57**	.53**	.59**	.68**

Note. ***p*<.01, **p*<.05. *N*=351. Variable names = 1. Average goal progress, 2. Coach's ability to genuinely listen, 3. Coach's ability to communicate, 4. Extent that you could trust your coach, 5. Satisfaction with coach's knowledge of your work, 6. Satisfaction with coach's knowledge of your organization, 7. Satisfaction with coach's level of expertise, 8. Satisfaction with coaching experience, 9. Overall satisfaction with coach.

Appendix

Coaching Components Measure

Q1 *Informed Consent:* You are invited to be in a research study of workplace coaching. You were selected as a possible participant because you were identified as having had a workplace coaching experience and holding a position of team leader or above. We ask that you read this form and ask any questions you may have before agreeing to participate in the study. This study is being conducted by: Chelsea Jenson (University of Minnesota). *Background Information:* The purpose of this study is to learn about things that make workplace coaching relationships successful or unsuccessful. We plan to use this data to help make future coaching programs more effective. *Procedures*: If you agree to participate, we will ask you to complete the following survey about your workplace coaching experience. You will be asked to provide information about the process of your coaching experience, goals that you set, things that you did to work on your goals, and the progress you made. *Confidentiality*: The data you provide will remain anonymous and will not contain any individually identifiable information. Furthermore, the records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify any individual as a subject. Research records will be stored securely and only researchers will have access to the records. Study data will be encrypted according to current University policy for protection of confidentiality. *Voluntary Nature of the Study*: Participation in this study is voluntary. Your decision whether or not to participate will not affect the status of your employment or your relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships. *Contacts and Questions:* The researchers conducting this study are: Chelsea Jenson and Paul Sackett. If you have questions at any time, you are encouraged to contact them at jens1177@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650. Click the link below to download a copy of this information to keep for your records.

Q2 Statement of Consent: I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

- ❍ Yes, I give consent to participate in this study. (1)
- ❍ No, I do not give consent to participate in this study. (2)

If No, I do not give consent... Is Selected, Then Skip To End of Block

Q3 Professional workplace coaching is a developmental experience where an employee is paired with a coach and that coach supports the employee by providing work related expertise and guidance on an ongoing basis. In the last 5 years, have you received professional coaching at work?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To End of Block

Q4 How many coaching sessions did you receive?

- 1 (1)
- 2 (2)
- 3-5 (3)
- 6-10 (4)
- 11 or more (5)
- I don't know or I don't remember (6)

If 1 Is Selected, Then Skip To End of Block. If I don't know or I don't remember.. Is Selected, Then Skip To End of Block

Q5 Which of the following best describes your coach?

- An individual from outside my organization (1)
- An individual from inside my organization (2)
- Other (Please describe) (3) _____
- I don't know or I don't remember (4)

If An individual from outside ... Is Selected, Then Skip To This set of questions...

Q6 Did you know your coach prior to your coaching engagement?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To This set of questions…

Q7 Which of the following best describes your coach?

- My coach was an individual working in my company's human resources department. (1)
- My coach was an individual working in my own department. (2)
- Other (Please describe how you knew your coach prior to coaching) (3) _____

If My coach was an individual ... Is Selected, Then Skip To End of Block

This set of questions is intended to collect demographic information. These questions are optional; please respond to your comfort level.

Q8 What is your gender?

- Male (1)
- Female (2)

Q9 Please select the option that best describes your race.

- ❍ American Indian or Alaskan Native (1)
- ❍ Hawaiian or Pacific Islander (2)
- ❍ Asian or Asian American (3)
- ❍ Black or African American (4)
- ❍ Hispanic or Latino (5)
- ❍ Non Hispanic White (6)
- ❍ Other (7)

Q10 What is your age?

- ❍ 18-29 (1)
- ❍ 30-39 (2)
- ❍ 40-49 (3)
- ❍ 50-59 (4)
- ❍ 60-69 (5)
- ❍ 70+ (6)

The remaining questions ask you to reflect on your coaching program. If you have difficulty remembering some of the details, please use the "I don't know or I don't remember" response option.

Q11 Which of the following best describes the industry that you work in?

- ❍ Agriculture (1)
- ❍ Education (2)
- ❍ Engineering (3)
- ❍ Entertainment (13)
- ❍ Financial Services (4)
- ❍ Food and Beverage (5)
- ❍ Legal (6)
- ❍ Manufacturing (7)
- ❍ Medical (8)
- ❍ Public Service (9)
- ❍ Retail (10)
- ❍ Transportation (11)
- ❍ Technology (12)
- ❍ Other (Please describe) (14) _____

Q12 At the start of your coaching experience, which of the following best describes your work role?

- ❍ Entry Level (1)
- ❍ Manager/Team Leader (2)
- ❍ General Manager (3)
- ❍ Executive (4)
- ❍ Other (Please describe) (5) _____

Q13 Approximately how many employees report to you?

Q14 How long had you worked in your role prior to receiving coaching?

- ❍ Less than 6 months (1)
- ❍ 6 months - 1 year (2)
- ❍ 1 year - < 2 years (3)
- ❍ 2 years - < 5 years (4)
- ❍ More than 5 years (5)
- ❍ I don't know or I don't remember (6)

Q15 What was your job title during your coaching experience?

Q16 How long did you work with your coach?

- ❍ Less than 1 month (1)
- ❍ 1 - < 3 months (2)
- ❍ 3 - < 6 months (3)
- ❍ 6 - < 9 months (4)
- ❍ 9 - < 12 months (5)
- ❍ 1 year or longer (6)
- ❍ I don't know or I don't remember (7)

Q17 On average, how long were your coaching sessions?

- ❍ 30 minutes (1)
- ❍ 1 hour (2)
- ❍ 90 minutes (3)
- ❍ 2 hours (4)
- ❍ Other (Please describe) (5) _____
- ❍ I don't know or I don't remember (6)

Q18 How long ago did you complete your coaching engagement?
- ❍ Less than 1 year (1)
- ❍ 1-2 years (2)
- ❍ More than 2 years (3)
- ❍ Coaching is still in progress (4)

Q19 How was your coaching engagement arranged? Select all that apply.
- ❑ Referred by a manager (1)
- ❑ Self selected (2)
- ❑ Part of an on boarding program (3)
- ❑ Other (Please describe) (4) _____
- ❑ I don't know or I don't remember (5)

Q20 Some workplace coaching programs follow a specific model. Using the options below, describe the type of coaching you received. Select all that apply.
- ❑ Development focused coaching (1)
- ❑ A debrief of a workplace assessment (i.e. 360 feedback) (2)
- ❑ Performance focused coaching (3)
- ❑ Transition coaching (4)
- ❑ Career coaching (5)
- ❑ Group coaching (6)
- ❑ Other (Please describe) (7) _____
- ❑ I don't know or I don't remember (8)

Throughout the next several sections, you will find some words highlighted in blue. Blue words indicate that you can hover your mouse over the word and a clarifying definition will appear. Note that it works best to slide your mouse over the word slowly from left to right. Give it a try using the word "contract" in the question below.

Q21 As part of your coaching experience, did you develop a formal coaching contract?
- ❍ Yes (1)
- ❍ No (2)

Q22 Before coaching, which of the following did you discuss with your coach? Select all that apply.

- ❑ Purpose of coaching engagement (1)
- ❑ Coaching goals (2)
- ❑ Timeline (3)
- ❑ Scope of coaching (4)
- ❑ Measurements of success (5)
- ❑ Confidentiality agreement (6)
- ❑ Guidelines for the engagement (7)
- ❑ Other (Please describe) (8) _____

Q23 Did you formally set coaching goals?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To From the list below, identify all of ...

Q24 Which parties were involved in the goal setting process? Select all that apply.

- ❑ Yourself (1)
- ❑ Manager (2)
- ❑ Organization (3)
- ❑ Coach (4)
- ❑ Other (Please describe) (5) _____
- ❑ I don't know or don't remember (6)

Q25 From the list below, identify all of the goals you planned to address in during coaching. Select all that apply. Reminder: Blue words indicate that you can hover your mouse over the word and a clarifying definition will appear. Note that it works best to slide your mouse over the word slowly from left to right.

- ❑ Change a behavior (1)
- ❑ Enhance my management style (2)
- ❑ Improve ability to assess staffing needs (3)
- ❑ Improve ability to manage time (4)
- ❑ Improve interpersonal skills (5)
- ❑ Improve active listening skills (6)
- ❑ Improve communication style (7)
- ❑ Improve meeting management skills (8)
- ❑ Improve mentoring ability (9)
- ❑ Improve writing skills (10)
- ❑ Improve presentation skills (11)
- ❑ Improve sales or financial performance (12)
- ❑ Improve strategic thinking (13)
- ❑ Increase adaptability (14)
- ❑ Increase leadership ability (15)
- ❑ Increase motivation (16)
- ❑ Increase my ability to delegate (17)
- ❑ Increase self-awareness (18)
- ❑ Increase self-confidence (19)
- ❑ Increase team building (20)
- ❑ Increase tolerance for ambiguity (21)
- ❑ Learn a new skill (22)
- ❑ Learn conflict management skills (23)
- ❑ Learn stress management (24)
- ❑ Prepare for a business change (25)
- ❑ Reduce work-life conflict (26)
- ❑ Create a career development plan (27)
- ❑ Improve ability to deliver difficult news (28)
- ❑ Enhance my satisfaction (29)
- ❑ Other (Please describe) (30) _____

Q26 This list contains all of the goals that you identified on the previous page. Use the list below to select the 3 goals that were most important to you during coaching.

Q27 From the following list, identify the behaviors your coach used throughout your coaching engagement. Select all that apply. Reminder: Blue words indicate that you can hover your mouse over the word and a clarifying definition will appear. Note that it works best to slide your mouse over the word slowly from left to right.

- ❑ Activated my resources (1)
- ❑ Activated my strengths (2)
- ❑ Built rapport (3)
- ❑ Challenged me (4)
- ❑ Encouraged me to be persistent (5)
- ❑ Established consequences for behaviors (6)
- ❑ Evaluated me (7)
- ❑ Facilitated insight development (8)
- ❑ Increased my motivation (9)
- ❑ Instilled hope for change (10)
- ❑ Interpreted my thoughts and behavior (11)
- ❑ Interviewed me (12)
- ❑ Made action plans (13)
- ❑ Performed work analysis (14)
- ❑ Provided advice (15)
- ❑ Provided empathy (16)
- ❑ Provided encouragement (17)
- ❑ Provided feedback (18)
- ❑ Reviewed multisource ratings (19)
- ❑ Taught me how to remove organizational barriers (20)
- ❑ Used my performance data (21)
- ❑ Videotaped my behavior (22)
- ❑ Other (Please describe) (27) _____

Q28 This list contains the behaviors you identified on the previous page. Use the rating scales below to indicate how much each behavior helped or hindered progress toward one or more of your most important goals. Response Options: -3: The behavior had a strong negative impact on my goal progress. -2: The behavior had a moderate negative impact on my goal progress. -1: The behavior had a slight negative impact on my goal progress. 0: The behavior had no impact on my goal progress. 1: The behavior had a slight positive impact on my goal progress. 2: The behavior had a moderate positive impact on my goal progress. 3: The behavior had a strong positive impact on my goal progress. Use the vertical bars to select your answer choices. A number will appear to the right of the bar indicating your numerical choice.

Q29 From the following list, identify all of the activities you engaged in during your coaching engagement. Select all that apply. Reminder: Blue words indicate that you can hover your mouse over the word and a clarifying definition will appear. Note that it works best to slide your mouse over the word slowly from left to right.

- ❑ Journaling (1)
- ❑ Practiced agenda setting (2)
- ❑ Practiced behavior modification (3)
- ❑ Practiced brainstorming (4)
- ❑ Practiced conflict management (5)
- ❑ Practiced goal setting (6)
- ❑ Practiced identifying and working with my emotions (7)
- ❑ Practiced interpreting non verbal behaviors (8)
- ❑ Practiced limit setting (9)
- ❑ Practiced listening (10)
- ❑ Practiced purposeful conversation (11)
- ❑ Practiced reflecting (12)
- ❑ Practiced relationship building (13)
- ❑ Practiced setting and maintaining boundaries (14)
- ❑ Practiced supportive confrontation (15)
- ❑ Received reading assignments (16)
- ❑ Received self-awareness training (17)
- ❑ Received skill training (18)
- ❑ Rehearsed behavior (19)
- ❑ Role played (20)
- ❑ Took assessments (21)
- ❑ Other (Please describe) (22) _____

Q30 This list contains the activities you identified on the previous page. Use the rating scale below to indicate how much each activity helped or hindered progress toward one or more of your most important goals. Response options: -3: The behavior had a strong negative impact on my goal progress. -2: The behavior had a moderate negative impact on my goal progress. -1: The behavior had a slight negative impact on my goal progress. 0: The behavior had did not impact my goal progress. 1: The behavior had a slight positive impact on my goal progress. 2: The behavior had a moderate positive impact on my goal progress. 3: The behavior had a strong positive impact on my goal progress. Use the vertical bars to select your answer choices. A number will appear to the right of the bar indicating your numerical choice.

Q31 This list contains the objectives you identified as your top 3 most important goals for coaching. Using the rating scale below, report the extent to which coaching impacted your goal progress.

Q32 Since the completion of your coaching engagement which of the following workplace experiences have you received? Select all that apply.

- ❑ A promotion (1)
- ❑ Leadership training (2)
- ❑ Development opportunities (3)
- ❑ A job rotation (4)
- ❑ A bonus (5)
- ❑ A significant pay increase (6)
- ❑ An increase in job responsibilities (7)
- ❑ An achievement award (8)
- ❑ An award of stock options (9)
- ❑ Other (Please describe) (10) _____

Q33 From the following list, identify the outcomes that were positively or negatively affected by coaching. Select all that apply. Reminder: Blue words indicate that you can hover your mouse over the word and a clarifying definition will appear. Note that it works best to slide your mouse over the word slowly from left to right.

- ❑ My ability to "be heard" (1)
- ❑ My ability to identify problems (2)
- ❑ My ability to problem solve (3)
- ❑ My ability to think before I act (4)
- ❑ My attitude (5)
- ❑ My balance at work (6)
- ❑ My work-life balance (7)
- ❑ My behavior changed (8)
- ❑ My career development (9)
- ❑ My goal setting ability (10)
- ❑ My interpersonal skills (11)
- ❑ My job satisfaction (12)
- ❑ My leadership effectiveness (13)
- ❑ My management skills (14)
- ❑ My meeting facilitation skills (15)
- ❑ My patience (16)
- ❑ My performance (17)
- ❑ My presenting style (18)
- ❑ My productivity (19)
- ❑ My ability to manage my emotions (20)
- ❑ My satisfaction with business outcomes (21)
- ❑ My satisfaction with business processes (22)
- ❑ My self-awareness (23)
- ❑ My self-confidence (25)
- ❑ My specific business objectives (26)
- ❑ My tolerance for ambiguity (27)
- ❑ My tolerance for diversity (28)
- ❑ My topic knowledge (29)
- ❑ My vision for the future (30)
- ❑ Other (Please describe) (31) _____

Q34 This list contains the outcomes you identified on the previous page. Use the rating stales below to indicate how much each outcome was affected by coaching. Response options: -3: The outcome was very negatively impacted by coaching. -2: The outcome was negatively impacted by coaching. -1: The outcome was somewhat negatively impacted by coaching. 0: The outcome was negligibly impacted by coaching. 1: The outcome was somewhat positively impacted by coaching. 2: The outcome was positively impacted by coaching. 3: The outcome was very positively impacted by coaching. Use the vertical bars to select your answer choices. A number will appear to the right of the bar indicating your numerical choice.

Q35 Rate your coach's ability to genuinely listen to you.
- ❍ Very Poor (1)
- ❍ Poor (2)
- ❍ Fair (3)
- ❍ Good (4)
- ❍ Very Good (5)

Q36 Rate your coach's ability to communicate in a clear and concise manner.
- ❍ Very Poor (1)
- ❍ Poor (2)
- ❍ Fair (3)
- ❍ Good (4)
- ❍ Very Good (5)

Q37 To what extent did you feel you could trust your coach?
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Most of the Time (4)
- ❍ Always (5)

Q38 Rate your level of satisfaction with your coach's knowledge about your work role.
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q39 Rate your level of satisfaction with your coach's knowledge about your organization.
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q40 If you are reading this question, please select neutral.
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q41 Overall, how satisfied were you with your coach's level of expertise?
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q42 Overall, how satisfied were you with your coaching experience?
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q43 Overall, how satisfied were you with your coach?
- ❍ Very Dissatisfied (1)
- ❍ Dissatisfied (2)
- ❍ Neutral (3)
- ❍ Satisfied (4)
- ❍ Very Satisfied (5)

Q44 Would you recommend your coach to others?
- ❍ Yes (1)
- ❍ No (2)
- ❍ Unsure (3)