

February 2019

## Why Does Coaching Work? An Examination of Inputs and Process Variables in an Employee Coaching Program

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Why Does Coaching Work? An Examination of Inputs and Process Variables in an Employee  
Coaching Program

by

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A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
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Date of Approval:  
November 28, 2018

Keywords: Coaching, leader development, coach, coachees, leader-member exchange, trust

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## ABSTRACT

The efficacy of leadership coaching to improve leader and organizational outcomes cannot be overstated. However, a thorough understanding of some of the inputs and process variables involved in coaching has not been empirically established to date. To address this issue in the leader development and coaching literature, I examined the characteristics of the coaches and the coachees and their relationships with two relational variables potentially involved in coaching relationships (i.e., leader-member exchange and trust). The importance of leadership to work outcomes and leader development is highlighted, followed by a discussion of the specific leader development technique of coaching. The discussion then moves to the relational variables of interest involved in coaching, namely leader-member exchange (LMX) and trust, drawing from research on team and leadership phenomena. Specific inputs (e.g., coach and coachee characteristics) and their impacts on the relationships of interest are discussed. This work focuses on hypotheses in three streams of research: characteristics of coaches and coachees, LMX, and trust. The findings from this research indicate that a coach's experience, specifically operationalized as the activities he or she has experience in, positively predicts LMX, and self-efficacy positively predicts LMX and trust in the coaching relationships. The theoretical and practical implications of this project are noted.

## **CHAPTER ONE: INTRODUCTION**

Leadership is a crucial asset and advantage in any organization, and measures are commonly taken to improve leadership capabilities in organizations with the goal of positively impacting work outcomes, such as individual and team performance and financial results. Efforts to improve leaders and their capabilities can take many forms, and one commonly employed technique is employee coaching. Across studies, coaching has been found to improve coachee leadership skills and job performance (Sonesh, Coultas, Lacerenza, et al., 2015).

Despite the widespread use of coaching, a thorough analysis of some of the process variables that may be involved in coaching relationships (i.e., leader-member exchange and trust) has not been empirically conducted to date. Understanding the process of coaching is vital to improve this commonly employed technique in that research in this area can lead to insights into which relational variables should be fostered in coaching relationships. For example, if trust is found to be an influential variable in the process, coaches and coachees can engage in activities to foster trust from the beginning of the relationship to positively impact the coaching process (as suggested by Gregory & Levy, 2011). By understanding the relational processes at play in effective coach-coachee pairs, we can foster those mechanisms and increase the quality of such relationships, thereby ultimately improving the outcomes of coaching. Further, including characteristics of the coaches and coachees in the study of process variables is worthy of attention



as doing so can yield understanding into how characteristics of both parties involved in the relationships can impact the process. This gap occurring in the current leader development and coaching literature is also crucial to address; failing to do so would result in a lack of knowledge on how best to pair coaches and coachees to reap the maximum benefits such relationships offer (Boyce, Jeffrey Jackson, & Neal, 2010).

Overall, the findings of such work can be used to influence the coaching process and pairs of coaches and coachees leading to better outcomes as a result of the relationships. To address how inputs and coaching mechanisms impact coaching relationships, I examined the characteristics of the coaches and coachees and their relationships with mechanisms potentially involved in coaching. Specifically, the focal characteristics of coaches include personality traits (i.e., agreeableness and extraversion), experience, and self-efficacy, and for coachees, personality traits (i.e., agreeableness and conscientiousness) are of interest. The process variables of interest in this work include leader-member exchange (LMX) and trust.

To achieve my aim of determining how coach and/or coachee characteristics affect the mechanisms of coaching relationships, first, I will provide background and evidence of the importance of leadership to work outcomes, followed by a brief background on leader development. Then, a discussion of the specific leader development technique of coaching will be presented, including definitions of coaching and its goals, as well as proposed models and associated outcomes of this particular leader development technique. Next, the discussion will move to some of the process variables involved in coaching (i.e., LMX and trust). To understand and make a case for how these variables may affect the process of coaching, I will draw from previous research on leadership and team phenomena in which these two variables are often studied. Then, specific inputs (e.g., coach and coachee characteristics) and their impacts on the

relationships of interest will also be discussed. The hypotheses for this work will be presented, driven by previous research on coach and coachee characteristics, LMX, and trust, followed by the method of this study, including details about the participants and study design. Further, analyses conducted following data collection will be outlined, and finally, the contributions and implications of this project will also be noted.

### **The Importance of Leadership**

“Leadership is key to the success of an organization” (Leonard, Lewis, Freedman, & Passmore, 2013, p. 2). Vital components of any organization, leaders offers organizations competitive advantages when it comes to work processes and outcomes. Decades of research have determined the fundamental importance of leaders for organizations (see Dinh et al., 2014 for a review) as leaders influence individual, team, and organizational performance (Gerstner & Day, 1997; T. A. Judge, Piccolo, & Ilies, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). In fact, leaders are believed to impact organizations through the individuals and teams they lead (Ilies, Nahrgang, & Morgeson, 2007), and the impact of leaders on lower levels in an organization has aptly been referred to as “falling dominoes” (Bass, Waldman, Avolio, & Bebb, 1987). For example, at the individual level, it is understood that leaders influence the job performance, satisfaction, motivation, self-esteem, and well-being of their followers (Fiedler & House, 1988), and leaders having a significant impact on their followers’ attitudes toward work is believed to impact followers’ work-related behaviors (e.g., Bass, 1998; Belschak & Den Hartog, 2010; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Rowe, Cannella Jr., Rankin, & Gorman, 2005). Further, as leadership has been described as the process of influencing the behavior of others resulting in specific outcomes (Yukl & Van Fleet, 1992), scholars have studied and established the

important effect leaders have on the link between individual performance and organizational performance (Barling, Weber, & Kelloway, 1996; Bass, 1998; Crant, 2000; Keller, 2006; Yukl, 2010).

It has also been established that, in general, leaders aid team performance across work domains (Morgeson, DeRue, & Karam, 2010), as the effectiveness of leaders shares a strong relationship with the performance of their teams (Hackman & Wageman, 2005; House & Baetz, 1979; Smith, Carson, & Alexander, 1984; Stogdill & Bass, 1981). It cannot be overstated that leaders play a pivotal role in promoting, developing, and maintain team effectiveness (Zaccaro, Rittman, & Marks, 2001). In addition to performance, research has shown how leaders impact behavioral and attitudinal team outcomes as well, including team satisfaction (Fleishman, 1953) and team learning (C. S. Burke et al., 2006). Indeed, leaders are shown to influence their teams through various functions and behaviors (C. S. Burke et al., 2006; McGrath, 1962; Morgeson et al., 2010), such as establishing expectations and goals for the team and promoting team learning and adaptation (Edmondson, 1999; Kozlowski, Gully, McHugh, Salas, & Cannon-Bowers, 1996).

At an even broader level, leaders impact organizational performance, for better or for worse (Dinh et al., 2014; Kaiser, Hogan, & Craig, 2008). Numerous studies have determined a link exists between the individuals in leader roles and organizational performance; changes in leaders result in changes in organizational performance (Barney, 1991; Barrick, Day, Lord, & Alexander, 1991; Day & Lord, 1988; Kaiser et al., 2008; Thomas, 1988). For example, one study determined that top-level leaders explained as much as 45 percent of the variance in organizational performance (Day & Lord, 1988). Although the success of organizations is determined by more than its leaders, research has demonstrated that *leaders* have a substantial influence on organizational effectiveness (Kaiser et al., 2008).

It, therefore, follows that leaders can be considered “a solution to the problem of collective effort” (p. 96) at multiple levels, which involves bringing individuals together and combining their efforts with the aim of successfully completing work tasks (Kaiser et al., 2008). Essentially, leaders are charged with enabling their followers to achieve their individual goals, establishing contingent reward systems that promote goal accomplishment, and assisting followers as needed (House, 1996; House & Mitchell, 1974). Further, leaders contribute to team and organizational goals by coordinating and guiding their subordinates to obtain group goals (Colbert & Witt, 2009). To do so, they provide strategy, direction, and vision; engage in motivation and coping behavior; enforce and interpret organizational policies; and obtain resources for their followers, among other functions. Overall, leaders possess direct and indirect influence over individual, team/department, and organizational level outcomes (Lord & Dinh, 2014).

In addition to the focus on leaders as powerful drivers of outcomes at multiple levels, there has also been a renewed interest in the impact of leaders in organizations due to ongoing trends such as globalization of business and diversity in the workforce (W. L. Gardner, Lowe, Moss, Mahoney, & Cogliser, 2010) and the introduction of new technologies at an unprecedented pace (O'Toole & Lawler, 2006). Often, leaders are expected to address these now common workplace challenges (Cumberland, Herd, Alagaraja, & Kerrick, 2016; Leonard et al., 2013) and are charged with responding to various changes and challenges in the workplace in a positive and ethical manner (Heifetz, 1996). As Zaccaro and colleagues (2001) state, leaders are responsible for diagnosing problems, generating solutions, and implementing those solutions, and as a result, leaders undergo extreme amounts of pressure and stress to meet and adjust to continually changing expectations and needs in ambiguous environments (Hunter & Chaskalson, 2013). Building leadership skills needed in the volatile business world (e.g., problem-solving skills) often requires

leader development efforts, as development is focused on enhancing the potential and the capacity of an individual to act effectively in situations in which there may be no perfect or “right” solution (Day & Antonakis, 2013).

## **Leader Development**

The individual skills and behaviors needed to fulfill leadership duties serve as the focus of leader development efforts. It is important to note that effective leaders can be selected into an organization based on certain personal characteristics; however, there is little doubt that leader development efforts are also a viable avenue for increasing leader capability within an organization (and often the two options are both used to increase leader capabilities in an organization with selection preceding training and development). Further, the “war for talent” (i.e., the ongoing challenge organizations face in staffing positions with highly qualified individuals) often leaves development efforts as the only option to improve capacity in certain roles.

Overall, leader development involves designing and implementing social structures and processes that sustain ongoing and continuous development efforts for leaders (Day & Harrison, 2007) and acts as a source of competitive advantage for organizations (Hirst, Mann, Bain, Pirola-Merlo, & Richver, 2004). Day, Fleenor, Atwater, Sturm, and McKee (2014) define leader development as a dynamic process, which involves multiple interactions that persist over time and is shaped by factors such as personality traits and relationships with other parties. Research on leader development stemmed from the study of transformational and transactional leadership theories, attempting to move the focus of leadership research from specific traits (which can be used in selection systems) to more behavior-focused criteria for leaders (Lord, Day, Zaccaro,

Avolio, & Eagly, 2017). This focus on leader behaviors eventually led to work on leader development interventions to train specific behaviors (e.g., goal setting).

Because organizations view leaders as a competitive advantage, they tend to invest in leader development heavily (DeRue & Wellman, 2009; Hirst et al., 2004), and as Day and colleagues (2014) state, “The development of effective leaders and leadership behavior is a prominent concern in organizations of all types” (p. 63). A majority of funds in training budgets of organizations is designated for leader training and development efforts (Ho, 2016), further indicating how leader development is a crucial strategic priority (Lacerenza, Reyes, Marlow, Joseph, & Salas, 2017). However, only a small percentage of organizations believe their leader training and development programs are highly effective (Lacerenza et al., 2017). This finding draws scrutiny around organizational development efforts and illustrates why leader development is a significant topic worthy of research attention.

Before continuing with the purposes and outcomes of leader development, it should be noted that leader development and leadership development can be considered different initiatives with unique aims. Specifically, leader development is an intrapersonal process and pertains to the fostering of individual-based human capital, such as individual knowledge, skills, and abilities; leadership development, on the other hand, is interpersonal and refers to fostering social capital at collective levels (e.g., teams, organizations; Day, 2000; Day et al., 2014). For the purposes of this work, leader development is the main focus as the technique of coaching often operates at the individual level. Unfortunately, as Lord and colleagues (2017) state, although leader development aimed at individuals is crucial for organizational success, research in this area has fallen behind the strides made in practice. Further, leader development research has a relatively short history compared to the overall history of leadership theory and research (Day et al., 2014). In the leader

development research that has been conducted, the primary emphasis has been on individual-based knowledge, skills, and abilities (Day, 2000) with the aim of increasing the human capital within an organization (Day & Harrison, 2007). Avolio, Walumbwa, and Weber (2009) discuss how leader development has been conceptualized historically, starting with a deficit-reduction model, which focused on determining what was “wrong” with a leader and working to correct those deficits (Avolio & Luthans, 2006). The authors cite research indicating a broaden-and-build theory is more useful for characterizing leader development efforts, as this theory focuses on individual growth and the ability to build personal resources to perform (Fredrickson, 2001), rather than leader shortfalls. As such, leader development efforts are intended to build intrapersonal competence (H. Gardner, 1993), and developed leaders are believed to possess awareness and consideration of their contexts and include their followers’ perspectives more often (Day & Harrison, 2007). These initiatives also allow individuals to engage in healthy attitude and identity development (Hall & Seibert, 1992) and use that self-model to perform effectively in roles.

Leader development efforts have been shown to result in the intended effects. Previous research has found that leader interventions have a positive impact on important work-related outcomes, such as ratings of leader performance (DeRue, Nahrgang, Hollenbeck, & Workman, 2012; Dragoni, Park, Soltis, & Forte-Trammell, 2014; Reichard & Avolio, 2005). Leader development efforts have been shown to increase leaders’ confidence, broaden the perspectives of leaders, and improve leaders’ communication skills (e.g., Rohs, 1999; Solansky, 2010; Williams, 1981). Avolio, Reichard, Hannah, Walumbwa, and Chan (2009) calculated the return on investment (ROI) for leader development and intervention efforts (what the authors coin “RODI” – return on development investment) and found a positive ROI for these interventions, with some yielding up to 200 percent ROI. Further, this work determined through meta-analytical methods

that leader development efforts were effective across the type of effort, the type of organization, the level of leaders targeted, and the outcomes measured. Applying a training lens, Lacerenza and colleagues' (2017) meta-analytic work on 335 samples determined that leader training and development efforts resulted in improvements in reactions, learning, transfer of training, and results (with effect sizes ranging from .63 to .82). Further, corroborating and extending the work of M. J. Burke and Day (1986), Collins and Holton III (2004) found meta-analytic support for leader development programs improving a range of important outcomes, including knowledge (e.g., an increase in principles/facts learned at the end of an intervention), behavior (e.g., on-the-job actions taken after an intervention), and system (e.g., reduced costs, improved quality after an intervention) outcomes. The authors conclude that organizations can and should reap the desired benefits from leader development efforts.

Many approaches to leader development exist and include coaching, mentoring, networking, job assignments, action learning projects, and leader training (Day, 2000). In addition to multiple developmental activities, organizations are progressively asking for ways to accelerate development efforts (Avolio, Walumbwa, et al., 2009), and research testing theoretically based methods for improving leader development are needed (Day & Antonakis, 2013). Further research on coaching is no exclusion from this call for more rigorous testing of leader development initiatives.

### **Coaching as a Leader Development Effort**

One commonly used leader development intervention in organizations is coaching (i.e., executive coaching, business coaching; Feldman & Lankau, 2005). Coaching has been assigned multiple definitions, such as a “one-to-one relationship between a coach and coachee who work



together to identify and achieve organizational, professional, and personal developmental goals” (Sonesh, Coultas, Lacerenza, et al., 2015) and a “practical, goal-focused form of one-on-one learning” (Day, 2000; p. 588). Among the definitions, most agree that coaching includes “a series of one-to-one interactions between a manager or executive and an external coach” (C. D. McCauley & Hezlett, 2002; p. 321) to aid leaders in learning specific skills or behaviors (Witherspoon & White, 1996) and to equip individuals with the various tools, knowledge, and opportunities needed for development and effectiveness (Peterson, 1996). For the purposes of this work, a coachee is defined as an individual employee receiving and participating in coaching from a leadership coach. The objectives of coaching include: improving the individual performance and personal satisfaction of the coachee as proximal outcomes, and more distally, enhancing organizational effectiveness (Day, 2000), and Joo (2005) states the purposes of coaching provided throughout the literature can be reduced to behavioral change, self-awareness, learning, and consequently, individual success and organizational performance. These objectives can be accomplished through various coaching techniques, and some strategies include: assessment (of personality traits, competencies/skills, and deficiencies, for example), confrontation, goal setting, action planning, structured learning, creative problem solving, role playing, immersion, rehearsal, dialogue, reframing, and visualization, to name a few (Carey, Philippon, & Cummings, 2011; Giglio, Diamante, & Urban, 1998; Kiel, Rimmer, Williams, & Doyle, 1996; McNally & Lukens, 2006). Previous research has determined that to achieve the aims of coaching, coaches, especially psychologist coaches (as opposed to coaches with no background in the field of psychology), use multiple techniques when working with coachees (rather than one technique per relationship; Bono, Purvanova, Towler, & Peterson, 2009; Kilburg, 2000).

Ely and colleagues (2010) posit that coaching is a unique training and development effort for four distinguishing reasons: (1) coaching focuses on the needs of the coachee and the organization; (2) coaching requires coaches to have unique sets of skills; (3) coaching places a “premium” on the relationship between the coach and coachee; and (4) coaching demands process flexibility to obtain results. For these reasons, the authors conclude that coaching can address a range of issues, from learning a new skill to applying the new skill in the workplace effectively.

Some attempts to outline how coaching as a leader development initiative operates have been put forth in the coaching literature, and to illustrate the specific steps involved in a coaching relationship, various models of coaching have been created. The commonalities underlying these models include relationship building, problem defining, problem solving, and a transformation process (Carey et al., 2011). Carey and colleagues (2011) also provide examples of each of these elements such as building trust between the coach and coachee (i.e., relationship building), using a 360-degree survey to gain insight on developmental needs (i.e., problem defining), building a development plan with specific actions for the coachee (e.g., problem solving), and engaging in actions to improve, such as role playing, seeking feedback, and completing stretch assignments (i.e., transformation process). One example of a model focused on coaching for leader effectiveness is the Individual Coaching for Effectiveness Model (Hellervik, Hazucha, & Schneider, 1992). This model describes three stages of the process: diagnosis, coaching, and lastly, maintenance/support. Similarly, Kampa-Kokesch and Anderson (2001) posit that coaching can be described in the following stages: relationship building, assessment, intervention, follow-up, and evaluation. Considering various models is useful when studying the process of coaching as it is important to understand the stages coaches and coachees undergo throughout their relationships. These stages form the building blocks from which any improvement as a result of coaching is

experienced and from which relationships between the two parties are developed. Despite the various models developed over the years, as Lowman (2005) stated, in the past, the field of coaching has tended to be an area more focused on practice than on theory or research. This work aims to use applied research to connect the practice of coaching to relevant theories and previous research, such as LMX theory.

The efficacy of coaching to improve leader and organizational outcomes cannot be overstated. The relationship between coaching and outcomes is important for both broad and narrow reasons. First, broadly, coaching has been discussed as a means of ensuring effective succession planning and development of high-potential leaders within organizations (Carriere, Muise, Cummings, & Newburn-Cook, 2009) and has been shown to be important to organizational performance (Cortvriend, Harris, & Alexander, 2008). Additionally, coaching has the potential to facilitate the retaining of leadership talent, as well as improve performance at the organizational level (Carey et al., 2011). At a more granular level, coaching can positively impact individual outcomes, including task performance, relationships with others, and attitudinal variables, and coaching has been found to have positive effects on leader skills and overall job performance (Sonesh, Coultas, Lacerenza, et al., 2015). Additionally, multiple studies have demonstrated the influence coaching has on individual goal attainment (Bowles, Cunningham, De La Rosa, & Picano, 2007; Grant, Curtayne, & Burton, 2009; Sonesh, Coultas, Lacerenza, et al., 2015), based in goal-setting theory, which contends that goals improve performance by directing an individual's energy, attention, and effort over time and motivating the individual to create strategies for goal attainment (Locke, Shaw, Saari, & Latham, 1981). In addition to improving goal-directed self-regulation, Theeboom, Beersma, and van Vianen (2014) found coaching also positively affected individual job performance and skills, well-being (e.g., reduced burnout), coping skills (e.g.,

increased self-efficacy and mindfulness), and work attitudes (e.g., job satisfaction), leading the authors to conclude coaching is an effective means of improving employee effectiveness in organizations.

As outlined by de Haan and colleagues (2013), there are some specific studies that serve as exemplars in demonstrating the efficacy of coaching and offer substantial justification for using coaching to improve leader capabilities and outcomes. For example, in one of the most comprehensive coaching studies to date, Smither and colleagues (2003) tracked senior managers over two years and determined that after participating in two or three coaching sessions, the managers were more likely to set specific goals, ask for ideas for improvement from their supervisors, and receive higher 360-degree ratings from direct reports and superiors than managers who did not undergo any coaching. Focused on a shorter timeframe, Olivero and colleagues (1997) found that eight weeks of one-on-one coaching (which included goal setting, problem solving, feedback, presentations, etc.) increased the productivity of managers in a public agency by almost 90 percent. Interested in subjective ratings, Thach (2002) found that coaching provided over five months to executives and high-potential managers in a telecommunications firm increased 360-degree ratings of leader effectiveness by 60 percent. Interested in the effects of a single coaching session, Luthans and Peterson (2004) studied 20 senior and midlevel managers who participated in one coaching session and found that three months later, ratings provided by supervisors, peers, and direct reports of behavioral and interpersonal competence of the coachees had significantly increased. Within a U.S. Army recruiting context, Bowles and colleagues (2007) found that a year-long coaching program resulted in individual growth on specific leader competencies of interest and the achievement of self-set goals. Further, Evers and colleagues (2006) discovered that

managers, who all met with their coaches an average of three times, increased both their self-efficacy beliefs and outcome expectancies after coaching sessions.

Support for behavioral indicators of leader improvement as a result of coaching has also been provided. For instance, Perkins (2009) demonstrated significant behavioral changes in a range of positions (i.e., from CEO to director) during meetings (e.g., summarizing key points, asking for consensus more frequently). Hernez-Broome (2002) witnessed changes in on-the-job behavior (e.g., changes in coachees' own coaching behavior towards others, their ability to empower others, and interpersonal behaviors) with only one coaching phone call a month for three months. Additionally, Sue-Chan and Latham (2004) found improvement on a behavioral observation scale of team leadership behaviors (e.g., informs team members, coordinates upcoming work, etc.) for students who participated in just two coaching sessions with a faculty member. Kochanowski, Seifert, and Yukl (2010) found improvement in managers' behaviors following coaching, as those who received coaching increased their use of collaboration as a proactive influence tactic according to their subordinates. Research conducted by Kampa-Kokesch (2001) witnessed increased ratings (both by coachees and direct reports of the coachees) of charismatic behavior in upper-management leaders and CEOs following coaching. Further, in a case study with a senior executive, Orenstein (2006) found significant results for improvement in behaviors directly related to coaching objectives (e.g., giving credit to others, listening to others, allowing challenges to one's own position) as report by the individual's peers, direct reports, and customers. Similar case studies demonstrating the efficacy of coaching for behavioral improvements have also been published (e.g., Blattner, 2005; Cooper & Quick, 2003; Giglio et al., 1998). Discussing the common thread among these research efforts, Wasylshyn (2003) found that the majority of coaching relationships studied were focused on behavioral changes (e.g., improving

listening skills, engaging in stress reduction techniques, exhibiting persuasion and influence) and sustaining those changes over time. Taken altogether, previous research has demonstrated the efficacy of leadership coaching (Baron & Morin, 2009; Bowles et al., 2007; Boyce et al., 2010; Campbell, 1989; Cortvriend et al., 2008; Day, 2000; de Haan et al., 2013; Ellinger, Ellinger, & Keller, 2003; Evers et al., 2006; Hernez-Broome, 2002; Kampa-Kokesch, 2001; Kochanowski et al., 2010; Ladegard & Gjerde, 2014; Luthans & Peterson, 2004; Olivero et al., 1997; Perkins, 2009; Seifert, Yukl, & McDonald, 2003; Smither et al., 2003; Smither & Reilly, 2001; Sonesh, Coultas, Lacerenza, et al., 2015; Sue-Chan & Latham, 2004; Thach, 2002; Theeboom et al., 2014; Wasylshyn, 2003).

Now, to expand upon the foundation provided by these tests of coaching effectiveness, research efforts need to model coach and coachee characteristics and involved processes to advance this area and move beyond studying the effectiveness of the mere application of coaching or specific coaching skills and techniques that do not provide a full picture of coaching (de Haan et al., 2013). Through coaching, coachees benefit from a personalized and intensive process, a major advantage of employing coaching as a development initiative. However, a significant consideration of engaging in a coaching process is the financial costs associated with such an investment. Because of the accompanying expenses, great care should be taken to ensure coaching efforts result in the largest possible return on investment. Further, based on the differential impacts across coach-coachee pairs seen in the literature (de Haan, Grant, Burger, & Eriksson, 2016; Hooijberg & Lane, 2009; Sonesh, Coultas, Lacerenza, et al., 2015), it is important to determine the factors that differentiate effective coaching relationships from ineffective ones to maximize the efficacy of these relationships. As Ely and colleagues (2010) state, research needs to better understand predictors in the coaching relationships, including coach characteristics, coachee

characteristics, and coaching process variables. This gap occurring in the leader development and coaching literature is crucial to address so that we are more effectively able to build successful coach-coachee pairs to train coachees to more successfully perform in their roles, as well as to foster those mechanisms that increase the quality of such relationships. Being able to do so, we can ultimately improve the outcomes of coaching (Boyce et al., 2010). Therefore, although research has demonstrated the overall efficacy of coaching, questions remain as to the specific drivers and processes that allow coaching to be an effective tool (one exception can be found in Sonesh, Coultas, Marlow, et al. (2015), in which the authors examine information sharing and working alliance as mediators between coach and coachee inputs and specific outcomes). This is not surprising as Dinh and colleagues (2014) state, our science knows much more about the outcomes of leadership than the processes that affect these outcomes, and the same is true about processes in coaching relationships that may be affecting leadership outcomes. However, as de Haan and colleagues (2013) discuss, various factors have been shown to be important across “helping” professions (e.g., counselors), such as both parties’ personalities, individuals’ self-efficacy, and the quality of the relationships (each will be discussed in turn later with additional considerations).

As the efficacy of coaching as a leader development tool has been firmly established, the focus needs to change to the variables that allow for its success. As Fillery-Travis and Lane (2006) and Theeboom and colleagues (2014) state, researchers need to turn attention from the question “Does it work?” to “*How* does it work?” When studying coaching, there are several processes that may be driving the ability of the parties in coaching relationships to attain desired outcomes (e.g., perceptions of a strong working alliance, trust, information sharing, perceptions of similarity; Theeboom et al., 2014). As previous research has demonstrated (i.e., de Haan et al., 2013;

Gyllensten & Palmer, 2007; Sonesh, Coultas, Marlow, et al., 2015), there is value in fostering strong, high-quality relationships between coaches and coachees. Indeed, McGovern and colleagues (2001) determined that approximately 87 percent of coachees surveyed credited the success of coaching efforts to the quality of the relationships. When considering relationships at a dyadic level, LMX and trust are two common emergent variables often studied (Dinh et al., 2014). LMX and trust have been shown to be important for building strong, high-quality work relationships, and therefore, it is my intention to examine these specific mechanisms and how they may be acting as driving influences in coaching relationships. Specifically, I am interested in these two variables and their respective linkages to antecedents of interest in coaching relationships.

### **Leader-Member Exchange**

Exchanges between an individual and his or her leader are referred to as leader-member exchange (LMX; Graen & Scandura, 1987), and LMX theory posits that leaders develop different relationships of varying quality with each of their followers based on their social exchanges (Dansereau Jr., Graen, & Haga, 1975; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Liden & Graen, 1980). LMX is considered a process that occurs over time (Day, 2014), and when used as a relational-based approach to leadership, the main tenant of LMX theory is that effective leadership processes occur when leaders and followers are able to develop mature leadership relationships with each other, and thus, gain access to the many benefits these relationships can offer (e.g., shared resources, social support; Graen & Uhl-Bien, 1991). Extrapolating the basis of LMX theory to coaching relationships, as coaching relationships share parallels to traditional leader-follower relationships, one could posit that relationships between coaches and coachees that are characterized by high-quality LMX will result



in better interactions, exchanges, and relational and work outcomes for both parties. Indeed, de Haan, Culpin, and Curd (2011) conclude that the effectiveness of coaching is not dependent on specific techniques but rather on the quality of the coaching relationship among other important factors (e.g., expectations, understanding). As LMX represents relationship quality and views relationships from a social exchange lens (Blau, 1964; Graen & Scandura, 1987), it is logical to conclude many of the same processes involved in leader-follower relationships can occur in coach-coachee relationships which are inherently embedded in a social context. In terms of the advantages and requirements for both parties involved in coaching relationships, the beneficial outcomes associated with coaching for coachees are evident as already outlined (e.g., improved performance, increased satisfaction, etc.) and require the coach to provide the necessary resources (e.g., coaching expertise, training materials, opportunities to practice learning, meeting time) to fulfill those objectives of coaching. For coaches, coaching relationships also offer benefits and require commitment from the coachees. First, a coach should desire a productive working relationship with his or her coachees to continue the engagement (in some coaching programs, the coachees may have the option to discontinue coaching if they realize no benefit, potentially damaging a coach's reputation and, possibly, income source). Further, coachees' outcomes and progress as a result of coaching serve as a testament to the coach's success and work performance and can assist coaches in obtaining further work and gaining more coachees. For these reasons, coaches desire strong working relationships with their coachees and should work to obtain and maintain the commitment from coachees that lead to the desired results. Overall, both parties in coaching relationships serve to benefit from gaining access to the resources the other party possesses (e.g., commitment, impact on coaching reputation, and continued work on the coachees' end; coaching expertise and resources on the coaches' end). To further understand how LMX may

operate in coaching relationships, it is useful to consider how this mechanism operates in traditional leadership contexts.

Previous research has highlighted a host of variables that serve as antecedents to LMX and predict the quality of resulting LMX, such as the perceived contributions of the other party (van Gils, van Quaquebeke, & van Knippenberg, 2010). In addition to the contributions made by the parties, Dulebohn and colleagues (2012) discuss how interpersonal relationship variables (e.g., perceived similarity, liking, trust) play a role in the relationship quality that develops between a leader and a follower. Additionally, leader and follower characteristics (e.g., competence, personality traits, expectations, and behaviors; Dulebohn et al., 2012) have been shown to influence the development of LMX. Further, Nahrgang, Morgeson, and Ilies (2009) determined both individual characteristics and behavior shape the quality of relationships over time, as does the performance of each party.

Considering the impact of leader characteristics on LMX development, a leader's level of agreeableness has been shown to influence relationship quality from the very first interaction between the two parties (Nahrgang et al., 2009). The agreeableness of a leader being related to LMX has been corroborated by others as well (Bernierth, Armenakis, Feild, Giles, & Walker, 2007; Dulebohn et al., 2012). A link between a leader's level of extraversion and LMX has also been discovered, in which leaders higher in extraversion experience relationships of higher quality, which is believed to be driven by the fact that extraverted individuals will likely seek social interactions, thereby increasing opportunities to develop a high-quality LMX with followers (Dulebohn et al., 2012). This finding is not surprising as extraversion has been found to be the most consistent correlate of leadership across studies (T. A. Judge, Bono, Ilies, & Gerhardt, 2002). In addition to personality traits, other attributes of leaders have also been linked to LMX. For

example, the experience of a leader is related to LMX as postulated by Wayne, Liden, and Sparrowe (1994). The authors discuss how a leader's experience could impact the rewards, resources, advice, and guidance the leader can offer his/her followers, thereby impacting the development of LMX. Further, Wang, Fang, Qureshi, and Janssen (2015) discuss how one of the benefits of having a high-quality relationship with a leader is the opportunity to profit from the experience and knowledge the leader has attained. Similar to experience, the self-efficacy of a leader has proved to be important for developing LMX as well (Murphy & Ensher, 1999), which is not surprising considering leader confidence is related to persuasiveness and influence (Bass, 1990), and individual self-efficacy is generally linked to other notable outcomes, such as performance and career-related activities (e.g., skill development; Stajkovic & Luthans, 1998).

Research has also examined the effects of followers' personality traits on relationships, further demonstrating the importance of personality to the study of LMX. A follower's level of extraversion has been shown to influence relationship quality from the very beginning of the relationship (Nahrgang et al., 2009), and Bernerth and colleagues (2007) determined that employees' conscientiousness, extraversion, and emotional stability all impacted the LMX developed between leaders and followers. Further illustrating the important role the traits of followers play, Dulebohn and colleagues (2012) found that agreeableness, extraversion, and conscientiousness of followers were all positively associated with LMX. Not only have the direct effects of followers' characteristics been considered, but also the interactive effects of such attributes with other inputs, such as leader features, have been examined to understand how the interplay between various inputs leads to outcomes (Liden, Sparrowe, & Wayne, 1997). For example, Monzani, Ripoll, and Peiró (2014) found that follower agreeableness moderated the relationship between authentic leader behaviors and employee loyalty toward leaders (i.e., an

important component of LMX; Liden & Maslyn, 1998). To gain a deeper sense of why LMX is important in relationships though, outcomes related to this theory must be considered in addition to the aforementioned inputs.

Indicating the importance of this variable, LMX has been linked to various outcomes (Lord et al., 2017), such as follower performance ratings (Wayne, Shore, & Liden, 1997), organizational commitment, job satisfaction, follower well-being (Epitropaki & Martin, 2005), individual empowerment (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007), turnover (Dansereau Jr. et al., 1975), and organizational citizenship behavior (Ilies et al., 2007). Further, through meta-analytic investigation, Gerstner and Day (1997) found positive relationships between LMX and objective performance, satisfaction with one's supervisor, overall satisfaction of the follower, and role clarity. The authors also determined negative relationships exist between LMX and role conflict and turnover intentions, and they conclude that having a high-quality relationship with one's leader can affect the whole work experience, including performance and affective outcomes, in a positive manner. However, not only is LMX studied as a direct input leading to outcomes; it has also been studied as a mediator to important consequences in many instances (see Dulebohn et al., 2012 for a meta-analytic review of LMX as a mediator). For example, LMX has been examined as a mediating link between follower characteristics (e.g., positive affect) and outcomes; leader variables (e.g., transformational behavior, contingent reward behavior) and outcomes; and relationship characteristics (e.g., trust) and outcomes (Dulebohn et al., 2012).

Describing relationship quality as an important driver of outcomes, Day (2000) hypothesized that the quality of a coaching relationship would be positively associated with the effectiveness of coaching for the development of an individual, similar to how LMX impacts leader and follower effectiveness. Thus, it is logical to conclude that LMX, as an indication of the quality

of a coaching relationship, will play an important role in the inputs, processes, and outcomes of a coaching engagement as both the coaches and coachees benefit from but must also commit to their coaching relationships. As such, previous LMX research has implications for the current work and is considered in developing support for hypotheses. More specifically, this work is interested in the inputs of coach and coachee characteristics and their influences on LMX.

## **Trust**

Interpersonal trust has been defined as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998; p. 395) and is thought to reflect one’s perceptions of the ability, benevolence, and integrity of the other party (R. C. Mayer, Davis, & Schoorman, 1995). Ability refers to the skills that enable an individual to be competent within a specific domain; benevolence is the extent to which the individual is believed to feel interpersonal care and concern for others; and integrity is an individual’s adherence to a set of principles that make that individual dependable and reliable (R. C. Mayer et al., 1995). It comes as no surprise that trust is regarded as an important component of any relationship and is often studied in the context of leadership relationships (Dirks & Ferrin, 2002). In a leadership context, trust is thought to operate according to a process of social exchange (e.g., Konovsky & Pugh, 1994; Whitener, Brodt, Korsgaard, & Werner, 1998), with parties behaving on the basis of trust, goodwill, and mutual obligations (Blau, 1964). Further, trust and LMX are often studied together (e.g., Brower, Schoorman, & Tan, 2000), and therefore, it is plausible to consider that both of these variables are involved in leadership coaching, rather than just one variable alone. Regarding trust, as coaching involves a relationship with one party presumably possessing higher expertise and control (e.g., the coach), it is logical to

consider trust as an important factor in these relationships as well (Bluckert, 2005; Graham, Wedman, & Garvin-Kester, 1994; Gregory & Levy, 2011; Gyllensten & Palmer, 2007; Jones & Spooner, 2006; Kowalski & Casper, 2007; Phillips, 1998; Theeboom et al., 2014). de Haan and colleagues (2013) state it best: “Coaching is tailored to individuals so that they learn and develop through a reflective conversation within an *exclusive relationship that is trusting, safe, and supportive*” (p. 2). Indeed, trust as a process variable has been evaluated in terms of its impact on the quality of the coaching relationships. In one of the first empirical tests of trust in the coaching process, Gregory and Levy (2011), interested in coaching provided by supervisors, determined that trust in supervisors (as rated by subordinates) impacted the employees' evaluations of the coaching relationships at hand, such that more trust in the supervisor resulted in a better evaluation of the coaching relationship. The authors conclude one could make the case that trust was the most important predictor of perceived quality of the coaching relationships in their study. Indeed, trust has been described as the foundation for a successful coaching relationship (Smither & Reilly, 2001). To explicate this relation further, Ely and colleagues (2010) outline reasons trust is important in coach-coachee relationships; first, establishing trust within these relationships provides the mutual safety and security needed to engage in open, candid, and honest dialogue. Additionally, developing trust between parties allows the individuals to manage their expectations and establish boundaries. Essentially, trust forms a beneficial environment that supports the coaching process (Ely et al., 2010). Indeed, the authors feel so strongly about trust being a crucial piece of the coaching process that they recommend it should be measured and used in evaluations of coaching effectiveness.

To properly understand how trust operates in coaching relationships, it is important to consider the common precursors to trust in interpersonal relationships. Antecedents of trust have

been studied quite extensively, especially in the leadership literature. One of the most common traits associated with interpersonal trust is agreeableness (Evans & Revelle, 2008; Hiraishi, Yamagata, Shikishima, & Ando, 2008; D. Mayer, Nishii, Schneider, & Goldstein, 2007; Mooradian, Renzl, & Matzler, 2006), both on the part of the leader and the follower when embedded in leadership contexts (Nahrgang et al., 2009). McCarthy, Wood, and Holmes (2017) ascertained that agreeableness is a key determinant in predicting trust, such that individuals who are highly agreeable are more likely to trust others and engage in higher levels of emotional disclosure. The authors state the connection between agreeableness and trust is logical due to the nature of agreeableness as a trait that reflects “the positivity of interpersonal motivations and behaviors” (p. 95). This link between being agreeableness and trusting others is not a new notion (see Costa Jr. & McCrae, 1988; McCrae & Costa Jr., 1987). Further, an agreeable individual has a higher likelihood of others trusting him or her (Costa Jr. & McCrae, 1992), and therefore, agreeable individuals are both trusting and trustworthy (McCrae & Costa Jr., 2008).

Another important personality component in predicting trust is extraversion. Previous research has determined that extraverted individuals are more willing to trust others than introverted individuals (Ben-Ner & Halldorsson, 2010; Bergman, Small, Bergman, & Rentsch, 2010; Evans & Revelle, 2008; Gaines Jr. et al., 1997; Hiraishi et al., 2008; Oskarsson, Dawes, Johannesson, & Magnusson, 2012; Swope, Cadigan, Schmitt, & Shupp, 2008). Oskarsson and colleagues (2012) postulate that extraversion is related to trust due to its sociability quality and the premise that extraverted individuals desire engaging with others and building new social relationships, which allow for more opportunities to develop trust with others. Further, Bergman and colleagues (2010) add that due to extraverts’ increased tendency toward pleasant affect (Ashton, Lee, & Paunonen, 2002), these individuals also likely perceive others as trustworthy to

continue engaging in and enjoying social activities and environments. There is also research to suggest that individuals tend to trust extraverts (Thielmann & Hilbig, 2014), building the case that, similar to agreeable individuals, extraverted individuals trust and are trusted.

In addition to personality traits, other individual differences have also been included in the study of interpersonal trust. In a unique study of trust in dyads engaged in negotiations, Lu, Kong, Ferrin, and Dirks (2017) found that specific individual attributes (i.e., positive affect, negative affect, and social motives) had strong relationships with interpersonal trust in the expected directions (e.g., the higher the negative affect, the less interpersonal trust). An individual's ability (e.g., skills and competencies) has also been discussed as a crucial antecedent to trust (Brower et al., 2000; R. C. Mayer & Davis, 1999; R. C. Mayer et al., 1995; Schoorman, Mayer, & Davis, 2007). Further, an individual's experience and tenure have been shown to impact the trust within relationships as well, especially in leader-follower relationships. Sarros and Sarros (2011) determined that trust in a leader is associated with seniority and length of tenure, as more leadership experience is met with more trust from others. In a prescriptive fashion, Jung and Avolio (2000) stress the importance of building trust in leadership contexts and presume initial levels of trust in a leader are predicated upon relevant characteristics such as experience, among others (e.g., expertise, education). As Groves (2005) states, an individual's previous experience in leader roles will enable and shape the interpersonal behaviors and skills he or she utilizes with their followers. Considering a leadership coaching context, McNally and Lukens (2006) describe an experienced coach as one who understands and has the capabilities to build trust within his or her relationships. In addition to individual experience, a leader's self-efficacy and confidence in his or her experience and abilities have been shown to be important in building trust with followers (Lloyd, 2006; Oyer, 2011). Indeed, Hannah, Avolio, Luthans, and Harms (2008) postulate the higher the self-efficacy



of leaders, the more trust followers will place in those leaders, and Murphy (2002) states that self-confidence is necessary to build trust with followers. Taken altogether, as outlined here, there are numerous antecedents to trust (e.g., agreeableness, extraversion, affect, ability, experience, self-efficacy), as there are also outcomes.

Trust has been linked to important outcomes through several leadership studies (see Fulmer & Gelfand, 2012 for a comprehensive review). For example, employee trust in leaders has been connected to belief of information, organizational commitment, decision commitment, organizational citizenship behavior, job satisfaction, satisfaction with leaders, intention to stay, and LMX (Bijlsma & Van De Bunt, 2003). Further, interpersonal trust in leaders is related to justice, perceived organizational support, and participative decision making (Dirks & Ferrin, 2002), as well as objective performance (Jung & Avolio, 2000). Trust in leaders has also been shown to negatively predict perceived work stress and stress symptoms as reported by employees (Liu, Siu, & Shi, 2010). All in all, interpersonal trust can affect behavioral and performance outcomes, job attitudes and intentions, and health-related outcomes (Dirks & Ferrin, 2002), and thus, it is evident that trust, especially in a leader, holds a significant position in the workplace.

Overall, trust is a crucial aspect of interpersonal relations, underscoring the importance of including this variable in the study of coaching, as done in some previous research efforts (e.g., Boyce et al., 2010; Gregory & Levy, 2011; Gyllensten & Palmer, 2007). As an example, interested in the related practice of mentoring, Lester, Hannah, Harms, Vogelgesang, and Avolio (2011) discovered that trust in a mentoring relationship predicted leader efficacy within a developmental program, such that those individuals who trusted their mentors reported stronger efficacy in their roles following the program. Similarly, without trust, a coaching relationship would not have the foundation needed to realize improvement in outcomes and overall effectiveness. Following the

argument previously made for studying LMX in coaching relationships, this work is interested in the specific inputs of coach and coachee characteristics and their influences on trust, which will be discussed in more detail next.

### **Coach Characteristics**

The characteristics of coaches (e.g., personality traits, previous experiences, professional qualifications) can play a substantial role in coaching relationships (Bono et al., 2009; Brotman, Liberi, & Wasylyshyn, 1998; Cox & Bachkirova, 2007; Jones & Spooner, 2006; W. Q. Judge & Cowell, 1997; Passmore & Gibbes, 2007; Theeboom et al., 2014; Wasylyshyn, 2003). For example, research by Bono and colleagues (2009) revealed that the background of coaches (i.e., obtaining a psychology or non-psychology education) resulted in some differences in terms of coaching practices (e.g., usage of assessment tools, activities, goals, evaluation methods) as well as differences in ratings of importance for coaching competencies (e.g., questioning, analysis and planning, communication skills, knowledge and understanding of human behavior, self-management and professionalism). Further, Brotman and colleagues (1998) discuss how the experiences, coaching tactics, psychological tools, and graduate training of coaches determine their qualification for coaching. The credibility, confidence, experience, and knowledge of coaches are also believed to be important factors in coaching relationships (Jones & Spooner, 2006), while work by Wasylyshyn (2003) determined that a clear coaching methodology, an ability to form a strong connection, and professionalism all on the part of coaches resulted in effective coaching. These results parallel general findings in the therapy literature around the characteristics of effective counselors driving desired outcomes. For example, Burns and Nolen-Hoeksema (1992) determined a therapist's experience (operationalized as tenure) directly impacted improvement in

patient outcomes, and Elliott, Bohart, Watson, and Greenberg (2011) discovered a therapist's empathy also resulted in better outcomes for patients. As such, the call from Theeboom and colleagues (2014) to more deeply explore coach characteristics as an important area of research in the coaching literature is fully warranted.

Due to the fact that previous research suggests the backgrounds of coaches will likely influence coaching relationships (e.g., higher education could increase perceptions of a coach's credibility and competency; Feldman & Lankau, 2005), these important variables need to be considered in this investigation of coach characteristics. Indeed, results from the work of Bono and colleagues (2009) indicate a coach's background (e.g., education, management experience, coaching tenure) significantly predicts how he or she will coach an individual and evaluate if the coaching is effective. Also depicting the value placed on coach experience, some previous studies have only examined experienced coaches (i.e., those who have conducted a certain number of sessions) and disregarded data of novice coaches with the intent of understanding how successful coaches conduct their work (e.g., de Haan et al., 2011; de Haan et al., 2013; de Haan et al., 2016; Scoular & Linley, 2006; Stewart, Palmer, Wilkin, & Kerrin, 2008). As a guiding example for this work, in an effort to gain more detail on experience as more than simply the number of years a person has served as a coach or the number of coachees he or she has worked with, Bono and colleagues (2009) surveyed coaches on the types of experiences and competencies that are essential for effective coaching. The results indicate experience in diagnostics and planning processes, as well as utilizing intervention and problem-solving capabilities, are important areas for a coach to have encountered and mastered. This type of information on a coach's experience can prove useful, as Bozer, Joo, and Santora (2015) state that, depending on the purpose of the coaching endeavor, leveraging a coach with relevant coaching experience (e.g., similar coaching

engagements in the past to the current situation) can be more important than attempting to match a coach and coachee based on gender or other individual attributes. For the purposes of this study, the basic aspects of a coach's experience that were explored include professional certifications, number of current coachees, total coachees over one's career, and total years of coaching experience. Beyond these demographical experience aspects, due to the fact that the types of experiences coaches have accumulated can play a role in the success of coaching efforts, these were also considered. Some specific experience areas which can be useful in coaching include interpreting assessment results, conducting assessments, creating assessment reports, designing training, providing feedback, and providing ongoing coaching. These will be discussed in more detail in the section on the measurement of coaching experience.

In terms of personality, the coach traits of interest in this work are agreeableness and extraversion. The logic behind including these two personality variables is discussed by Nahrgang and colleagues (2009). First, agreeableness and extraversion are influential variables in social interactions (Asendorpf & Wilpers, 1998; Barrett & Pietromonaco, 1997) as they are inherently interpersonal by their nature (Costa Jr. & McCrae, 1992). Further, agreeableness and extraversion are relatively salient traits, meaning individuals can assess, react, and respond to these traits in others fairly easily and quickly (Carney, Colvin, & Hall, 2007). As previously alluded to, while studying personality in a leadership context, Nahrgang and colleagues (2009) discovered that the agreeableness of a leader positively influenced ratings of relationship quality, as agreeable individuals tend to be perceived as good-natured, cooperative, and trusting (Costa Jr. & McCrae, 1988; McCrae & Costa Jr., 1987). Further, due to their helpful nature (Neuman & Wright, 1999), agreeable individuals are more likely to work cooperatively with each other (Hogan & Holland, 2003; LePine & Van Dyne, 2001), making the argument that not only could agreeableness in

coaches be viewed as a positive input, but coachee agreeableness could be too (which will be discussed in more detail later). Beyond agreeableness, extraversion can also be considered a potentially important characteristic of coaches. Again, extraversion is characterized by sociability, assertiveness, and talkativeness (Costa Jr. & McCrae, 1992; Oskarsson et al., 2012), and as such, extraverts could be expected to start conversations, seek interactions, and endeavor to learn more about other parties (Nahrgang et al., 2009). These tendencies coupled with enhanced social skills (McCrae & Costa Jr., 1999) and research demonstrating overall success in social relationships (e.g., Asendorpf & Wilpers, 1998; Barrett & Pietromonaco, 1997) indicate that extraverted coaches may be more effective in their efforts.

In addition to the coaches' personality traits, self-efficacy in terms of coaching skills can also be considered an influential characteristic of coaches. As already mentioned, a leader's self-efficacy is a crucial factor in relationships within a leadership context, so it follows that a coach's self-efficacy (i.e., a coach's perception of his or her ability to execute the functions of the coaching role effectively) should play a strong role in the success of coaching relationships (McBride, 2013). Baron and Morin (2009) note that coaching self-efficacy can be broken down into relational skills (e.g., showing empathy, respect, trust, presence, and availability), communication skills (e.g., questioning, reformulating, reinforcing, and confronting), and skills in facilitating learning and results (e.g., establishing a development plan, assessing learning, and identifying obstacles). As for empirical support of coaches' self-efficacy as an important predictor, in the limited research that has been conducted to date on the topic, de Haan and colleagues (2016) found coaches' self-efficacy positively related to coaching effectiveness, as reported by the coaches. Although a dearth of research does not exist on the self-efficacy of coaches, one can postulate that this variable will impact coaches' performance in their roles, as is the case in other contexts. For example, in an

educational context, Ware and Kitsantas (2007) investigated teachers' self-efficacy beliefs and found individuals who possessed greater self-efficacy were more likely to overcome challenging situations in the classroom. More generally, the considerable strength of the relationship between self-efficacy and job performance has also been evidenced (Stajkovic & Luthans, 1998), lending more support to the inclusion of this attribute in the study of coaching. Considering self-efficacy from these angles, this personal attribute should be examined as an input into coaching relationships.

Therefore, the characteristics possessed by coaches that may be influential in coaching relationships and that are of interest in this work are agreeableness, extraversion, coaching experience, and coach self-efficacy. Other inputs in coaching relationships should also be examined to test for effects on the outcomes of interest. In addition to coach characteristics, coachee characteristics need to be considered as important factors in coaching relationships.

### **Coachee Characteristics**

As coaches' characteristics can impact coaching relationships, so can the attributes of coachees. Individual differences of coachees should be taken into consideration when studying proposed relationships, as these variables could make individuals more or less responsive to coaching (Feldman & Lankau, 2005), may affect individual attitudinal and behavioral reactions to coaching (Weer, DiRenzo, & Shipper, 2016), and can influence the mechanisms operating in such relationships (Dulebohn et al., 2012). For example, personality traits (e.g., the Big Five traits; Van Velsor & Guthrie, 1998) have been touted as particularly influential inputs into the coaching process with some even calling for "personality-focused" coaching (McCormick & Burch, 2008). More specifically, Van Velsor and Guthrie (1998) suggested that openness to experience and

conscientiousness are two personality variables that affect one's ability to learn from experiences that are developmental in nature. As the trait of conscientiousness is based on an individual being responsible, dependable, planful, organized, persistent, and achievement-oriented (Barrick, Mount, & Strauss, 1993) and has been shown to be a reliable predictor of job performance (Barrick & Mount, 1991) and performance in leader roles (Strang & Kuhnert, 2009), it is logical that coachees high in conscientiousness will tend to learn from the coaching process and experience success on the job following their efforts. In fact, Stewart and colleagues (2008) found a positive correlation of coachee conscientiousness with the application/implementation of learnings from coaching experiences (e.g., "I am better at adapting my management style to fit the situation"; p. 36). Further, conscientiousness was also associated with the generalization and maintenance of development techniques from those coaching experiences (e.g., "I use the development that I gained in coaching in my job..."; p. 36). Research in other areas supports the soundness of these findings; Nguyen, Allen, and Fraccastoro (2005) found higher levels of conscientiousness result in a higher likelihood of transferring learning in academic contexts.

Other traits of the Big Five personality factors, like agreeableness, may also affect a coachee's responsiveness to coaching and subsequent success, as they have been shown to relate to job performance in specific occupations and for certain criteria (Barrick, Mount, & Judge, 2001). Looking into agreeableness further, one can make the case that this trait on the coachee's side could allow for more cooperation between the two parties (Hogan & Holland, 2003; LePine & Van Dyne, 2001). In fact, "coachability" has been defined as a multidimensional construct with one of the main components being a coachee's level of agreeableness (Giacobbi Jr., 2000; Theeboom et al., 2014). Corroborating the importance of this personality trait in dyadic interactions, in the mentoring literature, agreeableness of the protégé has been lauded as an important predictor of

dyad success (Engstrom, 2004). Overall, it is no surprise then that personality traits, especially conscientiousness and agreeableness, are often taken into account when studying leader development and effectiveness (Day et al., 2014). Overall, based on previous research, the coachee characteristics of interest in the current work are agreeableness and conscientiousness. These variables likely play a role in how coach characteristics and processes, such as LMX and trust, operate within a coaching context.

When discussing the relevant inputs in coaching relationships, outcomes of such efforts should also be mentioned. de Haan and colleagues (2013) address many of the issues current coaching studies (and for that matter, the field) face. The authors state that since previous studies have successfully established the efficacy of coaching (but did not look at variables affecting the efficacy), we can assume coaching is effective and proceed with coaching studies without outcome data to link the variables of interest to or the stringent requirements of a control group, for example. This way, we can now turn focus to the variables that affect the efficacy of coaching rather than debating if coaching is effective. For that reason, as well as practical constraints in obtaining such data, outcome data were not included in this research, and the focus is on the inputs and drivers of coaching relationships.

## **Hypotheses**

Considering and incorporating all of the aforementioned research findings and theoretical foundations, including the three streams of research around coach and coachee characteristics, LMX, and trust, I am proposing multiple relationships between coach characteristics, coachee characteristics, LMX, and trust. First, considering the research on leader and coach characteristics, taken altogether, it is evident that certain attributes of a coach will influence the relationship



between the two parties. First, when considering the personality traits of coaches, based on the fact that agreeableness is an influential and salient characteristics in social interactions (Asendorpf & Wilpers, 1998; Barrett & Pietromonaco, 1997; Carney et al., 2007; Costa Jr. & McCrae, 1992), I expect this trait to play a role in the coaching process due to the social embeddedness of such a process. Additionally, agreeableness is characterized by cooperation and trust in others (Hogan & Holland, 2003; LePine & Van Dyne, 2001; Neuman & Wright, 1999), which allow for successful relationships to develop. Further, previous research permits the postulation that a coach's levels of agreeableness (Bernerth et al., 2007; Dulebohn et al., 2012; Nahrgang et al., 2009) will affect the quality of LMX developed with the coachee. Thus, I expect that the more agreeable a coach is, the higher the quality of LMX will be in the relationship, and I hypothesize:

*Hypothesis 1: The agreeableness of a coach will positively predict the leader-member exchange between the coach and coachee.*

Similar to agreeableness, as previously discussed, extraversion serves as an influential and salient characteristic in social interactions (Asendorpf & Wilpers, 1998; Barrett & Pietromonaco, 1997; Carney et al., 2007; Costa Jr. & McCrae, 1992). Further, extraversion is expressed as sociability, talkativeness, and enjoyment of social interactions (Costa Jr. & McCrae, 1992; Nahrgang et al., 2009; Oskarsson et al., 2012) and tends to be associated with enhanced social skills (McCrae & Costa Jr., 1999) and success in relationships (Asendorpf & Wilpers, 1998; Barrett & Pietromonaco, 1997). Further, research indicates extraversion will affect the quality of the LMX developed with the coachee (Dulebohn et al., 2012). Therefore, I expect the more extraverted a coach is, the higher the quality of LMX between coach and coachee will be, and thus, I hypothesize:

*Hypothesis 2: The extraversion of a coach will positively predict the leader-member exchange between the coach and coachee.*

Next, taking into account the experience coaches possess, previous research suggests the backgrounds of coaches will influence the relationships they develop (Bono et al., 2009; Bozer et al., 2015; Feldman & Lankau, 2005), as has also been found in a therapy context (Burns & Nolen-Hoeksema, 1992). Further, a leader's experience and background have been shown to be directly linked to LMX (Wang et al., 2015; Wayne et al., 1994). With this in mind, I believe the experience a coach possesses will play an important role in the relationship at hand, such that the more experience a coach has, the higher the LMX in the relationship will be. Therefore, I hypothesize:

*Hypothesis 3: The experience of a coach will positively predict the leader-member exchange between the coach and coachee.*

Last, as it relates to coach characteristics predicting LMX, an individual's self-efficacy has also been shown to play an important role in LMX (Murphy & Ensher, 1999), and further, Baron and Morin (2009) highlight the importance of a coach's self-efficacy in the coaching process. It is, therefore, logical to expect that the higher a coach's self-efficacy is, the higher the LMX will be in the relationship. In terms of indirect support of self-efficacy serving as an input in coaching relationships, as already discussed, self-efficacy and job performance are related (Stajkovic & Luthans, 1998), and this linkage generalizes to teachers' self-efficacy as well (Ware & Kitsantas, 2007). As more direct support, de Haan and colleagues (2016) found a positive impact of coaches' self-efficacy on coaching effectiveness. Therefore, I hypothesize:

*Hypothesis 4: The self-efficacy of a coach will positively predict the leader-member exchange between the coach and coachee.*

As they are likely important to the development of LMX, these personality traits and characteristics of coaches can also be considered important to the development of trust within coaching relationships. For instance, I expect a coach's agreeableness to impact the trust developed in a relationship for the same reasons outlined above that I hypothesized this trait will influence the development of LMX. Therefore, extrapolating findings from previous research on trust and personality traits (Costa Jr. & McCrae, 1988, 1992; Evans & Revelle, 2008; Hiraishi et al., 2008; D. Mayer et al., 2007; McCarthy et al., 2017; McCrae & Costa Jr., 1987, 2008; Mooradian et al., 2006; Nahrgang et al., 2009) to a coaching setting, I hypothesize:

*Hypothesis 5: The agreeableness of a coach will positively predict the trust between the coach and coachee.*

Considering the research on trust and personality further, it is also important to recognize that extraverted individuals tend to be more trusting than introverted individuals (Ben-Ner & Halldorsson, 2010; Bergman et al., 2010; Evans & Revelle, 2008; Gaines Jr. et al., 1997; Hiraishi et al., 2008; Oskarsson et al., 2012; Swope et al., 2008). Again, this is not surprising as extraverts demonstrate an increased tendency toward pleasant affect (Ashton et al., 2002) and trustworthiness themselves (Thielmann & Hilbig, 2014). Therefore, I predict a coach's level of extraversion will also influence the trust developed in a relationship, such that the higher the coach is in the trait of extraversion, the more trust there will be within the relationship. As such, I hypothesize:

*Hypothesis 6: The extraversion of a coach will positively predict the trust between the coach and coachee.*

Additionally, I expect the experience of coaches to impact the trust developed between the two parties, based on research showing that more leadership experience resulted in more trust from others (Sarros & Sarros, 2011), as well as the emphasis placed on using one's experience to build

trust with others (e.g., Jung & Avolio, 2000; McNally & Lukens, 2006). Further, as already mentioned, previous research determined the backgrounds of coaches impact the relationships they develop (Bono et al., 2009; Bozer et al., 2015; Feldman & Lankau, 2005). In the same way I expect the experience of a coach to impact the LMX developed within a relationship, I also expect a coach's experience to impact the trust fostered in the relationship, such that the more experience a coach has, the greater the trust within the relationship will be. Therefore, I hypothesize:

*Hypothesis 7: The experience of a coach will positively predict the trust between the coach and coachee.*

As for coaches' self-efficacy affecting trust, again, the impact of self-efficacy on coaching effectiveness has been demonstrated (de Haan et al., 2016). Further, a leader's self-efficacy has proven useful in building trust with followers (Hannah et al., 2008; Lloyd, 2006; Murphy, 2002; Oyer, 2011). Therefore, as with self-efficacy impacting LMX and considering the aforementioned research surrounding self-efficacy as a predictor, it is reasonable to consider that the self-efficacy of a coach regarding his or her role will positively impact the trust developed in a coaching relationship, such that the higher the self-efficacy of the coach, the greater the trust within the relationship will be. Thus, I hypothesize:

*Hypothesis 8: The self-efficacy of a coach will positively predict the trust between the coach and coachee.*

Next, considering how coach characteristics may impact the relationships of interest, in this work, coachee personality traits are similarly hypothesized to have direct effects on LMX and trust. Understanding that both parties' personality traits influence their relationships (Boyce et al., 2010; Bozer et al., 2015; de Haan et al., 2013; Scoular & Linley, 2006; Wycherley & Cox, 2008), it is important to consider the effects of coachee personality traits in addition to coach

characteristics. Individual characteristics have often been studied in the training and development literature (Colquitt, LePine, & Noe, 2000) and proposed as useful in the leader development realm when it pertains to impacting the resulting relationships in such efforts (C. McCauley, 2008). In this work, the coachee personality traits of agreeableness and conscientiousness are believed to affect the resulting levels of LMX and trust.

Broadly speaking, a coachee's level of agreeableness can have a substantial impact on the coaching relationship based on previous research examining agreeableness in coaching and mentoring contexts (e.g., Engstrom, 2004; Giacobbi Jr., 2000) and, more generally, in the workplace and social interactions (e.g., Barrick et al., 2001; Hogan & Holland, 2003; LePine & Van Dyne, 2001). Further, follower agreeableness can play a substantial role in leadership contexts; Dulebohn and colleagues (2012) determined that follower agreeableness impacts LMX, for example. Applying LMX theory and its tenets to coaching relationships coupled with the previous findings on agreeableness, I hypothesize the same phenomena will hold for coachee agreeableness. Specifically, I hypothesize the following:

*Hypothesis 9: The agreeableness of a coachee will positively predict the leader-member exchange between the coach and coachee.*

Another characteristic that may impact leader development interventions and specifically coaching relationships is an individual's level of conscientiousness. As outlined above, this personality trait, characterized as being responsible, planful, and achievement-oriented (Barrick et al., 1993), affects an individual's ability to learn from developmental experiences (Van Velsor & Guthrie, 1998). Further, conscientiousness predicts job performance and leader performance (Barrick & Mount, 1991; Strang & Kuhnert, 2009, respectively), and conscientiousness has been shown to be related to the application and implementation of material learned from coaching

events, as well as the generalization and maintenance of techniques obtained through coaching (Stewart et al., 2008). Further, Nahrgang and colleagues (2009) determined that conscientiousness impacted relationship quality between leaders and followers, such that individuals higher in conscientiousness experienced relationships of greater quality. Corroborating their work, Bernerth and colleagues (2007) posited that an individual's level of conscientiousness would affect LMX because an individual who is dependable, hardworking, and responsible will tend to be an individual others want to have a relationship with, and the authors indeed found a significant relationship between conscientiousness and LMX. One could postulate that a coachee high in conscientiousness may be seen as a favorable coachee due to their hardworking nature, and he or she may be more accepting of coaching and more successful in coaching engagements. Therefore, it is logical to conclude coachees' conscientiousness should impact the LMX developed within relationships. As such, I hypothesize the following:

*Hypothesis 10: The conscientiousness of a coachee will positively predict the leader-member exchange between the coach and coachee.*

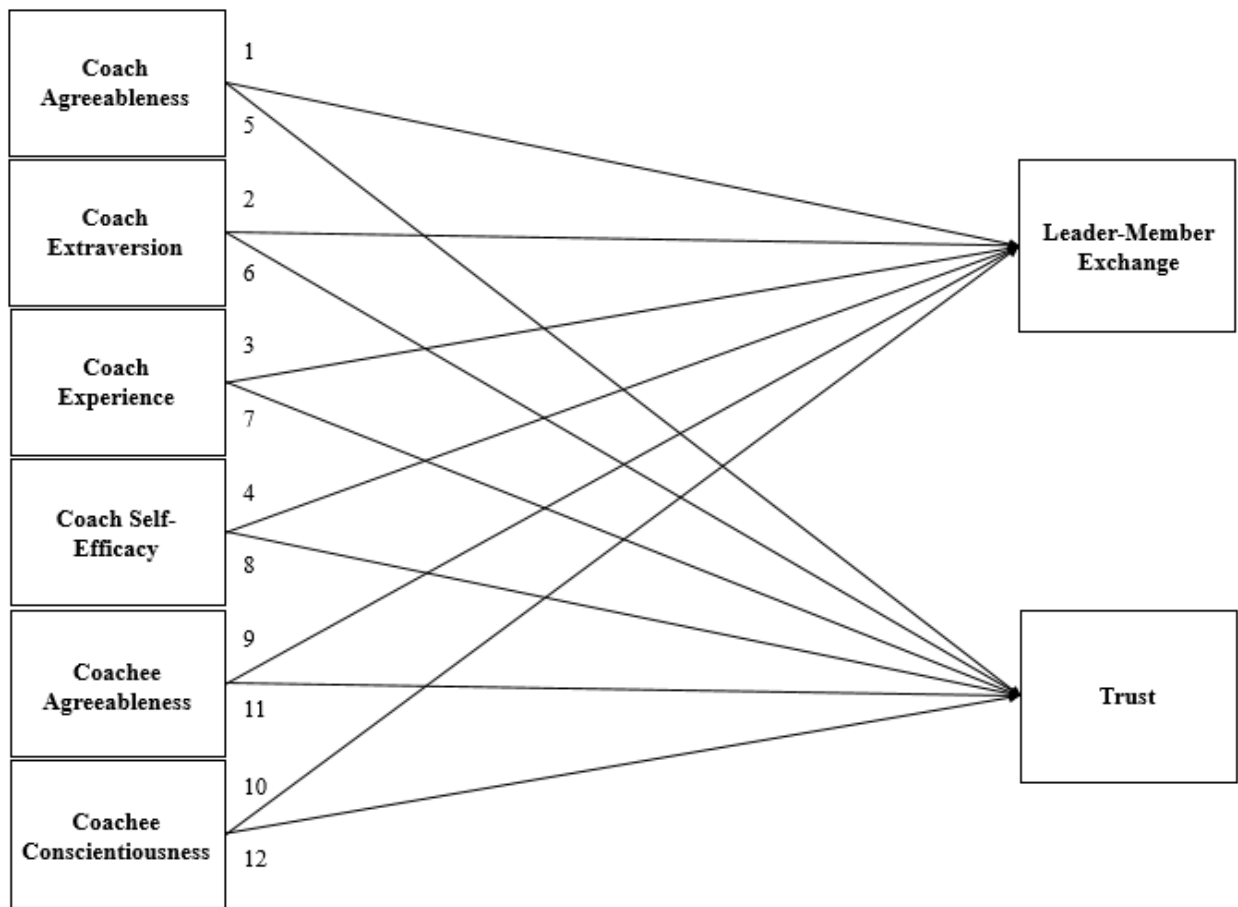
Turning to trust within a relationship, with the same logic outlined previously for coaches' levels of agreeableness predicting trust, trust should be impacted by coachees' agreeableness as well. Indeed, considering both parties' levels of agreeableness in predicting trust is soundly based on the aforementioned research on agreeableness and trust in dyadic interactions. As such, I hypothesize the following:

*Hypothesis 11: The agreeableness of a coachee will positively predict the trust between the coach and coachee.*

Further, considering how coachees' conscientiousness affects LMX in relationships as discussed, I also posit that trust should be influenced by the conscientiousness of coachees. As such, I also hypothesize the following:

*Hypothesis 12: The conscientiousness of a coachee will positively predict the trust between the coach and coachee.*

For a portrayal of hypothesized relationships, see Figure 1, and for a full list of study hypotheses, see Table 1.



*Figure 1.* Hypothesized relationships between characteristics of coaches and coachees and coaching process variables.

Table 1

*Study Hypotheses*

H1	The agreeableness of a coach will positively predict the leader-member exchange between the coach and coachee.
H2	The extraversion of a coach will positively predict the leader-member exchange between the coach and coachee.
H3	The experience of a coach will positively predict the leader-member exchange between the coach and coachee.
H4	The self-efficacy of a coach will positively predict the leader-member exchange between the coach and coachee.
H5	The agreeableness of a coach will positively predict the trust between the coach and coachee.
H6	The extraversion of a coach will positively predict the trust between the coach and coachee.
H7	The experience of a coach will positively predict the trust between the coach and coachee.
H8	The self-efficacy of a coach will positively predict the trust between the coach and coachee.
H9	The agreeableness of a coachee will positively predict the leader-member exchange between the coach and coachee.
H10	The conscientiousness of a coachee will positively predict the leader-member exchange between the coach and coachee.
H11	The agreeableness of a coachee will positively predict the trust between the coach and coachee.
H12	The conscientiousness of a coachee will positively predict the trust between the coach and coachee.



## **CHAPTER TWO:**

### **METHOD**

This study employed a mixed method design by administering a survey and leveraging archival databases to test the hypotheses. The two data sources include coaches (who responded to a survey) and coachees (whose data was archived). The participants, study design, and variables of interest will each be discussed.

#### **Participants**

All of the coachee participants in this study were employed by a global, agricultural organization with over 150,000 employees worldwide. The coachees were selected by their employer for an ongoing coaching program implemented by an outside consulting firm. There are various reasons an individual may be referred to a coach, including in preparation for a promotion, for career advancement and/or in preparation for a new position, for specific skill development, for performance improvement, and in preparation for retirement (Bono et al., 2009). The participants in this study received coaching for specific skill development (e.g., thinking strategically, presenting with impact, influencing others) following an assessment process (i.e., personality assessment, cognitive ability assessment, interview, and role-play simulations). The assessment and coaching were conducted by external assessors and coaches employed by the consulting firm. At the time of data collection, there were 29 coaches in the coaching program who

had completed a full coaching process with at least one coachee. A full coaching process was considered the completion of the number of coaching sessions allocated to a coachee (e.g., one to nine sessions depending on the level of the coachee and determination by the organization). In total, at the time of data collection, there were 182 coachees who completed their coaching process within the program. The maximum number of dyads (i.e., dependent on 100 percent response rate from the coaches) that this work could have data for is 182 (i.e., 182 unique coach-coachee dyads). Twenty-two coaches completed the study of the 29 coaches invited to participate, so data were collected for 138 dyads; as such, the response rate was approximately 76 percent. The average number of coachees per coach was approximately six, with a range of one to 23 coachees. The number of coachees assigned to each coach varied depending on the coach's tenure with the consulting firm, expertise, and availability. Following data collection, a power analysis was conducted to ensure adequate power before continuing with analyses. The statistical power for the coach-related hypotheses was slightly below adequate (0.68), so those results will be interpreted with caution. The power for the coachee-related hypotheses was more than adequate for the intended analyses (0.99).

This field sample is appropriate for the present research aims as it allows for generalizations to the population of interest, specifically employees participating in leadership coaching programs and the coaches serving to guide the employees through the process. Using a field sample is also advantageous because the sample was embedded in a more realistic setting and environment that the concepts and phenomena of interest operate in compared to a sample obtained in a laboratory study.

## Design

The design for this study was two-pronged: a survey was used to collect necessary data from coaches, and an archival database was leveraged for the coachee characteristics (i.e., these data were collected for assessment purposes before this research commenced). The survey completed by coaches included items regarding their personal characteristics (e.g., experience, self-efficacy; not personality traits though as this information was already collected through another measure and will be discussed next) and items about their coaching relationships (e.g., LMX and trust). Throughout the survey, where appropriate, a five-point Likert scale was used.

## Coach Characteristics

**Personality.** Most of the coaches surveyed for this work had previously completed the propriety personality assessment, ADEPT-15, created by the consulting firm. For those who had not completed the personality assessment prior to the study, the tool was administered with the other survey. ADEPT-15 is a standardized personality assessment based on psychometric techniques. The tool assesses six broad work styles (e.g., task style, teamwork style, emotional style) and 15 aspects of personality (e.g., composure, cooperativeness, drive), based on the Big Five personality traits (Aon, 2015). The assessment contains 100 items and takes approximately 25 minutes to complete. Due to the propriety nature of the assessment, the items are not included in this document. Because previous research and the current hypotheses are framed around the Big Five model of personality (e.g., agreeableness and extraversion), the relevant ADEPT-15 aspect scores of individuals were mapped onto the Big Five traits as commonly done within the consulting firm (e.g., cooperativeness onto agreeableness, assertiveness onto extraversion). Due to the lack

Table 2

*Associated Components of Study Assessments with the Big Five Traits*

<b>Big Five Trait of Interest</b>	<b>Related ADEPT-15 Aspects</b> (Coach data)	<b>Related Hogan Personality Inventory Scales</b> (Coachee data)
<i>Agreeableness</i>	<i>Cooperativeness</i> (e.g., courteous, trusting) and <i>Sensitivity</i> (e.g., compassionate, caring, understanding)	<i>Interpersonal Sensitivity</i> (e.g., friendly, warm, conflict averse; $r = .56$ )
<i>Conscientiousness</i>	N/A	<i>Prudence</i> (e.g., organized, dependable; $r = .36$ )
<i>Extraversion</i>	<i>Assertiveness</i> (decisive, competitive) and <i>Liveliness</i> (outgoing, energetic, confident)	N/A

*Note:* The correlations between the HPI scales and the related Big Five traits as determined by Hogan and Hogan (2007) are listed in the parentheses.

of access to item-level data for the personality scales, the reliabilities of each could not be calculated for this work. For the complete list of mappings from the ADEPT-15 aspects to the Big Five traits, see Table 2.

**Coaching experience.** To gather background information on the coaches, a series of questions were asked, including the number of coachees the coach was working with at the time of the study, the number of coachees the coach has worked with during his or her coaching career, the coach's professional length of tenure, and the professional certifications and degrees the coach holds. Further, a coach experience inventory developed by a consultant at the consulting firm was also employed to gain more detail on coaches' experiences. This inventory contains 25 items regarding specific experiences coaches may have encountered during their professional tenure (e.g., read and interpreted 360 survey results in order to provide feedback to hiring manager or

HR; conducted assessments, such as role plays and/or structured interviews; provided feedback to participant on simulation, 360, personality and/or other assessment results; provided ongoing coaching to a mid-level manager [manager of managers]). Coaches were asked to rate themselves on each experience with the following scale: “1 = *Learning* (1 or 2 minor experiences; understand basics or foundational activities required for this type of experience; would still need to refer to others for guidance/support or prepare extensively for such an experience)”; “2 = *Proficient* (3-4 moderately complex experiences; understands the complexities of these types of experiences; would only need to refer to others for guidance/support in rare circumstances); and “3 = *Expert* (5+ complex experiences or experience that occurred over longer timeframes; understands the nuances and intricacies of these types of experiences; sought out for advice/guidance from others on these types of experiences)”. There was also a response option if the coach had not partaken in a listed experience (“0 = *Never Experienced*”). The full inventory, as well as the demographic items about the experience of coaches, can be found in Appendix A. These aspects were treated as separate variables for analyses as one focused on experience-related demographics of the coaches, while the other served a checklist function for determining the previous experiences of coaches<sup>1</sup>. Additionally, reliabilities were not calculated for these as it was not appropriate to do based on the nature of the measures.

**Self-efficacy.** Additionally, the coaching self-efficacy of coaches was measured with the 18-item scale presented in Baron and Morin (2009). The scale has three subcomponents, which have shown adequate reliability in previous research: relational ( $\alpha = .75$ ), communication ( $\alpha = .60$ ), and facilitating learning and results ( $\alpha = .76$ ). In this work, two of the items in the scale

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<sup>1</sup>An exploratory factor analysis was conducted with the items from both scales. The one-factor model demonstrated poor fit (CFI = 0.11; TLI = 0.05; RMSEA = 0.51; SRMR = 0.20), supporting the decision to keep the data separate for use as two variables.

demonstrated negative item-total correlations (specifically, “I strive for a good relationship with the person” and “I reinforce and constructively criticize the behaviors of the person”). With these two items included, the reliability of the scale was slightly less than adequate ( $\alpha = .78$ ). After removing these two items, the scale showed good overall reliability ( $\alpha = .83$ ). An example item from this scale includes: “I ask questions that will help the individual to better understand his/her situation, identify causes, and see possible improvement actions.” See Appendix B for the full measure.

### **Coaching Process Variables**

For the process variables of interest, LMX and trust, the coaches completed a survey containing a measure of each while considering their various coaching relationships. See Appendix C and D, respectively, for the full instructions and measures of each. The scales will each be discussed in more detail next.

**Leader-member exchange.** To measure LMX between coaches and coachees, a seven-item LMX scale (i.e., “LMX-7”) was administered to coaches. The scale originated from Graen and Uhl-Bien (1995) and was adapted for the purposes of this work (e.g., the wording “follower” was changed to “coachee”). As outlined in Graen and Uhl-Bien (1995), the scale reflects the quality of the relationship and indicates the degree to which the relationship is characteristic of a partnership. This scale is commonly used in leadership research and has consistently shown acceptable reliability (Epitropaki & Martin, 1999; Raghuram, Gajendran, Liu, & Somaya, 2017). In this work, the scale demonstrated good reliability ( $\alpha = .80$ ). Indeed, Gerstner and Day (1997) describe the scale as providing “the soundest psychometric properties of all available LMX measures” (p. 837). Again, this scale can be found in Appendix C.

**Trust.** To measure the trust between coaches and coachees, a scale focused on the three constructs of trust (i.e., ability, benevolence, and integrity) was administered to coaches. Gregory and Levy (2011) conceptualized and measured trust from the followers' perspective in the context of employee coaching. The current work sought to examine trust from the coaches' viewpoint, similar to the approach employed by Ladegard and Gjerde (2014) to capture a leader's perceptions of trust within the relationship. The scale used in this study was an adapted version of the one found in Lleo de Nalda, Guillen, and Gil Pechuan (2016), which was originally developed by R. C. Mayer and Davis (1999). The version used in Lleo de Nalda and colleagues (2016) showed good reliability across the three subscales (ability  $\alpha = .92$ ; benevolence  $\alpha = .89$ ; integrity  $\alpha = .89$ ). The items of the scale were altered to fit the nature of this work and the perspective of the coaches (e.g., the referent of the items was changed to "coachee"), and the scale showed good reliability ( $\alpha = .90$ ). Again, this scale can be found in Appendix D.

## Coachee Characteristics

In addition to coach characteristics, information on some important attributes of the coachees was collected. Due to the partnership with the client organization in which the coaching program is implemented, the coachee data had already been collected for the purposes of assessment at the beginning of the coaching program prior to coaching sessions and was utilized in this work. Each component of the coachee data will be discussed in turn.

**Personality.** Personality assessments are often leveraged in coaching engagements to build coachees' awareness of their tendencies and behaviors across situations (Allworth & Passmore, 2008). In line with this, the coachees in this study previously completed the Hogan Personality Inventory (HPI) as part of the assessment process. An assessment process like this is often the case and considered best practice when starting a coaching engagement (McCormick & Burch, 2008). The HPI assessment has been used in previous coaching research to gain insight into coachees' personalities (e.g., Mansi, 2007). The scales assessed via this measure include adjustment, ambition, sociability, interpersonal sensitivity, prudence, inquisitive, and learning approach. This assessment is based on the Big Five personality traits (e.g., extraversion, agreeableness, conscientiousness, emotional stability, and intellect/openness to experience), and each of the subscales on the measure has shown decent reliability (ranging from .57 to .82; Hogan & Hogan, 2007). Due to lack of access to item-level data for the personality scales, the reliabilities of each could not be calculated for this research. There are 206 items across the seven scales for this personality measure, and scores on each scale range from one to 100, with 100 being the highest possible score. Due to the propriety nature of the assessment, the items are not included in this document. Similar to the personality assessment for the coaches, the HPI scales were mapped onto the Big Five personality traits. Again, this information was leveraged because the study hypotheses are framed around the Big Five traits



(e.g., agreeableness and conscientiousness). The mapping was guided by the validation work done by Hogan Assessments (i.e., the correlations between the HPI scales and the Big Five traits were used to determine the mappings; Hogan & Hogan, 2007). See Table 2 for the list of mappings and associated correlations pertaining to this assessment.

**Coaching sessions.** In addition to the individual differences of coaches and coachees, the number of times the two parties meet can affect the relationships at hand. Indeed, previous studies have accounted for the frequency of interactions between parties when attempting to study coaching relationships (see Gregory & Levy, 2011 for an example using manager and subordinate data). It could be presumed that dyads who have met more often could develop stronger LMX and trust due to their increased interaction. To account for this possibility, the number of coaching sessions each dyad has engaged in was used as a covariate in the analyses. As already stated, the number of sessions varied by coachee, from one to nine sessions, based on the organization's determination of each individual's advancement potential.

## CHAPTER THREE:

### RESULTS

SPSS and Mplus software were used for the analyses. Before proceeding with analyses, the data were screened to ensure they met the necessary assumptions (e.g., no outliers, normal distributions, etc.), and skewness and kurtosis values were also evaluated. There were no concerns with any of the data, and the quality of the data was confirmed. For descriptive statistics, means, standard deviations, scale reliabilities (where applicable), and correlations were calculated (see Table 3).

The analyses for this work were driven by the structure of the data. Due to the fact that the nature of the data is hierarchical (e.g., coachees embedded within coaches), hierarchical linear modeling (HLM) is the most appropriate and ideal method for analyzing these data, in which coaches serve as the level-two units in the models and coachees represent the level-one units. Before proceeding with HLM, intraclass correlation coefficients were calculated to determine if there was, in fact, a grouping effect that needs to be accounted for. The ICC values for the two outcomes of interest, LMX and trust, justified the use of HLM (ICC = .25 and .32, respectively). After confirming HLM was appropriate for the current research, the variables were grand-mean centered to aid in interpretation of the results. For each of the hypotheses, as already mentioned, I used the number of coaching sessions conducted between each coach and coachee dyad as a control variable due to the fact that the frequency of interactions between the coach and coachee could affect the relationships. Therefore, for each of the hypotheses, the focus lies in the main effect of the predictor of interest

Table 3

*Correlations, Means, and Standard Deviations of Study Variables*

	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Number of Coaching Sessions	4.59	1.72	-									
2. Leader-Member Exchange	3.66	0.67	<b>.30**</b>	(.80)								
3. Trust	3.85	0.49	<b>.19*</b>	<b>.79**</b>	(.90)							
4. Coach Agreeableness	6.16	1.55	.04	-.03	.10	-						
5. Coach Extraversion	5.05	1.34	-.01	<b>-.26**</b>	<b>-.18*</b>	.15	-					
6. Coach Experience Demographics	1.63	0.60	.06	<b>-.25**</b>	<b>-.24**</b>	-.17	.31	-				
7. Coach Experience Inventory	3.45	0.37	.06	<b>.24**</b>	.12	-.18	.17	.24	-			
8. Coach Self-Efficacy	4.26	0.43	<b>.19*</b>	<b>.39**</b>	<b>.30**</b>	.12	.10	-.10	<b>.47*</b>	(.88)		
9. Coachee Agreeableness	65.66	29.06	.02	.04	.05	-.09	-.06	.03	.10	.06	-	
10. Coachee Conscientiousness	56.65	26.15	.04	.05	<b>.18*</b>	.08	.12	.12	-.03	.05	<b>.18*</b>	-

*Note:* \*\* $p \leq 0.01$  (2-tailed). \* $p \leq 0.05$  level (2-tailed).  $N = 22$  for coach-related variables and  $N = 138$  for coachee-related variables. Coachee agreeableness and conscientiousness were assessed on a 1-100 scale. Reliabilities are located in parentheses along the diagonal, where applicable. Item-level data for the personality variables were not available for this research, so reliabilities could not be calculated for those measures. Reliabilities were not calculated for the coach experience demographics or the coach experience inventory as they represent demographic information and a checklist function of previous experiences, respectively.

above and beyond the number of coaching sessions within each relationship<sup>2</sup>. For Hypothesis 1, which states *the agreeableness of a coach will positively predict analysis in which agreeableness of the coach was entered as the predictor and the reported LMX served as the dependent variable.* Examining the regression coefficient (i.e., beta weight) and corresponding  $p$ -value, coach

<sup>2</sup>The analyses were also conducted without the inclusion of the number of coaching sessions as a covariate, and the results remained the same in terms of significance and direction of effects.

agreeableness was not found to be a significant predictor of LMX ( $\beta = 0.01$ ,  $SE(\beta) = 0.05$ ,  $p = .81$ ,  $CI_{95\%} = [-0.09, 0.11]$ ). Therefore, Hypothesis 1 is not supported. See Table 4 for the full results.

Similarly, for Hypothesis 2, which states *the extraversion of a coach will positively predict the leader-member exchange between the coach and coachee*, another multi-level regression analysis was conducted in which coach extraversion was the independent variable and LMX was once again the dependent variable. Examining the beta weight and corresponding  $p$ -value, coach extraversion is not a significant predictor of LMX ( $\beta = -0.08$ ,  $SE(\beta) = 0.08$ ,  $p = .27$ ,  $CI_{95\%} = [-0.23, 0.07]$ ). Thus, Hypothesis 2 is not supported. See Table 5 for the full results.

For Hypothesis 3, which reads *the experience of a coach will positively predict the leader-member exchange between the coach and coachee*, a multi-level regression analysis was also conducted in which the experience of the coach was the independent variable of interest and LMX was, again, the dependent variable. Because the coaching experience demographic scale and coaching inventory were treated as separate variables, both were entered into the regression equation as predictors<sup>3</sup>. Both coaching experience in terms of demographics ( $\beta = -0.31$ ,  $SE(\beta) = 0.11$ ,  $p = .01$ ,  $CI_{95\%} = [-0.52, -0.09]$ ) and coaching experience as determined by the inventory ( $\beta = 0.48$ ,  $SE(\beta) = 0.18$ ,  $p = .01$ ,  $CI_{95\%} = [0.14, 0.83]$ ) were found to be significant predictors of LMX between a coach and coachee<sup>4</sup>. The relationship between the coach experience inventory was positive as expected (i.e., as a coach gains more experience in the activities listed in the inventory, the higher the LMX in the relationship will be). However, the relationship between the coaching experience demographics and LMX was negative (i.e., as a coach gains more experience in terms of the demographic variables of interest, such as the number of coachees and number of years coaching,

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<sup>3</sup>This decision was also supported by the non-significant correlation between the two operationalizations of the coaching experience variable ( $r = .24$ ,  $p > .05$ ).

<sup>4</sup>It should be noted that changing the order in which these variables were entered into the regression equation did not alter the results.

Table 4

*Hypothesis 1 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.06	0.09	0.63	.53	-0.12	0.23
<b>Number of Coaching Sessions</b>	<b>0.11*</b>	<b>0.05</b>	<b>2.53</b>	<b>.01</b>	<b>0.03</b>	<b>0.20</b>
Coach Agreeableness	0.01	0.05	0.25	.81	-0.09	0.11
$R^2_{Within}$	0.12	0.09	1.28	.20	-0.07	0.30
$R^2_{Between}$	0.00	0.03	0.12	.90	-0.05	0.06

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

Table 5

*Hypothesis 2 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.08	0.09	0.92	.36	-0.09	0.26
<b>Number of Coaching Sessions</b>	<b>0.11**</b>	<b>0.04</b>	<b>2.56</b>	<b>.01</b>	<b>0.03</b>	<b>0.20</b>
Coach Extraversion	-0.08	0.08	-1.10	.27	-0.23	0.07
$R^2_{Within}$	0.12	0.09	1.28	.20	-0.06	0.30
$R^2_{Between}$	0.13	0.21	0.59	.55	-0.30	0.55

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

the more likely LMX is to decrease), which was surprising. This result will be discussed in more detail in the Discussion section. Thus, Hypothesis 3 is partially supported, in that the relationship between coaching experience as determined by the inventory and LMX was in the expected

direction (i.e., positive), but the relationship between the coaching experience demographics and LMX was negative. See Table 6 for the full results.

Next, for Hypothesis 4, which states *the self-efficacy of a coach will positively predict the leader-member exchange between the coach and coachee*, I conducted another multi-level regression analysis in which the self-efficacy as reported by the coach was the predictor and LMX was the dependent variable of interest. Again, I examined the beta weight and corresponding  $p$ -value and determined that coach self-efficacy is a significant predictor of LMX ( $\beta = 0.56$ ,  $SE(\beta) = 0.11$ ,  $p = .00$ ,  $CI_{95\%} = [0.34, 0.77]$ ). Therefore, Hypothesis 4 is supported. See Table 7 for the full results.

Turning to the hypotheses focused on trust between coaches and coachees as the outcome with coach characteristics serving as the predictors of interest, for Hypothesis 5, which states *the agreeableness of a coach will positively predict the trust between the coach and coachee*, I conducted a multi-level regression analysis in which the agreeableness of the coach served as the predictor and the trust between the coach and coachee was the dependent variable of interest. Examining the results, coach agreeableness is not a significant predictor of trust ( $\beta = 0.006$ ,  $SE(\beta) = 0.04$ ,  $p = .10$ ,  $CI_{95\%} = [-0.01, 0.13]$ ). So, Hypothesis 5 is not supported. See Table 8 for the full results.

For Hypothesis 6, which reads *the extraversion of a coach will positively predict the trust between the coach and coachee*, I conducted a multi-level regression analysis in which the extraversion of the coach served as the predictor and trust was the outcome of interest. I then examined the beta weight and corresponding  $p$ -value of coach extraversion and determined it is not a significant predictor of trust ( $\beta = -0.03$ ,  $SE(\beta) = 0.06$ ,  $p = .58$ ,  $CI_{95\%} = [-0.15, 0.09]$ ).

Therefore, Hypothesis 6 is not supported. See Table 9 for the full results.

For Hypothesis 7, which reads *the experience of a coach will positively predict the trust between the coach and coachee*, a multi-level regression analysis was conducted in which the

Table 6

*Hypothesis 3 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.12	0.07	1.63	.10	-0.02	0.26
<b>Number of Coaching Sessions</b>	<b>0.12**</b>	<b>0.04</b>	<b>2.68</b>	<b>.01</b>	<b>0.03</b>	<b>0.20</b>
<b>Coach Experience Demographics</b>	<b>-0.31**</b>	<b>0.11</b>	<b>-2.84</b>	<b>.01</b>	<b>-0.52</b>	<b>-0.09</b>
<b>Coach Experience Inventory</b>	<b>0.48**</b>	<b>0.18</b>	<b>2.74</b>	<b>.01</b>	<b>0.14</b>	<b>0.83</b>
<i>R</i> <sup>2</sup> <sub>Within</sub>	0.13	0.09	1.36	.18	-0.06	0.31
<i>R</i> <sup>2</sup> <sub>Between</sub>	0.48	0.25	1.95	.05	-0.01	0.97

Note. Results shown are unstandardized. *N* = 138. Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\**p* ≤ .01; \**p* ≤ .05.

Table 7

*Hypothesis 4 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.09	0.07	1.24	.22	-0.05	0.23
<b>Number of Coaching Sessions</b>	<b>0.10*</b>	<b>0.04</b>	<b>2.40</b>	<b>.02</b>	<b>0.02</b>	<b>0.19</b>
<b>Coach Self-Efficacy</b>	<b>0.56**</b>	<b>0.11</b>	<b>5.05</b>	<b>.00</b>	<b>0.34</b>	<b>0.77</b>
<i>R</i> <sup>2</sup> <sub>Within</sub>	0.10	0.08	1.18	.24	-0.07	0.27
<i>R</i> <sup>2</sup> <sub>Between</sub>	0.60	0.16	3.81	.00	0.28	0.91

Note. Results shown are unstandardized. *N* = 138. Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\**p* ≤ .01; \**p* ≤ .05.

coaching experience variable was the predictor and trust was, again, the dependent variable. As previously discussed for Hypothesis 3, the coaching experience demographic scale and coaching inventory were treated as separate variables, and both were entered into the regression equation as

Table 8

*Hypothesis 5 Results Predicting Trust*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.06	0.07	0.90	.37	-0.08	0.20
<b>Number of Coaching Sessions</b>	<b>0.06*</b>	<b>0.02</b>	<b>2.34</b>	<b>.02</b>	<b>0.01</b>	<b>0.10</b>
Coach Agreeableness	0.06	0.04	1.63	.10	-0.01	0.13
$R^2_{Within}$	0.06	0.05	1.10	.27	-0.04	0.16
$R^2_{Between}$	0.11	0.13	0.82	.41	-0.16	0.37

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

Table 9

*Hypothesis 6 Results Predicting Trust*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.07	0.08	0.88	.38	-0.08	0.22
<b>Number of Coaching Sessions</b>	<b>0.06*</b>	<b>0.02</b>	<b>2.39</b>	<b>.02</b>	<b>0.01</b>	<b>0.10</b>
Coach Extraversion	-0.03	0.06	-0.55	.58	-0.15	0.09
$R^2_{Within}$	0.06	0.05	1.12	.26	-0.04	0.16
$R^2_{Between}$	0.03	0.09	0.29	.78	-0.16	0.21

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

predictors. I examined the beta weights and corresponding  $p$ -values of the coaching experience variables and determined that neither coaching experience demographics ( $\beta = -0.25$ ,  $SE(\beta) = 0.13$ ,  $p = .06$ ,  $CI_{95\%} = [-0.50, 0.01]$ ) nor the coach experience inventory ( $\beta = 0.21$ ,  $SE(\beta) = 0.17$ ,  $p = .22$ ,



$CI_{95\%} = [-0.13, 0.54]$ ) were significant predictors. Thus, Hypothesis 7 is not supported. See Table 10 for the full results.

For Hypothesis 8, which states *the self-efficacy of a coach will positively predict the trust between the coach and coachee*, again, I conducted a multi-level regression analysis in which the self-efficacy of the coach was the predictor and trust between the coach and coachee was the dependent variable. Examining the beta weight and corresponding  $p$ -value, coach self-efficacy is a significant predictor of trust ( $\beta = 0.42$ ,  $SE(\beta) = 0.13$ ,  $p = .00$ ,  $CI_{95\%} = [0.16, 0.67]$ ), such that as the self-efficacy of a coach increases, so does the trust between the coach and coachee. Therefore, Hypothesis 8 is supported. See Table 11 for the full results.

For Hypothesis 9, which states *the agreeableness of a coachee will positively predict the leader-member exchange between the coach and coachee*, I conducted a multi-level regression analysis in which coachee agreeableness was the predictor and the LMX between the coach and coachee was the outcome. Examining the beta weight and corresponding  $p$ -value, I determined coachee agreeableness is not a significant predictor of LMX ( $\beta = 0.00$ ,  $SE(\beta) = 0.00$ ,  $p = .58$ ,  $CI_{95\%} = [-0.11, 0.20]$ ). Thus, Hypothesis 9 is not supported. See Table 12 for the full results.

Similarly, for Hypothesis 10, which states *the conscientiousness of a coachee will positively predict the leader-member exchange between the coach and coachee*, I conducted a multi-level regression analysis with coachee conscientiousness predicting LMX. I then examined the beta weight and corresponding  $p$ -value; coachee conscientiousness is not a significant predictor of LMX ( $\beta = 0.00$ ,  $SE(\beta) = 0.00$ ,  $p = .38$ ,  $CI_{95\%} = [0.00, 0.01]$ ). Therefore, Hypothesis 10 is not supported. See Table 13 for the full results.

For Hypothesis 11, which reads *the agreeableness of a coachee will positively predict the*

Table 10

*Hypothesis 7 Results Predicting Trust*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.05	0.07	0.69	.49	-0.09	0.18
<b>Number of Coaching Sessions</b>	<b>0.06*</b>	<b>0.02</b>	<b>2.61</b>	<b>.01</b>	<b>0.02</b>	<b>0.10</b>
Coach Experience Demographics	-0.25	0.13	-1.91	.06	-0.50	0.01
Coach Experience Inventory	0.21	0.17	1.22	.22	-0.13	0.54
$R^2_{Within}$	0.06	0.05	1.24	.21	-0.04	0.17
$R^2_{Between}$	0.27	0.22	1.25	.21	-0.16	0.70

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

Table 11

*Hypothesis 8 Results Predicting Trust*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.09	0.06	1.48	0.14	-0.03	0.22
<b>Number of Coaching Sessions</b>	<b>0.05*</b>	<b>0.02</b>	<b>2.24</b>	<b>0.03</b>	<b>0.01</b>	<b>0.09</b>
<b>Coach Self-Efficacy</b>	<b>0.42**</b>	<b>0.13</b>	<b>3.22</b>	<b>0.00</b>	<b>0.16</b>	<b>0.67</b>
$R^2_{Within}$	0.05	0.05	1.00	0.32	-0.05	0.14
$R^2_{Between}$	0.50	0.19	2.63	.01	0.12	0.88

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ .

*trust between the coach and coachee*, again, I conducted a multi-level regression analysis and entered coachee agreeableness into the regression equation as the predictor. Examining the beta weight and corresponding  $p$ -value, I concluded coachee agreeableness is not a significant predictor of trust between coaches and coachees ( $\beta = 0.00$ ,  $SE(\beta) = 0.00$ ,  $p = .61$ ,  $CI_{95\%} = [0.00, 0.00]$ ), and

Table 12

*Hypothesis 9 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.06	0.09	0.60	.55	-0.13	0.23
<b>Number of Coaching Sessions</b>	<b>0.11*</b>	<b>0.04</b>	<b>2.54</b>	<b>.01</b>	<b>0.03</b>	<b>0.20</b>
Coachee Agreeableness	0.00	0.00	0.56	.58	0.00	0.00
$R^2_{Within}$	0.12	0.09	1.33	.18	-0.06	0.29

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ . There is no  $R^2_{Between}$  provided because the equation only contains predictors on the within level.

Table 13

*Hypothesis 10 Results Predicting Leader-Member Exchange*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.06	0.09	0.62	.54	-0.12	0.24
<b>Number of Coaching Sessions</b>	<b>0.11*</b>	<b>0.05</b>	<b>2.40</b>	<b>.02</b>	<b>0.02</b>	<b>0.20</b>
Coachee Conscientiousness	0.00	0.00	0.87	.38	0.00	0.01
$R^2_{Within}$	0.13	0.08	1.55	.12	-0.04	0.29

Note. Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ . There is no  $R^2_{Between}$  provided because the equation only contains predictors on the within level.

Hypothesis 11 is not supported. See Table 14 for the full results.

Similarly, for Hypothesis 12, which states *the conscientiousness of a coachee will positively predict the trust between the coach and coachee*, I used coachee conscientiousness as the predictor in the multi-level regression equation predicting trust. The beta weight and corresponding  $p$ -value indicate that coachee conscientiousness is not a significant predictor of trust ( $\beta = 0.00$ ,  $SE(\beta) = 0.00$ ,

Table 14

*Hypothesis 11 Results Predicting Trust*

Variable	b	SE	t	p	Confidence Interval (CI)	
					LL 95% CI	UL 95% CI
Intercept	0.06	0.07	0.80	.42	-0.09	0.20
<b>Number of Coaching Sessions</b>	<b>0.06*</b>	<b>0.02</b>	<b>2.38</b>	<b>.02</b>	<b>0.01</b>	<b>0.10</b>
Coachee Agreeableness	0.00	0.00	0.51	.61	0.00	0.00
$R^2_{Within}$	0.06	0.05	1.22	.22	-0.04	0.15

*Note.* Results shown are unstandardized.  $N = 138$ . Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\* $p \leq .01$ ; \* $p \leq .05$ . There is no  $R^2_{Between}$  provided because the equation only contains predictors on the within level.

$p = .19$ ,  $CI_{95\%} = [0.00, 0.01]$ ), and thus, Hypothesis 12 is not supported. See Table 15 for the full results. Table 16 contains a summary of the results across hypotheses.

Table 15

*Hypothesis 12 Results Predicting Trust*

<i>Variable</i>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>Confidence Interval (CI)</i>	
					<i>LL 95% CI</i>	<i>UL 95% CI</i>
Intercept	0.06	0.07	0.86	.39	-0.08	0.20
<b>Number of Coaching Sessions</b>	<b>0.05*</b>	<b>0.02</b>	<b>2.39</b>	<b>.02</b>	<b>0.01</b>	<b>0.10</b>
Coachee Conscientiousness	0.00	0.00	1.31	.19	0.00	0.01
<i>R</i> <sup>2</sup> <sub>Within</sub>	0.09	0.05	1.77	.08	-0.01	0.18

*Note.* Results shown are unstandardized. *N* = 138. Confidence intervals computed with standard errors; LL = lower limit; UL = upper limit. \*\**p* ≤ .01; \**p* ≤ .05. There is no *R*<sup>2</sup><sub>Between</sub> provided because the equation only contains predictors on the within level.

Table 16

*Results across Hypotheses*

<i>Predictor</i>	<i>Outcomes</i>	
	<i>LMX</i>	<i>Trust</i>
Coach Agreeableness	.	.
Coach Extraversion	.	.
Coach Experience	<b>Demographics (-); Inventory (+)</b>	
Coach Self-Efficacy	+	+
Coachee Agreeableness	.	.
Coachee Conscientiousness	.	.

## CHAPTER FOUR: DISCUSSION

Previous coaching research set the stage for a closer examination of the inputs and process variables involved in coaching relationships, which this work has conducted. The results of this study indicate that both the experiences and the self-efficacy of coaches play important roles in coaching relationships. First, considering the results around the coaches' experiences, one result, in particular, was unexpected and surprising. As mentioned in the Method section, the coaching experience construct was operationalized in two forms for this study: the coach experience demographics and the coach experience inventory. The coach experience inventory positively predicted LMX, as expected, indicating that the more experience the coach possessed (in terms of the activities listed in the inventory), the higher the quality of LMX in the relationship. However, the experience demographics completed by the coaches negatively predicted LMX. This is counter to the finding regarding the inventory and Hypothesis 3, in which I predicted the experience of a coach would positively predict LMX. One could postulate that as coaches acquire more coachees and more years of coaching (as the measure assessed), LMX may be negatively affected due to limitations on individual resources such as time and attention required for each coachee; however, more research is needed to further investigate this result and possible explanations due to the nature of the measure<sup>5</sup> and the power constraints faced in this work.

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<sup>5</sup>This measure served to collect demographic information on coaches' experiences, which may have caused some issues when averaging the responses across the items. The individual items of this demographic scale were correlated with the mean of the coach experience inventory, and the relationships varied widely (i.e., some relationships were positive; some were negative. Some relationships were significant; some were non-significant), demonstrating the lack of uniformity across the items.

Turning to the results involving coach self-efficacy, this work discovered that a coach's self-efficacy positively predicted both LMX and trust. This finding corroborates the notion that just as a leader's self-efficacy is important in developing LMX and trust with followers (Hannah et al., 2008; Lloyd, 2006; Murphy & Ensher, 1999; Oyer, 2011), a coach's self-efficacy is important in the context of coaching relationships. This finding is plausible as an individual's self-efficacy is generally linked to important outcomes, such as job performance and skill development (Stajkovic & Luthans, 1998), and this research has demonstrated how these previous findings can be applied to a coaching context, lending support to other work. Again, as previously discussed, de Haan and colleagues (2016) determined that coaches' self-efficacy was positively related to coaching effectiveness, as reported by coaches, which is also an important relationship underscored by Baron and Morin (2009). More specifically, an individual's self-efficacy has been shown to play an important role in LMX (Murphy & Ensher, 1999), a finding verified in this work. As for coaches' self-efficacy affecting trust, this is also a logical finding as a leader's self-efficacy been shown to be important in building trust with followers (Hannah et al., 2008; Lloyd, 2006; Murphy, 2002; Oyer, 2011). Indeed, Murphy (2002) highlights that self-efficacy is necessary to build trust with others. Therefore, it is reasonable that these relationships between an individual's self-efficacy and LMX and trust as outcomes shown in previous research were also discovered in this work.

As done in previous studies (Gregory & Levy, 2011), this work also accounted for the frequency of interactions between parties when studying coaching relationships as it could be presumed that dyads who have met more often develop stronger LMX and trust due to their increased interaction. Indeed, the number of coaching sessions the dyad experienced together was positively related to LMX and trust within the relationships. These results are logical as the constructs of LMX and trust require interactions between the involved parties and time to grow.

In addition to these hypotheses that received support, there were also quite a few that were not upheld. For instance, none of the hypotheses involving personality traits, on the coach or coachee side, were supported. This also means that the hypotheses with coachee individual difference variables as predictors (i.e., agreeableness and conscientiousness) did not receive support. As previously mentioned, lower than ideal power may be to blame for not finding some of these relationships in the study; however, in this research at least, these variables are not considered important predictors of LMX and trust in coaching relationships. The context of the highly structured coaching relationships may be one potential explanation of personality traits not playing an impactful role. The coaching relationships examined in this study involved external coaches, who only interacted with the coachees in the context of their coach-coachee dyads and were focused solely on the coaching activities at hand. Thus, there may not have been ample opportunity for individual differences to impact the relationships. This is in contrast to the findings regarding LMX and trust we often see in traditional leadership relationships; this discrepancy may be due to the fact that traditional leader-follower relationships are much more dynamic in nature than coaching relationships. Future research should test these relationships again though to determine if these variables are truly important, and if not, which influential variables we should turn our attention to in research and practice.

### **Theoretical Implications**

There are multiple theoretical implications of this work to note. First, at a broad level, by examining the variables that impact coaching relationships, this study contributes to the leader development literature as a whole by building greater understanding around some of the specific mechanisms that drive relationship quality, namely coach experience in terms of activities and coach self-efficacy. This work also extends some of the previous findings on leadership and individual



differences (i.e., the importance of experience and self-efficacy) to coaching contexts. Additionally, this research did not find the expected relationships involving personality, LMX, and trust, which may indicate there are boundary conditions to those associations. However, more data is necessary to fully explore any nuances that may exist.

In terms of the experience findings and their relationship to the broader literature, this work draws attention to the need to carefully and precisely define constructs in the study of coaching. For example, although it could be easy to consider both experience measures as collecting data on the same construct, they were clearly not doing so, and treating them separately yielded differing results. Researchers and practitioners alike should consider the purpose and aims of their work when deciding which measures to use and ensure the measurement is capturing the construct as intended. Further, the coaching literature may benefit from researchers being highly specific and detailed as to the measurement used and the rationale behind each operationalization. Ultimately, these actions could help to solidify some of the theoretical contributions in the coaching literature.

Additionally, the self-efficacy findings bolster the small amount of research on self-efficacy in coaching and indicate that coaches' self-efficacy is an important variable that should continue to be taken into account in both research and practice. Confirming the overall importance of coach self-efficacy as a construct, this work also opens the path to begin considering self-efficacy at the subscale-level (i.e., relational skills, communication skills, and skills in facilitating learning and results) to determine if differential relationships exist when predicting LMX and trust based on the types of skills a coach feels they excel in using.

Lastly, the findings regarding the number of coaching sessions that dyads participated in supports the notion found across literatures (i.e., leadership, counseling, mentoring) that interacting with another party more frequently allows for opportunities to build important relational elements, including LMX and trust. Although this contribution may not be groundbreaking, it is worthwhile

to note that the frequency of interactions does play some role in the relationships of interest. A related practical implication, therefore, is that coaching programs should provide sufficient time for these relationships to develop. The number of interactions that requires is an area to be explored by future research, and any supported findings should also be connected to practical results coachees and their organizations care about (e.g., financial outcomes). In addition to these theoretical implications, there are other practical considerations associated with this work that should be addressed.

### **Practical Implications**

Understanding the factors that impact the success of coaching can lead to knowledge and practices targeting coaching relationships with the intention of improving this leader development effort. Since coach experience and self-efficacy were found to be important in the work, coaches can be trained in practices to build and sustain these characteristics to reap the associated benefits. First, the surprising results around the coach experience measures should be considered when determining the experiences coaches need to be effective in their roles. This work would support the argument that the types and quality of experiences a coach possesses (i.e., specific, relevant activities) are more important than the amount of experience a coach has. The inventory used in this work may serve as a valuable assessment for coaches to determine where their gaps in coaching experiences lie, allowing them to focus on gaining experience in those activities. Further, targeted training focused on the skills and experiences listed in the inventory may be recommended for coaches seeking to increase the quality of their coaching relationships. Coaches could participate in training programs that focus on the specific types of situations they need experience in (e.g., reading and interpreting reports; providing feedback to various levels of leaders; participating in assessments as raters and/or role players). Further, for coaches working internally to an organization, as Gregory

and Levy (2011) suggest, organizations can encourage behaviors in the workplace that supplement and enforce coaching, such as offering continuing training or linking coaching behaviors and skills to performance management systems.

In terms of applying the findings around self-efficacy, coaches should be encouraged to engage in activities that may boost their perceptions of their abilities to execute the functions of the coaching role effectively. These activities can be categorized into the labels Baron and Morin (2009) originally provided to organize and focus one's training: relational skills (e.g., showing empathy, respect, trust, presence, and availability), communication skills (e.g., questioning, reformulating, reinforcing, and confronting), and skills in facilitating learning and results (e.g., establishing a development plan, assessing learning, and identifying obstacles). By gaining necessary skills involved in the practice of coaching, coaches' self-efficacy should increase, and thereby, positively influence the LMX and trust developed in future coaching relationships.

Further, the positive findings involving the number of coaching sessions should be shared with coaches. Coaches may benefit from understanding that some relational aspects will improve over time and to not become discouraged if a coaching engagement is not exhibiting strong relational features from the start. This information may also be useful to share with coachees at the start of coaching engagements to manage and align expectations around the relationships. Overall, the findings of this research can be leveraged to inform the involved parties and coaching training.

### **Limitations**

There are several limitations to this work to be noted. First, the data being self-reported in nature, and particularly same-source self-reported data, is a major limitation. When using self-report measures, as is done in this study, the researcher(s) must be wary of potential socially desirable responding, which would impact results. Further, when the data are provided by the same party, relationships between the variables of interest are often inflated (Gregory & Levy, 2011). In this

study, most of the data for any given coaching relationship was collected from the coaches (with the exception of the coachee personality data previously collected from the coachees and accessed through an archival database). Therefore, the supported relationships in this work (i.e., between coach experience and LMX; coach self-efficacy and LMX; and coach self-efficacy and trust) are likely inflated due to this effect and should be interpreted with caution. Another concern with self-reported data is the accuracy of such data and the inability to test for agreement or consistency across self-reported data and other-reported data. Indeed, other coaching studies have complemented self-report data with other-reported data (e.g., from peers, supervisors, followers, customers) when possible (see Bozer & Sarros, 2012; Smither et al., 2003; and Thach, 2002 for examples). Unfortunately, the collection of data from other sources was not a viable option in this work. However, future research could extend this work by examining the same hypotheses using multiple sources of data, including objective sources, to alleviate these issues. Possibly compounding some of these issues is the additional limitation of the retrospective nature of the study design. Coaches were asked to reflect on their previous coaching relationships, some of which concluded recently, but many concluded months prior. Therefore, the accuracy of the coaches' memories of the relationships could also be causing issues when examining the data. One solution to this limitation would be a study design that assesses ongoing coaching relationships, and such a study could also collect data at numerous time points to study how the relationships change over time.

As previously mentioned, this work was limited by the available data sources and participants, and thus, may suffer from a shortage of power with only 22 coaches surveyed. However, a few relationships surfaced, and those provide some insight into coaching relationships and important coach characteristics. Future work should attempt to collect data from a larger sample to be able to test these relationships with more power and confirm the results found here.

Additionally, this work was unable to leverage performance data, disallowing the linking of the variables of interest to this important type of outcome. In general, being able to link coaching relationships to performance effects can be extremely meaningful and demonstrative of intended effects and is strongly encouraged in future coaching studies (Gregory & Levy, 2011). As such, the limitations of the current work can be addressed through future efforts.

### **Future Directions**

In addition to the aforementioned areas, there are multiple directions future research could take to further advance the study of coaching. First, in addition to other inputs in the coaching process, accounting for the development needs of coachees as factors in coaching relationships is warranted. Coachees are usually aiming to improve their skills to continue in their current positions or to receive promotions and more advanced positions (Kampa-Kokesch & Anderson, 2001). In the current study, the development needs of coachees, such as improving leadership skills and interpersonal relations or learning to take control of a meeting to ensure its effectiveness, were not evaluated. However, they should also be considered in the study of coaching (Feldman & Lankau, 2005). Determining the reasons individuals are receiving coaching may play a role in the relationships at hand, and it is possible that the development needs of the coachees drive coaching process and outcomes.

Further, this study examined only a small range of possible individual difference variables which could logically affect the coaching process, and there is a host of other variables worth studying from both the coach and coachee perspectives. For example, the tenure/career stage (Feldman & Lankau, 2005) and emotional intelligence (Goleman, 1998) of coachees have been deemed influential characteristics of coachees on the coaching process. As such, future studies should examine other individual difference variables that could affect the quality and success of

coaching relationships. In addition to individual difference variables, research could also explore how the timing of coaching in an individual's career impacts the coaching relationship and outcomes. For example, when mentoring, another employee intervention commonly compared to coaching, is received in an early stage of one's career, it is considered more impactful than if experienced in a later career stage (Donaldson, Ensher, & Grant-Vallone, 2000). Also, the goals set for the coaching relationship may differ depending on the career stage of the coachee (Zeus & Skiffington, 2000), and thus, could also be taken into account when studying these relationships.

Additionally, in the current study, LMX and trust were investigated as the outcomes of interest; however, in addition to these, other potential coaching outcomes are worth addressing (Boyce et al., 2010), including coachee attitudes (e.g., job satisfaction, organizational commitment; Gregory & Levy, 2011), job performance, learning outcomes, goal attainment, and relationship outcomes (Sonesh, Coultas, Lacerenza, et al., 2015). For example, learning outcomes associated with coaching are an important result of the process. As learning can be thought to occur when individuals reflect on or process prior experiences, leading to a range of potential actions (Hagen & Gavrilova Aguilar, 2012), the role of learning in coaching includes a coachee processing information and experiences and enacting various desired behaviors. As such, learning outcomes can capture the amount of knowledge gained and/or skills acquired or improved from coaching (Feldman & Lankau, 2005). Further, since coaching is considered a goal-focused process (Grant, 2006), it follows that goal attainment is also an outcome worthy of examination (Spence, 2007) and should be explored in future work.

In terms of objectives outcomes that could be investigated, a leader's impact on results and behavioral changes are other plausible outcomes of interest following coaching. Other researchers have suggested linking coaching to important organizational outcome variables to understand the impact of coaching at a higher level (Gregory & Levy, 2011). Organizational results that can be

attributed to the leader (e.g., financial performance of one's business unit) and tend to be objective in nature could be used to measure the efficacy of the coaching process (Feldman & Lankau, 2005; Kirkpatrick, 1996). However, this type of outcome may pose issues in predictive validity due to the distal nature of such an outcome from the predictors of interest. Regardless of this concern, obtaining certain objective information regarding coachee performance may be difficult depending on the study design (e.g., Gregory & Levy, 2011), as was in the case in this work. Further, presumed outcomes of coaching include changes in managerial behaviors (Hooijberg & Lane, 2009; Saporito, 1996); however, direct observation to examine changes in the behaviors of coachees can be both costly and time-consuming and is not feasible within a survey design. Overall, there is a multitude of avenues future coaching research can embark on, including incorporating the development needs of coachees, other individual difference variables from both parties, and additional outcomes of the coaching process.

## **Conclusion**

The renewed interest in the impact of leaders due to ongoing trends such as globalization and diversity in the workforce (W. L. Gardner et al., 2010) and the introduction of new technologies and advancements (O'Toole & Lawler, 2006) requires a strong focus on the efficacy of leadership development efforts. Fortunately, there is a continually growing interest in which specific development interventions are most effective for improving leadership. As leaders and their organizations look to prepare for the future, coaching can serve as an effective method to equip leaders with the skills and abilities necessary to succeed in the face of emerging changes and challenges. As Bluckert (2004) stated, coaching will continue to be practiced well into the future, and as such, we should work to understand how to optimize these efforts as best we can.

## REFERENCES

- Allworth, E., & Passmore, J. (2008). Using psychometrics and psychological tools in coaching. In J. Passmore (Ed.), *Psychometrics in coaching: Using psychological and psychometric tools for development* (pp. 7-24). Philadelphia, PA: Kogan Page Limited.
- Aon (2015). *ADEPT-15*. Retrieved from [http://bestemployerseurope.aon.com/en/wp-content/uploads/2016/02/Adept15\\_infosheet\\_final.pdf](http://bestemployerseurope.aon.com/en/wp-content/uploads/2016/02/Adept15_infosheet_final.pdf)
- Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology*, 74(6), 1531-1544.
- Ashton, M. C., Lee, K., & Paunonen, S. V. (2002). What is the central feature of extraversion? Social attention versus reward sensitivity. *Journal of Personality and Social Psychology*, 83(1), 245-252.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader: Moments matter in accelerating authentic leadership*. New York, NY: McGraw-Hill.
- Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The Leadership Quarterly*, 20(5), 764-784.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421-449.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827-832.



- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baron, L., & Morin, L. (2009). The coach-coachee relationship in executive coaching: A field study. *Human Resource Development Quarterly*, 20(1), 85-106.
- Barrett, L. F., & Pietromonaco, P. R. (1997). Accuracy of the five-factor model in predicting perceptions of daily social interactions. *Personality and Social Psychology Bulletin*, 23(11), 1173-1187.
- Barrick, M. R., Day, D. V., Lord, R. G., & Alexander, R. A. (1991). Assessing the utility of executive leadership. *The Leadership Quarterly*, 2(1), 9-22.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9(1-2), 9-30.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, 78(5), 715-722.
- Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership*. New York, NY: Free Press.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B. M., Waldman, D. A., Avolio, B. J., & Bebb, M. (1987). Transformational leadership and the falling dominoes effect. *Group & Organization Studies*, 12(1), 73-87.

- Belschak, F. D., & Den Hartog, D. N. (2010). Different foci of proactive behaviour: The role of transformational leadership. *Journal of Occupational and Organizational Psychology*, 83, 267-273.
- Ben-Ner, A., & Halldorsson, F. (2010). Trusting and trustworthiness: What are they, how to measure them, and what affects them. *Journal of Economic Psychology*, 31(1), 64-79.
- Bergman, J. Z., Small, E. E., Bergman, S. M., & Rentsch, J. R. (2010). Asymmetry in perceptions of trustworthiness: It's not you; it's me. *Negotiation and Conflict Management Research*, 3(4), 379-399.
- Bernerth, J. B., Armenakis, A. A., Feild, H. S., Giles, W. F., & Walker, H. J. (2007). Is personality associated with perceptions of LMX? An empirical study. *Leadership & Organization Development Journal*, 28(7), 613-631.
- Bijlsma, K. M., & Van De Bunt, G. G. (2003). Antecedents of trust in managers: A "bottom up" approach. *Personnel Review*, 32(5), 638-664.
- Blattner, J. (2005). Coaching: The Successful Adventure of a Downwardly Mobile Executive. *Consulting Psychology Journal: Practice and Research*, 57(1), 3-13.
- Blau, P. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Bluckert, P. (2004). The state of play in corporate coaching: current and future trends. *Industrial and Commercial Training*, 36(2), 53-56.
- Bluckert, P. (2005). Critical factors in executive coaching—the coaching relationship. *Industrial and Commercial Training*, 37(7), 336-340.
- Bono, J. E., Purvanova, R. K., Towler, A. J., & Peterson, D. B. (2009). A survey of executive coaching practices. *Personnel Psychology*, 62(2), 361-404.

- Bowles, S., Cunningham, C. J., De La Rosa, G. M., & Picano, J. (2007). Coaching leaders in middle and executive management: Goals, performance, buy-in. *Leadership & Organization Development Journal*, 28(5), 388-408.
- Boyce, L. A., Jeffrey Jackson, R., & Neal, L. J. (2010). Building successful leadership coaching relationships: examining impact of matching criteria in a leadership coaching program. *Journal of Management Development*, 29(10), 914-931.
- Bozer, G., Joo, B.-K., & Santora, J. C. (2015). Executive coaching: Does coach-coachee matching based on similarity really matter? *Consulting Psychology Journal: Practice and Research*, 67(3), 218-233.
- Bozer, G., & Sarros, J. C. (2012). Examining the Effectiveness of Executive Coaching on Coachees' Performance in the Israeli Context. *International Journal of Evidence Based Coaching & Mentoring*, 10(1), 14-32.
- Brotman, L. E., Liberi, W. P., & Wasylshyn, K. M. (1998). Executive coaching: The need for standards of competence. *Consulting Psychology Journal: Practice and Research*, 50(1), 40-46.
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader-member exchange. *The Leadership Quarterly*, 11(2), 227-250.
- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, 17(3), 288-307.
- Burke, M. J., & Day, R. R. (1986). A cumulative study of the effectiveness of managerial training. *Journal of Applied Psychology*, 71(2), 232.

- Burns, D. D., & Nolen-Hoeksema, S. (1992). Therapeutic empathy and recovery from depression in cognitive-behavioral therapy: a structural equation model. *Journal of Consulting and Clinical Psychology, 60*(3), 441-449.
- Campbell, J. P. (1989). The agenda for theory and research. In I. L. Goldstein & Associates (Eds.), *Training and development in organizations* (pp. 469-486). San Francisco, CA: Jossey-Bass.
- Carey, W., Philippon, D. J., & Cummings, G. G. (2011). Coaching models for leadership development: An integrative review. *Journal of Leadership Studies, 5*(1), 51-69.
- Carney, D. R., Colvin, C. R., & Hall, J. A. (2007). A thin slice perspective on the accuracy of first impressions. *Journal of Research in Personality, 41*(5), 1054-1072.
- Carriere, B. K., Muise, M., Cummings, G., & Newburn-Cook, C. (2009). Healthcare succession planning: an integrative review. *Journal of Nursing Administration, 39*(12), 548-555.
- Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology, 92*(2), 331-346.
- Colbert, A. E., & Witt, L. (2009). The role of goal-focused leadership in enabling the expression of conscientiousness. *Journal of Applied Psychology, 94*(3), 790-796.
- Collins, D. B., & Holton III, E. F. (2004). The effectiveness of managerial leadership development programs: A meta-analysis of studies from 1982 to 2001. *Human Resource Development Quarterly, 15*(2), 217-248.
- Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology, 85*(5), 678-707.

- Cooper, C. L., & Quick, J. C. (2003). The stress and loneliness of success. *Counselling Psychology Quarterly*, 16(1), 1-7.
- Cortvriend, P., Harris, C., & Alexander, E. (2008). Evaluating the links between leadership development coaching and performance. *International Coaching Psychology Review*, 3(2), 164-179.
- Costa Jr., P. T., & McCrae, R. R. (1988). From catalog to classification: Murray's needs and the five-factor model. *Journal of Personality and Social Psychology*, 55(2), 258-265.
- Costa Jr., P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cox, E., & Bachkirova, T. (2007). Coaching with emotion: How coaches deal with difficult emotional situations. *International Coaching Psychology Review*, 2(2), 178-189.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- Cumberland, D. M., Herd, A., Alagaraja, M., & Kerrick, S. A. (2016). Assessment and development of global leadership competencies in the workplace: A review of literature. *Advances in Developing Human Resources*, 18(3), 301-317.
- Dansereau Jr., F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, 13(1), 46-78.
- Day, D. V. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581-613.
- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York, NY: Oxford University Press.

- Day, D. V., & Antonakis, J. (2013). The future of leadership. In H. S. Leonard, R. Lewis, A. M. Freedman, & J. Passmore (Eds.), *The psychology of leadership, change, and organizational development* (pp. 221-235). West Sussex, UK: Wiley-Blackwell.
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25, 63-82.
- Day, D. V., & Harrison, M. M. (2007). A multilevel, identity-based approach to leadership development. *Human Resource Management Review*, 17(4), 360-373.
- Day, D. V., & Lord, R. G. (1988). Executive leadership and organizational performance: Suggestions for a new theory and methodology. *Journal of Management*, 14(3), 453-464.
- de Haan, E., Culpin, V., & Curd, J. (2011). Executive coaching in practice: what determines helpfulness for clients of coaching? *Personnel Review*, 40(1), 24-44.
- de Haan, E., Duckworth, A., Birch, D., & Jones, C. (2013). Executive coaching outcome research: The contribution of common factors such as relationship, personality match, and self-efficacy. *Consulting Psychology Journal: Practice and Research*, 65(1), 40-57.
- de Haan, E., Grant, A. M., Burger, Y., & Eriksson, P.-O. (2016). A large-scale study of executive and workplace coaching: The relative contributions of relationship, personality match, and self-efficacy. *Consulting Psychology Journal: Practice and Research*, 68(3), 189-207.
- DeRue, D. S., Nahrgang, J. D., Hollenbeck, J. R., & Workman, K. (2012). A quasi-experimental study of after-event reviews and leadership development. *Journal of Applied Psychology*, 97(5), 997-1015.
- DeRue, D. S., & Wellman, N. (2009). Developing leaders via experience: the role of developmental challenge, learning orientation, and feedback availability. *Journal of Applied Psychology*, 94(4), 859-875.

- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25, 36-62.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611-628.
- Donaldson, S. I., Ensher, E. A., & Grant-Vallone, E. J. (2000). Longitudinal examination of mentoring relationships on organizational commitment and citizenship behavior. *Journal of Career Development*, 26(4), 233-249.
- Dragoni, L., Park, H., Soltis, J., & Forte-Trammell, S. (2014). Show and tell: How supervisors facilitate leader development among transitioning leaders. *Journal of Applied Psychology*, 99(1), 66-86.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38(6), 1715-1759.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Ellinger, A. D., Ellinger, A. E., & Keller, S. B. (2003). Supervisory coaching behavior, employee satisfaction, and warehouse employee performance: A dyadic perspective in the distribution industry. *Human Resource Development Quarterly*, 14(4), 435-458.
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48(1), 43-49.
- Ely, K., Boyce, L. A., Nelson, J. K., Zaccaro, S. J., Hernez-Broome, G., & Whyman, W. (2010). Evaluating leadership coaching: A review and integrated framework. *The Leadership Quarterly*, 21(4), 585-599.

- Engstrom, T. (2004). Variation in mentoring outcomes: An effect of personality factors? . In D. Clutterbuck & G. Lane (Eds.), *The situational mentor: An international review of competences and capabilities in mentoring*. Aldershot, UK: Gower.
- Epitropaki, O., & Martin, R. (1999). The impact of relational demography on the quality of leader-member exchanges and employees' work attitudes and well-being. *Journal of Occupational and Organizational Psychology*, 72(2), 237-240.
- Epitropaki, O., & Martin, R. (2005). From ideal to real: a longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, 90(4), 659-676.
- Evans, A. M., & Revelle, W. (2008). Survey and behavioral measurements of interpersonal trust. *Journal of Research in Personality*, 42(6), 1585-1593.
- Evers, W. J., Brouwers, A., & Tomic, W. (2006). A quasi-experimental study on management coaching effectiveness. *Consulting Psychology Journal: Practice and Research*, 58(3), 174-182.
- Feldman, D. C., & Lankau, M. J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management*, 31(6), 829-848.
- Fiedler, F. E., & House, R. J. (1988). Leadership theory and research: A report of progress. *International Review of Industrial and Organizational Psychology*, 3, 73-92.
- Fillery-Travis, A., & Lane, D. (2006). Does coaching work or are we asking the wrong question? *International Coaching Psychology Review*, 1(1), 24-36.
- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37(1), 1-6.
- Fredrickson, B. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226.



- Fulmer, C. A., & Gelfand, M. J. (2012). At what level (and in whom) we trust: Trust across multiple organizational levels. *Journal of Management*, 38(4), 1167-1230.
- Gaines Jr., S. O., Panter, A., Lyde, M. D., Steers, W. N., Rusbult, C. E., Cox, C. L., & Wexler, M. O. (1997). Evaluating the circumplexity of interpersonal traits and the manifestation of interpersonal traits in interpersonal trust. *Journal of Personality and Social Psychology*, 73(3), 610-623.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York, NY: Basic Books.
- Gardner, W. L., Lowe, K. B., Moss, T. W., Mahoney, K. T., & Coglisier, C. C. (2010). Scholarly leadership of the study of leadership: A review of The Leadership Quarterly's second decade, 2000–2009. *The Leadership Quarterly*, 21(6), 922-958.
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader–member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827-844.
- Giacobbi Jr., P. R. (2000). *The athletic coachability scale: Construct conceptualization and psychometric analyses*. (Unpublished doctoral dissertation). University of Tennessee, Knoxville, TN.
- Giglio, L., Diamante, T., & Urban, J. M. (1998). Coaching a leader: Leveraging change at the top. *Journal of Management Development*, 17(2), 93-105.
- Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, 9, 175-208.
- Graen, G. B., & Uhl-Bien, M. (1991). The transformation of professionals into self-managing and partially self-designing contributors: Toward a theory of leadership-making. *Journal of Management Systems*, 3(3), 25-39.

- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Graham, S., Wedman, J. F., & Garvin-Kester, B. (1994). Manager coaching skills: What makes a good coach? *Performance Improvement Quarterly*, 7(2), 81-94.
- Grant, A. M. (2006). An integrative goal-focused approach to executive coaching. In S. R. & A. M. Grant (Eds.), *Evidence based coaching handbook: Putting best practices to work for you* (pp. 153-192). Hoboken, NJ: John Wiley & Sons.
- Grant, A. M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and workplace well-being: A randomised controlled study. *The Journal of Positive Psychology*, 4(5), 396-407.
- Gregory, J. B., & Levy, P. E. (2011). It's not me, it's you: A multilevel examination of variables that impact employee coaching relationships. *Consulting Psychology Journal: Practice and Research*, 63(2), 67-88.
- Groves, K. S. (2005). Gender differences in social and emotional skills and charismatic leadership. *Journal of Leadership & Organizational Studies*, 11(3), 30-46.
- Gyllensten, K., & Palmer, S. (2007). The coaching relationship: An interpretative phenomenological analysis. *International Coaching Psychology Review*, 2(2), 168-177.
- Hackman, J. R., & Wageman, R. (2005). A theory of team coaching. *Academy of Management Review*, 30(2), 269-287.
- Hagen, M., & Gavrilova Aguilar, M. (2012). The impact of managerial coaching on learning outcomes within the team context: An analysis. *Human Resource Development Quarterly*, 23(3), 363-388.

- Hall, D. T., & Seibert, K. W. (1992). Strategic management development: Linking organizational strategy, succession planning, and managerial learning. In D. H. Montross & C. J. Shinkman (Eds.), *Career development: Theory and practice* (pp. 255-275). Springfield, IL: Charles C. Thomas.
- Hannah, S. T., Avolio, B. J., Luthans, F., & Harms, P. D. (2008). Leadership efficacy: Review and future directions. *The Leadership Quarterly*, 19(6), 669-692.
- Heifetz, R. A. (1996). *Leadership without easy answers*. Boston, MA: Harvard University Press.
- Hellervik, L. W., Hazucha, J. F., & Schneider, R. J. (1992). Behavior change: Models, methods, and a review of the evidence. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (2nd ed., pp. 823-895). Palo Alto, CA: Consulting Psychologists Press.
- Hernez-Broome, G. (2002). In it for the long haul: Coaching is key to continued development. *Leadership in Action*, 22(1), 14-16.
- Hiraishi, K., Yamagata, S., Shikishima, C., & Ando, J. (2008). Maintenance of genetic variation in personality through control of mental mechanisms: A test of trust, extraversion, and agreeableness. *Evolution and Human Behavior*, 29(2), 79-85.
- Hirst, G., Mann, L., Bain, P., Pirola-Merlo, A., & Richver, A. (2004). Learning to lead: The development and testing of a model of leadership learning. *The Leadership Quarterly*, 15, 311-327.
- Ho, M. (2016). Investment in learning increases for fourth straight year. Retrieved from <https://www.td.org/Publications/Magazines/TD/TDArchive/2016/11/Investment-in-Learning-Increases-for-Fourth-StraightYear>
- Hogan, J., & Hogan, R. (2007). *Hogan Personality Inventory manual* (3rd ed.). Tulsa, OK: Hogan Assessment Systems.

- Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, 88(1), 100-112.
- Hooijberg, R., & Lane, N. (2009). Using multisource feedback coaching effectively in executive education. *Academy of Management Learning & Education*, 8(4), 483-493.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, 7(3), 323-352.
- House, R. J., & Baetz, M. L. (1979). Leadership: Some empirical generalizations and new research directions. In B. M. Staw (Ed.), *Research in organizational behavior* (Vol. 1, pp. 399-401). Greenwich, CT: JAI Press.
- House, R. J., & Mitchell, T. R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business*, 3, 81-97.
- Hunter, J., & Chaskalson, M. (2013). Making the mindful leader: Cultivating skills for facing adaptive challenges. In H. S. Leonard, R. Lewis, A. M. Freedman, & J. Passmore (Eds.), *The psychology of leadership, change, and organizational development* (pp. 195-219). West Sussex, UK: Wiley-Blackwell.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92(1), 269-277.
- Jones, G., & Spooner, K. (2006). Coaching high achievers. *Consulting Psychology Journal: Practice and Research*, 58(1), 40-50.
- Joo, B.-K. (2005). Executive coaching: A conceptual framework from an integrative review of practice and research. *Human Resource Development Review*, 4(4), 462-488.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765-780.

- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology, 89*(1), 36-51.
- Judge, W. Q., & Cowell, J. (1997). The brave new world of executive coaching. *Business Horizons, 40*(4), 71-78.
- Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior, 21*(8), 949-964.
- Kaiser, R. B., Hogan, R., & Craig, S. B. (2008). Leadership and the fate of organizations. *American Psychologist, 63*(2), 96-110.
- Kampa-Kokesch, S. (2001). *Executive coaching as an individually tailored consultation intervention: Does it increase leadership?* (Unpublished doctoral dissertation). Western Michigan University, Kalamazoo, MI.
- Kampa-Kokesch, S., & Anderson, M. Z. (2001). Executive coaching: A comprehensive review of the literature. *Consulting Psychology Journal: Practice and Research, 53*(4), 205-228.
- Keller, R. T. (2006). Transformational leadership, initiating structure, and substitutes for leadership: a longitudinal study of research and development project team performance. *Journal of Applied Psychology, 91*(1), 202-210.
- Kiel, F., Rimmer, E., Williams, K., & Doyle, M. (1996). Coaching at the top. *Consulting Psychology Journal: Practice and Research, 48*(2), 67-77.
- Kilburg, R. R. (2000). *Executive coaching: Developing managerial wisdom in a world of chaos*. Washington, DC: American Psychological Association.
- Kirkpatrick, D. (1996). Great ideas revisited. *Training and Development, 50*(1), 54-59.

- Kochanowski, S., Seifert, C. F., & Yukl, G. (2010). Using coaching to enhance the effects of behavioral feedback to managers. *Journal of Leadership & Organizational Studies*, 17(4), 363-369.
- Konovsky, M., & Pugh, D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, 37, 656-669.
- Kowalski, K., & Casper, C. (2007). The coaching process: An effective tool for professional development. *Nursing Administration Quarterly*, 31(2), 171-179.
- Kozlowski, S. W. J., Gully, S. M., McHugh, P. P., Salas, E., & Cannon-Bowers, J. A. (1996). A dynamic theory of leadership and team effectiveness: Developmental and task contingent leader roles. In G. R. Ferris (Ed.), *Research in Personnel and Human Resources Management* (Vol. 14, pp. 253-305). Greenwich, CT: JAI Press.
- Lacerenza, C. N., Reyes, D. L., Marlow, S. L., Joseph, D. L., & Salas, E. (2017). Leadership training design, delivery, and implementation: A meta-analysis. *Journal of Applied Psychology*, 102(12), 1686-1718.
- Ladegard, G., & Gjerde, S. (2014). Leadership coaching, leader role-efficacy, and trust in subordinates. A mixed methods study assessing leadership coaching as a leadership development tool. *The Leadership Quarterly*, 25(4), 631-646.
- Leonard, H. S., Lewis, R., Freedman, A. M., & Passmore, J. (2013). The role of psychology in leadership, change, and organization development. In H. S. Leonard, R. Lewis, A. M. Freedman, & J. Passmore (Eds.), *The psychology of leadership, change, and organizational development* (pp. 1-11). West Sussex, UK: Wiley-Blackwell.
- LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, 86(2), 326-336.

- Lester, P. B., Hannah, S. T., Harms, P. D., Vogelgesang, G. R., & Avolio, B. J. (2011). Mentoring impact on leader efficacy development: A field experiment. *Academy of Management Learning & Education, 10*(3), 409-429.
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal, 23*(3), 451-465.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management, 24*(1), 43-72.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management, 15*, 47-120.
- Liu, J., Siu, O. L., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology, 59*(3), 454-479.
- Lleo de Nalda, A., Guillen, M., & Gil Pechuan, I. (2016). The influence of ability, benevolence, and integrity in trust between managers and subordinates: the role of ethical reasoning. *Business Ethics: A European Review, 25*(4), 556-576.
- Lloyd, J. M. (2006). *Predicting leadership: Characteristics associated with student leadership*. (Unpublished doctoral dissertation). University of Georgia, Athens, GA.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological Bulletin, 90*(1), 125-152.
- Lord, R. G., Day, D. V., Zaccaro, S. J., Avolio, B. J., & Eagly, A. H. (2017). Leadership in applied psychology: Three waves of theory and research. *Journal of Applied Psychology, 102*(3), 434-451.

- Lord, R. G., & Dinh, J. E. (2014). What have we learned that is critical in understanding leadership perceptions and leader-performance relations? *Industrial and Organizational Psychology, 7*(2), 158-177.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly, 7*(3), 385-425.
- Lowman, R. L. (2005). Executive coaching: The road to Dodoville needs paving with more than good assumptions. *Consulting Psychology Journal: Practice and Research, 57*(1), 90-96.
- Lu, S. C., Kong, D. T., Ferrin, D. L., & Dirks, K. T. (2017). What are the determinants of interpersonal trust in dyadic negotiations? Meta-analytic evidence and implications for future research. *Journal of Trust Research, 7*(1), 22-50.
- Luthans, F., & Peterson, S. J. (2004). 360-degree feedback with systematic coaching: Empirical analysis suggests a winning combination. *Human Resource Management, 42*(3), 243-256.
- Mansi, A. (2007). Executive coaching and psychometrics: A case study evaluating the use of the Hogan Personality Inventory (HPI) and the Hogan Development Survey (HDS) in senior management coaching. *The Coaching Psychologist, 3*(2), 53-58.
- Mayer, D., Nishii, L., Schneider, B., & Goldstein, H. (2007). The precursors and products of justice climates: Group leader antecedents and employee attitudinal consequences. *Personnel Psychology, 60*(4), 929-963.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology, 84*(1), 123-136s.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734.



- McBride, B. W. (2013). *Coaching, clients, and competencies: How coaches experience the flow state*. (Unpublished doctoral dissertation). Fielding Graduate University, Santa Barbara, CA.
- McCarthy, M. H., Wood, J. V., & Holmes, J. G. (2017). Dispositional pathways to trust: Self-esteem and agreeableness interact to predict trust and negative emotional disclosure. *Journal of Personality and Social Psychology*, *113*(1), 95-116.
- McCauley, C. (2008). *Leader Development: A Review of Research*. Retrieved from Society for Human Resource Management:  
[https://www.researchgate.net/publication/266495919\\_Leader\\_Development\\_A\\_Review\\_of\\_Research](https://www.researchgate.net/publication/266495919_Leader_Development_A_Review_of_Research)
- McCauley, C. D., & Hezlett, S. A. (2002). Individual development in the workplace. In N. Anderson, D. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of Industrial, Work and Organizational Psychology* (Vol. 1: Personnel psychology, pp. 313-335). Thousand Oaks, CA: Sage.
- McCormick, I., & Burch, G. S. J. (2008). Personality-focused coaching for leadership development. *Consulting Psychology Journal: Practice and Research*, *60*(3), 267-278.
- McCrae, R. R., & Costa Jr., P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81-90.
- McCrae, R. R., & Costa Jr., P. T. (1999). A five-factor theory of personality. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). New York, NY: Guilford.
- McCrae, R. R., & Costa Jr., P. T. (2008). Empirical and theoretical status of the five-factor model of personality traits. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE*

*handbook of personality theory and assessment* (Vol. 1, pp. 273-294). Los Angeles, CA: SAGE.

McGovern, J., Lindemann, M., Vergara, M., Murphy, S., Barker, L., & Warrenfeltz, R. (2001).

Maximizing the impact of executive coaching. *The Manchester Review*, 6(1), 1-9.

McGrath, J. E. (1962). *Leadership behavior: Some requirements for leadership training*.

Washington, DC: U.S. Civil Service Commission, Office of Career Development.

McNally, K., & Lukens, R. (2006). Leadership development: An external-internal coaching partnership. *Journal of Nursing Administration*, 36(3), 155-161.

Monzani, L., Ripoll, P., & Peiró, J. M. (2014). Followers' agreeableness and extraversion and their loyalty towards authentic leadership. *Psicothema*, 26(1), 69-75.

Mooradian, T., Renzl, B., & Matzler, K. (2006). Who trusts? Personality, trust and knowledge sharing. *Management Learning*, 37(4), 523-540.

Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management*, 36(1), 5-39.

Murphy, S. E. (2002). Leader self-regulation: The role of self-efficacy and multiple intelligences.

In R. Riggio, S. Murphy, & F. J. Pirozzolo (Eds.), *Multiple intelligences and leadership*.

Mahwah, NJ: Lawrence Erlbaum Associates.

Murphy, S. E., & Ensher, E. A. (1999). The effects of leader and subordinate characteristics in the development of leader-member exchange quality. *Journal of Applied Social Psychology*, 29(7), 1371-1394.

Nahrgang, J. D., Morgeson, F. P., & Ilies, R. (2009). The development of leader-member exchanges: Exploring how personality and performance influence leader and member

- relationships over time. *Organizational Behavior and Human Decision Processes*, 108(2), 256-266.
- Neuman, G. A., & Wright, J. (1999). Team effectiveness: beyond skills and cognitive ability. *Journal of Applied Psychology*, 84(3), 376-389.
- Nguyen, N., Allen, L. C., & Fraccastoro, K. (2005). Personality predicts academic performance: Exploring the moderating role of gender. *Journal of Higher Education Policy and Management*, 27(1), 105-117.
- O'Toole, J., & Lawler, E. E. (2006). *The new American workplace*. New York: NY: Palgrave MacMillan.
- Olivero, G., Bane, K. D., & Kopelman, R. E. (1997). Executive coaching as a transfer of training tool: Effects on productivity in a public agency. *Public Personnel Management*, 26(4), 461-469.
- Orenstein, R. L. (2006). Measuring executive coaching efficacy? The answer was right here all the time. *Consulting Psychology Journal: Practice and Research*, 58(2), 106-116.
- Oskarsson, S., Dawes, C., Johannesson, M., & Magnusson, P. K. (2012). The genetic origins of the relationship between psychological traits and social trust. *Twin Research and Human Genetics*, 15(1), 21-33.
- Oyer, B. J. (2011). *The relationship between principals' confidence, humility, and effectiveness: A study of teacher perceptions*. (Unpublished doctoral dissertation). Bowling Green State University, Bowling Green, OH.
- Passmore, J., & Gibbes, C. (2007). The state of executive coaching research: What does the current literature tell us and what's next for coaching research. *International Coaching Psychology Review*, 2(2), 116-128.

- Perkins, R. D. (2009). How executive coaching can change leader behavior and improve meeting effectiveness: An exploratory study. *Consulting Psychology Journal: Practice and Research*, 61(4), 298.
- Peterson, D. B. (1996). Executive coaching at work: The art of one-on-one change. *Consulting Psychology Journal: Practice and Research*, 48(2), 78-86.
- Phillips, K. R. (1998). The Achilles' heel of coaching. *Training & Development*, 52(3), 41-46.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142.
- Raghuram, S., Gajendran, R. S., Liu, X., & Somaya, D. (2017). Boundaryless LMX: Examining LMX's impact on external career outcomes and alumni goodwill. *Personnel Psychology*, 70(2), 399-428.
- Reichard, R. J., & Avolio, B. J. (2005). Where are we? The status of leadership intervention research: A meta-analytic summary. In W. L. Gardner, B. J. Avolio, & F. O. Walumbwa (Eds.), *Authentic leadership theory and practice: Origins, effects and development* (pp. 203-226). Oxford, UK: Elsevier.
- Rohs, F. R. (1999). Response shift bias: A problem in evaluating leadership development with self-report pretest-posttest measures. *Journal of Agricultural Education*, 40(4), 28-37.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393-404.
- Rowe, W. G., Cannella Jr., A. A., Rankin, D., & Gorman, D. (2005). Leader succession and organizational performance: Integrating the common-sense, ritual scapegoating, and vicious-circle succession theories. *The Leadership Quarterly*, 16(2), 197-219.

- Saporito, T. J. (1996). Business-linked executive development: Coaching senior executives. *Consulting Psychology Journal: Practice and Research*, 48(2), 96-103.
- Sarros, J. C., & Sarros, A. M. (2011). Five years on: Leadership challenges of an experienced CEO. *School Leadership & Management*, 31(3), 235-260.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 32(2), 344-354.
- Scoular, A., & Linley, P. A. (2006). Coaching, goal-setting and personality type: what matters? *The Coaching Psychologist*, 2(1), 9-11.
- Seifert, C. F., Yukl, G., & McDonald, R. A. (2003). Effects of multisource feedback and a feedback facilitator on the influence behavior of managers toward subordinates. *Journal of Applied Psychology*, 88(3), 561-569.
- Smith, J. E., Carson, K. P., & Alexander, R. A. (1984). Leadership: It can make a difference. *Academy of Management Journal*, 27(4), 765-776.
- Smither, J. W., London, M., Flautt, R., Vargas, Y., & Kucine, I. (2003). Can working with an executive coach improve multisource feedback ratings over time? A quasi-experimental field study. *Personnel Psychology*, 56(1), 23-44.
- Smither, J. W., & Reilly, S. P. (2001). Coaching in organizations. In M. London (Ed.), *How people evaluate others in organizations* (pp. 221-252). Mahwah, NJ: Erlbaum.
- Solansky, S. T. (2010). The evaluation of two key leadership development program components: Leadership skills assessment and leadership mentoring. *The Leadership Quarterly*, 21(4), 675-681.
- Sonesh, S. C., Coultas, C. W., Lacerenza, C. N., Marlow, S. L., Benishek, L. E., & Salas, E. (2015). The power of coaching: a meta-analytic investigation. *Coaching: An International Journal of Theory, Research and Practice*, 8(2), 73-95.

- Sonesh, S. C., Coultas, C. W., Marlow, S. L., Lacerenza, C. N., Reyes, D., & Salas, E. (2015). Coaching in the wild: Identifying factors that lead to success. *Consulting Psychology Journal: Practice and Research*, 67(3), 189-217.
- Spence, G. B. (2007). GAS powered coaching: Goal Attainment Scaling and its use in coaching research and practice. *International Coaching Psychology Review*, 2(2), 155-167.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124(2), 240-261.
- Stewart, L. J., Palmer, S., Wilkin, H., & Kerrin, M. (2008). The influence of character: Does personality impact coaching success? *International Journal of Evidence Based Coaching & Mentoring*, 6(1), 32-42.
- Stogdill, R. M., & Bass, B. M. (1981). *Stogdill's handbook of leadership: A survey of theory and research*. New York, NY: Free Press.
- Strang, S. E., & Kuhnert, K. W. (2009). Personality and leadership developmental levels as predictors of leader performance. *The Leadership Quarterly*, 20(3), 421-433.
- Sue-Chan, C., & Latham, G. P. (2004). The Relative Effectiveness of External, Peer, and Self-Coaches. *Applied Psychology*, 53(2), 260-278.
- Swope, K. J., Cadigan, J., Schmitt, P. M., & Shupp, R. (2008). Personality preferences in laboratory economics experiments. *The Journal of Socio-Economics*, 37(3), 998-1009.
- Thach, E. C. (2002). The impact of executive coaching and 360 feedback on leadership effectiveness. *Leadership & Organization Development Journal*, 23(4), 205-214.
- Theeboom, T., Beersma, B., & van Vianen, A. E. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9(1), 1-18.

- Thielmann, I., & Hilbig, B. E. (2014). Trust in me, trust in you: A social projection account of the link between personality, cooperativeness, and trustworthiness expectations. *Journal of Research in Personality, 50*, 61-65.
- Thomas, A. B. (1988). Does leadership make a difference to organizational performance? *Administrative Science Quarterly, 33*(3), 388-400.
- van Gils, S., van Quaquebeke, N., & van Knippenberg, D. (2010). The X-factor: On the relevance of implicit leadership and followership theories for leader–member exchange agreement. *European Journal of Work and Organizational Psychology, 19*(3), 333-363.
- Van Velsor, E., & Guthrie, V. A. (1998). Enhancing the ability to learn from experience. In C. McCauley, R. Moxley, & E. Van Velsor (Eds.), *The Center for Creative Leadership handbook of leadership development* (pp. 242-261). San Francisco, CA: Jossey-Bass.
- Wang, X. H. F., Fang, Y., Qureshi, I., & Janssen, O. (2015). Understanding employee innovative behavior: Integrating the social network and leader–member exchange perspectives. *Journal of Organizational Behavior, 36*(3), 403-420.
- Ware, H., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research, 100*(5), 303-310.
- Wasylyshyn, K. M. (2003). Executive coaching: An outcome study. *Consulting Psychology Journal: Practice and Research, 55*(2), 94-106.
- Wayne, S. J., Liden, R. C., & Sparrowe, R. T. (1994). Developing leader-member exchanges: The influence of gender and ingratiation. *American Behavioral Scientist, 37*(5), 697-714.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40*(1), 82-111.

- Weer, C. H., DiRenzo, M. S., & Shipper, F. M. (2016). A holistic view of employee coaching: Longitudinal investigation of the impact of facilitative and pressure-based coaching on team effectiveness. *The Journal of Applied Behavioral Science*, 52(2), 187-214.
- Whitener, E., Brodt, S., Korsgaard, M. A., & Werner, J. (1998). Managers as initiators of trust: An exchange relationship for understanding managerial trustworthy behavior. *Academy of Management Journal*, 23, 513–530.
- Williams, A. S. (1981). Training rural citizens: An evaluation of a leadership training program. *Journal of the Community Development Society*, 12(1), 63-82.
- Witherspoon, R., & White, R. P. (1996). Executive coaching: A continuum of roles. *Consulting Psychology Journal: Practice and Research*, 48(2), 124-133.
- Wycherley, I. M., & Cox, E. (2008). Factors in the selection and matching of executive coaches in organisations. *Coaching: An International Journal of Theory, Research and Practice*, 1(1), 39-53.
- Yukl, G. (2010). *Leadership in organizations* (7th ed.). London, UK: Prentice-Hall.
- Yukl, G., & Van Fleet, D. D. (1992). Theory and research on leadership in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (Vol. 3, pp. 147-197). Palo Alto, CA: Consulting Psychologists Press.
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, 12(4), 451-483.
- Zeus, P., & Skiffington, S. (2000). *The complete guide to coaching at work*. Roseville, CA: McGraw-Hill



## APPENDICES

## Appendix A: Coaching Experience Scales

### Coaching Background

*Instructions:* Please answer the following questions regarding your coaching background.

1. How many coaching clients (i.e., individuals) do you currently work with? \_\_\_\_
2. Approximately how many individuals have you worked with in a coaching capacity in total? \_\_\_\_
3. On an annual basis, how many coachees on average do you work with?
4. How long have you been a professional coach (in years)? \_\_\_\_
5. Is coaching your full-time job? (Yes/No)
6. If not, what is your title in your full-time job? \_\_\_\_\_
7. Which professional certifications for coaching do you hold, if any? \_\_\_\_\_
8. Which academic degrees do you hold? \_\_\_\_\_
9. Which areas are these degrees in? \_\_\_\_\_

### Coach Experience Inventory

*Instructions:* This inventory contains a number of activities coaches often experience in their careers. Please answer the following questions regarding your coaching experience. For each activity listed, indicate your level of expertise/experience you've accumulated using the following scale:

0	<i>Never Experienced</i>	0 experiences in listed activity
1	<i>Learning</i>	1 or 2 minor experiences; understand basics or foundational activities required for this type of experience; would still need to refer to others for guidance/support or prepare extensively for such an experience
2	<i>Proficient</i>	3-4 moderately complex experiences; understands the complexities of these types of experiences; would only need to refer to others for guidance/support in rare circumstances
3	<i>Expert</i>	5+ complex experiences or experience that occurred over longer timeframes; understands the nuances and intricacies of these types of experiences; sought out for advice/guidance from others on these types of experiences

### Interpreted Assessment Results

1. Read and interpreted personality or cognitive ability results in order to provide feedback to hiring manager or HR
2. Read and interpreted personality or cognitive ability results in order to provide feedback to a participant
3. Read and interpreted personality or cognitive ability results in order to provide input to aggregate level report
4. Read and interpreted 360 survey results in order to provide input into aggregate level report
5. Read and interpreted 360 survey results in order to provide feedback to hiring manager or HR
6. Read and interpreted 360 survey results in order to provide feedback to participant
7. Read, interpreted and integrated results from a variety of assessment tools in order to provide input into aggregate level report
8. Read, interpreted and integrated results from a variety of assessment tools in order to provide feedback to a hiring manager or HR
9. Read, interpreted and integrated results from a variety of assessment tools in order to provide feedback to a participant

### Conducted Assessment / Designed Training / Created Assessment Reports

10. Been trained as a role player and/or structured/behavioral interviewer
11. Conducted assessments, such as role plays and/or structured interview
12. Wrote an integrated assessment report including an executive summary
13. Designed and/or developed training

### Provided Feedback

14. Provided feedback to a friend or family member based on direct observation or conversation about specific simple situation
15. Provided feedback to a friend or family member based on direct observation or conversation about moderately complex issue or situation
16. Provided feedback to a friend or family member based on direct observation or conversation about a sensitive or highly complex issue or situation
17. Provided feedback to a direct report or peer
18. Provided formal performance evaluation/review for direct report
19. Provided feedback to participant on personality and/or cognitive ability results
20. Provided feedback to participant on 360 survey and/or personality/cognitive ability results
21. Provided feedback to participant on simulation, 360, personality and/or other assessment results
22. Provided feedback to hiring manager and/or HR on personality and/or cognitive ability results
23. Provided feedback to hiring manager and/or HR on 360 survey and/or personality/cognitive ability results
24. Provided feedback to hiring manager and/or HR on simulation, 360, personality and/or other assessment results

25. Provided feedback to entry-level individual contributor
26. Provided feedback to professional-level, experienced individual contributor
27. Provided feedback to supervisory-level manager (manager of individual contributors)
28. Provided feedback to mid-level manager (manager of managers)
29. Provided feedback to executive level leaders (leader of business)
30. Provided feedback to C-level leaders

#### Provided Ongoing Coaching

31. Provided ongoing feedback and coaching to a friend or family member on a simple or specific situation
32. Provided ongoing feedback and coaching to a friend or family member on a moderately complex situation
33. Provided ongoing feedback and coaching to a friend or family member on a sensitive or highly complex situation
34. Provided peer and/or community coaching/counseling
35. Provided ongoing coaching/development to direct report
36. Provided ongoing coaching to an entry-level individual contributor
37. Provided ongoing coaching to a supervisory-level manager (manager of individual contributors)
38. Provided ongoing coaching to a mid-level manager (manager of managers)
39. Provided ongoing coaching to an executive level leader
40. Provided ongoing coaching to a C-level leader

## Appendix B: Coach Self-Efficacy Scale

*Instructions:* Please answer the following questions regarding your coaching style. Please indicate the degree to which you agree with the following statements, using the following scale:

1	2	3	4	5
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>

### Relational Subscale

1. I do what it takes to make myself completely available.
2. I demonstrate a sincere interest for the individual I coach and his/her development plan.
3. I strive for a good relationship with the person.
4. I treat the person with respect.
5. I make an effort to understand what the person experiences.
6. I show confidence in the person I coach.

### Communication Subscale

7. I ask questions that will help the individual to better understand his/her situation, identify causes, and see possible improvement actions.
8. I reformulate to verify my comprehension.
9. I reinforce and constructively criticize the behaviors of the person.
10. I confront, when necessary, the beliefs and own truths of the person.

### Facilitating Learning and Results Subscale

11. I establish coaching agreements that take into account the needs and expectations of all people involved.
12. I utilize a structured approach during my coaching meetings.
13. I help the individual to make links between the situation and what he/she has learned.
14. With the person, I review on a regular basis our approach and make some adjustments if necessary.
15. I help the individual to identify occasions to put in practice what he/she has learned as well as concrete actions to achieve his goals.
16. I help the individual to acknowledge his responsibility toward coaching and the power he/she has with respect to the situation.
17. I help the individual to identify difficulties he/she could encounter during the implementation of his development plan as well as means to address those difficulties.
18. I give my support to the individual during the implementation of his plan.

## Appendix C: Leader-Member Exchange Scale

*Instructions:* Please answer the following questions regarding your coaching relationship with [coachee first name and last name]<sup>6</sup>. Please indicate the degree to which you agree with the following statements, using the scales after each question:

1. How often do you know where you stand with your coachee?  

1	2	3	4	5
<i>Rarely</i>	<i>Occasionally</i>	<i>Sometimes</i>	<i>Fairly often</i>	<i>Very often</i>
  
2. How often is your coachee satisfied with your coaching?  

1	2	3	4	5
<i>Rarely</i>	<i>Occasionally</i>	<i>Sometimes</i>	<i>Fairly often</i>	<i>Very often</i>
  
3. How well do you understand your coachee's job problems and needs?  

1	2	3	4	5
<i>Not at all</i>	<i>A little</i>	<i>A fair amount</i>	<i>Quite a bit</i>	<i>A great deal</i>
  
4. How well do you recognize your coachee's potential?  

1	2	3	4	5
<i>Not at all</i>	<i>A little</i>	<i>Moderately</i>	<i>Mostly</i>	<i>Fully</i>
  
5. What are the chances that you would use your power to help solve your coachee's problems in your work?  

1	2	3	4	5
<i>Not at all</i>	<i>A little</i>	<i>Moderately</i>	<i>Mostly</i>	<i>Fully</i>
  
6. I have enough confidence in my coachee that I would defend and justify his or her decision if he or she was not present to do so.  

1	2	3	4	5
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
  
7. How would you characterize your working relationship with your coachee?  

1	2	3	4	5
<i>Extremely ineffective</i>	<i>Ineffective</i>	<i>Average</i>	<i>Effective</i>	<i>Extremely effective</i>

<sup>6</sup> The coaches would fill this section out for *each* individual he or she has coached.

## Appendix D: Trust Scale

*Instructions:* Please answer the following questions regarding your coaching style with [coachee first name and last name]<sup>7</sup>. Please indicate the degree to which you agree with the following statements, using the following scale:

1	2	3	4	5
<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>

### Ability Subscale

1. My coachee is very skilled at his/her job.
2. My coachee is known to (always) achieve) what he/she sets out to achieve.
3. My coachee knows a lot about his/her job.
4. I have complete trust in my coachee's professional competence.
5. My coachee is particularly able in regards to improving our results.
6. My coachee is well qualified.

### Benevolence Subscale

7. I am really concerned for my coachee's personal fulfillment.
8. My coachee's needs and wishes are important to me.
9. I would never knowingly do something that would damage my coachee's interests.
10. I am really interested in what is important to my coachee.
11. I would leave my own work to help my coachee with anything.

### Integrity Subscale

12. My coachee has a clear sense of fairness.
13. I never question my coachee's word.
14. My coachee usually tries to be fair to others.
15. My coachee's actions and behavior are consistent.
16. I share my coachee's values.
17. My coachee's behavior seems to be guided by sound principles.

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<sup>7</sup> The coaches would fill this section out for *each* individual he or she has coached.

## Appendix E: IRB Approval Letter



RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799  
(813) 974-5638 • FAX (813) 974-7091

June 25, 2018

Sarah Frick  
Psychology Tampa,  
FL 33612

RE: **Expedited Approval for Initial Review**  
IRB#: Pro00035759  
Title: Why Does Coaching Work? An Examination of Inputs and Process Variables in an Employee Coaching Program

### Study Approval Period: 6/24/2018 to 6/24/2019

Dear Ms. Frick:

On 6/24/2018, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents contained within, including those outlined below.

#### Approved Item(s):

##### Protocol Document(s):

[IRB Study Pro00035759 Protocol 05.23.18 V1.docx](#)

##### Consent/Assent Document(s)\*:

[Online Consent, Version #1, 06-20-2018.docx](#)

\*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent documents are valid until the consent document is amended and approved. Online consent forms are not stamped.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110. The research proposed in this study is categorized under the following expedited review category:

(5) Research involving materials (data, documents, records, or specimens) that have been



collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your study qualifies for a waiver of the requirements for the informed consent process as outlined in the federal regulations at 45CFR46.116 (d) which states that an IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent, or waive the requirements to obtain informed consent provided the IRB finds and documents that (1) the research involves no more than minimal risk to the subjects; (2) the waiver or alteration will not adversely affect the rights and welfare of the subjects; (3) the research could not practicably be carried out without the waiver or alteration; and (4) whenever appropriate, the subjects will be provided with additional pertinent information after participation. (archival dataset)

Your study qualifies for a waiver of the requirements for the documentation of informed consent as outlined in the federal regulations at 45CFR46.117(c) which states that an IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or (2) That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context. (online consent)

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval via an amendment. Additionally, all unanticipated problems must be reported to the USF IRB within five (5) business days.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,



Mark Ruiz, PhD, Vice Chairperson USF  
Institutional Review Board