A STATE OF CHANGE: EVALUATING THE EFFECTIVENESS OF LEAD TENNESSEE

By

Jessie M. McClure

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Master of Arts in
Industrial-Organizational Psychology

Middle Tennessee State University
August 2018

Thesis Committee:

Dr. Mark Frame, Chair

Dr. Michael Hein, Committee Member

Dr. Richard Moffett, Critical Reader

ACKNOWLEDGEMENTS

First and foremost, I would like to thank the Dunkin Donuts Corporation for their endless supply of affordable and high-quality coffee that helped me get through this thesis process. Secondly (but really first and foremost), I have to thank my advisor and mentor, Dr. Mark Frame, for his dedication to my success and wellbeing over the past year and a half and beyond. This experience has been challenging and rewarding, but would have been a catastrophic failure without his boundless support and advocacy for me.

I would also like to thank my committee member, Dr. Mike Hein, for taking the time to answer my many questions about data analysis and for providing me with helpful feedback on this project. Thank you to my critical reader, Dr. Rick Moffett for assisting me in the beginning phases of this process and for offering additional help after his role of critical reader was finished. I would also like to thank the rest of the I/O program faculty members, Dr. McCarthy, Dr. Van Hein, Dr. Jackson and Dr. Littlepage for their encouragement of me as a student and colleague in this program.

Thank you to my friends and family for always being there to support me. I want to give a special thank you to Beth Adams, Tara Schlacter and Emilie Seyfang for being such wonderful friends and colleagues and offering to take on more work at COHRE to ensure I was able to work on this project during critical times.

A final thank you goes to the State of Tennessee, specifically Ernie Ricketts and Trish Holliday, for providing me with the incredible opportunity to analyze the LEAD Tennessee data. Without their help and support, this project would not have been able to happen. I am extremely grateful for the opportunity I have had to work with them and the State of Tennessee and I hope

that the information I have found and reported in this document will help them further improve this flagship program.

ABSTRACT

More and more organizations are looking to become a learning organization, in which they focus more on their employee's development and put this developmental focus at the forefront of their organization's initiatives to increase organizational effectiveness. One way that organizations can do this is through the use of leadership development programs that have a variety of components to increase the employee's skills and development them beyond their current state. The current study empirically evaluates LEAD Tennessee, a state-run leadership development program with an executive coaching component. The results of this study indicate that there is a significant change in time one and time two 360-degree feedback ratings (one year apart) for the manager and peer rating sources, but not for the direct report rating source. Additionally, statistical interactions between the coach and coach gender were examined to determine if certain coaches had an impact on specific rating sources and competencies. These interactions were not significant. Limitations, future research and the overall implications of this study are also discussed.

TABLE OF CONTENTS

CHAPTER I

LITERATURE REVIEW

Leadership is a highly sought-after commodity in the workplace and organizations use a variety of strategies to develop their employee's leadership capabilities. Employers seeking to develop the leadership skills of their personnel have a variety of options available including: feedback intensive programs, mentorships, job assignments, 360-degree feedback and executive coaching to name a few (McCauley & Van Veslor, 2004). There is no consensus regarding which of the aforementioned methods is most effective, or what combination of methods might be more effective than others. This is – in part – due to a dearth of empirical leadership development research with a strong experimental design which would provide researchers and practitioners with the evidence to support (or rebuke) leadership development practices. Furthermore, the costs of this leadership development programs are substantial for organizations. In 2008 companies spent an average of $500,000 on leadership development initiatives for managers and leaders, with the range of cost varying between $170,000 for the smaller companies and up to 1.3 million dollars for the larger companies (Chakrabarti, 2009). On average, organizations spend a little over $2,000 per employee they develop per year (Chakrabarti, 2009).

This all leads to the question of whether companies are getting an adequate return on their investment for the money they are spending. More specifically, to what extent are the leadership development initiatives in which these organizations are investing their money into actually producing more capable leaders and outcomes related to the organizations' goals and mission? Chakrabarti (2009) asserted that they are, but only if the leadership development is done correctly. The limited research that has been done on leadership development programs suggests that a well created and maintained program can create long term benefits, such as stronger leader abilities, reduced turnover, and better organizational performance at the financial and business levels (Chakrabarti, 2009). Fortunately, many organizations have recognized the importance of leadership development programs in recent years. According to a DDI report, as of 2015, across-the-board organizations were expected to start spending more money on leadership development initiatives in the years to come (Loew, 2015).

One of the more expensive leadership development options available to organizations is executive coaching. Executive coaches can charge up to $3,500 per hour, with the median cost being around $500 per hour for coaching services. Due to the ongoing nature of coaching the per person cost can quickly rise as the individuals working with the coach (the coachees) work with their coaches one-on-one on a weekly, bi-weekly or monthly basis and communicate with their coaches outside of those coaching session While executive coaching is often one of the more costly leadership development options, it is widely seen as one of the less structured and less standardized leadership development interventions available.

While executive coaching is a growing endeavor in the field of leadership development, ascertaining the return on investment of executive coaching is challenging – at best. Sparse data regarding the effectiveness of executive coaching, has not hindered it from becoming common in more organizations across the United States (TECF, 2015). Despite its growing popularity, executive coaching is far from a consistent practice. There are significant hurdles that should be overcome before executive coaching can be considered a reliable and valid way to develop leaders. These hurdles range in magnitude, from creating a consistent definition of executive coaching, determining the credential for who should be (and who should not be) an executive coach, and the practices and guidelines that executive coaches should adhere to (TCEF, 2015).

Defining Executive Coaching

While the name “executive coaching” implies that the practice occurs only at the upper echelons of organizations, this term is frequently used to describe individualized development efforts that are done at other managerial levels in organizations. The developmental intervention of executive coaching became popular in the early 1990’s, though it has been around for much longer. During this history, executive coaching has been inconsistently defined and conceptualized. Richard Kilburg, who has been writing about and studying executive coaching since the mid-1990s offered a comprehensive definition of executive coaching that is in line with many other researcher’s definitions of executive coaching (Kampa-Kokesch & Anderson, 2001):

> a helping relationship formed between a client who has managerial authority and responsibility in an organization and a consultant who uses a wide variety of behavioral techniques and methods to help the client achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction and, consequently, to improve the effectiveness of the client’s organization within a formally defined executive coaching agreement (Kilburg, 2000, p. 67).

Dean and Meyer (2002) explain how executive coaching is distinct from therapy, mentorship and consulting and define executive coaching as:

> a collaborative partnership in which the coach serves to facilitate awareness and enhance interpersonal and organizational effectiveness in the executive which extends to job-related performance and beyond (Dean & Meyer, 2002).

The Center for Creative Leadership (CCL) created a formal executive coaching program and has been working on their executive coaching initiatives for years. While the CCL definition is not as comprehensive as Kilburg's (2000), it is a commonly cited definition (McCauley & Van Veslor, 2004):

> a practice in which the coachee and coach collaborate to assess and understand the coachee and his or her developmental task, to challenge current constraints while exploring new possibilities, and to ensure accountability and support for reaching goals and sustaining development (McCauley and Van Veslor, 2004)

Executive coaching has also been defined less broadly as an ongoing relationship between a coach and manager in which the coach has no direct authority over the manager and can last anywhere between a few months and a few years (Diedrich, 1996; Levinson, 1996). To further complicate the definition issue, the International Executive Coaching Federation (ICF), an organization to which many executive coaches belong and are affiliated with, defines coaching broadly as:

> partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential, which is particularly important in today's uncertain and complex environment. (International Federation of Coaches [ICF], n.d.)

This definition is different from the others given, as it is less specific and focuses on personal development as well as professional development. ICF coaches range from life coaches to professional executive coaches, so the definition given above is a general coaching definition that encompasses all kinds of coaching. The varying interpretations of what executive coaching is, who coaches are, and what they do will be addressed later. Suffice it to say that many researchers seem to agree on a common framework of what coaching is and what coaches do.

The same cannot be said for practitioners of coaching and the organizations which support many of them.

There are various models of executive coaching and each has unique components or stages which make up the executive coaching process. To start out broadly, Feldman (2001) identified three elements of the executive coaching process that are thought to be key elements of the executive coaching relationship. The first is that it entails one-on-one counseling between a coachee and a coach concerning issues at work. The second is that the executive coaching process involves 360-degree feedback that identifies strengths and weaknesses of the coachee, and serves as the initial jumping off point for the sessions. The final key element is that the purpose of the sessions is to increase the coachee's effectiveness in their current position. Given the developmental nature of executive coaching, it can easily be argued that this purpose is too narrow and that executive coaching can also focus on developing managers for *future* roles while increasing their effectiveness in their current role.

The reason Feldman (2001) defined the purpose of executive coaching in this narrow manner could be due to the history of executive coaching. The early days of executive coaching did not view executive coaching as being a tool for advancing leaders, but rather the view was that executive coaching was remedial and was primarily used to correct deficiencies in performance. Executive coaching can still be used for remedial purposes, especially among top level executives who have nowhere else to climb in the organization. For the most part, however, executive coaching is primarily used to develop people for those executive roles so that remedial action is not necessary down the line (Feldman & Lankau, 2005). Given the current practice of using coaching principally as a means to improve a person's performance in an effort to help them continue to be successful, the present study will focus on executive coaching as a developmental as opposed to a remedial tool.

While there are many ambiguities concerning the executive coaching process, one thing that is generally agreed upon across coaches and throughout the research is that there are six stages in the process. Those stages are: 1) relationship building, 2) assessment, 3) feedback, 4) planning, 5) implementation and 6) evaluation/follow up (Kampa-Kokesch & Anderson, 2001). The weakest and most challenging of these stages is the evaluation stage (Frame & Sanders, 2015). Many organizations use executive coaching to help their executives or to develop leaders in their leadership development programs, but very few formally evaluate the process. This is because – as most of the research asserts – executive coaching is an intervention where practice is substantially ahead of the research. Thus, organizations simply don't know how to evaluate the executive coaching process or the larger program of which executive coaching is a component. This issue is problematic, and extremely pertinent to organizations using executive coaching because without knowing the effectiveness, there is no way to determine whether or not it is worth the high cost. A practical issue in the evaluation of executive coaching is that small consulting firms do not have the financial or personnel resources they need to evaluate the intervention. These same consulting firms might not even have the knowledge to evaluate such interventions. Due to the high cost of coaching, research regarding the effectiveness and return on investment of executive coaching is a necessary step that needs to be taken to ensure that organizations resources are well spent when it comes to leadership development initiatives.

Executive Coaching Qualifications

One of the most debated issues with executive coaching is the lack of consensus on who executive coaches should be, including the qualifications they should have, and the skills they should utilize during executive coaching. There is – literally – nothing that stops someone from calling themselves an "executive coach," as coaches tend to come from a wide variety of educational backgrounds, all of which offer a different view on what an executive coach does and what skills they should utilize (Liljenstrand & Nebeker, 2008). This is understandable given the interdisciplinary nature of executive coaching. Executive coaching combines the areas of mentoring, consulting, and psychotherapy (Dean & Meyer, 2002), which makes it a difficult field for which to be completely "qualified." This can lead to different fields using differing methods for varying interventions but calling them the same name. A survey of executive coaches, revealed that of the 60 who responded, 45% had Ph.D.'s and 90% had a Master's degree in the fields of business and the social sciences (Judge & Cowell, 1997). Furthermore, the Executive coaches reported having degrees that ranged from drama to psychology (Judge & Cowell, 1997). The good news is that most people who consider themselves executive coaches, report having advanced degrees, but the issue remains that executive coaches may be getting education and training from very different fields of study, each of which may provide different levels of understanding regarding human behavior and behavior change.

The definition of executive coaching and what executive coaching entails is likely to vary by individual coaches depending on their field of study. Unlike other professions, executive coaching does not have a specified field of study, or even a grouping of fields that can go into executive coaching. The debate has mainly centered on psychologists as coaches versus everyone else (Liljenstrand & Nebeker, 2008). It has been suggested that psychologists are "uniquely qualified" to define the necessary skillset for executive coaches (Brotman et. al., 1998). This argument has been made because executive coaching tends to involve confidentiality, the use of psychological assessments, and psychological concepts, all of which a psychologist is trained in extensively, where other fields are not (Tobias, 1996). Additionally, because executive coaching involves executives and organizations, some researchers have also argued that I/O psychologists are even more uniquely qualified to lead the field of executive coaching, as they tend to be trained in both psychology and business concepts, as well as psychometric testing (Harris, 1999).

When venturing to literature outside of the field of psychology and HRM, some contend that no psychologists – of any kind – should be conducting executive coaching interventions. One study analyzed the content of 72 articles related to executive coaching across a wide range of journals and found that 44% of the articles did not come from a human resource related publication and a mere 31% of the articles they reviewed on executive coaching mentioned psychological training (Garman et. al., 2000). Furthermore, when psychological training was mentioned, 18% of the articles speculated that it was potentially harmful (Garman et. al., 2000) demonstrating that psychological training is not regularly or universally thought to be useful or relevant in the practice of executive coaching.

In a survey of 428 executive coaches from a variety of backgrounds, some psychological and some non-psychological, researchers found very small differences between the practices, outcomes, background and competencies of psychological executive coaches and non-psychological executive coaches (Bono, Purvanova, Towler, & Peterson, 2009). Based on the results of this survey, the authors suggested that a move away from the debate on whether or not all executive coaches should have psychological training and that a move toward a understanding of the kinds of situations at which executive coaches with differing backgrounds do best and the kinds of training that will make executive coaches as a whole more successful (Bono, et. al., 2009).

Overall, there are still discordant opinions regarding the profile of executive coaches. In many ways, it is up to a given organization or individual to determine what characteristics and skills are preferred in an executive coach and to hire someone in line with their needs. It is difficult to create a model for evaluating executive coaching and determining executive coaching effectiveness when coach's educational backgrounds and skill sets vary so widely, so anytime executive coaching is evaluated it must be evaluated with the knowledge of the background of the coaches and the skills they are utilizing, which is something many empirical articles on executive coaching tend to omit.

The Executive Coaching Process

While the definition of executive coaching and the qualifications needed for a coach are disputed, the intervention process is fairly agreed upon. Feldman and Lankau's (2005) review of the literature indicates that there are four phases of executive coaching, though there is some variability on how coaches carry out each of these phases to meet the client's needs. The four phases that Feldman and Lankau present are data gathering, feedback, periodic executive coaching sessions, and evaluation and each will be addressed in its own section. It is important to note that these phases do not represent the needs assessment portion of executive coaching, but only the executive coaching process and the evaluation of executive coaching following the intervention. These four phases also differ from Kampa-Kokesch & Anderson's (2001) more broad six stages of executive coaching, though they are conceptually similar to one another.

Phase 1: Data Collection

This is the foundational phase and the starting point of the executive coaching relationship, which includes gathering initial data on the executive and setting preliminary developmental goals (Feldman & Lankau, 2005). There are two steps within this phase. The first step is purely foundational and consists of the coach and the coachee discussing mutual expectations of the relationship and getting to know one another. It is during this step that confidentiality, schedules, and general executive coaching norms are discussed (Feldman, 2001).

The second step involves the coach utilizing assessments and other data collection methods to gather additional information on the coachee that can help them create a developmental plan for their coachee. There are many methods for gathering this data, such as through personality assessments, personnel records, leadership assessments, or 360-degree feedback. Data can be collected from multiple sources, such as bosses, subordinates, peers and self-assessment (Feldman & Lankau, 2005; Kampa-Kokesch & Anderson, 2001). 360-degree feedback is one of the most popular developmental tools used in executive coaching interventions due to the low cost and easy administration (Hazucah, Hezlett, & Schneider, 1993). The intersection between 360-degree feedback and executive coaching is a focal point of the current study and will be discussed in depth later in the review.

Phase 2: Feedback

The second phase of the executive coaching intervention is the feedback phase. It is during this phase that the data that is collected is presented to the coachee. The coach’s goal is to initiate and facilitate a supportive and non-threatening conversation about the coachee’s strengths and weaknesses and to create a developmental plan that capitalizes on the coachee’s strengths while focusing on strategies to “shore up” weaknesses and ultimately improve job performance (Feldman & Lankau, 2005). If 360-degree feedback is used, the coach is likely to facilitate a conversation about how different groups perceive the executive’s areas of performance and how that differs from the way that the executive perceives his or her performance. This is often a topic of interest because empirical research has shown that at the earlier stages of executive coaching self-ratings tend to be higher than ratings by others, and by the end of the executive coaching intervention self-ratings are generally closer to alignment with ratings by others (Hazucah et. al., 1993). By the end of this stage there is usually a list of developmental objectives that are based on the collected data and important for the executive to achieve, either for his or her current role or a future role they are in line for.

Phase 3: Periodic Executive Coaching Sessions

Once the developmental and behavioral objectives have been identified, the formal executive coaching sessions begin to occur periodically to start the development of the executive. During this phase, the coach helps the executive maintain and monitor developmental activities, modify the developmental plan, and work through overcoming developmental barriers (Feldman, 2001). In some cases, the executive’s boss or a representative from HR will sit in occasionally to measure progress (Tobias, 1996). There is significantly more variability in what occurs during these executive coaching sessions due to the wide variety of educational backgrounds and skillsets that each coach possesses (Feldman & Lankau, 2005). Furthermore, the amount of sessions and the time between sessions varies widely based on the needs of the coachee, the typical practices of the coach and the coaching budget.

Phase 4: Evaluation

This phase involves determining the efficacy of the executive coaching relationship. The organization obviously wants to know whether or not the executive coaching that they are paying for is resulting in development, so the organization will follow up with the executive and try to evaluate the effectiveness of the intervention, or the external coach will conduct their own evaluation. Unfortunately, many organizations actually don’t evaluate effectiveness of executive coaching and as such, they have no idea if the resources being invested into executive development is working. The main reason that this happens is because there is very little empirical research out there on the effectiveness of executive coaching, so no one really knows the best way to evaluate the intervention. The reason evaluation is such a difficult endeavor is because of the previously listed issues with executive coaching, namely that there is no agreed upon definition of executive coaching, virtually anyone can call themselves an "executive coach," and the executive coaching sessions are not systematic of structured, but vary from coach to coach and across disciplines that coaches stem from.

Evaluating the Effectiveness of Executive Coaching

The domain of executive coaching research is flooded with qualitative reviews and conceptual models, but there is little empirical research that evaluates its effectiveness. This is surprising considering the high costs associated with executive coaching and is perhaps the most pressing issue within the field. An essential component of any training or developmental intervention is the evaluation of the intervention. Without this, there is no way of determining whether the intervention is doing what it is supposed to do. Without this knowledge, organizations might be wasting their resources on an ineffective intervention. Additionally, evaluating executive coaching and determining its effectiveness can create an argument to keep that intervention around during hard economic times, when training and development interventions and budgets are often cut. Research does not currently point in any one direction when it comes to executive coaching evaluation, but rather, points in a variety of directions, none of which have a large amount of empirical support.

In fact, a survey of 2,231 coaches from various fields revealed that coaches stemming from the field of I/O tended to evaluate effectiveness using post-360 data and the coachee's supervisor more often than other groups (Liljenstrand & Nebeker, 2008). Even then, the most commonly used evaluation method was feedback from the coachee, regardless of the field the coach was trained in. This means that most executive coaching interventions are evaluated only at the first level of evaluation, which is reaction level per Kirkpatrick's (1977) model. While it cannot be argued that reaction level data is not important to the evaluation process, it is widely agreed that reaction level data is not enough to determine the effectiveness of a training intervention.

Unfortunately, there are very real challenges that come with evaluating an intervention such as executive coaching. Executive coaching is humanistic in nature, so it is not highly compatible with scientific rigor and classical measurement evaluation (Osatuke et. al., 2016). For this reason, attempts at evaluation of executive coaching interventions often fail to hit the mark (Osatuke et. al., 2016). A second challenge that is associated with executive coaching involves the uniqueness of executive coaching sessions from person to person, session to session, and across coaches with varying backgrounds. It is a difficult feat to find one way to measure executive coaching when the executive coaching experience varies so widely and a variety of measures are used throughout the process (MacKie, 2014; Osatuke et. al., 2016)

It is difficult to compare executive coaching outcomes across studies due to the wide range of outcomes associated with executive coaching (MacKie, 2014). This has led to a process focus – as opposed to an outcome focus – which has encouraged researchers to study self-report measures rather than assessing broad organizational outcomes. Yet another challenge is that organizations are large, complex systems and it is impossible to fully attribute changes in managerial behavior and overall organizational changes to executive coaching interventions alone. A variety of additional interventions are likely to be occurring simultaneously within the organization and because of the lack of scientific rigor in the executive coaching domain, causal statements are virtually impossible to assert (MacKie, 2014).

There are various approaches to executive coaching, and thus to evaluating it, depending on the background of the coach the organization hires. Osatuke et. al. (2016) take a psychotherapeutic approach to evaluating executive coaching by proposing the use of the assimilation model. This is a model used in psychotherapy to help track the developmental level of clients and has an associated measure, Assimilation of Problematic Experiences Scale (APES), which measures changes in individuals across several sessions.

Grant, Curtayne & Burton (2009) conducted a randomized controlled study in which they tested the effectiveness of outsourced executive coaching in terms of workplace well-being, depression, stress, anxiety, goal attainment and resilience. They found significant effects for goal attainment, resilience and workplace well-being with unclear effects for depression, anxiety and stress. This study was done in the public sector rather than the private sector. They note in their limitations that it is possible for the effects to be somewhat exaggerated in the public-sector due to the lack of previous leadership development opportunities in this sector compared to the private sector. Nieminen et. al. (2013) also note that the potential difference between executive coaching in the private and public sectors needs to be explored further.

Frame and Sanders (2015) proposed adapting Goldstein and Ford’s (2002) model to executive coaching to evaluate effectiveness. This model, The Executive Coaching Instructional Model, mimics Goldstein and Ford’s (2002) model; however, it applies to the domain of executive coaching rather than more traditional training programs. In terms of evaluation, Frame and Sanders suggest that executive coaching programs should be created based on a needs assessment, which will provide objectives for the executive coaching program and thus, objectives against which executive coaching can be formally evaluated. McCauley and Van Veslor (2004) also takes this needs assessment based approach to create a leadership development program. Frame and Sanders (2015) reference Kirkpatrick's (1977) model of evaluation by saying that organizations typically limit evaluation of executive coaching to reaction level data, which is a view that is commonly found in the literature and does not fully substantiate a program, but only tells you how the participants felt about it. Again, while it is important to evaluate at this level, further evaluation is needed to see the full picture. They assert that the achievement of objectives compared to the individual's baseline can provide learning level data in Kirkpatrick's model. To evaluate behavior change (transfer of executive coaching progress to the job) they suggest the use of performance evaluations, self-reports or interviews that will determine whether or not the client is using the knowledge and skills they acquired in executive coaching on the job. Finally, they suggest that the executive coaching program be validated.

MacKie (2014) tested the idea that a strength based approach to executive coaching would enhance positive outcomes, in this case transformational leadership behaviors, and reduce dysfunctional behaviors, such as management by exception and laissez faire leadership. They found this to be true for their study of 37 Australian executive managers in a non-profit organization and did find an increase in the facilitating leadership behaviors and a decrease in dysfunctional behaviors that the managers previously engaged in. In this study MacKie used 360-degree feedback to measure the use of facilitating and dysfunctional leadership behaviors and found that the study supported the use of 360-degree feedback as a measure of executive coaching effectiveness.

It is critical that we learn to evaluate the effectiveness of executive coaching. If researchers can determine a way to universally measure executive coaching effectiveness, there is likely to be substantially less ambiguity regarding what executive coaching is, characteristics and backgrounds of a suitable coach, and what executive coaching entails. If we can stop debating these facets of executive coaching and figure out how to evaluate executive coaching, then we can move on to a debate about what tools and methods are going to give us the most effective executive coaching program, which is likely to be a more productive debate.

Executive Coaching and 360-Degree Feedback

According to Hazucha et. al. (1993), 360-degree feedback is valuable for numerous reasons. The first reason they cite is that 360-degree feedback comes from multiple perspectives and differs from a performance appraisal in that the person being rated does not just get evaluated by supervisors, but also by peers and subordinates, who also have a meaningful and unique opinion about the person's performance. Additionally, Hazucha et. al. (1993) point out that 360-degree feedback tools give peers and subordinates a medium through which they can anonymously praise or criticize the person being rated. And finally, they emphasize the practicality of using such an instrument because they are relatively inexpensive in terms of time, effort and money.

There are also many challenges associated with 360-degree feedback. Perhaps one of the biggest barriers to overcome before implementing this initiative is that of organizational context, which must be considered extensively before implementation. Atwater, Brett, and Charles (2007) assert that organizations going through restructuring or downsizing are not in a good position to implement this kind of program because gaining the trust of employees will be challenging. Additionally, cynicism is thought to lead to interference with 360-degree interventions because cynical employees are likely to believe that the change effort is not worth it, or might not even be possible (Atwater, Brett, and Charles, 2007). In fact, Atwater, Waldman, Atwater and Cartier (2000) explored the relationship between cynicism and 360-degree feedback in a police organization and contended that supervisors who were cynical to organizational change were less likely to improve following 360-degree feedback; however, because this study was done in a militaristic organization, it is possible that many of the participants were apprehensive of 360-degree feedback since it violated the hierarchical structure of their organization.

McCauley and Van Veslor (2004) give several reasons why 360-degree feedback initiatives tend to fail, including lack of support from the leader's boss, not communicating openly about the process, and ignoring both individual and organizational readiness for development. One of the biggest mistakes an organization can make with 360-degree feedback is mistaking this simple assessment activity for a comprehensive developmental program. The results from 360-degree feedback are marginal when used alone, but when used in conjunction with other developmental interventions following the 360-process, such as executive coaching, a powerful leadership development program begins to emerge (Atwater, Brett, and Charles, 2007).

Rosti and Shipper (1993) conducted a study on 360-degree feedback to determine if it is an effective development tool. They found that managers who engaged in developmental activities were rated higher two years following the initial 360-assessment. Review of plans and progress on a quarterly basis, input from coworkers on the development plan, and executive coaching and feedback were related to the most change after those two years passed, but were also the least frequently performed activities. Overall, they concluded that 360-degree feedback is an effective developmental tool, but that follow up activities are critical for further development.

Smither, London, Flautt, Vargas, and Kucine (2003) explored the relationship between executive coaching and 360-degree feedback in their study of 1,361 managers working in a large, global organization. They conducted a study to determine if executive coaching improved 360-degree feedback across a one-year period and examined the ways in which executive coaching might affect 360-degree feedback, such as through effective goal setting and through soliciting suggestions for improvement from raters rather than ignoring feedback. They found that managers who worked with executive coaches were more likely to have specific goals rather than vague goals and were more likely to solicit ideas for improvement and utilize suggestions from raters. Through the time two post-360 administered to participants they found that managers who worked with executive coaches received improved performance ratings from direct reports and supervisors. A serious limitation of this study is that the senior managers were given copies of the coachee's 360-degree feedback results and could use them to make administrative decisions. As previously stated, 360-degree feedback is not nearly as useful when the results can be used for purposes other than development because rater errors are more likely to occur, specifically halo error (Seifert, Yukl, & McDonald, 2003). This limitation means that the results of this study could be skewed, so the results may not be generalizable to situations in which 360s are used solely for development.

In a study that builds on Smither (2003), researchers examined the impact of 360's when combined with executive coaching (Luthans & Peterson, 2003). The executive coaching involved coachee self-awareness as well as manager and employee attitudes. Increased self-awareness is thought to lead to improved employee and manager attitudes, and subsequently, increased performance. Results from the attitudes measure found that executive coaching combined with 360-degree feedback seemed to have positive effects on coachee attitude.

Overall, they found that for 360 programs to be effective, managers might need executive coaching to increase self-awareness, which can increase job satisfaction, organizational commitment and reduce turnover intent of both managers and their subordinates. Ideally these attitudinal changes lead to increased job performance. Unfortunately, there was no control group so the conclusions that can be drawn from this study are somewhat limited.

Thach (2002) conducted a study to try to determine the quantitative impact of both executive coaching and 360-degree feedback on the leader effectiveness of 281 executives in a mid-sized company. She found that there is a positive effect on leadership effectiveness when executive coaching and 360-degree feedback are used in conjunction with one another. More specifically, she found that following the executive coaching program, perceived leader effectiveness by others increased by 55% for the first group that went through the program, with the second group being 5% higher in perceived effectiveness. On the other hand, self-ratings of effectiveness did not increase, but went down slightly following executive coaching. This could have been because most of the executives were unable to meet with their coach the full four times they were supposed to, but rather averaged 3.6 times across all executives with only 17 executives exceeding four meetings. The time-related barriers that contributed to this might have made the executives feel as though they were not improving as much as they wanted to and decreased the ratings of themselves. Furthermore, the executives that went through the program reported that the executive coaching sessions and 360's were the most effective component of the program.

Wasylyshyn (2003) sent out a survey to 106 executives that she coached between 1985 and 2001 and found that 360-degree feedback was the second highest rated executive coaching tool, with executives rating this at an average of 9 out of 10. This was second only to the actual executive coaching sessions, which were rated at a 9.2. This result demonstrates that not only is 360-degree feedback an effective development tool (Luthans and Peterson, 2003; Rosti and Shipper, 1993; Smither, London, Flautt, Vargas, and Kucine, 2003; Thach, 2002), but it also is highly regarded by executives as being useful in their personal development.

The Current Study

The current study is a replication and extension of Nieminen, Smerek and Kotrba's (2013) study, which examined whether the benefits of executive coaching combined with the use of 360-degree feedback is worth the high cost of executive coaching. The researchers note that there are only six published empirical articles that have examined the effects of executive coaching and feedback workshops in the context of a leadership development program that utilizes 360-degree feedback (Nieminen, Smerek, & Kotrba, 2013). Each of these six studies contributed to the literature on executive coaching and 360's in a unique way. Most of the studies have been previously cited in this document; however, I will briefly review their major contributions, which are pertinent to the current study.

Rosti and Shipper (1998), Hazucah et. al. (1993) and Seifert et. al. (2003) found that the use of feedback workshops led to increased desired leader behavior more than when 360-degree feedback was used alone. More specifically, Rosti and Shipper (1998) and Hazucah et. al. (1993) found that managerial skills measured in a 360-format improved when followed up with developmental activities, such as executive coaching or feedback workshops following the 360. Seifert et. al. (2003) found that managers who engaged in the feedback workshop following 360-degree feedback, increased their use of two core influence tactics (consultation and collaboration), while no change was seen in the control group's use of core influence tactics.

On the executive coaching side of the empirical research, there are three more studies that support the use of 360-degree feedback in developmental interventions. Smither et. al. (2003) found that managers who went through executive coaching were more likely to set specific goals and solicit feedback from others compared to managers who did not receive executive coaching, which ultimately led to improved performance of those managers. Luthans and Peterson (2003) found that managers who underwent executive coaching reduced their self-ratings following executive coaching to be more in line with the ratings of others, indicating enhanced self-awareness.

Finally, one study that examined the use of both executive coaching and feedback workshops, which was Kochanowski et. al. (2010). These researchers found that managers who went through both the feedback workshops and executive coaching increased their use of the core influence tactics of collaboration and consultation more than leaders that only went through the feedback workshop and did not have executive coaching following the 360-process. This study was a follow up to Seifert et. al.'s (2003) study because it added in the component of executive coaching rather than just the feedback workshop.

Taken together, these studies, though each has their own set of limitations, give a good indication that 360-degree feedback and post-360 developmental activities, such as feedback workshops and executive coaching, are a way to develop organizational leaders effectively. Furthermore, Nieminen et. al. (2013) found that executive coaching sessions significantly changed self-ratings, though not the ratings of other sources. This is in line with the previous studies in that it shows a better alignment of self-ratings with the ratings of others following the executive coaching process. This again, indicates an increased self-awareness of managers, which can lead to improved performance over time, especially if the manager is given strategies and tactics to improve their leadership skills within the executive coaching sessions.

While leadership development and the effectiveness of leadership development programs is clearly lacking in research, the body of research is growing every year as the field focuses in on what a successful leadership development program looks like. As I have demonstrated, the combination of 360-degree feedback and executive coaching seems to be a successful combination for a leadership development program. Many organizations are taking note of this and implementing their own leadership development programs that are structured in this way. One such organization is the State of Tennessee, who has developed the LEAD Tennessee program to assist in developing high potential government leaders across the state.

LEAD Tennessee

LEAD Tennessee (LEAD TN) is a 12-month leadership development program for both current and emerging leaders in a variety of government branches across the state of Tennessee. The program itself includes six one-day "Summits", during which the leaders focus their learning on the eight leadership competencies that guide the program. These competencies are 1) Self-leadership, 2) Integrity and Trust, 3) High Performing, 4) Customer Focused, 5) Innovative, 6) Mission-driven, 7) Courageous, and 8) Talent Focused. The goal of the LEAD TN program is, "to increase the state's leadership bench strength by providing agencies a continuous pipeline of motivated and prepared leaders who share a common language and mindset about great leadership." ("LEAD TN Overview", 2016) In addition to the Summits that participants attend, the participants are also required to attend at least two personal executive coaching labs that occur in January at the start of the program, and again in August. These executive coaching labs focus on the results of the 360-degree feedback that was administered before the start of the program and are followed by an evaluation of the session. Each year long cohort of LEAD TN is called an alliance and to date, there have been seven "alliances" that have completed this program and one alliance that is currently going through it. With approximately 120 leaders per alliance, by the end of 2017, nearly 1,000 leaders will have completed the LEAD TN program since its inception in 2010. The State of Tennessee is interested in assessing the effectiveness of the LEAD TN program, and determining how the leadership development program could be enhanced, and improved.

Nieminen et. al.'s (2013) study is methodologically similar to the present study; however, the current study has some added components that make it unique. Specifically, the current study includes an analysis of reaction level data following *each* executive coaching session. Giving the participants the opportunity to formally evaluate their coach and the sessions throughout the leadership development program, rather than just at the end, is likely to provide a unique insight on why the participants improved, or did not improve, throughout the course of the program.

The researchers seek to test the following hypothesis and to answer the following research questions through the current study:

Hypothesis 1: Post-360 (time 2) ratings will increase from pre-360 (time 1) ratings for each rating source across all eight (8) competencies.

Hypothesis 1a: Post-360 ratings will increase from pre-360 ratings for ***direct reports*** *across all competencies.*

Hypothesis 1b: Post-360 ratings will increase from pre-360 ratings for ***managers*** *across all competencies.*

Hypothesis 1c: Post-360 ratings will increase from pre-360 ratings for ***peers*** *across all competencies.*

RQ1: Do particular coaches have a bigger impact on the overall improvement in competencies?

RQ1a: Do particular coaches have a bigger impact on specific competencies?

RQ2: Do particular coaches have a bigger impact on specific rating sources?

RQ2a: Do particular coaches have a bigger impact on ***Peer Ratings****?*

RQ2c: Do particular coaches have a bigger impact on ***Manager Ratings****?*

RQ2a: Do particular coaches have a bigger impact on ***Direct Report Ratings****?*

CHAPTER II

METHOD

The current study sought to determine the effectiveness of LEAD Tennessee (LEAD TN), the State of Tennessee's leadership development program, by using archival data regarding LEAD TN for four (4) of the seven (7) Alliances that have gone through this program since its inception in 2010. "Alliance" is the terminology that the State of Tennessee uses to refer to a group of individuals that went through the yearlong LEAD TN program together. Each Alliance is numbered by the year that they went through the program, so Alliance 1 would be the first-year LEAD TN was operational, Alliance 2 would be the second year of LEAD TN and so on. This study also sought to ascertain the relative utility of the coaching component of the LEAD TN program.

Participants

Each agency within the State of Tennessee was allotted several spots for their agency and was permitted to select which employees they wanted to fill those spots. The number of allocated spots was based on the size of the agency. Agencies with more than 3,000 full time employees were able to select six people for the LEAD TN program, agencies with 800-2,999 full time employees were able to select four people, agencies with 300-799 full time employees were able to select three people, agencies with 100-299 full time employees were able to select two people and agencies with less than 100 full time employees were able to select one employee for LEAD TN. Each agency was also permitted to request additional seats for specific individuals as needed. These individuals were only considered if the program did not reach its maximum of 120 employees after all the initial employees were selected for the program.

All preferred service and executive service state employees were eligible to apply for this program, though it was noted that participation in the program was not directly connected to a promotion. A preferred service employee is defined by the State of Tennessee as an employee who holds a position in an agency and has completed the probationary period successfully. An executive service employee is an employee who holds a position in an agency and who meets the specific criteria, which is outlined in the Tennessee Code Annotated (TCA). Executive service employees are unable to appeal employment decisions, such as suspension, dismissal or demotion.

Agencies were given latitude when selecting employees to fill the seat allotment. The agency's top leadership team was responsible for creating the actual selection process; however, they were provided with best practices and suggestions for selecting the right candidates for this program. The leadership team could delegate the selection task to managers and have the manager's pick candidates, or they could have candidates submit the application directly to top leadership for selection. A copy of the selection tips handout, as well as the most recent application that candidates were asked to submit to top leadership can be found in Appendix A. Agencies were asked to submit their selections and the participant paperwork by the end of September each year so that the Tennessee Department of Human Resources (TN DOHR) could create a final list of participants for the following year's program.

Table 1. Total Number of Participants in Alliances 4-7

Alliance 4	Alliance 5	Alliance 6	Alliance 7
118	123	127	118

There were 486 participants across Alliances four through seven. Participants were all employees of the State of Tennessee at the time when the data was collected. Many of the participants only had pre-360 scores, rather than both pre-and post-scores. As a result, the final sample for the study was be 253 (52% of the total participants for these four Alliances). A breakdown of participants per Alliance for which there were both pre-and post-scores can be seen in the table below.

Table 2. Number of Participants in Alliances 4-7 with Complete Data

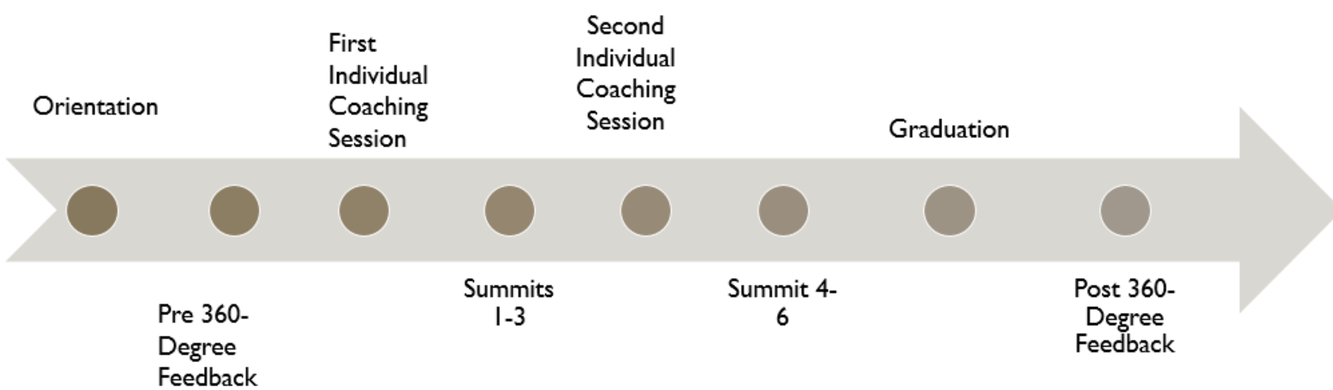
Alliance 4	Alliance 5	Alliance 6	Alliance 7
43	35	65	110

Of the 253 participants for which there was complete data (pre-and post-scores), the mean age across participants was 44 with 11 years of experience on average. 43% of the participants were male and 57% of the participants were female. 83% of participants across Alliances 4-7 were White, 14% were Black, 2% were Asian, and less than 2% were Hispanic.

360-degree feedback ratings refer to the pre-program and post-program scores across rating sources for each participant. As will be further discussed below, pre-program scores occurred around November of the year prior to the start of the LEAD TN program. The post-program scores occurred after the graduation of the participants from the LEAD TN program. Multiple rating sources were used for each dimension, which is why this is referred to as 360-degree feedback. The dimensions refer to the eight competencies (as of the LEAD TN 2013) that LEAD TN attempts to develop their leaders on.

Procedure

A visual overview of the process is shown below for reference throughout this section. The process below represents approximately one year from the LEAD TN orientation through the second administration of the 360 measures.



Pre-Program

After TN DOHR compiled the information on the selected participants from each department, the program participants were notified that they were selected to be a part of LEAD TN. Towards the beginning of November participants attended a half day orientation where they were introduced to the LEAD TN program, the rest of the alliance, and the HR and leadership team they would be working with throughout the year.

Following the orientation, participants were asked to choose their raters for the 360-degree feedback process. They were informed that the raters should be people with whom they work with frequently, people who have observed the participant in a variety of situations, and who will give the participant honest feedback. Participants were asked to pick at least five raters for the peer, direct report, and other groups to ensure that the participant had enough raters to meet the minimum two responses required for the group average to be assessed. Any rating sources that had less than two people (aside from supervisor) were not reported to the participant to protect anonymity. The participants were encouraged to talk to their manager when making this decision, but the final rater decisions were up to the participant. Participants were instructed to complete the rater information in a spreadsheet emailed to them in November. They then sent this information back to a designated employee within TN DOHR.

The participants and their designated raters were emailed access the 360-degree measure at the beginning of December and were given approximately two weeks to complete the measure. Participants were given contact information for technical support on the 360-degree feedback measure in case they ran into any issues completing the measure.

The First Coaching Session

Following the completion of the measure, participants were contacted by their assigned LEAD TN coach to schedule the first 45-minute coaching session, which occurred in late January. During this session, the participants and their coach went over the results of the 360-degree feedback and used that as a starting point to develop goals. Alliances 4, 5, and 6 had four coaches across all participants while Alliance 7 had five coaches. Coaches were generally kept consistent from year to year when possible.

Individual Development Plan

The Individual Development Plan (IDP) is a document given to the program participants at the start of the program. They were able to work on their IDP in their first one on one executive coaching session so that they could seek assistance from their coach. The purpose of this document was to help the participants narrow their focus to the most important leadership development opportunities for them to succeed. The participant was instructed to utilize their assessment feedback and to create a six-month development plan. Participants were also instructed to seek help in understanding their assessment results prior to finalizing their IDP.

The first section of the IDP is selecting a competency that they score high on (one that was identified as a strength). They were then instructed to select three different ways that they can capitalize on that strength in the future to make a positive impact on their department and role. They then had to create a specific plan for how they were going to ensure that they capitalize on this strength in the future.

They then went through a similar process for three competencies that they scored low on (areas identified as weaknesses). These selected competencies served as areas of development for the participant to focus on while in the program. The 360-degree feedback results provided specific actions to help the participant develop each competency that was identified as a weakness. The participant was instructed to select three of those suggested actions/activities, or come up with different behaviors with their coach that would ultimately lead to development of that competency. Again, participants were then instructed to develop a specific plan for how they were going to practice those actions.

Participants were then instructed to bring their IDP with them to each Summit. The form had a list of the dates for the participants to track their progress. These dates coincided with the Summit dates so that the participants could update their IDP with progress reports on the Summit dates. This progress update was done for both strengths and all three weaknesses following each Summit.

LEAD TN Summits

Following the first executive coaching session the program participants engaged in bi-monthly, day-long Summits that focused on one to two competencies per Summit. Each Summit had a working agenda that included speakers, experiential activities and small and large group discussions.

Summits began with participants going through the Summit's 45-minute coaching lab, where they broke into their group with approximately 23 people per group. Each group was led by one of the five LEAD TN coaches, whose coachees were all assigned to them during these labs. Individual coaching sessions were not available during the Summits, but the participants did get the opportunity to interact with their coach at the group level during this time. While the participants only met with their LEAD TN coach one-on-one on two occasions, the coaching labs at the start of each Summit are considered part of the coaching intervention.

Before each Summit the participants were sent pre-work, where they were given information about the competencies of focus for the Summit and discussion questions to review before the day of the Summit. During the executive coaching lab, the participants were instructed to have small group discussions about the questions they were given, all of which were related to the competencies that they would delve into later in the day, or related to how they applied what they learned from the previous Summit to their job. Following small group discussions, the coach facilitated a full group discussion and gave the participants materials, such as books and handouts, related to the competencies addressed in that Summit. Then, participants were told to pick two actions from the "Fully Engaged LEAD TN Participant" handout to work towards during the Summit. Finally, at the end of the executive coaching lab the participants write down questions that they want the panel to discuss later in the day and hand these questions in.

Before going into the lab, the coaches had a session with the LEAD TN program leaders where the program leaders prepared the coaches for the executive coaching lab and explained the purpose of the lab. This served as frame of reference training for the coaches to ensure that all the LEAD TN participants were given the same information and that the executive coaching lab was standardized from coach to coach, despite individual differences in coaching styles.

Following the executive coaching lab, all program participants gathered together to continue the day's activities. Program leaders introduced the competencies of the day in more depth and addressed feedback from the previous Summit, both good and bad. The program leaders noted that they strive for 80% above average and excellent ratings on each factor surveyed. They also addressed open ended feedback from the previous Summit, and sought to resolve any issues people had from the previous Summit in all later Summits. Then, the participants were shown a movie clip that was relevant to the competencies they were studying. Participants were in pre-made groups and were asked to discuss *how* the video was relevant to the competencies in question in their small groups. Following small group discussions, the program leaders facilitated a large group discussion about the videos and competencies.

Throughout the day various executive sponsors of the LEAD TN program spoke to the group about the competencies and what those competencies mean, as well as how they were relevant to the State of Tennessee. These executive sponsors were generally Commissioners of the State and changed at each Summit. At each Summit one of the five executive coaches gave a brief talk referred to as "Insights from a LEAD Tennessee Coach." This talk was also related to the competencies highlighted in the Summit. This component was added so that all participants could gain exposure to the coaches, even if they weren't their assigned coach.

After gaining breadth and depth of the highlighted competencies through discussions and guest speakers, the participants engaged in an experiential activity that taught them more about applying the competencies and sometimes extended into the afternoon session. For example, at the Summit that focused on the "Mission Driven" and "Customer Focused" competencies in 2017, the participants engaged in a technology based business simulation where they worked in teams of eight to assess the situation at a company by talking to stakeholders and viewing company documents and were then instructed to build and implement a change plan based on the company mission and information gathered in the first phase of the simulation. The goal was to garner at least 60% of stakeholder support and to meet the assigned budget and deadline.

Each Summit also had a lunch speaker session termed "Lunch and Opportunity with a Master," where a top-level employee of the state spoke to the participants and answered questions from the participants relating to the highlighted competencies. The speaker generally explained how the highlighted competencies related to the State of Tennessee and the other employees of the state, as well as the citizens of the state.

Towards the end of the day the commissioner sponsors who spoke earlier in the Summit formed a panel to answer questions posed by the LEAD TN participants. In the morning session, the participants were asked to write down questions for these panel members to answer related to the competencies that the Summit focused on. Following the panel, the participants finished up the experiential activities from the morning session and a facilitator led the final discussion on the outcome of the activity and what they learned from the activity.

At the end of each Summit, the participants were given a "simple read," which was a custom book created for participants with QR codes that take them to web based content about the highlighted competencies. The book also has action items for the participants to engage in for each competency in order to exhibit the desired behaviors on the job. By the end of the program, the LEAD TN participants have a number of these sources to help them apply the concepts they learned to their job, which ideally maximizes transfer of training.

The Second Executive Coaching Session and Post Measure

In August, the second executive coaching session occurred, during which participants met with their coach and discussed the progress of their developmental goals. They also discussed barriers to goal achievement and updated their individual development plans.

Measures

360-Degree Feedback (Pre-and Post)

The 360-degree feedback measure was an internet based assessment that asked raters to rate the frequency in which they observe the participants demonstrating a variety of behaviors. These behaviors were taken directly from the eight competencies that the participants study throughout the year and served as the baseline measure for the leadership development program.

This measure was developed and administered by an outside vendor and consisted of 36 items split into 8 dimensions. The 8 dimensions were the 8 competencies of the LEAD TN program. Each item represented one of the four to five behaviors associated with each of the eight competencies. See Appendix A (2017 LEAD TN Core Competencies) for the names and descriptions of the competencies, as well as the 36 associated behaviors.

The post-measure is the same as the pre-measure and assessed whether the participants have started engaging in the competency based behaviors more than when they first started the program. While we do not have detailed information on the raters, it can be assumed that not all the raters for the post-360 are the same as raters for the pre-360 due to turnover, promotion or lateral moves to other departments. A limitation of the current study is not having the information as to how many raters this applies to.

Typically, these ratings were collected from direct reports (if applicable), their manager, peers, and others. A limitation of the current study is that the researcher does not have access to the number of raters in each category; however, except for manager, if there were less than two respondents then the ratings were either not used to protect anonymity or rolled into the "other" category if there were enough responses to do so. This requirement resulted in less data points for peers and direct reports to ensure anonymity. A copy of the handout given to participants about the 360 measure can be found in Appendix B.

Summit Evaluation Measure

Following each Summit an online evaluation was given to each participant to complete. This survey was anonymous, so it cannot be connected to the scores from the pre-and post-measure, which is a major limitation of this study as we will discuss later. The following questions were asked on the survey:

1. How do you rate the relevance of the Summit content to your current job?
2. What barriers do you anticipate that might prevent you from applying what you learned?
3. Who is your LEAD Tennessee coach?
4. How do you rate the effectiveness of your COACH/FACILITATOR?
5. Overall, how do you rate LEAD Tennessee Summit X?
6. Overall, how would you rate the quality of your customer service experience provided by SLS?

SLS stands for Strategic Leadership Services, which is an internal consulting group within TN DOHR that focuses on assisting agencies in developing and retaining top talent through the use of customized learning strategies that lead to high performing employees.

Each question gave the participants the choice to rate on a 4-point scale (not satisfied, somewhat satisfied, satisfied, and highly satisfied). Then the participants were also able to contribute comments in an open-ended portion of each question, except questions one and three.

Despite the anonymity of the survey, we determined which participants were assigned to which coach based on information given by the State of Tennessee. Further, the survey that the participants take at the end of each Summit has them indicate who their coach was, so we were able to break the survey data down to groups of participants under each coach. This will allow the researcher to analyze pre-and post-360 differences based on who the coach was for a group of participants, but will not allow us to analyze these differences at the individual level. This was a major limitation of the current study.

The Competencies

The LEAD TN program is centered around eight competencies that the program participants are supposed to develop throughout the program. These competencies are divided into three broad categories (Lead Self, Lead People, Lead an Organization) with competencies relevant to that category falling under each.

The State of Tennessee defines Lead Self as "expands depth and breadth of capability." This represents personal development and encompasses the competencies of self-leadership, integrity and trust, and high performing. They define the Lead People category as "enables others to achieve high performing and full potential." The competencies of Courageous and Talent

Focused are listed under this category. The final category of competencies is Lead an Organization, which they define as “guides overall strategic and operational direction.” The competencies within this category include Customer Focused, Innovative, and Mission-Driven. Each competency has its own definition and corresponding set of behaviors so that participants can know specifically what demonstrating the competencies looks like. The listed behaviors allow the participants to be effectively evaluated on the competencies during the pre-and post-360 administration. This way peers and supervisors also know what each competency operationally looks like. See Appendix A (2017 LEAD TN Core Competencies) for more information on the competencies and behaviors.

Selection of Current Competencies

The competencies were selected by a task team in 2009 which convened specifically to determine what success will look like by government employees in the State of Tennessee. This task team is now a part of the Executive Leadership Council that convenes every three years to review the competencies and update them as needed. For example, the initial list of competencies included eleven competencies across five broad categories; however, for the 2013 program the competencies changed to the eight competencies across three broad categories that are listed above. This means that leaders in Alliances 1-3 were developed using the first set of competencies, while Alliances 4-7 were developed using the second set of competencies. This also means that the 360-measure changed in 2013 to be based upon the new set of competencies, which is why only Alliances 4-7 were analyzed in the current study.

Analyses

Content Coding for Coaches

The researcher obtained the biographies of each of the coaches across the six years of Alliances that were studied. The coach biographies contained information about the coaches, such as their current occupation, previous occupations, years of experience in executive coaching, education level etc.

After the coach biographies were content coded, the researcher was able to use the content coded information to analyze the relationship between coaches and the pre-test and posttest score difference on the 360-degree feedback by rating source. Unfortunately, the biographies did not all include standardized information about the coaches, so not all information was available for all coaches. This affected the analyses that were done in that the researcher was only able to look at gender as a between subject's factor. Content coding the biographical information allowed the researcher to control for factors of the coach that might change how effective the coach is and ultimately how much the program participants under that coach improved over the year.

Repeated measures ANOVAs were used to determine whether the differences from the pre-360 measure to the post-360 measure were statistically significant. Information regarding the Coach and the Coach's background and experiences were entered into the analyses as between subject's factors and the year of the LEAD TN Alliance were entered as a covariate in the repeated measure ANOVAs. A repeated measure ANOVA was done for each rating source for overall scores (across all competencies) and at the competency level.

CHAPTER III

RESULTS

Reliability Analysis

A reliability analysis was conducted in SPSS to determine the scale reliabilities of each of the 8 competency scales for the pre- and post-360 measure. The coefficient alphas of each scale for both the pre- and post-measure were fairly high, with most alphas being in the .8 and .9 range. See table 3 below for the specific coefficient alphas per measure and scale.

Table 3. Reliability coefficients for pre-and post-360-degree feedback scales

	Pre-360			Post-360		
Scale	Managers	Direct Reports	Peers	Managers	Direct Reports	Peers
Courageous	.91	.95	.92	.88	.96	.88
Customer focused	.76	.86	.82	.80	.88	.81
High performing	.88	.89	.88	.86	.93	.86
Innovative	.87	.89	.87	.88	.94	.88
Integrity	.86	.91	.86	.87	.89	.87
Mission driven	.87	.91	.88	.86	.92	.85
Self-mgmt.	.88	.90	.90	.87	.94	.88
Talent focused	.90	.91	.93	.90	.94	.91

Hypothesis 1

Hypothesis one was partially supported. Hypothesis 1a was not support, while hypothesis 1b and 1c were fully supported. Hypothesis one was evaluated by conducting a series of one-way repeated measures ANOVAs for each competency and rating source. Prior to the analyses a Bonferroni correction was done (.05/8) and yielded a corrected p value of .0063. Note that when the term “overall” is used in the current study, it is referring to the average score across all eight LEAD TN competencies.

Manager Ratings

Results indicate that the overall change in manager ratings from time one to time to was statistically significant, *F* = 20.0 (1, 230), *p* < .001, η_p^2 = .08. The customer focused competency also had a significant change among managers, *F* =8.93 (1, 230), *p* < .003, η_p^2 = .04. High performing scores among the manager rating source changed significantly, *F* = 18.5 (1, 228), *p* < .001, η_p^2 = .08, as did innovative scores among managers, *F* = 8.08 (1, 230), *p* < .005, η_p^2 = .03. Finally, both mission driven scores among managers, *F* = 13.7 (1, 230), *p* < .001, η_p^2 = .06, and self-management scores among managers, *F* = 23.1 (1, 227), *p* < .001, η_p^2 = .0 changed significantly from time one to time two.

The competency scores of courageous, integrity, and talent focused did not see a statistically significant change from time one administration to time two administration. See table 4 for the full list of results for the manager rating source.

Table 4. One-way repeated measures ANOVA for manager rating change between pre-360 and post-360

Scale	*Pre Mean*	*Pre SD*	*Post Mean*	*Post SD*	*df*	*F*	*p*	*Effect Size*
Overall*	4.19	0.50	4.31	0.48	(1, 230)	20.0	.000	.08
Courageous	4.05	0.64	4.13	0.60	(1, 230)	4.92	.027	.02
Customer focused*	4.23	0.48	4.36	0.49	(1, 230)	8.93	.003	.04
High performing*	4.17	0.58	4.31	0.55	(1, 228)	18.5	.000	.08
Innovative*	4.19	0.62	4.29	0.60	(1, 230)	8.08	.005	.03
Integrity	4.57	0.53	4.63	0.46	(1, 228)	4.73	.031	.02
Mission driven*	4.21	0.58	4.34	0.53	(1, 230)	13.7	.000	.06
Self-management*	4.23	0.58	4.39	0.58	(1, 227)	23.1	.000	.09
Talent focused	4.00	0.64	4.16	0.65	(1, 228)	14.7	.000	.06

* p < .0063

Direct Report Ratings

There were no statistically significant changes in the scores on any competencies or the overall scores from time one administration to time two administration for direct reports of the LEAD Tennessee participants. See table 5 for the full list of non-significant results.

Table 5. One-way repeated measures ANOVA for direct reports rating change between pre-360 and post-360

Scale	*Pre Mean*	*Pre SD*	*Post Mean*	*Post SD*	*df*	*F*	*p*	*Effect Size*
Overall	4.20	0.48	4.26	0.55	(1, 186)	1.17	.28	.00
Courageous	4.08	0.60	4.12	0.70	(1, 185)	0.92	.76	.00
Customer focused	4.33	0.45	4.33	0.51	(1, 186)	0.11	.74	.00
High performing	4.22	0.51	4.30	0.58	(1, 184)	1.65	.20	.01
Innovative	4.20	0.52	4.25	0.60	(1, 186)	1.00	.32	.01
Integrity	4.40	0.52	4.44	0.56	(1, 184)	0.01	.93	.00
Mission driven	4.24	0.52	4.31	0.58	(1, 185)	2.34	.13	.01
Self-management	4.26	0.55	4.33	0.55	(1, 183)	1.49	.23	.01
Talent focused	4.03	0.59	4.14	0.67	(1, 185)	3.27	.07	.02

* p < .0063

Peer Ratings

Results indicate that the overall change from administration of the 360 measure from time one to time two for peers were statistically significant, $F = 25.7$ (1, 235), $p < .001$, $\eta_p^2 = .01$. Additionally, peer ratings of courageous, $F = 13.5$ (1, 235), $p < .001$, $\eta_p^2 = .05$, high performing, $F = 36.3$ (1, 233), $p < .001$, $\eta_p^2 = .14$, mission driven, $F = 27.4$ (1, 235), $p < .001$, $\eta_p^2 = .11$, self-management, $F = 24.1$ (1, 231), $p < .001$, $\eta_p^2 = .10$, and talent focused, $F = 26.5$ (1, 233), $p < .001$, $\eta_p^2 = .10$, changed significantly from time one to time two. See table 6 below for the full results.

Table 6. One-way repeated measures ANOVA for peer rating change between pre and post-360

Scale	*Pre Mean*	*Pre SD*	*Post Mean*	*Post SD*	*df*	*F*	*p*	*Effect Size*
Overall*	4.12	0.39	4.31	0.37	(1, 235)	25.7	.000	.01
Courageous*	4.04	0.50	4.15	0.48	(1, 235)	13.5	.000	.05
Customer focused	4.33	0.37	4.39	0.39	(1, 235)	5.05	.026	.02
High performing*	4.19	0.42	4.37	0.41	(1, 233)	36.3	.000	.14
Innovative	4.18	0.45	4.25	0.45	(1, 235)	6.95	.009	.03
Integrity	4.50	0.40	4.57	0.39	(1, 233)	6.64	.011	.03
Mission driven*	4.23	0.40	4.37	0.39	(1, 235)	27.4	.000	.11
Self-management*	4.25	0.45	4.39	0.43	(1, 231)	24.1	.000	.10
Talent focused*	3.98	0.53	4.16	0.49	(1, 233)	26.5	.000	.10

* $p < .0063$

Research Question 1

Research question 1 was evaluated by conducting a series of repeated measures ANOVAs that evaluated the interaction between the eight competencies and the coach. In these analyses, coach was used as a between subjects factor. As in hypothesis 1 analyses, a Bonferroni correction was done (.05/8) and yielded a corrected alpha level of .0063. None of the interactions were significant. See table 7 below for the full results.

Table 7. Repeated measures ANOVA with coach as a between subject factor

Competency	*df*	*F*	*p*	*Effect Size*
Overall	(6, 243)	1.81	.09	.04
Courageous	(6, 242)	1.38	.23	.03
Customer focused	(6, 242)	2.24	.04	.05
High performing	(6, 240)	0.76	.61	.02
Innovative	(6, 242)	1.07	.38	.03
Integrity	(6, 240)	2.70	.02	.06
Mission driven	(6, 242)	1.54	.17	.04
Self-management	(6, 239)	1.00	.42	.03
Talent focused	(6, 242)	1.10	.36	.03

* $p < .0063$

Coach gender was the only standardized variable that could be confirmed in the current study due to a lack of consistent information on the coaches. For the next set of analyses coach gender was used as the between subjects factor to evaluate any potential interactions between the change in scores and the coach gender. There were no significant interactions found between coach gender and the change across time in any of the eight competencies. See table 8 for the full results.

Table 8. Repeated measures ANOVA with coach gender as a between subject factor

Scale	*df*	*F*	*p*	*Effect Size*
Overall	(1, 248)	0.54	.81	.00
Courageous	(1, 247)	0.02	.88	.00
Customer focused	(1, 247)	0.46	.50	.00
High performing	(1,189)	0.29	.60	.00
Innovative	(1, 247)	0.17	.68	.00
Integrity	(1, 208)	0.74	.40	.00
Mission driven	(1, 247)	0.60	.44	.00
Self-management	(1, 244)	1.34	.25	.00
Talent focused	(1, 247)	0.01	.92	.00

* p < .0063

Research Question 2

Research question 2 was evaluated using a series of repeated measures ANOVAs that evaluated the interaction between the rating source's (direct report, peer, and managers) change in scores and the coach. In these analyses the coach was used as the between subjects factor. There were not significant interactions between the rating source's change in scores and the coach. See tables 9 through 17 for the full set of results.

Table 9. Repeated measures ANOVA for overall scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 180)	0.91	.49	.03
Peer x Coach	(6, 228)	0.50	.81	.01
Manager x Coach	(6, 223)	0.82	.56	.02

Table 10. Repeated measures ANOVA for high performing scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 178)	0.59	.74	.02
Peer x Coach	(6, 226)	0.47	.83	.01
Manager x Coach	(6, 221)	0.93	.47	.03

Table 11. Repeated measures ANOVA for integrity scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 178)	0.93	.47	.03
Peer x Coach	(6, 226)	0.64	.70	.02
Manager x Coach	(6, 221)	0.86	.52	.02

Table 12. Repeated measures ANOVA for self-management scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 177)	1.26	.28	.04
Peer x Coach	(6, 224)	0.41	.87	.01
Manager x Coach	(6, 220)	0.94	.47	.03

Table 13. Repeated measures ANOVA for customer focused scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 180)	0.87	.52	.03
Peer x Coach	(6, 228)	1.05	.39	.03
Manager x Coach	(6, 223)	1.30	.26	.03

Table 14. Repeated measures ANOVA for innovative scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 180)	1.08	.38	.04
Peer x Coach	(6, 228)	0.35	.91	.01
Manager x Coach	(6, 223)	0.60	.73	.02

Table 15. Repeated measures ANOVA for mission driven scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 179)	1.46	.20	.05
Peer x Coach	(6, 228)	0.35	.91	.01
Manager x Coach	(6, 223)	0.60	.73	.02

Table 16. Repeated measures ANOVA for courageous scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 179)	0.86	.53	.03
Peer x Coach	(6, 228)	0.52	.79	.01
Manager x Coach	(6, 223)	0.83	.55	.02

Table 17. Repeated measures ANOVA for talent focused scores with coach as a between subject's factor

Effect	*df*	*F*	*p*	*Effect Size*
Direct Report x Coach	(6, 179)	0.84	.54	.03
Peer x Coach	(6, 226)	0.67	.68	.02
Manager x Coach	(6, 221)	0.98	.44	.03

CHAPTER IV

DISCUSSION

The overall scores for both the manager and peer rating sources saw statistically significant changes from time one administration to time two administration, with direct reports seeing no significant change on any of the eight competencies (High Performing, Courageous, Customer Focused, Innovative, Integrity, Mission Driven, Self-Management, Talent Focused). One possible explanation for this is that the participant could have had more direct conversations about their development with managers and peers than with direct reports, insofar that the managers and peers were more familiar with the improvements across time than the direct reports. It is also possible that the direct reports had less opportunity to see their manager utilizing these competency skills as compared to the peers and managers.

Another potential reason that the managers and peers reported significant changes that the direct reports did not report could be related to the specific competencies that are being measured by LEAD TN. The LEAD TN competencies assessed were not focused on the relationship between the leader and their direct reports, but are focused on more business and results driven behaviors. Because leader ratings by direct reports are heavily influenced by the relationship managing skills of the leader and those skills do not appear to be a focus of the LEAD TN program, this could explain why the direct report ratings did not increase significantly. By this rationale, the participant’s managers are more likely to notice the change in competencies since they are business and results driven, rather than relationship and development driven. Because the employees are selected for LEAD TN are considered high potential employees, it could be that they are already effectively managing the relationships with their employees and developing them. This would also explain why the direct report ratings already appear to be high.

High performing, mission driven and self-management are the three competencies in which both managers and peers saw a significant behavior change for the LEAD Tennessee participants. In all cases, the effect sizes were fairly high indicating that the results were not just statistically significant, but that the differences were large according to Cohen's guidelines on effect sizes.

The results of the current study indicate that LEAD TN is effective because of the statistically significant change in scores from time one to time two. However, the results of this study cannot pinpoint if any part or component of LEAD TN produced the change in scores. Nor can the results determine if any component or part of LEAD TN was less effective in changing scores. It is also possible that this change could be due to outside variables that were not controlled for in this study. All of these will be discussed further in the next section. As the results demonstrate, none of the interactions between the competencies and the coaches were significant; however, the pre- and post-360 scores yielded a statistically significant difference. This means that we cannot determine if the coaches are helping influence the scores or not.

Limitations and Future Research

Due to the nature of archival data, there are a number of limitations within the current study. These limitations should be considered and addressed for future iterations of LEAD TN and can also be considered for other organizations that are considering collecting data on a leadership development program similar to this one.

The major limitation of the study is concerned with data collection. Despite the fact that approximately 120 people participate in LEAD TN per year and we have four years' worth of data to look at, we only had access to 253 participants full (pre-and post-score) program data instead of the 486 participants who went through the program during this time frame.

Additionally, we do not have self-ratings for any of the participants, which is a major limitation. The reason for the lack of a full dataset is not known. It could be that we were not provided with all of the data. In many cases self-ratings are stored in a separate data file than other rating sources, so it is possible we did not receive this information from our point of contact. On the other hand, it is also possible that this information was not collected. Future research that is done on LEAD TN should aim to determine the reason for the missing data and try to gain access to it if possible.

A final issue in terms of the data collection is the way in which the coach evaluations were collected from participants. These were collected through the anonymous summit evaluation, so while we had information about what coach each participant was assigned, we were unable to connect the evaluation of each coach to the individual participants and their change in scores. Future research and future iterations of the LEAD TN program should collect this information in a way that can be connected to the individual participants so that this information can be analyzed to determine if there is a difference in scores based on coach evaluation. If this is the case, then the implications would be important to future leadership development programs that involve coaching. Future research should also seek to find more standardized information on the LEAD Tennessee coaches, including, but not limited to years of experience, degrees and certifications received, and professional organization memberships. This information was unable to be collected in the current study; however, having this information would allow the researcher to control for additional variables rather than only coach gender, which could yield unique insights on the selected coaches.

A potential limitation of this study is that this was a high potential employee leadership development program which leads to a potential selection bias and range restriction, which impacts how the participants do and how much they improve on the competencies. As such, the findings of this study might not generalize to other leadership development programs that are not focused on high potential employees or that have competencies that are more relationship focused than the LEAD TN competencies.

A final limitation and recommendation would be to work towards standardizing the coaches from year to year. The current study has multiple coaches who only had 21 participants across the four years (due to the fact that they were not LEAD TN coaches prior to Alliance 7) and coaches who had nearly 60 participants across all four years that are being studied. That being the said, the data might be slightly skewed.

Future research should attempt to control for more factors that could be causing the change in scores across time. For example, it is possible that the change in scores could be due to other leadership development initiatives that the leader participated in throughout the year the program was occurring, such as other workshops, job shadowing, mentoring from their leader and so on. Future research could ask about this additional activities and attempt to control for them. Future research should also involve a comparison group, where other high potential individuals take the measure at the same time as the LEAD TN participants, but don’t attend the coaching sessions or Summits. They could then offer the control group spots in the next Alliance so that they still get the development opportunity.

Research Implications

Culture change can be a tedious, difficult process that requires an immense amount of resources, support from the top and most of all, it requires time. The culture of state government is inherently known to represent the negative side of bureaucracy and be generally de-motivating to their employees. On the other hand, many high profile private sector companies have unique cultures full of motivated employees who are dedicated to their organization.

The main difference between these two types of culture is where and how money is invested. Public sector organizations are more closely watched by vigilant taxpayers and have to be cognizant of this when spending money. They are less able to provide unique and "fun" benefits to their employees; however, this is not the only way to create a great organizational culture. Creating a great culture can stem from simply recognizing an employee's strengths and helping them build and leverage those strengths. While state government has more barriers to motivating employees than private sector companies, they are still able to create a learning organization for their employees, which can be incredibly beneficial without costing too much money or causing taxpayer pushback.

Creating a culture of learning is what the State of Tennessee is trying to do. This is a unique initiative among state government and can benefit the state in a number of ways. Many organizations do not want to spend too much money developing their employees because they fear they won't retain the employee; however, in government losing employees who have well developed leadership skills is not always a bad thing. That employee could go on to start their own local business, or could leave to work for a company that has its headquarters in the state, which still has a positive impact on the state as a whole.

Through the LEAD Tennessee program, the State of Tennessee has invested in their employees and given those who have not yet been selected something to work towards. These employees who want to be selected are likely working to develop themselves through other developmental initiatives that the state offers so that they can qualify for LEAD TN. Employees who have participated in the program have a myriad of benefits beyond those that are discussed directly in this study. For example, employees have spent the year of their program with people across departments, so they have been able to build a network of leaders from various departments, which breaks down departmental silos across the state and ideally increases the day to day functioning and effectiveness of the organization. Additionally, this program has been going on for nearly a decade now, so the development has cascaded down the organization and will continue to cascade down to the most recent high potential employees.

The state is making great strides towards the goal of becoming a destination employer because of its unique developmental opportunities for leaders in the community. Programs for high potential employees are not new, but they are novel in the context of an entire state government. The State of Tennessee is looking to become a learning organization and LEAD Tennessee is an effective step in the right direction based on the current study.

REFERENCES

Atwater, L. E., Brett, J. F., & Charles, A. C. (2007). Multisource feedback: lessons learned and implications for practice. *Human Resource Management*, *46* (2), 285-307.

Atwater, L. E., Waldman, D. A., Atwater, D., & Cartier, P. (2000). An upward feedback field experiment: supervisors' cynicism, follow-up and commitment to subordinates. *Personnel Psychology, 53*, 275-296.

Brotman, L. E., Liberi, W. P., & Wasylyshyn, K. M. (1998). Executive coaching: The need for standards of competence. *Consulting Psychology Journal: Practice and Research, 50,* 40–46.

Chakrabarti, M. (2009). Leadership development – is it really worth the money? *Bersin by Deloitte.* Retrieved from: http://blog.bersin.com/leadership-development-is-it-really-worth-the-money/

Church, A. H. (2000). Do higher performing managers actually receive better ratings? A validation of multirater assessment methodology. *Consulting Psychology Journal: Practice and Research*, *52*, 99–116.

Conway, J., & Huffcutt, A. (1997). Psychometric properties of multisource performance ratings: a meta-analysis of subordinate, supervisor, peer and self-ratings. *Human Performance*, *10* (4), 331-360.

Coutu, D., Kauffman, C. (2009, January). What can executive coaching do for you? *Harvard Business Review.* Retrieved from https://hbr.org/2009/01/what-can-coaches-do-for-you.

Dean M.L., Meyer A.A. (2002). Executive coaching: In search of a model. *Journal of Leadership Education, 1*, 1–15.

Diedrich R.C. (1996). An iterative approach to executive coaching. *Consulting Psychology Journal: Practice and Research, 48,* 61–66.

Ennis, S. & Otto, J. (2015). The executive coaching handbook: principles and guidelines for a successful coaching partnership. *The Executive Coaching Forum.*

Evers, W. J. G., Brouwers, A., Tomic, W. (2006). A quasi-experimental study on management executive coaching effectiveness. *Consulting Psychology Journal: Practice and Research, 58* (3).

Feldman, D.C. (2001). Career executive coaching: What HR professionals and managers need to know. *Human Resource Planning, 24,* 26-35.

Feldman D.C., Lankau M.J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management, 31,* 829–848.

Frame, M.C., Sanders, E. K. (2015). Using a training model to improve leadership coaching. In M.D. Biderman, C. J. L Cunningham, B. J. O'Leary, and B.L. Weathington, (Eds), *Trends in training.* (pp. 25-36). New Castle: Cambridge Scholars Publishing.

Garman, A. N., Whiston, D. L., & Zlatoper, K. W. (2000). Media perceptions of executive coaching and the formal preparation of coaches. *Consulting Psychology Journal: Practice and Research*, *52*(3), 201-205.

Grant, A.M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience, and workplace well-being: a randomized controlled study. *The Journal of Positive Psychology, 4* (5), 396-407.

Harris, M. (1999). Practice network: Look, it's an I-O psychologist . . . no, it's a trainer . . . no, it's an executive coach! *The Industrial-Organizational Psychologist*, *36* (3), 38–42.

Hazucha, J. F., Hezlett, S. A., & Schneider, R. J. (1993). The impact of 360-degree feedback on management skills development. *Human Resource Management*, *32*, 325–351.

International Executive Coaching Federation. (N.d.). *Executive coaching FAQ's*. Retrieved from http://coachfederation.org/need/landing.cfm?ItemNumber=978&navItemNumber=567

Judge W.Q., Cowell J. (1997). The brave new world of executive coaching. *Business Horizons*, *40*, 71–77.

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

Kilburg, R. R. (2000). *Executive coaching: Developing managerial wisdom in a world of chaos.* Washington, DC: American Psychological Association.

Kochanowski, S., Seifert, C. F., & Yukl, G. (2010). Using executive coaching to enhance the effects of behavioral feedback to managers. *Journal of Leadership and Organizational Studies*, *17*, 363–369.

Levinson H. (1996). Executive coaching. *Consulting Psychology Journal: Practice and Research*, *48*, 115–123.

Liljenstrand, A. M. & Nebeker, D. M. (2008). Executive coaching services: A look at coaches, clients, and practices. *Consulting Psychology Journal: Practice and Research*, *60* (1), 57-77.

Loew, L. (2015). State of leadership development 2015: The time to act is now. *Brandon Hall Group.* Retrieved from http://www.ddiworld.com/DDI/media/trend-research/state-of-leadership-development_tr_brandon-hall.pdf?ext=.pdf.

Luthans, F., & Peterson, S. J. (2003). 360-degree feedback with systematic executive coaching: Empirical analysis suggests a winning combination. *Human Resource Management*, *42*, 243–256.

MacKie, D. (2014). The effectiveness of strength-based executive coaching in enhancing full range leadership development: a controlled study. *Consulting Psychology Journal: Practice and Research*, *66* (2), 118-137.

McCauley, C.D., Van Veslor, E. (2004). *The Center for Creative Leadership handbook of leadership development*. San Francisco, CA: John Wiley & Sons Inc.

Nieminen, L. R. G., Smerek, R., Kotrba, L., & Denison, D. (2013). What does an executive coaching intervention add beyond facilitated multisource feedback? effects on leader self-ratings and perceived effectiveness. *Human Resource Development Quarterly*, *24* (2), 145-176.

Osatuke, K., Yanovsky, B, & Ramsel, D. (2016). Executive coaching: new framework for evaluation. *Consulting Psychology Journal: Practice and Research.* Advance online publication.

Rosti, R. T., & Shipper, F. (1998). A study of the impact of training in a management development program based on 360 feedback. *Journal of Managerial Psychology, 13,* 77–89.

Seifert, C. F., Yukl, G., & McDonald, R. A. (2003). Effects of multisource feedback and feedback facilitator on the influence behavior of managers toward subordinates. *Journal of Applied Psychology*, *88,* 561–569.

Smither, J. W., London, M. L. Flautt, R., Vargas, Y., & Kucine, I. (2003). Can working with an executive coach improve multisource feedback ratings over time? A quasi-experimental study. *Personnel Psychology, 56,* 23–44.

Tennessee State Government. (2016). *LEAD TN Overview.* Retrieved from https://www.tn.gov/assets/entities/hr/attachments/2017_Overview.pdf.

Thach, E. (2002). The impact of executive coaching and 360-degree feedback on leadership effectiveness. *Leadership and Organizational Development Journal, 23* (4), 205-214.

Tobias, L. (1996). Executive coaching executives. *Consulting Psychology Journal: Practice and Research, 48* (2), 87-95.

Wasylyshyn, K. M. (2003). Executive coaching: an outcome study. *Consulting Psychology Journal: Practice and Research, 55* (2), 94-106.

APPENDICES

APPENDIX A: APPOINTING AUTHORITY PACKET FOR LEAD TN (2017)

Tennessee State Government | Leadership

LEAD Tennessee

2017
Appointing Authority Information Packet
Alliance 8

- *LEAD Tennessee Overview*
- *Core Competencies*
- *Core Competencies with Behaviors*
- *LEAD Tennessee-at-a-Glance*
- *Executive Leadership Council*
- *Selection Tips*
- *Agency Seat Availability*
- *Agency Participant Selection List*
- *LEAD Tennessee Alumni by Agency*
- *Frequently Asked Questions*
- *LEAD Tennessee Agency and Participant Commitment*
- *2017Participant Application*

"What you do speaks so loudly that I cannot hear what you sa

Ralph Waldo Emerson

TN Department of Human Resources | SLS Strategic Learning Solutions "Integrating Knowledge & Performance"

Learn → Apply → LEAD

Overview

LEAD Tennessee is a statewide, 12-month development initiative for current and emerging leaders from all branches of government. It consists of six one-day summits of intense, high impact learning focused on eight leadership core competencies. The goal of LEAD Tennessee is to increase the state's leadership bench strength by providing agencies a continuous pipeline of motivated and prepared leaders who share a common language and mindset about great leadership.

Participants learn a combination of behaviors, knowledge and skills through experiential learning that drives effective job performance. This shared leadership language enables leaders across agency lines to increase networking efficiency, which has a direct impact on the workforce and contributes to greater opportunities for resource sharing and problem solving. State government directly benefits by higher productivity, efficiency, and improved organizational performance. Better-trained leaders provide clearer direction and guidance to employees who in turn provide agencies with desired accomplishments and results. The overall workforce is better equipped to serve the citizens of the state of Tennessee.

Throughout the initiative, participants have an increased exposure and access to experienced leaders (e.g., the Governor of the state of Tennessee, Major General of the United States Army/National Guard, Presidents of Universities/Colleges, subject matter experts, and state appointing authorities). With this type of interaction, participants gain a deeper understanding of how powerful leaders use core skills to lead and how the eight leadership core competencies apply to real work situations.

BY JANUARY 2018

TENNESSEE WILL HAVE A POOL OF UP TO 920 LEADERS ACROSS MULTIPLE AGENCIES WHO:

- Share language and mindset about great leadership
- Demonstrate 8 leadership core competencies
- Provide agency bench strength
- Are motivated and prepared to lead

TN Tennessee State Government | Leadership


LEAD Tennessee
CORE COMPETENCIES
Lead Self
Self-Leadership
Integrity & Trust
High Performing
Lead People
Courageous
Talent Focused
Lead an Organization
Mission-Driven
Customer Focused
Innovative
Learn
Apply
LEAD

2017

LEAD Tennessee Core Competencies

Lead Self: ***Expands depth and breadth of capability***	
Competency and Definition	***Behaviors***
Self-Leadership *Developing a sense of who one is, what is one's ability, what is one's vision coupled with the ability to effectively communicate, manage emotions and model the way in reaching one's potential*	1. Has a clear understanding of personal opportunities for improvement; capitalizes on personal strengths 2. Establishes networks to stay active in the business of the organization and to stay abreast of trends 3. Continuously seeks opportunities to improve both professionally and personally 4. Seeks out experiences that challenge perspective or provide an opportunity to learn new things 5. Demonstrates the ability to adapt and navigate change within the organization
Integrity & Trust *Takes responsibility for personal actions, follows through on commitments, and instills confidence that all words and actions are the truth*	1. Can be relied on to tell the truth regardless of the circumstances 2. Does not blame others 3. Ensures alignment between words and actions 4. Acts in the best interest of others and for the greater good of the organization
High Performing *Sets a high standard that represents the organization in the best light to both internal and external customers and produces results that exceed expectations*	1. Uses strong, well-rounded written, and oral communication skills in a variety of situations 2. Collaborates with managers, co-workers, peers, and external stakeholders to gain cooperation, information and buy-in, making work more effective and efficient 3. Utilizes the mission of the organization to evaluate options and identify those that are most likely to move the business forward 4. Identifies top talent to grow a culture of high performance 5. Establishes clear expectations for self and others to achieve goals
Lead an Organization: ***Guides overall strategic and operational direction***	
Competency and Definition	***Behaviors***
Customer Focused *Places the customer at the center of strategic and operational planning*	1. Clearly identifies the full range of customers to be served 2. Follows through on commitments 3. Identifies and monitors customer metrics to improve performance 4. Anticipates and responds to changing and evolving customer needs
Innovative *Demonstrates flexible thinking while producing creative thought processes; open to suggestions of others*	1. Offers new and unique ideas 2. Demonstrates value to teams and organizations by providing original thought and connections to ideas outside own area of focus 3. Demonstrates enthusiasm and support of innovative initiatives by others 4. Balances perspective and forward thinking
Mission-Driven *Demonstrates through actions, absolute clarity as to the purpose of the organization*	1. Ensures the organization has a relevant mission that instills a sense of purpose 2. Demonstrates focus on mission, goals, and priorities of the organization when making strategic decisions 3. Clearly communicates the organization's mission to others 4. Balances daily operational responsibilities while implementing long term mission-critical strategies
Lead People: ***Enables others to achieve high performance and full potential***	
Competency and Definition	***Behaviors***

Courageous *Demonstrates understanding of concerns; takes responsibility and addresses them with fortitude and composure*	1. Clearly identifies tough feedback situations and demonstrates ability to give feedback in a timely and effective manner 2. Addresses issues and challenges with the appropriate persons and takes responsible risks 3. Ensures controversy, misperceptions, and misunderstandings are quickly addressed and reconciled 4. Leads with a strong sense of courage through the uncertainty, making bold transformational changes 5. Demonstrates the ability to effectively manage conflict
Talent Focused *Demonstrates the ability to create an environment that encourages outstanding individual performance from each employee*	1. Demonstrates a commitment to the development and success of employees who are tasked with implementing and executing results by providing challenging work and opportunities for growth 2. Motivates others to perform at their best 3. Utilizes effective strategies to facilitate change initiatives and to overcome resistance to change 4. Creates an environment that attracts highly talented, engaged, and productive employees 5. Provides ongoing coaching and mentoring opportunities in an effort to promote continual learning and growth for employees

Alliance 8

LEAD Tennessee–at–a–Glance

"What you do speaks so loudly that I cannot hear what you say."

~ Ralph Waldo Emerson

Orientation and Graduation will be held at the Department of Military, Houston Barracks

All Summits 7:30 am to 5:00 pm

November 7, 2016

Orientation: 12:00 pm – 4:30 pm

Department of Military, Houston Barracks

3041 Sidco Drive, Nashville, TN 37204

January 17, 18, 19, 2017

Coaching Labs – *One hour session by appointment*

James K. Polk Building, 1st Floor

505 Deaderick Street, Nashville, TN 37243

February 27, 2017

Summit 1: Competency Focus: *Self-Leadership*

One University Park Drive

Ezell Center, Room 301, Nashville, TN 37204

April 24, 2017

Summit 2: Competency Focus: *Mission-Driven and Customer Focused*

One University Park Drive

Ezell Center, Room 301, Nashville, TN 37204

June 26, 2017

Summit 3: Competency Focus: *Innovative and High Performing*

SPARK Lipscomb's Idea Center 3252 Aspen Grove Drive, Suite #9, Nashville, TN 37067

August 8, 9, 10, 2017

Coaching Labs – *One hour session by appointment*

James K. Polk Building, 1st Floor

505 Deaderick Street, Nashville, TN 37243

August 28, 2017

Summit 4: Competency Focus: *Courageous and Talent Focused*

One University Park Drive

Ezell Center, Room 301, Nashville, TN 37204

October 23, 2017

Summit 5: Competency Focus: *Integrity & Trust*

One University Park Drive

Ezell Center, Room 301, Nashville, TN 37204

November 13, 2017

Summit 6: *Essence of Leadership: Seize the Moment*

One University Park Drive

Ezell Center, Room 301, Nashville, TN 37204

December 11, 2017

Graduation: "LEAD On" Celebration

Appointing Authorities' Selection Tips

- **ENGAGE** your executive team by discussing the leadership needs of your agency and identifying those employees who are serving in critical roles throughout your agency.
- **DETERMINE** the executive and senior leaders who would like to attend to ensure the agency has top leadership involvement in the initiative.
- **DETERMINE** the number of high potential, emerging leaders that would benefit the agency's succession planning process.
- **INVITE** input from your people managers as to who are the high potentials, top talent, emerging leaders, etc.
- **COLLABORATE** with your executive and senior level teams about which leaders need to represent your agency and who could help transfer their learning to the agency so there is opportunity for continual improvement.
- **FOCUS** on new and current leaders, i.e., Deputy Commissioners, Assistant Commissioners, Directors and high potential leaders
- **SELECT** participants who are:
  - Well respected
  - Trusted
  - Able to model top leadership behaviors
  - Willing to keep learning and growing
  - Executive and/or senior level leadership and high potential leaders
- **CONTACT** Dr. Trish Holliday, Assistant Commissioner and Chief Learning Officer, for consultation on developing a selection process customized for your needs.

Deadline for Participant Forms: September 30, 2016

Orientation: November 7, 2016

To determine the number of seats available for your agency see Agency Seat Availability chart.

2017 Agency Seat Availability

Number of Full-time Employees 3000+	Seats Reserved
Children's Services	6
Correction	6
Human Services	6
Transportation	6
Number of Full-time Employees 2999-800	**Seats Reserved**
District Attorneys General Conference	4
Environment & Conservation	4
Finance & Administration	4
Health	4
Health Care Finance & Administration (TennCare)	4
Intellectual & Developmental Disabilities	4
Labor & Workforce Development	4
Mental Health and Substance Abuse Services	4
Revenue	4
Safety and Homeland Security	4
Number of Full-time Employees 799-300	**Seats Reserved**
Agriculture	3
Commerce & Insurance	3
Comptroller of the Treasury	3
Court System	3
Department of State	3
District Public Defenders Conference	3
Education	3
General Services	3
Legislative	3
Military	3
TN Bureau of Investigation	3
TN Wildlife Resources Agency	3
Number of Full-time Employees 299-100	**Seats Reserved**
Economic & Community Development	2
Financial Institutions	2
Human Resources	2
Office of the Attorney General & Court Reporter	2
TN Housing Development Agency	2
Tourist Development	2
Treasury	2
TRICOR	2

Number of Full-time Employees 99-Below	Seats Reserved
Health Services Development Agency	1
Office of the Governor	1
Post Conviction Defender	1
TN Advisory Committee on Intergovernmental Relations	1
TN Alcoholic Beverage Commission	1
TN Arts Commission	1
TN Board of Parole	1
TN Commission on Aging & Disabilities	1
TN Commission on Children & Youth	1
TN Higher Education Commission	1
TN Human Rights Commission	1
TN Regulatory Authority	1
TN State Museum	1
TN Student Assistance Corporation	1
Veterans Services	1

Agency Participant List

AGENCY: ____ __________________

APPOINTING AUTHORITY: ____ ____________________________________

PARTICIPANT NAME	TITLE	DIVISION	MANAGER'S NAME
REQUEST FOR ADDITIONAL SEATS *If there are vacant seats for LEAD Tennessee, I request seats for the following individuals*			

AGENCY CONTACT NAME AND PHONE NUMBER: ______________________________

____

SUBMIT CANDIDATES IN SELECTION PRIORITY BY SEPTEMBER 30, 2016.

Attach and send the application and resume for each selected participant to the Department of Human Resoruces, attention: Sharon Buwalda by September 30, 2016.

PR-0449

Frequently Asked Questions
LEAD Tennessee Mission, Vision and Design

1. ***What is LEAD Tennessee?***
   LEAD Tennessee is a pipeline of current and emerging leaders moving through 12-months of intense, high impact development in eight leadership core competencies, thus building bench strength within agencies and creating a pool of leadership talent for the state.

2. ***Why is the state investing in leadership development now?***
   Data clearly show Tennessee is facing significant loss of leadership with the potential retirement of baby boomers. LEAD Tennessee seeks to address the urgency to create a talent pool of leaders and build leadership bench strength within each agency.

3. ***What is the difference between current and emerging leaders?***
   Current leaders are those individuals who hold accountability to lead today while emerging leaders are individuals who have high potential to make greater strategic contributions to the agency. LEAD Tennessee will serve both current and emerging leaders seeking to develop their professional contribution to the state.

4. ***What is the benefit to the state in using use a "pipeline" and "pool" approach?***
   A pipeline denotes the state's capability to develop leaders continuously over time. A talent pool will be created as up to 120 current and emerging leaders per 12-month period develop in the eight core competencies. As opportunities arise within the agencies and across the state, there will be a pool of individuals who are motivated to lead, thus providing individuals who have essential transferable skills and abilities.

5. ***What are the benefits of participating in LEAD Tennessee?***
   LEAD Tennessee participants are:
   - Developed in the competencies identified as essential to leading any organization within state government
   - Acknowledged as prepared for future leadership opportunities with clear understanding that participation does not guarantee promotion
   - Included in a cross-agency network of peers who share a common language and perspective about great leadership
   - Equipped to mentor others in leadership

6. ***What is the agency dollar investment?***
   The investment per participant is $1,500 each fiscal year for a total investment of $3,000 over the 12-month development period.

7. ***What are core competencies?***
   Core competencies are a combination of behaviors, knowledge and skills that drive effective job performance. Strong demonstration of behavioral core competencies differentiates average leaders from superior performing leaders.

8.

How were the competencies selected?

In 2009, a task team of appointing authorities convened to select the leadership competencies most critical to the future success of Tennessee. This task team was invited to be the Executive Leadership Council and provide on-going guidance and feedback.

9. What are the developmental activities that occur within the pipeline?

At the beginning of the 12-month developmental journey, participants receive 360° feedback on the eight leadership core competencies and create an individual development plan. They then move through six one-day Summits. Each Summit targets development in the eight core competencies. At the close of the journey, the 360° feedback repeats to determine growth and areas for additional development. Along the journey, participants receive one-on-one coaching, access to an advanced on-line leadership library, learning opportunities and cross-agency peer networking.

10. What is 360° feedback?

360° feedback assesses the ability of an individual to demonstrate the behaviors required of a core competency. Feedback is gathered from: (1) superiors (2) direct reports and (3) peers. The data is compared to a self-assessment that then reveals the perception gaps between self and others as it relates to performance. The data is compiled into a confidential report provided to the participant from which an individual development plan is generated.

11. How many current and emerging leaders can the pipeline develop over 12-months?

Up to 120 leaders from across all agencies have the opportunity to participate in LEAD Tennessee.

12. Who is eligible to participate?

All preferred service and executive service state employees are eligible to submit their names into their respective agency's selection process. Participation in the program does not guarantee promotion.

13. Who selects participants?

Seats are reserved for agencies based on the number of employees within the agency. DOHR has provided a chart with recommended seats for each agency. The agency's executive leadership team creates a selection process. They may choose to engage people managers for recommendations or may choose to have employees submit directly to the executive leadership. Participants are selected by the agency appointing authority and executive team.

14. ***Who is managing LEAD Tennessee?***

The Department of Human Resources, Strategic Learning Solutions (SLS) Division, under the direction of Dr. Trish Holliday, Assistant Commissioner and Chief Learning Officer, leads the leadership initiative and participant pipeline.

15. ***How can I find out more detail?***

Visit http://www.tn.gov/hr/article/lead-tennessee.

16. ***After I review the information on the site, if I have more questions, whom can I contact?***

Please contact Dr. Trish Holliday, SPHR, SHRM-SCP, Assistant Commissioner and Chief Learning Officer at Trish.Holliday@tn.gov.

LEAD Tennessee Agency and Participant Commitment

I commit to 100% participation in all dates and aspects of the LEAD Tennessee initiative.

- **Orientation – November 7, 2016**
- **1st Coaching Labs – January 17, 18, 19, 2017**
- **Summit #1 – February 27, 2017**
- **Summit #2 – April 24, 2017**
- **Summit #3 – June 26, 2017**
- **2nd Coaching Labs – August 8, 9, 10, 2017**
- **Summit #4 – August 28, 2017**
- **Summit #5 – October 23, 2017**
- **Summit #6 – November 13, 2017**
- **"LEAD On" Celebration – December 11, 2017**

If selected, I understand attendance at all events listed above is required. Full participant fee is charged regardless of the number of sessions attended.

My agency leadership commits to my participation in all events and views participation as a priority.

I understand participation in LEAD Tennessee does not guarantee promotion.

____

Name of Agency

________________	____________________	________
Print Participant's Name	**Participant's Signature**	**Date**
	____________________	________
	Manager's Signature	**Date**
	____________________	________
	Appointing Authority's Signature	**Date**

Please attach current resume to application

2017

Participant Application Alliance 8

Name: ____

Preferred Name for Name Tag: ____

Position:____

Title: ____

Agency: ____

Division: ____

Business Mailing Address: ____

City, State, Zip Code: ____

Business Phone: ______________________ **Cell Phone:** ______________________

Email Address: ____

Edison Employee ID:_____________ **Speed Chart Number:** ______________________

Number of Direct Reports: ____

Manager's Name: ____

Manager's Title: ____

Manager's Email Address: ____

Emergency Contact Name and Number: ____

Dietary / Mobility restrictions: ____

____

Shirt Size (men's sizing): ☐ **Small** ☐ **Medium** ☐ **Large** ☐ **X-Large** ☐**2XL** ☐**3XL** ☐**4XL**

Please attach current Resume

Career path to date:

- ____
- ____
- ____

Attending LEAD Tennessee is important to me because:

____

With the limited number of seats available in LEAD Tennessee per agency, explain why you should be selected to participate:

____

Please attach current resume

How do you think your participation will contribute both to the agency and to your personal development?

If selected, I will contribute the following three leadership strengths during the LEAD Tennessee initiative:

1. ______________________________________ **2.**

______________________________________ **3.**

____

Please attach current Resume

APPENDIX B: LEAD TN ALLIANCE 8 - 360 BASICS

Alliance 8
Your 360$_{0}$ Feedback Experience

The Basics

- The sole purpose of 360^{o} feedback is to help you develop to your full potential as a leader in Tennessee.
- The feedback you receive is based on the demonstration of the state's 8 core leadership competencies.
- A competency is a combination of knowledge, skills and abilities that, when demonstrated consistently, can differentiate between average and superior performance. Behavioral based competencies are observable and measurable.
- 360^{o} feedback means you receive feedback from a full range of individuals who are using the same survey.
- Individuals providing the feedback are "raters." There are four groups of raters: Manager, Peers, Direct Reports and Others. You select your raters.
- An internet-based 360 assessment asks raters to assess the frequency in which they observe you demonstrating specified behaviors associated with the state's 8 core leadership competencies. You also assess yourself by completing the 360 assessment.
- A report is generated showing the differences in perception among your raters as well as between you and your rater groups.
- Confidentiality of the report: The 360^{o} feedback report is read only by you and the designated coach for the sole purpose of development. DOHR rigorously adheres to and treats all reports as confidential. Participants do need to be aware that 360^{o} reports may be considered public records and subject to disclosure upon request.
- Rater Anonymity: Manager feedback is not anonymous and exact responses will be shown. Feedback from Peers, Direct Reports or Others are combined and displayed as averages by group. No one rater's response will be individually identifiable and at least three raters in a group must respond for that rater group's data to be shown.

The Process

Step 1: Select your raters

- A rater should be a person who: ♦you work with frequently ♦has observed you in a variety of situations ♦will give you honest feedback.
- It is recommended you select a minimum of five raters for the Peer, Direct Report and Other groups in order to ensure the minimum two responses required for a group's average to be separately displayed.
- You may want to discuss your rater selection with your manager to gain his/her insight and opinion, but the final decision is yours.
- Use the excel spreadsheet that you'll receive by email today (**11/7/16**) to fill in the rater information. Save it to your computer with a name that incorporates your name (johndoe.xls) and email a copy to Sharon.Buwalda@tn.gov no later than this Monday **11/14/16**.
- On **11/18/16**, you will receive an email from the Korn Ferry system (the vendor) directing you to take the assessment. The email will come from voices@kornferry.com.

Step 2: Complete the Survey

- All raters receive an email from Korn Ferry on **12/1/16** inviting them to complete the survey. Click on the link inside the invite which will bring you directly to your assessment.

Step 3: Receive your feedback

- No later than **12/15/16**, you will be contacted by your LEAD Tennessee Coach to schedule a forty five minute coaching session where you will meet your coach, learn how to interpret your 360° report, and draft your development plan. Sessions held at James K. Polk Building, First Floor.
    - January 19, 2016
    - January 20, 2016
    - January 21, 2016

Step 4: Take the next steps

- As part of your coaching session, you will help identify three strengths and three areas for focused development. You are encouraged before **2/27/2016** (Summit 1) to meet with your manager to discuss the 360° experience, share your strengths and discuss the areas for development.
- Thank your raters for their feedback and reinforce anonymity.
- Work your development plan, seek feedback, and enlist your coach.

360° Technical Support

Steve Chester - 615 741-9406
Steven.Chester@tn.gov

Sharon Buwalda – 615-741-4157
Sharon.Buwalad@tn.gov

APPENDIX C: AGREEMENT WITH THE STATE OF TENNESSEE

RESEARCH AGREEMENT

This Research Agreement is made between Mark Frame, Ph.D., Professor of Industrial and Organizational Psychology and the project Principal Investigator (PI) and The Tennessee Department of Human Resources (TNDOHR).

RECITALS

A. Mark Frame, Ph.D. is requesting access to data relating to LEAD Tennessee and similar agency programs conducted by and through TNDOHR for the purposes of conducting research.

B. TNDOHR is an advocate of research and is willing to sponsor such research by providing access to their data for this specific purpose.

C. TNDOHR is willing to grant PI, Mark Frame, Ph.D., access to the data provided and permits the PI to allow research co-investigators (students and other faculty researchers) to access the data provided.

D. Both TNDOHR and the PI will have access to the data provided by TNDOHR.

NOW THEREFORE, in consideration of the mutual covenants and promises herein made, Mark Frame, Ph.D. and TNDOHR agree as follows:

1. *EFFECTIVE DATE*

This Agreement shall be effective as of January 17 i 2017.

2. PUBLICATION

The PI has the right to publish or otherwise publicly disclose information gained in the course of this research. In order to avoid breach of confidentiality as a result of premature public disclosure of proprietary information, the PI will submit any prepublication materials to TNDOHR for review and comment at least thirty
(30) days prior to planned submission for publication or presentation.

The PI agrees to seek publication or presentation of the research products resulting from this work with TNDOHR data and to collaborate with TNDOHR on the nature and scope of the resulting research product. The PI will cite TNDOHR as the source of data for any research resulting from this data that is presented, disclosed, or published by the PI. The form of such citations will be provided and/or approved by TNDOHR. In the event that the research results are not approved by TNDOHR, exceptions to citations will be negotiated between the PI and TNDOHR to ensure the research is published or presented while maintaining the investment and integrity of the intellectual property of TNDOHR.

The PI will seek consultation and collaboration with employees of TNDOHR as a part of the research projects. As such and depending on the level or amount of contribution, employees of TNDOHR may be included as co-authors on the research products resulting from this work with TNDOHR in accordance with the ethical principles of the American Psychological Association.

3, CONFIDENTIAL INFORMATION

- The PI and all co-investigators will honor the confidentiality of information that TNDOHR deems confidential.
- The PI agrees to protect the identity and confidentiality of all individuals, organizations, and firms included in the TNDOHR data, and that that no individual or organization will be identifiable in any document, published or unpublished, including any report summarizing research conducted with the TNDOHR data.
- The PI agrees that the TNDOHR data will not be used in any internally or externally competitive product or service.

4, TERMS AND TERMINATION

a. This Agreement may be terminated only by the written agreement of both parties.

b. In the event that either party shall be in default of its material obligations under this Agreement and shall fail to remedy such default within sixty (60) days after receipt of written notice thereof, this Agreement shall terminate upon expiration of the sixty (60) day period.

c. This Agreement is independent of the employment status of the PI.

d. Termination or cancellation of this Agreement shall not affect the rights and obligations of the parties accrued prior to termination.

e. Any provisions of this Agreement which by their nature extend beyond termination shall survive such termination.

f. Research and publication involving the TNDOHR data will be conducted strictly in accordance with applicable statutes and American Psychological Association (APA) ethical guidelines and research standards.

g. The PI and TNDOHR will adhere to the APA Publication Guide when determining the authorship of publications.

h. All relevant TNDOHR data will be deleted from the Investigators files (paper and computer) on the date exactly 5 (five) years after publication of the research or 5 (five) years after delivery of the data to the Investigators (if no publication attempts have been made).

i. Where applicable, this Agreement shall be governed by, construed, and enforced in accordance with the internal laws of the states of Tennessee and California.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Data Provider

Signed• Rebecca R. Hunter, BDG

Date : January 18, 2017

Print Name: Ernie Rickets Ph.D.

Print Title: Director of Orqanizational Development – Tennessee Human Resources

Data Recipient

Signed• Mark C. Frame

Date: January 13. 2017

Print Name: Mark C. Frame Ph.D.

Print Title: Professor of I/O Psychology

APPENDIX D: IRB APPROVAL LETTER

IRB
INSTITUTIONAL REVIEW BOARD
Office of Research Compliance,
010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129

MIDDLE TENNESSEE STATE UNIVERSITY

IRBN007 – EXEMPTION DETERMINATION NOTICE

Friday, February 16, 2018

Investigator(s): Mark Frame, Richard Moffett, Michael Hein, Jessica M. McClure
Investigator(s') Email(s): mark.frame@mtsu.edu; rick.moffett@mtsu.edu; michael.hein@mtsu.edu; m5t@mtmail.mtsu.edu
Department: Psychology

Study Title: Evaluating the Effectiveness of a LEAD TN Program from 2010-2016
Protocol ID: **18-1175**

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXEMPT** review mechanism under 45 CFR 46.101(b)(2) within the research category *(4) Study involving existing data* A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action	EXEMPT from furhter IRB review***	
Date of expiration	NOT APPLICABLE	
Participant Size	Existing Data	
Participant Pool	**Existing data**	
Mandatory Restrictions	1. Data covered under the letter provided by TN Dept of Human Resources	
Additional Restrictions	**None at this time**	
Comments	None at this time	
Amendments	**Date**	**Post-Approval Amendments**
		None at this time

***This exemption determination only allows above defined protocol from further IRB review such as continuing review. However, the following post-approval requirements still apply:

- Addition/removal of subject population should not be implemented without IRB approval
- Change in investigators must be notified and approved
- Modifications to procedures must be clearly articulated in an addendum request and the proposed changes must not be incorporated without an approval
- Be advised that the proposed change must comply within the requirements for exemption
- Changes to the research location must be approved – appropriate permission letter(s) from external institutions must accompany the addendum request form
- Changes to funding source must be notified via email (irb_submissions@mtsu.edu)
- The exemption does not expire as long as the protocol is in good standing
- Project completion must be reported via email (irb_submissions@mtsu.edu)