

**MOTIVATIONAL INTERVIEWING  
AND TRANSFORMATIONAL LEADERSHIP:  
THE IMPACT OF TRAINING ON  
SELF-PERCEPTIONS OF LEADERSHIP**

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## ABSTRACT

Transformational leadership research has garnered much attention for being an effective and desired approach to leadership. Despite the attention given to the approach, organizations struggle with engaging followers. While robust in showing efficacy, research is lacking in providing a framework for how to become a transformational leader. The current study examined motivational interviewing as a framework for assisting leaders in becoming more transformational. The current study compared training interventions among middle managers in criminal justice. The Leadership Practices Inventory was taken by participants before and after a training intervention. The results were used to compare two groups, a group given a traditional training, The Leadership Challenge, an intervention in transformational leadership and a group provided a training intervention of motivational interviewing and transformational leadership, a brief introduction to The Leadership Challenge. In the current study, the results from a statistical analysis using an analysis of covariance indicated that there were no statistically significant differences between the interventions. Despite fairly brief training interventions, further analysis through paired t-tests did indicate that both interventions resulted in significant increases in self-perceptions of leadership behaviors among criminal justice mid managers. These increases were across all five of the leadership practices in the Leadership Practices Inventory, which includes what might be perceived as softer skills.

*Keywords:* motivational interviewing, transformational leadership, leadership practices inventory

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## CHAPTER 1. INTRODUCTION

The current study examined the connection between motivational interviewing and leadership. The examination occurred through a quasi-experimental design focused on a training intervention. The intervention explored motivational interviewing as a clarifying element of transformational leadership.

### Introduction to the Problem

Motivation and change are major components of many definitions of contemporary leadership in the literature (Burns, 1978; Deci & Ryan, 2000; Heifetz, 1994; Kotter, 1996). In order to move forward with change, several leadership theories have focused on the transcendence of the motivation of followers (Burns, 1978; Heifetz, 1994; Kotter, 1996). In particular, transformational leadership has supported a focus on motivation and change. Transformational leaders set out to empower followers and nurture them in change, and attempt to help followers transcend their own motives and self-interests for the sake of others or a greater good (Northouse, 2010). According to Northouse (2010), transformational leadership is positively related to follower satisfaction, motivation, and performance. Burns (1978) stated that transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (p. 20). Kotter (1996) stated that leadership is necessary to motivate the actions necessary to

change behavior, and to have the ability to demonstrate sustained change in meaningful ways. This focus on follower motivation and change is clear (Burns, 1978; Deci & Ryan, 2000; Heifetz, 1994; Kotter, 1996).

Despite being clearly focused on motivation and change, the construct of transformational leadership remains ambiguous (Carson, 2011; Northouse, 2010; Yukl, 2012). In other words, transformational leadership has been defined clearly, and yet a path towards how to become a transformational leader offers less clarity. The current study will explore a possible path to being a more transformational leader through the use of motivational interviewing, and explore how the use of motivational interviewing might address the criticisms of transformational leadership. One of the criticisms of transformational leadership is that it lacks conceptual clarity, making it difficult to define the parameters of the approach (Northouse, 2010). Another criticism is that transformational leadership treats leadership as a personality trait rather than a behavior that people can learn (Northouse, 2010).

Motivational interviewing, as a collaborative conversation style, is a behavior that can be learned (Miller & Rollnick, 2013). According to Northouse (2010), another criticism of transformational leadership is that it is elitist and anti-democratic because it positions the leader playing a direct role in creating change, establishing a vision, and setting a new direction. Motivational interviewing, as a collaborative process, directly involves the follower by focusing on their own personal motivation. A final criticism is that transformational leadership can be abused, as it involves changing people's values. Heifetz (1994) stated that the adaptive challenge is identifying the discrepancy between

followers' values and their behavior. Motivational interviewing is focused on exploring this discrepancy between behaviors of the individual in contrast to their own values while determining motivation. Motivational interviewing involves clarifying values that already exist within people and helping them align their actions to these values.

### **Background of the Study**

Through a focused review of the literature on leadership, the current study established an argument for utilizing motivational interviewing as a clarifying element in the framework of intrinsically motivating employees to change in the context of leadership. A lay person's definition of motivational interviewing is "a collaborative conversation style for strengthening a person's own motivation and commitment to change" (Miller & Rollnick, 2013, p. 12). To this point, motivational interviewing has been most widely used in a therapeutic environment. Miller and Rollnick (2013) invited utilization in organizations in the most recent edition of their book on motivational interviewing (MI) suggesting:

MI has many similarities to Theory Y and to appreciative inquiry, a collaborative organizational change approach designed to evoke strengths and possibilities.

Rather than solutions coming from an outside expert, they are elicited from the system itself, and good listening is key. (p. 345)

Rogers (1951) promoted "attempts to utilize therapeutic approaches in group leadership and administration" (p. 334). More recently, a limited number of individuals (Erichsen & Tolstrup, 2013; Klonek, Paulsen, & Kauffeld, 2015; Merrill, 2015) are applying this style of conversation in a leadership or managerial context.

## **Statement of the Problem**

The literature indicating that transformational leadership is effective is robust (Avolio & Bass, 1998; Dvir, Eden, Avolio, & Shamir, 2002; Northouse, 2010; Yukl, 2012). Less clear is how to become a transformational leader. Burns (1978), the seminal author on transformational leadership, stated that the study of leaders raised questions inherent in the complexity of the leadership process. There is a dearth of literature on the topic of motivational interviewing and its connection to leadership. The current study examined this dyad and endeavored to explore the relationship between the two disciplines.

## **Purpose of the Study**

The main purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The justification for this purpose stemmed from the trend in research (Burns, 1978; Deci & Ryan, 2000; Heifetz, 1994; Kotter, 1996) that examines engaging followers in the solving of their own problems and changing through examining and drawing on their own intrinsic motivation. The current study explored a possible path to being a more transformational leader through the use of motivational interviewing and explored how the use of motivational interviewing might address the criticisms of transformational leadership. The current study attempted to address the problem of clarity on how to become a more transformational leader. The current study addressed this by utilizing a quantitative approach to address the problem by conducting a research plan

that emphasized training that placed motivational interviewing as a clarifying element of traditional transformational leadership.

### **Rationale**

The current study attempted to address some of the weaknesses identified for transformational leadership, particularly conceptual clarity and explored a possible path to being a more transformational leader through the use of motivational interviewing. Motivational Interviewing has been used to help people change in various fields and is a learnable skill. By doing so, the current study will add to the body of knowledge in this subject. The current study utilized a training intervention to examine the impact on perceptions of individual leaders. Burns (1978) advocated that the study of leadership, in general, could be advanced by looking at leaders in particular and the current study focused on differences among individual leaders. While there have been articles speculating about the role of motivational interviewing in a leadership context, none of them have offered anything quantifiable. In doing so, this study contributed new knowledge to the field.

### **Research Question**

The current study linked the elements of motivational interviewing as an effective strategy in a leadership context. The overarching question is the following: Does training in motivational interviewing have an impact on self-perceptions of transformational leadership for mid-managers in a criminal justice setting? The hypothesis is that it does have a positive impact on self-perceptions. This was analyzed using the Leadership Practices Inventory (LPI). Traditionally, the training of individuals in motivational



interviewing has been for the use of therapeutic interventions with patients or clients (Miller & Rollnick, 2013). While starting in the addiction field as an alternative to a confrontational and authoritarian style that was believed to be a barrier to change, it has been expanded to use in medical, criminal justice, and school settings. No empirical research exists on the relationship between motivational interviewing and leadership, despite very few written articles about motivational interviewing being utilized with employees. The research questions allowed for the exploration and discovery about the training and adaptation, if any, of utilization among leaders and followers. In addition to a focused literature review making possible connections between motivational interviewing and leadership, the current study provided the beginning to an answer to the research question.

**Research Question 1 (RQ1):** Is there a significant difference between the mean LPI overall scores or subscales of participants from the experimental and comparison groups after participating in training for mid-managers?

The research plan included a pre-test and post-test approach to the issue. Utilizing the existing training programs of the Criminal Management Institute of Texas (CMIT) with the director as a gatekeeper, a group of mid-managers from various criminal justice agencies throughout the state was asked to volunteer to consent to participate in the research. The mid-managers completed a self-report LPI measure online. This served as the pre-test, prior to the training intervention. These mid-managers were placed into two randomized groups: one group receiving transformational leadership training, and a second group receiving motivational interviewing for leadership training. The training

interventions were conducted by the researcher, in order to provide consistency. The training interventions consisted of a full workday of training, with approximately 6.5 hours of training. The training interventions included an introduction to transformational leadership and the examination of the framework of *The Leadership Challenge*'s five practices of an exemplary leader (Kouzes & Posner, 2012). The framework from *The Leadership Challenge* explored each of the five practices addressed in the LPI, the instrument utilized in the current study. The training interventions concluded with practical applications. The application process is where the interventions diverged. The second group will be the experimental group, with the other being a comparison group. The applications for the comparison group focused on traditional methods of goal setting, planning, and feedback to followers. The experimental group discussed goal setting, planning, and feedback through the lens and approach of motivational interviewing.

The training interventions were conducted in six different regions across Texas on six separate dates. Three of those sessions consisted of the comparison group. Three of the sessions consisted of the experimental group. There were approximately 40 participants in each session. All participants were provided with a coaching session by the researcher of the current study based on his or her pre-test LPI results within one-month post-training, in addition to the training intervention received. Within 60 to 90 days after the coaching session, all participants were asked to complete a follow-up self-report LPI online. This served as the post-test. The data was analyzed for any potential differences to address the hypotheses of the research questions.

## **Significance of the Study**

The outcomes of the current study provide a possible path for knowing how a leader can become more transformational. The concern for ambiguity of transformational leadership is listed as a weakness for the model, and the results of the study address, if not negate, this perception of weakness. Leaders and followers could benefit as a result, and ultimately the organization and clients would benefit. Motivational interviewing could provide a bridge to the gap of learning transformational leadership (Northouse, 2010). Heifetz (1994) stated that the adaptive challenge is identifying the discrepancy between followers' values and their behavior, and motivational interviewing could provide a framework for this process. In addition to addressing criticisms of transformational leadership by exploring the strengths of motivational interviewing, the current study of the application of motivational interviewing in a leadership context speaks back into the broader, more general, discipline of leadership with knowledge transferrable to other theories of leadership.

## **Definition of Terms**

There are several terms or concepts that are instrumental to the current study. The definitions provided represent those that might carry slightly different meanings in other studies. These definitions are specific to the current study.

### **Adaptive Leadership**

The adaptive leadership approach consists of “the learning required to address conflicts in the values people hold or to diminish the gap between the values for which

people stand and the reality they face.” Adaptive work “requires a change in values, beliefs, or behavior” (Heifetz, 1994, p. 22).

### **Change**

For the current study, change was defined as “to make the form, nature, content, future course, etc., of (something) different from what it is or from what it would be if left alone” (Dictionary.com, 2019). Change is doing anything differently than is currently being done, and includes first and second order change. Bergquist (1993) differentiated between first-order change and second-order change. Bergquist stated that first-order change was doing something you already knew how to do, but doing more or less of it, and did not require new learning. In contrast, second-order change was a choice to behave differently and might require new learning.

### **Motivational Interviewing**

Motivational interviewing is “a collaborative conversation style for strengthening a person’s own motivation and commitment to change” (Miller & Rollnick, 2013, p. 12).

### **Leadership Practices Inventory**

The Leadership Practices Inventory is a 360-degree assessment tool that measures five behaviors necessary for a visionary or transformational leader: (1) model the way, (2) inspire a shared vision, (3) challenge the process, (4) enable others to act, and (5) encourage the heart (Kouzes & Posner, 2002).

### **Self-Determination Theory**

Self-determination theory is a theory that examines “the degree to which individuals experience basic psychological need satisfaction in different social contexts

and of the consequences of various degrees of satisfaction” of those needs (Deci & Ryan, 2000, p. 232). The theory differentiates human motivation in terms of autonomy and control related to those needs (Deci & Ryan, 2000).

### **Transformational Leadership**

Transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (Burns, 1978, p. 20).

### **Assumptions and Limitations**

The current study suggested that motivational interviewing is an appropriate conversation style for managers and employees. One assumption was that there are enough mid-managers in the criminal justice setting who are interested in the implementation of motivational interviewing with workers and clients to meet the numbers required for the current study. Another assumption was that participation in the current study will not endanger the careers of the participants or cause them unnecessary concern about their employment.

The current study presents certain limitations. One limitation is a small sample size, and participants will come from a single discipline, criminal justice. The study of a single discipline impacted the generalizability of the research. Another limitation was that the current study’s sample consisted of those who volunteered to participate in leadership training. The voluntary nature of selection impacted the strength of randomization and likely resulted in the study of a group that was already interested in leadership. Another limitation was the ability to change behavior through a single training session. While this

was a limitation, the literature section provides some evidence of the efficacy of a single training session. There was also a limitation in focusing only on the self-perception of the leaders themselves, without including observers of the leader's behavior, particularly followers.

### **Nature of the Study**

The current study was a quantitative study. After approval from Dallas Baptist University's Committee on the Protection of Human Participants, data was obtained from a self-report survey of participants. The current study looked at the differences of self-perceptions of leadership between two groups, a group receiving transformational leadership training and a group receiving training in motivational interviewing and transformational leadership.

### **Organization of the Remainder of the Study**

The first chapter of the current study introduces the problem of clarity around becoming a more transformational leader, and efforts to address the problem through motivational interviewing. The second chapter reviews the literature concerning both motivational interviewing and leadership. The second chapter also examines the related literature associated with change, motivation, and the connection between motivational interviewing and leadership. The third chapter focuses on the methodology for the current study. The fourth chapter discusses the findings. The final chapter offers a discussion of the findings, along with implications and recommendations.

## CHAPTER 2. LITERATURE REVIEW

### Introduction

The literature review was divided into ten sections. The section on transformational leadership is first, with a focus on the seminal work of Burns (1978). The second section discusses a form of transformational leadership called adaptive leadership that added to the work of Burns. A discussion of the field of leadership development is in the third section. The fourth section examines the literature on criminal justice and leadership. The fifth section is on the construct of change, particularly change management. The sixth section focuses on the science behind motivation. The seventh section examines motivational interviewing, and some of the research from this field.

The motivational interviewing literature is essentially absent in the discussion of leadership with the exception of an unscientific article (Erichsen & Tolstrup, 2013) and a few empirical studies (Klonek et al., 2015; Merrill, 2015) that do not measure motivational interviewing skills against leadership behaviors. The eighth section examines person-centered principles and the relationship to change. The ninth section is on the Leadership Practices Inventory (LPI). The final section is on the concept of parallel processes within a supervisory relationship.

## **Transformational Leadership**

The study of transformational leadership is technically synonymous with the academic study of leadership by Burns. In Burns (1978) seminal text *Leadership*, he set out to construct a theoretical framework for leadership and brought forward the contrast of transforming and transactional leadership. Burns stated that transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (p. 20).

A number of identified constructs or frameworks advancing leadership theory appeared over the last several decades since the work of Burns. The research has included concepts like visionary and charismatic leadership as distinct disciplines within the leadership field. Even among these distinct disciplines, convergence has emerged within the broader concept of transformational leadership (Dvir et al., 2002). Dvir et al. (2002) indicated that a principle aspect of transformational leadership includes an emphasis on follower development. Dvir et al. stated that transformational leaders evaluate the full potential of all followers in terms of their ability to complete current assignments, while also imagining the possibilities of the expansion of future responsibilities and future endeavors. This emphasis on follower development stands in stark contrast to the transactional model of asking someone to complete the task at hand, no more or less. Dvir et al. indicated that while this is a central aspect of a transformational leader, very little is actually known about “how such leaders develop followers” (p. 736). To address this lack of knowledge, Dvir et al. demonstrated the building of a conceptual framework



for follower development that included three domains: motivation, empowerment, and morality. The authors adapted two of the domains, motivation and morality, from the work of Burns. The third, empowerment, was selected out of work from the transformational, charismatic, and follower research. These authors indicated that while transformational leadership had been shown to have a positive relationship to performance, a study about follower development shored up a gap in the literature, and the findings were promising if inconclusive.

Avolio and Bass (1998) have continued to contribute to the work of Burns. The authors defined transformational leaders as leaders who “motivate others to do more than they intended and often even more than they ever thought possible” (p. 6). They explored the possibility of providing leadership training that was more transformational than transactional, and to see if this training increased skill development by the leaders. The authors examined skill development using the self-created Multi-Factor Leadership (MLQ) scale. This scale looked at four domains: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The results of the research indicated that training had an impact on idealized influence and intellectual stimulation, but did not have a significant impact on the other two domains. The authors stated that one outcome of the training was the possibility that training at the upper end of the leadership continuum, and not just transactional processes, could be effective. Avolio and Bass (1998) stated that the results suggested that this kind of training should include trainees in the development of plans, opportunities for practice and not simply the acquisition of knowledge, and appropriate attention to context.

Carson (2011) looked at the antecedents of transformational leadership, examining why some leaders exhibited the characteristics and why some did not. This study examined the leadership discourse through the emerging literature on social intelligence as central to successful leadership behavior, with mixed results. There was no statistically significant relationship between ratings of a leader's overall social skills and ratings of transformational leadership. There was a statistically significant relationship between three of six social skill dimensions and transformational leadership, but only as rated by the leader. When rated by direct reports, this relationship did not exist. The author suggested that these differences between perceptions of direct reports and supervisors reinforced the importance of examining alignment between self and other ratings and that social skills and transformational leadership needed additional study.

Wang, Oh, Courtright, and Colbert (2011) conducted a meta-analysis of the transformational leadership literature. In their study of over 117 research articles, the authors found that transformational leadership was positively associated with performance at the individual level, in addition to team level and organizational level performance. Overall, there was a positive relationship between transformational leadership at three areas of individual performance: task, contextual, and creative. While creative performance was discussed, most of the study focused on task and contextual performance differences. Task performance was loosely defined as those tasks associated with a particular role or job. This could be something connected to a specific job description. The contextual performance definition related to those actions that were voluntary or above and beyond the job description. The authors reported being surprised

to find that there was no augmentation effect over transactional or contingent reward based leadership at the individual task performance level. An augmentation effect refers to the ability to account for impact beyond any impact controlling for transactional leadership. In fact, transactional leadership was more positively associated with individual task performance. Interestingly, transformational leadership seemed to have a higher mean correlation for contextual performance rather than task performance, except for studies conducted in the public sector. The authors pointed out that the existing literature did not provide a clear understanding of what it would mean for a transformational leader to help a follower to perform “beyond expectations” (Wang et al., 2011, p. 224).

Wang et al. (2011), in discussing the results and recommendations, indicated that while more research is needed, their study suggested that transformational leadership is possibly not the most effective style of leadership when there is low interdependence, and where interpersonal cooperation is less critical. Furthermore, transformational leadership may possibly be less effective in a context where precision, known solutions and menial tasks are more prominent and the preferred outcome. Wang et al. recommended that while training is possible for transformational leadership, it appeared that a better strategy would be selecting individuals who had traits with such characteristics as extraversion and emotional stability for upper-level management positions.

Trottier, Van Wart, and Wang (2008) looked at the application of transformational leadership in government settings. The authors looked at the possibility that both transactional and transformational leadership are needed in government,

indicating that they are not ends of a continuum but approaches that are each needed for effective leadership. This study examined data from the Office of Personnel Management, where data existed from a Federal Human Capital Survey completed in 2002. One of the findings indicated that federal managers tend to excel at transactional leadership over transformational leadership. This occurred despite responses that stated that transformational leadership was preferred over transactional leadership by federal government employees. The results indicated that supervisors at the federal level performed lowest in inspirational motivation. The authors surmised that a rule-based mentality and need for compliance likely diminished this particular capacity in a bureaucracy.

The literature on transformational leadership provided evidence of an emphasis on follower development (Avolio & Bass, 1998; Burns, 1978; Dvir et al., 2002; Wang et al., 2011). Research indicates that current training methods offer promise such as areas of individualized consideration and intellectual stimulation, but do not impact all dimensions of transformational leadership, particularly motivation and concern for others (Avolio & Bass, 1998; Carson, 2011). There is not a linear connection between ratings of social skills and being more transformational (Carson, 2011). It is not clear for managers or researchers how to help and develop a follower as suggested in transformational leadership (Avolio & Bass, 1998; Dvir et al., 2002; Carson, 2011; Wang et al., 2011). The evidence is clear that transformational leadership seems better suited for working with knowledge workers, and those who are not completing mundane or technical tasks (Wang et al., 2011). In government work, in particular, supervisors tend to be more

transactional and perform lowest in motivating others from a transformational framework. This is despite a perceived preference for transformational leaders in a government setting (Trottier et al., 2008).

### **Adaptive Leadership**

Heifetz (1994) coined the term adaptive leadership and indicated that he did so while contemplating Burns' definition of transformational leadership. Heifetz articulated the importance of Burns' promotion of the needs of followers, starting from low-level needs, and moving on to higher order needs such as the common good. Heifetz indicated this hierarchy of orienting values was a good beginning but identifying a hierarchy that would apply across situations and cultures made for difficulties in application. Heifetz also put an emphasis on legitimate authority to restrict this kind of leadership from being applied to those who misuse power (p. 21). While Heifetz did not describe his work in terms of transformational leadership, he did speak in terms of technical and adaptive work. Technical work occurs when there is a known solution, as opposed to adaptive work, which is a work that is needed when a solution is unknown. It would be possible to think of technical work as the kind of work where transactional leadership was appropriate, and adaptive work where transformational leadership is necessary. Heifetz moved from the crisis related context of Burns towards a model needed for times of change. A values-based approach to the work was also forwarded by Heifetz.

Adams, Bailey, Anderson, and Galanos (2013) observed the application of an adaptive leadership framework within a medical setting dealing with family group decisions. The study conducted was a pilot project within an intensive care unit. The case

study was a gentleman and his family with an end of life decision regarding resuscitation. The doctor in the study indicated that people would generally make the same decisions as the experts given a sufficient amount of information. This approach is in contrast to providing a solution to the family, which is applying a technical solution to an adaptive challenge. The authors indicated that allowing the family to grapple with the decision without being pressured allowed the family the opportunity to begin to accept a dramatic change.

Thygeson, Morrisey, and Ulstad (2010) also explored the use of adaptive leadership within a medical setting. The authors posited that while Heifetz's work on leadership appears to be focused on the organization and change it is also appropriate for individuals since human beings are complex adaptive systems. The authors identified three ways in which adaptive work is different from technical work: (1) identifying that the problem and possible solutions involve learning by the followers or patients, (2) implementing a solution requires behavior change, and (3) the change required involves trade-offs and losses to move forward. The authors claimed that adaptive leadership is conducive to medical practice in two distinct ways. At the condition level, it allows patients to respond to very specific and necessary adaptive challenges. At the patient level, it provides self-efficacy in that building adaptive capabilities generally offers an opportunity for the patient to build skills in becoming more adaptive, resilient, and autonomous. The patient can use these skills to problem solve adaptive challenges in the future. Thygeson et al. (2010) indicated that adaptive leadership frameworks map well to theories of behavior change. The authors also stated that adaptive leadership frameworks

make explicit the alliance between the leader and follower, and notions of shared expertise.

Klonsky (2010) provided research on the exercising or practicing of adaptive leadership. The author stated that a leader's action becomes somewhat dependent on the values they hold and the level of risk involved in taking action. Essentially, the leader will typically be motivated by a conflict in values and yet demotivated by the perceived risk in making a change. As a result, Klonsky argued that courage is a necessary construct of adaptive leadership. The author indicated that the findings of the study resulted in several antecedents of exercising adaptive leadership: leader characteristics, a holding environment, and wisdom in action.

Heifetz (1994) also moved the concept of leadership away from simply being connected to a position of authority and placed a focus on the activity of leadership. The author indicated that it was an activity involving "any citizen from any walk of life mobilizing people to do something" (p. 20). Heifetz defined adaptive work as "the learning required to address conflicts in the values people hold, or to diminish the gap between the values people stand for and the reality they face. Adaptive work requires a change in values, beliefs, or behavior" (p. 22).

Central to adaptive work in the literature is the notion of change, whether it is seen as necessary or risky (Klonsky, 2010). Heifetz (1994) was influenced by Burns' notion of the promotion of the needs of the followers. Heifetz differentiated between technical work, where a solution is known, and adaptive work, where the solution is not obvious. This seems to parallel transactional and transformational leadership, and where

they are most effective. The literature review indicated that a leader develops a follower by allowing the follower to come up with their own solution (Adams et al., 2013; Heifetz, 1994; Thygeson et al., 2010). This allows self-efficacy and the building of skills in becoming more adaptive, resilient, and autonomous which the follower can use to solve future problems (Adams et al., 2013; Thygeson et al., 2010). According to some of the authors, adaptive leadership signified an alliance between the leader and follower that highlighted working together (Adams et al., 2013; Thygeson et al., 2010).

### **Leadership Development**

There is a consensus that leadership talent is scarce, and the intense competition and a growing global economic scene provide evidence of a need for leadership (Conger & Benjamin, 1999). This scarcity of leadership has created an emphasis on the field of leadership development. Day (2001) argued that due to increased competition and a global marketplace, leadership development is at its zenith (p. 581). A survey by the American Society for Training and Development (1995) found that 60% of companies indicated that leadership development was a high or very high priority. At that time, 80% were currently offering some form of leadership development to their employees. Leadership development is defined as expanding the capacity of organizational members to engage effectively in leadership roles and processes (McCauley, Moxley, & Van Velsor, 1998). Leadership roles refer to those that come with and without formal authority. Leadership processes are those that enable groups of people to work together in meaningful ways (Day, 2001).



Conger and Benjamin (1999) questioned whether or not training, as the primary means of developing future leaders, was an effective strategy. The concern about training, effectiveness, and the transfer of learning have been addressed more recently (Blume, Ford, Baldwin, & Huang, 2010; Eich, 2008). Previously, Feidler (1996) had lamented that:

While the number of available training programs is considerable and continues to grow at an increasing pace, the scarcity of sound research on training has been one of the most glaring shortcomings in the leadership area. Most of the training programs are untested and, at best, of uncertain value. (p. 243)

Despite this uncertainty around training, there is a promise of potential. Conger (1992) indicated that “training could and did play an influential role in helping managers become more effective leaders” (p. 8). Avolio (2005) stressed that the “evidence we have now collected certainly supports short training events can have a positive impact on leader development” (p. 2). Avolio further indicated that when looking back on the leadership of the past 100 years, “we found that even a few hours of training could have a positive impact on one’s leadership development” (p. 3).

The focus in the past has been somewhat leader-centric, but the concept of a more comprehensive approach might be necessary. Follett (1924) stated “leadership is not defined by the exercise of power, but by the capacity to increase the sense of power among those led. The most essential work of the leader is to create more leaders” (p. 3). Avolio (2005) indicated that a complicating but long overdue focus in leadership development is the focus on followers as a key component of leadership development.

Leaders should find what they say and do reflected back to them by the behavior of followers.

In addition to a focus on followers, there has been a focus on softer skills. Avolio (2005) stated that communication problems become “exacerbated...where there is a great deal of psychological distance between leaders and followers” (p. 100). Avolio used effective parenting as a model for developing effective leaders. The author pointed to a study of current transformational leaders and their childhoods and found that parents challenged children to the extreme boundaries of their performance, resulting in a failure. The parent worked with the child to figure out where the mistake was rooted and what needed to be done to be successful. This not only created children who were later perceived to be transformational leaders, but it also generated trust. Avolio promoted the idea of spending time getting to know the hopes and desires of people who work with and for the leader. The author suggested that people “come to trust each other based on the observations they have of you during their most difficult times” (p. 131).

A paradox currently exists as leadership talent is seen as limited, and yet leadership development is heavily promoted and invested in to shore this gap (Conger & Benjamin, 1999; Day, 2001). The literature offered competing ideas about whether or not training, the most common form of leadership development, is the most effective process (Conger, 1992; Fiedler, 1996). There is research suggesting only a few hours can have an impact on a leader (Avolio, 2005). Gradually, a realization has occurred indicating that leadership development should be less leader-centric with a focus on followers and the

building of what might be considered soft skills, such as social skills (Avolio, 2005; Follett, 1924).

### **Criminal Justice and Leadership**

The current study was in a criminal justice setting focused on mid-managers. This section examines the limited literature related to criminal justice and leadership. A criminal justice sample was utilized, not because of a robust research base, primarily because it was convenient, and to supplement the literature. The early view of the administration of justice was related to the study of penology, how to manage a prison, and was focused on control (Dilulo, 1991). Dilulo's (1991) own work kept safety and security front and center, thereby perpetuating this idea that the best prisons were well-governed prisons. This long-term approach to managing offenders has likely led to a somewhat stagnant view of leadership in criminal justice.

Waters (1992) summed up much of the view of leadership in criminal justice before and since when he indicated that few studies had focused exclusively on leadership skills and behaviors of managers of criminal justice agencies. This had been discussed by Thomas (1990) several years earlier after reviewing almost 700 criminal justice publications in search of leadership focused articles:

I find the almost total absence of literature dealing with correctional administration and its problems puzzling, but the lack reinforces my contention that academic experts have contributed little in the way of solutions or leadership for this critical part of the criminal justice system and are, as a logical

consequence, isolated from and usually ignored by correctional administrators. (p. 9)

Despite a paucity of literature, particularly in the United States, there have been articles stateside and internationally focused on this topic. Dale and Trlin (2010) conducted qualitative interviews between probation officers and their supervisors in New Zealand in an attempt to find out the kinds of leadership issues that would influence the effective practice of probation. Dale and Trlin identified four themes as a result of their interviews: the importance of credibility and professionalism from leadership, the quality of the relationship between the leader and the follower, the importance of leadership that focused on practice and the perils of disempowerment between front-line staff and senior leadership. Dale and Trlin pointed out that transformational leadership could be an approach of promise among this community corrections staff.

There are a few articles focused quantitatively on the use of transformational leadership in a criminal justice setting. Walker (2011) looked at the job satisfaction of corrections officers related to the leadership style of their boss. This is considered important due to the impending mass retirement of the baby boomer criminal justice professionals in a field that already has high turnover. Walker found that perceived transformational leadership of a supervisor, as measured by the LPI, was correlated with job satisfaction of the officer.

McTavish (1993) convened a panel of corrections related administrators and asked them to identify exceptional leaders in the field. This panel came up with seventy individuals who were asked to complete the LPI and a self-created leadership inventory.

Fifty-five male leaders completed LPI's and were compared with a much larger normative sample of non-criminal justice professionals, and the criminal justice professionals scored significantly higher than other managers across the five sub-scales of the LPI.

Atkin-Plunk and Armstrong (2013) examined the correlation between leadership style and job stress among prison wardens. Atkin-Plunk and Armstrong noted that there had been several studies indicating that leadership style rated by a follower impacted the stress level of a follower, but few that looked at the leader's style and the leader's stress. The authors surveyed 103 prison wardens and found that self-perceived transformational leadership, as measured by the MLQ, was positively correlated with lower amounts of self-perceived stress. Atkin-Plunk and Armstrong surmised that this likely had to do with Burns' (1978) ideas of the transformational leader motivating in a way that developed both the follower and the leader, and the active support that a transformational leader was likely to engender due to the style of leadership.

Baker, Gordon, and Taxman (2015) grappled with the idea that in a corrections environment, in addition to worrying about inmates acting out, managers also must worry about inherent power dynamics and potential for abuse between officers and inmates. Their review of literature led them to further explore the idea that officer perceptions of procedural justice acted as a buffer to this kind of abuse. The idea being that if the officer believed there was an organizational culture of procedural justice or fairness, the individual officers were less likely to abuse their power. Baker et al. decided to explore the link in the literature between procedural justice and transformational leadership.

Procedural justice was positively associated with transformational leadership, as measured by six items in a survey. Baker et al. suggested that a sense of autonomy in decision making and “perceptions that management leads through motivation and encouragement” (p. 1038) increased an officer’s consideration of whether the organization was interested in procedural justice.

Wright (1999) made an assumption that may not have been widely embraced at the time when he indicated that “criminal justice practice is guided by a mission and organizational culture that respects the dignity of every human being” (p. 69). Wright stressed that ethics and leadership would be key in driving this sort of culture. Felts (2013) further moved the needle in the direction Wright had embraced and indicated that the leadership methods used by criminal justice managers today must be different than the command and control models used in the past. Felts promoted shifting from a product-centered process to a client-centered model.

For such an important topic, there is surprisingly little literature focused on criminal justice and leadership, particularly in the United States (Dilulo, 1991; Thomas, 1990; Waters, 1992). There is a small movement towards a shift from process and control, towards the individuals (Felts, 2013; Wright, 1999). This shift toward the individual is often the offender, but the literature seems to highlight the importance of the officer in this shift towards a system that is focused on justice (Baker et al., 2015; Dale & Trlin, 2010; Walker, 2011). The concept of a person-centered approach, personal change, and the genesis from this approach to motivational interviewing will be explored in the next section.

## Person-Centered Practices

Miller and Rollnick (2013) have suggested that “MI has similarities to Theory Y” (p. 345). McGregor (1960) had earlier asserted that management had to choose between two, and only two, styles of managing people: Theory X and Theory Y. He suggested that Theory Y was the preferred style, a style that treated employees as people rather than simply assets or widgets that were interchangeable and could be treated the same. Drucker (2001) also identified a shift from subordinates to knowledge workers and explained that the shift was due in part to knowledge workers possessing skills and knowing more about the actual job than their boss (p. 78). This emphasis on the personal nature of managing has expanded in recent years to include more than just knowledge or traditional intelligence in the role of leadership.

Riggio, Murphy, and Pirozzolo (2002) articulated the role of social, emotional, and even cultural intelligence as having implications for leader self-regulation. The authors stated that these constructs “relate directly to a leader’s ability to influence others” (p. 174). They also tie into the “leader’s ability to tune into the needs of the followers” (p. 175). Well before these came into the forefront of leadership approaches, another author, Rogers (1980), associated with influence on the creators of motivational interviewing, spoke to the importance of person-centered practices.

Rogers (1980) identified the importance of a person-centered approach to helping individuals change. Rogers used this concept of a person-centered approach as one that promoted growth in individuals. The author stated that three conditions must be present for a climate to be growth promoting. Rogers identified these elements as “congruence,

acceptance, and empathic understanding” (pp. 115-116). The first two elements allow the last, empathic understanding, to be possible. He also called empathic understanding active listening and stated that this kind of listening was “the most potent force for change that I know” (p. 116). While Rogers work as a psychologist and a therapist influenced his thought, he indicated that this sort of approach would help transform people into all they are capable of becoming “whether they are clients, students, workers, or persons in a group” (p. 134).

There has been a strong movement since the end of the industrial revolution to distinguish between managing people and leading people (Drucker, 2001). The concepts of social and emotional intelligence while relatively new, has its roots in the kind of person-centered approach Rogers (1980) and others were emphasizing in the 1950s and 1960s related to the transformation of individuals (McGregor, 1960). Miller and Rollnick (2013) were influenced by Rogers (1980) in creating motivational interviewing, and this way of being has elements to bring all of this work together in a leadership construct.

### **Change**

Change is a key aspect of theories on leadership. For the current study, change was defined as “to make the form, nature, content, future course, etc., of (something) different from what it is or from what it would be if left alone” (Dictionary.com, 2019). Change is essentially doing anything differently than is currently being done, and includes first and second order change. Bergquist (1993) differentiated between first-order change and second-order change. Bergquist stated that first-order change was doing something you already knew how to do, but doing more or less of it, and did not require



new learning. In contrast, second-order change was a choice to behave differently and might require new learning.

The current study will focus more on second-order change, without ignoring first-order change. Adaptive work, described in this review, involves the change of attitudes, beliefs, and behavior (Heifetz, 1994). Kotter (1996) is one of the thought leaders in the area of change, specifically organizational change. While focusing on the organizational level, Kotter also addressed the work of individuals within an agency in promoting change. Kotter indicated that “first, useful change tends to be associated with a multi-step process that creates power and motivation sufficient to overwhelm all the sources of inertia. Second, this process is never employed effectively unless it is driven by high-quality leadership, not just excellent management” (p. 20).

Bommer, Rich, and Rubin (2005) stated that transformational leadership transforms employees to make them more receptive to, and to build capacity for, bringing about organizational change. The authors explored the strategies used by change implementers on outcomes experienced by change recipients. Bommer et al. (2005) conducted a study that was particularly interested in whether or not transformational leaders reduced employee cynicism about organizational change (CAOC). Bommer et al. found that transformational leadership behavior did have a positive correlation to reduced cynicism about change. In addition, the authors stated that the findings indicated that selection and training based on these behaviors appeared to be a useful strategy. Training was described as necessary, but likely insufficient in promoting transformational leader behavior. The authors argued that the creation of an organizational culture that supports

these behaviors would be the most beneficial. This suggestion was made as a result of findings detailing the undermining effects of unsupportive contexts.

Change is the one constant, the thing that all people can count on. The study of change in organizations has been growing, and has shifted from organizational change to individual and back at times (Bommer et al., 2005; Kotter, 1996). Adaptive leadership is focused on the kind of change that occurs when solutions are unknown, and learning has to occur (Heifetz, 1994). This is an inherently collaborative process but also involves individual growth. For leaders to be able to bring about organizational and individual growth, they will need to be interested in what motivates followers.

### **Motivation**

Motivation has been associated with the field of leadership and is an element identified as early as the work of Burns (1978). Motivation refers to the “reasons underlying behavior” (Guay et al., 2010, p. 712). Gredler, Broussard, and Garrison (2004) more broadly defined motivation as “the attribute that moves us to do or not to do something” (p. 106). Burns indicated that transformational leadership occurred when “leaders and followers raised one another to higher levels of motivation” (p. 20). Burns borrowed from the work of Abraham Maslow on the common needs that are shared by all individuals and pointed towards a way to motivate employees towards higher level needs.

McNeese-Smith (1999) looked at the concept of motivation based on research conducted from the 1970s and 1980s that indicated a correlation between a motivation for power and a low need for affiliation. The author asked the question of how does that notion of motivation and affiliation fit in with the movement of the literature from a

management perspective to a focus on leadership. The definition for motivation used by McNeese-Smith was as follows, “motivation creates the energy which incites, inspires, impels, influences, urges, and moves one to action” (p. 243). McNeese-Smith found that motivation for power for managers had a negative correlation to leadership behaviors as measured through the LPI and staff outcomes among nurses. Interestingly, the manager’s motivation for power was positively correlated to patient satisfaction.

Gagne and Deci (2005) examined the field of motivation for the implication that extrinsic and intrinsic motivation can both be positively or negatively interactive with one another. They identified previous research suggesting that cognitive evaluation theory provided an explanation for this interactivity. Cognitive evaluation theory proposed that tangible rewards could diminish or undermine intrinsic motivation, moving the “locus of causality from internal to external” (p. 332). Yet, there is research that indicated other external concepts such as choice of task management lead to increased intrinsic motivation (Koestner & Losier, 2002). A further look at the research found two specific outliers: autonomy and competency.

Gagne and Deci (2005) provided a definition and explanation of self-determination theory that proposed intrinsic motivation is a motivation that is autonomous, and anything outside of volition, choice, or voluntariness might fall into controlled or extrinsic motivation. The authors indicated that “when externally regulated, people act with the intention of obtaining a desired consequence or avoiding an undesired one” (p. 334). The fullest internalization, which allows extrinsic motivation to become autonomous, is when something becomes “integrated regulation” (p. 334). This occurs

when people have a sense that the behavior is an integral part of who they are as an individual. “It emanates from their sense of self and is thus self-determined” (p. 335). Gagne and Deci differentiated this as extrinsic motivation by indicating that it was not something of interest or satisfying, which would be intrinsic motivation, but something that was “instrumentally important” (p. 335) to the individual. This is a difficult distinction to conceptualize, but it is seen as the most developmentally advanced form of extrinsic motivation. Controlled motivation, in particular, has the ability to detract from positive outcomes, particularly if the task involves “creativity, cognitive flexibility, or deep processing of information” (p. 341).

Self-determination theory is described as a continuum with amotivation, or no self-determination, on one end and intrinsic motivation, or fully self-determined, on the other. In between, there are four types of extrinsic motivation, with integrated regulation being the most self-determined and controlled motivation being the least. Gagne and Deci (2005) identified needs as “a need only to the extent that its satisfaction promotes psychological health and its thwarting undermines psychological health” (p. 337). The authors indicated that self-determination theory identifies autonomy, competence, and relatedness as universal needs.

According to Gagne and Deci (2005), several studies have indicated that the ability to provide a context of support for those needs in others has the ability to enhance intrinsic motivation in others. An example given was a study by Grolnick and Ryan (1989) where parents’ provision of support for competence, autonomy, and relatedness with regards to a child’s homework predicted the children’s maintaining intrinsic

motivation for schoolwork and school-related activities, which in turn predicted school performance and adjustment by the child. Another study by Black and Deci (2000) was described where instructor autonomy supportiveness predicted increases in scores in a university chemistry course even when controlling for grade point averages and scholastic aptitude test scores, in addition to increasing autonomous behavior by the students over the semester.

Miller and Rollnick (2013) described motivational interviewing as developing from the bottom up out of practical experience in the addictions field. They contrast this to the top down theory of self-determination theory, which started from a coherent theory. The authors indicated that there may be a natural fit between the two approaches, since motivational interviewing has lacked a well-developed theory, and self-determination theory lacks clinical procedures for putting the theory into practice. In particular, Miller and Rollnick suggested that motivational interviewing has been faulted for underemphasizing a social context evident in self-determination theory.

As early as the work of Burns (1978), motivation has been associated with leadership. In transformational leadership, motivation is seen as focused on helping others (Burns, 1978). Research has shown that a leader's quest for power is negatively associated with motivation among followers (McNeese-Smith, 1999). The examination of self-determination theory suggests that followers can be extrinsically motivated, but that anything more than rudimentary work likely requires a leader to determine how a follower is intrinsically motivated (Gagne & Deci, 2005; Koestner & Losier, 2002). The literature suggests that leaders who created a context of support were likely to enhance

intrinsic motivation in followers (Grolnick & Ryan, 1989). The next section will discuss the concept of motivational interviewing, and its emphasis on a context of support and dependence on the intrinsic motivation of an individual when considering change.

### **Motivational Interviewing**

Motivational interviewing grew out of frustration with a confrontational and authoritative approach utilized in the treatment of patients with issues of addiction. Miller and Rollnick (2013) defined motivational interviewing as “a collaborative conversation style for strengthening a person’s own motivation and commitment to change” (p. 12).

While the authors initially applied this to the field of addictions, it has since been applied to almost any setting where change is being considered and is now being considered for fields beyond pure behavior change, like decision making and personal development (Miller & Rollnick, 2013). Miller and Rollnick described two components of motivational interviewing: a relational aspect and a technical aspect. The relational aspect is described as the spirit of motivational interviewing. The technical aspect consists of the techniques utilized to demonstrate the skill of motivational interviewing. The authors indicated that neither aspect is dependent upon the other. The relational aspect is not a prerequisite to the practice of motivational interviewing. The practice of motivational interviewing has the ability to teach practitioners the spirit of motivational interviewing.

According to Miller and Rollnick (2013), four components of the spirit of motivational interviewing are partnership, acceptance, compassion, and evocation. Partnership is the expression that motivational interviewing is “not something done by an expert to a passive recipient” (p. 15). Partnership is the idea that there are as many

experts as there are people in the room. Clients are experts on themselves. The idea is indicative of a profound respect for the other person. Acceptance is related in that it represents the acceptance of what the client brings to the relationship, and where they are in the process of change. There are four aspects of the construct of acceptance: absolute worth, accurate empathy, autonomy support, and affirmation. Compassion is “the deliberate commitment to pursue the welfare and best interest of the other” (p. 20). Evocation is the strength based premise that “people already have within them much of what is needed” (Miller & Rollnick, 2013, p. 21) and the practitioner’s role is to draw upon and bring it forward.

The technical aspect of motivational interviewing involves a particular set of communication skills: open questions, affirmations, reflections, and summarization. Miller and Rollnick (2013) suggested that these techniques “become navigational tools as well for guiding and propelling the course of change” (p. 62). These skills are utilized to draw out or evoke the person’s own motivation for change, in the form of change talk. A key to approaching another’s internal frame of reference is to understand their core goals and values. The authors posited that understanding another’s values provides a key to what is motivating to them. The focus on listening for, evoking, and responding appropriately to change talk, along with the relational aspect, is what distinguishes motivational interviewing from other therapeutic styles.

### **Motivational Interviewing and Psychological Safety**

Zuckoff (2002) stated that motivational interviewing was developed inductively and that a clear and concise theoretical framework as to why motivational interviewing

works and a specific account of how it exerts its effects remains to be articulated. Zuckoff's study investigated the process of motivational interviewing. The study was conducted by examining the client's experience, and the finding was that clients value psychological safety above other characteristics with a provider. Motivational interviewing, done well, provides this sort of safety for individuals.

Kreman (2005) examined the impact of motivational interviewing on the adherence to behavior changes of reducing dietary fat intake and increasing physical activity. This study identified motivational interviewing as a promising method of targeting self-directed motivation. Kreman cited Miller & Rollnick (1991) and indicated that "readiness to change is not a client trait, but a fluctuating product of interpersonal interaction" (p. 26). Hettema (2006) conducted a meta-analysis of motivational interviewing. Hettema pointed out the proximity of a motivational interviewing approach to self-perception theory as drafted by Bem (1967). The premise of Bem's theory is that people tend to defend the things they voice aloud.

Brobeck, Odencrants, Bergh, and Hildingh (2013) conducted a qualitative study that consisted of interviews with sixteen patients who had conversations with registered nurses utilizing motivational interviewing regarding lifestyle discussions. Lifestyle discussions in this study were related to healthy lifestyles. The interviews conducted with the patients regarding lifestyle discussions were deemed helpful, as perceived by the patient when they were a part of a collaborative interaction with the nurse. The authors appeared curious about the type of environment that might be conducive to following through with preventive changes. The findings suggested that certain conditions were



required in a lifestyle discussion to be perceived as meaningful and possibly leading to changes by the patients. The first condition was a mutual interaction where the patient felt that the nurses were present and where they felt that someone genuinely listened to their story. The second condition was about what the patient brought to the encounter. The patients felt that they needed a true desire to make any suggested changes. The results also showed that a successful lifestyle discussion brought a sense of well-being to both the nurse and the patient and that there was a sense of satisfaction and motivation in the patient. The final condition the patients considered as necessary was a dialogue that resulted in a new way of thinking about the issue in a way where the patient's ideas were encouraged in order to contribute to the change process.

### **Motivational Interviewing and Training**

Hettema (2006) highlighted several studies that looked at the efficacy and the ability to learn motivational interviewing. The studies found that motivational interviewing training could result in increased skill development. Skills improved considerably by providing ongoing feedback and coaching regarding performance and use of the skills. While the research tends to demonstrate the efficacy of motivational interviewing, the effectiveness of motivational interviewing proves difficult to interpret due to the variability involved in training and fidelity. Several meta-analyses of motivational interviewing showed that the majority of cases had significant effects, particularly when compared to no treatment. When compared to other treatments, there were limited or no significant effects. The findings indicated that motivational interviewing was at least as effective as other treatment options. Over time, the effects of

motivational interviewing did not diminish. Hettema (2006) found medium to low effect sizes across domains and treatment types. Lundahl, Kunz, Brownell, Tollefson, and Burke (2010) also found that motivational interviewing was particularly effective with treatment readiness and intention to change. Motivational interviewing might serve useful in preparatory change.

Miller and Mount (2001) provided one-day training in motivational interviewing to a group of experienced counselors and probation officers. Pre-test and post-test measures indicated that trainers increased their knowledge of motivational interviewing. Observations of practice showed only modest gains in skills and did not result in a decrease in motivational interviewing inconsistent skills. Four months following the training, practice behavior did increase in a statistically significant manner, but not sufficient to make a difference in client response. The authors described concern for the possibility that one shot training seems to increase confidence sufficient to possibly inoculate against further learning. The authors described one shot training as a single session of training.

Young and Hagedorn (2012) studied the effects of a brief training in motivational interviewing. The authors articulated that motivational interviewing is most effective when a change is being considered and described the intervention as a way to prepare clients to become ready, willing, and able to change. This study focused on an identified gap in the literature with regards to trainees. According to Young and Hagedorn, most of the previous literature on training in motivational interviewing focused on those who had counseling experience, or previous experience with motivational interviewing. In this

study, the researchers targeted individuals who were still training to become counselors. In essence, this group would see the training as preparing them to become ready, willing, and able to be counselors. The authors provided brief four-hour training sessions, indicating that this group would find a brief training just as helpful as longer trainings for experienced counselors. Those in the experimental group resulted in increases in skill that were similar to other studies with more experienced counselors and longer training programs.

Doran, Hohman, and Koutsenok (2013) compared the training of motivational interviewing between expert consultants and trainers developed within an agency. The study found that the attainment of skill development did not differ between experts and internal agency trainers, while both increased in skills. The results indicated that a train the trainer model may be as effective as relying exclusively on expert trainers. Training in a group setting appears to be more effective than self-directed study. This particular study occurred within a juvenile (criminal) justice setting.

Passmore (2011) focused on the ethical decisions related to motivational interviewing. The author detailed the efficacy of motivational interviewing by describing how the intervention has built up a strong evidence base with over two hundred randomized controlled trials. The article pointed out the growing application of motivational interviewing while being utilized in areas from oral health, the education of diabetes patients, and managing television viewing habits of children. Essentially, the application exists wherever there is a targeted behavior change.

Passmore (2011) described that ethical considerations appear whenever the aspirations of the client and the practitioner diverge. The author explored ethical considerations in a coaching environment, which occurs within an organizational context. The author highlighted ethical situations that occur when a manager is concerned with performance issues of employees.

### **Motivational Interviewing and Growth**

Another area where motivational interviewing is explored more recently in the literature is the area of personal growth and development. Iarussi (2013) explored this concept in looking at the utilization of motivational interviewing and how that would correlate with student development in college students. The author felt that a gap in the literature was that motivational interviewing had been used previously in the college environment exclusively to address problem behaviors, such as alcohol use. This study was a conceptual and qualitative research paper involving literature review and theory development. In particular, Iarussi looked at the links and similarities between motivational interviewing and Chickering and Reisser's (1993) seven vector theory of development for college students. The author pointed out that change can be either positive or negative, but that development was generally seen as growth in a positive direction, and that motivational interviewing is typically focused on positive change.

Continuing the focus on development and schools, another study by Richer (2012) also examined the impact of motivational interviewing on adolescents' motivation to perform to their potential in academic efforts. This was a mixed method study of four students. The study design utilized school grades as a pre-test and post-test measure of

the impact of motivational interviewing on the four students. In addition, Richer conducted interviews with the students and their parents. All four students showed an improvement in grades after the intervention of motivational interviewing. The four students were selected as part of a purposive sampling case study. The four students were selected because they had at some point been identified as gifted, and each was seen as underperforming in a public school setting. The students were between middle school and high school when the study began. In addition to several questionnaires, Richer conducted a motivational interview with the goal of developing discrepancy between where the students were at the beginning of the study, and where they wanted to be or saw themselves in the future. Richer indicated that a few conclusions could be drawn from the qualitative examination: underperforming students are often highly motivated and passionate, but perhaps not by the goals prioritized by schools, and that because of this disconnect a person trained in motivational interviewing might be successful at empathically reconnecting the school and student. In other words, motivational interviewing might be an effective way to deal with connecting and engaging individuals.

Motivational interviewing is a “collaborative conversation style for strengthening a person’s own motivation and commitment to change” (Miller & Rollnick, 2013, p. 12). It includes a relational aspect, the spirit of motivational interviewing, which provides a supportive context of psychological safety for individuals (Zuckoff, 2002). The approach also involves a technical aspect that is targeted at eliciting change talk from an individual, seeking their intrinsic reasons for changing behavior (Miller & Rollnick, 2013). The process of an individual’s readiness to change is not static and is influenced through

personal interaction (Brobeck et al., 2013; Kreman, 2005). Motivational interviewing is utilized to guide individuals to voice aloud intentions to change (Hettema, 2006). It is a skill that can be trained, and in brief timeframes with gains in skills (Hettema, 2006; Miller & Mount, 2001). The training has potency regardless of expertise or discipline (Doran et al., 2013; Young & Hagedorn, 2012). In addition to being effective with change, the literature indicated that effectiveness has expanded to include growth and development (Iarussi, 2013; Richer, 2012). While it has been applied in almost any area where there is change involved, it has only recently been associated within a leadership context (Miller & Rollnick, 2013).

### **Motivational Interviewing and Leadership**

Erichsen and Tolstrup (2013) are from Copenhagen, Denmark, and wrote a book on motivational interviewing and leadership. The book was written in Dutch, and there are no current translations outside of that language. The authors did write a summary of their book in an article in English. Erichsen and Tolstrup indicated that motivational interviewing is an interaction strategy, enabling managers to become better at evoking intrinsic motivation among their followers. They coined the title of MI leadership where the key elements are the same as a traditional way of applying motivational interviewing. The article contrasts the style from a traditional coaching style, and as a way of working directly with individual motivation.

Erichsen and Tolstrup (2013) argued for the importance of a roadmap for change within today's organizations. The authors described that managers are constantly dealing with change processes. Typically, organizational administrators determine the direction

of change and tell their employees the intended direction. In contrast, MI leadership organizations are not things to be moved from one position to another (p. 3). In MI leadership, the organization is seen through a somewhat different lens. The organization consists of individuals who interact, and change the organization through their attitudes, beliefs, thoughts, conversations, and behavior to lead towards a particular and shared direction. In this context, collaboration, empathy, and autonomy are necessary to provide the organization with the most benefit. MI leadership is offered as a supplement in which a change process can be initiated. While it might be tempting to direct or control the course of change out of convenience and timeliness, Erichsen and Tolstrup pointed to research suggesting that experts who argue strongly, or make a case for, adopting a particular solution, the recipient of such information begins to consider and articulate alternative solutions and even arguments against the proposed changes.

Erichsen and Tolstrup (2013) spoke to the relational aspect of motivational interviewing as being key to effective leadership. They described a relationship between a manager and an employee as not being about friendship, but about a deep mutual respect where you have compassion and sincerely want the best for the employee. The authors pointed out that the spirit of motivational interviewing is a key underpinning to MI leadership, and without the spirit, it becomes quite difficult to impact intrinsic motivation. One key aspect of that underlying spirit is empathy. A focus on empathy means that managers are expected to put forth considerable energy towards understanding the employee and their point of view. The authors quoted Soren Kierkegaard to describe this undertaking, “if one is truly to succeed in leading a person to

a specific place, one must first and foremost take care to find him where he is and begin there” (p. 3).

Erichsen and Tolstrup (2013) indicated that while a positive relationship between managers and employees is necessary, what distinguishes motivational interviewing as an effective tool is the pathway or direction that can be utilized as most helpful given the context. They identified four strategies within motivational interviewing that are most helpful in setting direction: exploring the importance of moving in a direction of change, assessing the confidence of making such a change, identifying any ambivalence connected to the change, and developing discrepancy between the values and goals towards the change.

Importance and confidence can generally be explored through the use of open ended questions. Using questions involves simply checking in with the individual to assess where they are with the possible change. As stated in the self-determination theory section, employees need to either have some level of intrinsic motivation or integrated extrinsic motivation to see it as useful and to feel equipped to be competent in carrying change forward. Ambivalence occurs when an employee holds two different thoughts or feelings about the benefits of making the change at the same time. Ambivalence can be frustrating for managers, but the concept of ambivalence is very natural, and is actually an antecedent of change, meaning it is what makes change possible. Feeling two ways about the change is where the change talk aspect of motivational interviewing can be important for managers, as it is suggested by the authors that you want to “primarily steer the conversation towards the advantages of the change” (Erichsen & Tolstrup, 2013, p.



6). The last strategy Erichsen and Tolstrup (2013) mentioned in the area of direction was discrepancy. Discrepancy is assessed by managers looking to see if there is a difference between what the employee says about change, and the behaviors that they actually exhibit. If there is disagreement, then this discrepancy can be addressed in a collaborative conversation style. In some cases, it is the manager just noticing aloud the difference between the values they heard and the actions that they are seeing, and expressing curiosity to the employee about the difference. Pointing out the contrast between values and action aligns with Heifetz's (1994) definition of adaptive work being "the learning required to address conflicts in the values people hold, or to diminish the gap between the values people stand for and the reality they face" (p. 22). According to Erichsen and Tolstrup, the gap in values and action is where the spirit of motivational interviewing has advantages, as the manager may be bringing topics to surface that the employee has chosen to ignore (p. 7).

Erichsen and Tolstrup (2013) stated that the way in which motivational interviewing differs substantially from other approaches is the focus on change talk or statements from the employee in favor of change. The authors coined change talk as the engine that drives intrinsic motivation (p. 8). They argued the need for managers to become proficient in recognizing and reinforcing change talk when it is noticed. Change talk has two components, preparatory change talk and commitment change talk. Preparatory change talk involves listening for an employee's desire, ability, reasons, and need for the change. Commitment talk involves taking steps, action, and committing to change.

Erichsen and Tolstrup (2013) concluded the article by stating that managers who feel that MI leadership is possibly an effective approach should hold to three basic assumptions. The first is that unmotivated employees do not exist. The role of the manager becomes figuring out what it is that intrinsically motivates an employee and tap into that and how it aligns with the goals of the organization. The second assumption is that the manager's relationship with the employee enhances or decreases the motivation of the employee. Without a good relationship, the manager may never truly even learn the intrinsic motivation of an employee, much less be able to draw upon it or call it forth towards a collaborative benefit to the organization and the employee. The final assumption is that thoughts and spoken words are the foundation for action for an employee. While attention to words and relationships speaks to the power and art of a manager's communication, it is particularly applicable to what comes from the inner motivation of the employee.

Merrill (2015) explored the relational aspect, the spirit of motivational interviewing, for evidence of the spirit of MI in Utah's best places to work. Merrill looked particularly at evidence of MI and its relation to job satisfaction of employees. The study resulted in a finding that organizations with components of the spirit of MI had a positive effect on employee job satisfaction factors of achievement and recognition.

Klonek et al. (2015) examined the use of motivational interviewing's focus on change talk to deal with readiness to change and resistance to organizational change in a workplace meeting. The authors focused on utilizing meetings as interactions that can initiate strategic change since talk can drive action in organizations. Klonek et al. (2015)

posited that focusing on change talk, and avoiding sustain, or status quo, talk could drive change in organizations.

Kersh, Jenkins, and Wilcox (2017) highlighted the possibilities of motivational interviewing and transformational leadership. The authors indicated that motivational interviewing provided a roadmap for leaders wishing to become more transformational. Kersh et al. (2017) mapped out how some of the skills in motivational interviewing could be used in leadership, but did not attempt to provide an empirical basis for their argument.

### **Leadership Practices Inventory**

The LPI was created by Kouzes and Posner (2002) for a concept of visionary leadership. Kouzes and Posner identified five behaviors necessary for a visionary leader: (1) model the way, (2) inspire a shared vision, (3) challenge the process, (4) enable others to act, and (5) encourage the heart

Carless (2001) attempted to examine the construct validity of the LPI. The author pointed out that while many theories of leadership focus on the apex, or the single individual at the top, of an organization, that Kouzes and Posner constructed a leadership concept and tool that had more widespread applicability, including lower to middle-level managers. Carless suggested that there is an overarching construct of transformational leadership. There was a high correlation between the different leadership behaviors, which indicated that it was difficult to give meaningful feedback on specific leadership behaviors. The author provided a possible reason, supported by previous research, of an augmentation effect of charisma. If followers find the leader charismatic, it becomes

difficult for them to distinguish between particular behaviors. Carless (2001) stated that the result would also make it difficult to “defend promoting the development of specific transformational leader behaviors” (p. 237).

Harms and Crede (2010) found that while the MLQ, designed specifically for transformational leadership, was the most often used instrument in research for measuring this leadership approach, that the LPI was the second most often used instrument. In their study, the LPI was the only other instrument utilized more than once. Carless, Wearing, and Mann (2000) concluded that while both the LPI and MLQ successfully discriminated between effective and ineffective leaders, the LPI had better discriminant validity. The authors also found better agreement between self and other ratings with the LPI as compared to the MLQ. The MLQ, while the most popular instrument, is a measure of both transformational and transactional leadership. Oterkiil and Ertesvag (2014) claimed that questions have been raised about the factor structure of transformational leadership, and about the discriminant validity of the components of the model with each other using the MLQ. In contrast, Oterkiil and Ertesvag indicated that the LPI is one of the more popular measures that explored transformational leadership behaviors without measuring transactional leadership.

Lummus (2010) reported that the LPI is one of the most common 360-degree feedback tools for leadership. Lummus’ study looked at which of the 30 questions within the LPI were perceived to be the most valuable or least valuable to nurses, in an attempt to understand the kind of leadership necessary to bridge the nursing shortage gap. The study concluded that the following three items were perceived as most important in a

leader: treats others with dignity and respect, sets a personal example of what to expect from others, and develops cooperative relationships among the people with whom they work (Lummus, 2010). The following three items were deemed least important in a leader: describes a compelling vision of the future, experiments and takes risks, even when there is a chance of failure, and appeals to others to share an exciting dream of the future. From the perspective of a sample of nurses, modeling the way was rated more important than inspiring a shared vision. Lummus also discovered a weak correlation between experience as a nurse and the additional importance attached to inspire a shared vision and challenge the process.

Francisco (2000) compared transformational leadership behavior as measured by the LPI to several scales related to employee outcomes. The study found that there was a statistically significant positive correlation between the five leadership behaviors and trust in the leader and organizational commitment. Dunn, Dastoor, and Sims (2012) utilized the LPI to examine transformational leadership and organizational commitment. The findings of the study revealed that all five practices of the LPI were positively related to two of the three components of organizational commitment: affective and normative commitment.

### **Parallel Process**

In addition to a possible contribution to the field of leadership, the current study examined a possible benefit for the field of motivational interviewing. With organizations that implement motivational interviewing, there is a growing interest in creating a supportive environment or context for helping employees quickly adopt the new practice.

Within a leadership framework, the concept of parallel processes may provide a catalyst for leaders learning a practice such as motivational interviewing.

Koltz, Odegard, Feit, Provost, and Smith (2012) shared a definition of parallel process cited from Bernard and Goodyear (2009) and Jacobsen (2007) as “an intrapsychic phenomenon that unconsciously occurs on the part of the supervisee and originates in a relationship in one setting and is reflected in a relationship in a different setting” (p. 233). This process originated in psychodynamic theory. In a working relationship, particularly in a helping profession, this shows up as a process of transference and countertransference. In layman’s terms, the supervisee might work with a client in a directive and authoritarian style and then transfer that behavior when meeting with a supervisor, or the supervisor might behave in a confrontational way, and the supervisee then counter transfers that behavior when meeting with a client. A suggested intervention for dealing with transference from a supervisee is for the supervisor to validate the feelings of the supervisee and explore and role model an interaction with the client.

Giordano, Clarke, and Borders (2012) addressed the issue of whether or not the supervisor should explicitly bring awareness to parallel processes. Giordano et al. suggested that naming the behavior when it happens is important, and others have expressed an approach of being aware and navigating the situation indirectly. Resistance and defensiveness during parallel processes were another consideration of the strategy considered by the supervisor in the intervention. The authors proposed that motivational interviewing could be an appropriate supervisory style to address parallel processes.

## Summary

In addition to examining the broader literature for motivational interviewing and transformational leadership, a review of some of the specific elements of each approach was explored. These elements included subjects such as change, motivation, and parallel processes. There appears to be convergence in the focus on follower development in both the leadership and person-centered practices, such as motivational interviewing (Avolio & Bass, 1998; Burns, 1978; Miller & Rollnick, 2013; Rogers, 1980). Motivational interviewing also shares with transformational leadership a focus on changed behavior (Burns, 1978; Heifetz, 1994; Miller & Rollnick, 2013). The literature indicated an emphasis on leadership development, and mixed evidence about effectiveness of training and development in changing the leader, or in any changes by the leader actually being noticed by followers (Avolio, 2005; Avolio & Bass, 1998; Conger & Benjamin, 1999; Dvir et al., 2002; Wang et al., 2011). Where there has been evidence of change in influence and stimulation, it has not typically been with how to motivate followers or show concern for others (Avolio & Bass, 1998; Carson, 2011). Motivational Interviewing research provides evidence of being able to do this outside of leadership context, and promise to do so within this context (Erichsen & Tolstrup, 2013; Richer, 2012; Iarussi, 2013). The use of motivational interviewing in leadership seems particularly potent within agencies that are trying to promote the use of motivational interviewing to help clients, and as a buffer to parallel processes for leaders (Giordano et al., 2012; Koltz et al., 2012). Finally, there seems to be consensus emerging from the various aspects of the literature that a context of psychological safety is necessary to fully develop leaders

(Avolio, 2005; Dale & Trlin, 2010; Gagne & Deci, 2005; Grolnick & Ryan, 1989; Walker, 2011; Zuckoff, 2002). Motivational interviewing as a framework for having a conversation with people is claimed through the research to provide this sort of environment (Zuckoff, 2002). In chapter three, a discussion of the methodology includes an examination of the data from the participants of the current study.



## **CHAPTER 3. METHODOLOGY**

### **Introduction**

The method of research for the current study was a quantitative, quasi-experimental design. There is a lack of agreement among the practitioners of motivational interviewing within the international community (MINT) and a lack of research about the place for motivational interviewing in leadership. The current study served as a starting place in indicating whether this is an effective approach. The goal was to establish whether or not there are differences between two groups, one with training in transformational leadership and the other with training in motivational interviewing and transformational leadership. The researcher looked for differences of significance in perceptions of mid-managers, as rated by self.

### **Research Design**

The research design for the current study was a nonequivalent-groups pretest/posttest design. This design is often referred to as a quasi-experimental design and is commonly used in educational research (McMillan, 2008). A quasi-experimental design is similar to an experimental design but lacks the key ingredient of random assignment (Trochim, 2006). In addition, researchers are working in a field setting rather than a laboratory and have less control over the variables (Vogt, 2007). For the current study, the design included an experimental group and a comparison group. All groups completed a pretest and posttest. The pretest and posttest was the LPI. The experimental

group received an intervention of motivational interviewing and transformational leadership training, while the comparison group received an intervention of transformational leadership training. The trainings both described transformational leadership, with a focus on the five practices of exemplary leadership identified in *The Leadership Challenge (TLC)*. The trainings also provided practical application of transformational leadership in everyday workplace situations. The experimental group looked at these practical applications through the lens of motivational interviewing (MI).

Analysis of covariance, ANCOVA, can be used when there are two or more groups with a pre-test/post-test design. The current study utilized a pre-test and post-test design, comparing the impact of two interventions, taking before and after measures for each group. This is useful in situations where there are small sample sizes and only small or medium effect sizes. ANCOVA is also useful when the researcher is unable to randomly assign the participants to the different groups, but instead have to use existing groups (Pallant, 2013). The current study utilized a one-way between groups ANCOVA since there was one dependent variable and one independent variable. The dependent variable was the score on the Leadership Practices Inventory (LPI). The independent variable was the type of intervention. The additional variable (called a covariate) is a variable suspected of influencing scores on the dependent variable. The scores on the pre-test were treated as a covariate in that the pre-intervention scores controlled for possible pre-existing differences between the groups.

## Target Population and Sample

The current study included a population and sample of criminal justice middle managers. The population consisted of all the mid managers for criminal justice agencies throughout the state of Texas. The total numbers possible for this population are not measured precisely. The criminal justice community consists of employees in corrections facilities, adult parole employees, adult probation departments, and juvenile justice departments. There are approximately 33,000 corrections employees, and about 5,000 employees for each of the community supervision agencies: adult parole, adult probation, and juvenile justice. This equates to approximately 50,000 employees. A rough estimate of the middle management population would be ten percent of the population or 5,000 middle managers.

The sample for the current study consisted of the group of middle managers from the criminal justice community in Texas who voluntarily chose to participate in leadership training offered by the Correctional Management Institute of Texas (CMIT). The leadership training was a six and half hour training with 40 individuals. CMIT offered six of these leadership training events in six different regions in Texas. The leadership training was offered on six separate days. The leadership training included close to 270 individuals, and ultimately created a sample size of 107 individuals, with 55 in the comparison group and 52 in the experimental group. According to Cohen (1992), when examining medium effect sizes utilizing the ANCOVA, 52 participants are needed in each group, so the current study reached this minimum participant size. Ideally, all of the participants who chose to be involved in the training would have consented to being

involved in the current study and the self-rating utilizing the LPI, but some classes did not reach capacity, and individuals were allowed to discontinue participation along the way. Originally, only four trainings were scheduled, but two additional trainings were ultimately conducted to reach the minimum goal of 52 participants in each group. The sample for the current study was a convenience sample as the gatekeeper, CMIT, allowed access to this group, and the individuals self-selected to be involved in the training.

### **Setting**

The gatekeeper for the current study was the Correctional Management Institute of Texas (CMIT). CMIT is charged with developing and delivering professional education, management development, and issues specific training programs for personnel in juvenile and adult community and institutional corrections agencies. The organization is operated and housed out of Sam Houston State University, in Huntsville, Texas. The opportunity to grow leadership skills was offered to all mid-managers who elected to attend leadership training through CMIT which resulted in a sample that included two groups, with 55 participants in the comparison group and 52 participants in the experimental group. The participants were asked to complete consent documents to have statistical information included in a research project. The opportunity to grow leadership skills was eventually offered through six separate training sessions, with approximately 40 mid-managers being asked to consent each time. CMIT offered six sessions over the course of several months with approximately 40 individuals in each training session. These trainings were offered in six different counties throughout the state of Texas. Midland, Lubbock, Dallas, Tarrant, Travis, and Gillespie were the counties, and were

sponsored by CMIT. Each of the individuals was asked to complete a pre-test LPI. The individuals rated themselves on the LPI-self. Everyone who completed the pre-test LPI was offered feedback on their LPI scores by the researcher of the current study. The comparison group and the experimental group received a training intervention. The comparison group received a transformational leadership training intervention. The experimental group received a motivational interviewing training, with an introduction to transformational leadership.

The training interventions were conducted by the researcher of the current study, along with a co-trainer who is a training specialist with CMIT. The training was developed by the trainers. The transformational leadership training was largely based off of curriculum for *The Leadership Challenge*. *The Leadership Challenge* is an established curriculum, and the co-trainer is a certified facilitator. The motivational interviewing for transformational leadership module was developed by the researcher. The motivational interviewing for transformational leadership curriculum was sent to four different MINT members with a specialty in the area of leadership. These four MINT members provided feedback and direction on the development of the curriculum. Each of the participants of the training intervention, across the groups, was asked to complete a post-test LPI within 60 to 90 days following the training. The individuals again rated themselves. For the six training sessions, half of the sessions (3) were groups that received the transformational leadership intervention, and half of the sessions (3) received the motivational interviewing for transformational leadership intervention.

## Instrumentation and Measures

The survey instrument used in the current study is the LPI (Kouzes & Posner, 2002). The LPI was originally designed to measure general best practice leadership qualities. The instrument consists of two components: the Leadership Practices Inventory-Self and Leadership Practices Inventory-Observer, but the current study will only utilize the Leadership Practices Inventory-Self.

The Leadership Practices Inventory is a 30-item Likert-scale questionnaire measuring five areas of visionary leadership that have been described as transformational; (a) challenging the process, the extent the leader questions assumption, experiments and takes risks; (b) inspiring a shared vision, the degree the leader describes an exciting view of the future; (c) enabling others to act, the amount of cooperative and participative decision making used by the leader; (d) modeling the way, the extent the leader consistently practices his or her espoused values; and (e) encouraging the heart, the degree the leader gives positive feedback, publicly recognizes individual contributions and celebrates team achievements. (Kouzes & Posner, 2002, pp. 1-2)

According to Kouzes and Posner (2002), “the LPI was developed through a triangulation of qualitative and quantitative research methods and studies” (p. 1). The LPI results provide a mean score for each subscale, and the questionnaire consists of 6 questions within each of the five subscales. Over almost a decade, the authors of the LPI claimed that the reliability and validity of the scales have been consistently confirmed. The scores on the LPI are positively correlated with measures of a leader’s credibility, effectiveness

with upper management, team building skills, and levels of output. In the current study, the overall score of the LPI will be utilized. Overall LPI scores are obtained by adding the five subscales of the LPI. Utilizing an overall leadership behavior score has been an established practice in research (Bowles & Bowles, 2000; B. Posner, personal communication, August 19, 2016).

Several reviews of leadership development instruments resulted in the LPI consistently rating among the best in its class. In one assessment of 18 different instruments, the LPI was the only one to receive a top score for “psychometric soundness and ease of use” (Kouzes & Posner, 2002, p. 16). Carless, Wearing, and Mann (1994) compared the LPI to another popular instrument for measuring transformational leadership, the MLQ. In addition to finding that the two instruments shared substantial agreement, the research indicated that the LPI was a more effective instrument when looking at discriminant validity. The reliability of the instrument is also important. Posner (2015) stated that “the reliabilities for the LPI, as measured by Cronbach alpha coefficients, are consistently strong” (p. 3). The coefficients for the subscales for self-ratings are listed as: Model the Way (.814), Inspire a Shared Vision (.903), Challenge the Process (.846), Enable Others to Act (.829), and Encourage the Heart (.900) (p. 3).

The LPI was created by developing a set of statements describing each of the various leadership actions and behaviors. Each statement was originally cast on a five-point Likert scale, and reformulated in 1999 into a more robust and sensitive ten-point Likert-scale. A higher value represents more frequent use of a leadership behavior. For example: (1) Almost never do what is described in the

statement, (2) Rarely; (3) Seldom; (4) Once in a while; (5) Occasionally; (6) Sometimes; (7) Fairly often; (8) Usually; (9) Very frequently; and, (10) Almost always do what is described in the statement. (Kouzes & Posner, 2002, p. 3)

The LPI has been refined after initially being developed to identify personal best leadership practices as described by exemplary leaders. The five leadership practices of the LPI have been correlated in previous studies with the four behaviors of the transformational leadership model that are measured by the MLQ (Lummus, 2010). Table 1 displays a comparison of leadership characteristics between the LPI and MLQ.

Table 1

*A Comparison of Leadership Characteristics*

Leadership Practices Inventory (LPI)	Transformational Leader Model (MLQ)
Model the Way	Idealized Influence
Inspiring a Shared Vision	Inspirational Motivation
Challenging the Process	Intellectual Stimulation
Enabling Others to Act	Intellectual Stimulation
Encouraging the Heart	Individualized Consideration

While there are five leadership practices and only four behaviors of the transformational leadership in the MLQ, previous studies have indicated that one of the behaviors on the MLQ maps to two different leadership practices in the LPI. The four behaviors of transformational leadership in the MLQ are; idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.



## Data Collection

The current study utilized SurveyMonkey to distribute and collect scores on the LPI. Each participant who volunteered for the training intervention and study was sent a link to the survey. The survey included information and direction regarding consent for participation in the study, in addition to demographic data presented in Appendix A. The survey included general demographic information; age, gender, field of service – adult corrections, juvenile corrections, adult probation, juvenile probation - tenure in the field, tenure as a leader/manager/supervisor, etc. The survey included the scales/questions of the LPI. Permission was granted to use the instrument, see Appendix B. The training intervention took place on six separate dates and had a set agenda, which may be viewed in Appendix C. Three of the sessions included participants who received transformational leadership training only. These three sessions of transformational leadership were the comparison group. Three of the sessions included participants who received transformational leadership and motivational interviewing training. These three sessions primarily including motivational interviewing were the experimental group. The trainings occurred in partnership with CMIT, as explained in Appendix D. Within the month following training, the participants received feedback and a phone call coaching session from the researcher of the current study. The coaching session included brief coaching on the results of the LPI and a plan for improvement centered on the intervention received by the participant. For consistency, this was a scripted coaching session, detailed in Appendix E. The coaching session ended with an action plan for improvement determined by the participants, as delineated in Appendix F. Within 60 to 90 days after

the intervention, the participants who had completed a pre-study survey received a link to complete a post-study survey with linking information and the LPI. The researcher's role included setting up the survey, interpreting results, delivering the interventions, providing a telephonic coaching interview, setting up and interpreting the follow-up survey, and interpreting the results. The researcher for the current study has completed a certificate for scoring and coaching the LPI. The researcher completed all coursework for a doctoral degree in leadership. The researcher is a member of the MINT. The co-trainer for each of the interventions is a certified facilitator of *The Leadership Challenge* curriculum. The co-trainer taught the framework of *The Leadership Challenge*.

### **Procedures and Data Analysis**

The results of each participant's LPI was placed into a Statistical Package for Social Sciences (SPSS) database. The data from the participants in the transformational leadership trainings were separated and compared with the data from the participants in the motivational interviewing and transformational leadership trainings. The data was analyzed by examining the scores of each participant utilizing SPSS using an ANCOVA.

**Research Question 1 (RQ1):** Is there a significant difference between the mean LPI overall score and subscale scores of the experimental group and comparison group after training for mid-managers?

H<sub>10</sub>: There is no significant difference between the mean LPI overall score of the experimental group and the comparison group.

H<sub>1</sub>: There is a significant difference between the mean LPI overall score of the experimental group and the comparison group.

The hypotheses were evaluated using an ANCOVA comparing differences of the overall LPI score, which were obtained by adding the five subscales of the LPI, between participants attending transformational leadership training and participants attending motivational interviewing and transformational leadership training. Utilizing an overall leadership behavior score has been an established practice in research (Bowles & Bowles, 2000; B. Posner, personal communication, August 19, 2016).

H2<sub>0</sub>: There is no significant difference between the mean Modeling the Way subscale scores of the experimental group and comparison group.

H2: There is a significant difference between the mean Modeling the Way subscale scores of the experimental group and comparison group.

H3<sub>0</sub>: There is no significant difference between the mean Challenging the Process subscale scores of the experimental group and comparison group.

H3: There is a significant difference between the mean Challenging the Process subscale scores of the experimental group and comparison group.

H4<sub>0</sub>: There is no significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and comparison group.

H4: There is a significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and comparison group.

H5<sub>0</sub>: There is no significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

H5: There is a significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

H6<sub>0</sub>: There is no significant difference between the mean Enabling Others to Act subscale scores of the experimental group and comparison group.

H6: There is a significant difference between the mean Enabling Others to Act subscale scores of the experimental group and comparison group.

There was also testing for mean differences of each of the subscales of the LPI between the experimental group and the comparison group. This was accomplished by utilizing an ANCOVA. The subscale scores of the LPI was the dependent variable, and the interventions received served as the independent variable.

All data were analyzed at the 95 % level of significance. The data was analyzed utilizing SPSS (24.0). A paired samples *t*-test was conducted to analyze within-group differences of each intervention. The demographic data will be descriptive of the sample from the various groups.

### **Ethical Considerations**

There were limited risks to the participants in the current study. The risks were associated with demographic data and any uneasiness from participation in a training intervention and phone coaching session. Essentially, the only risk was of the data being identified, but all data was de-identified in the current study. The benefits consisted of free leadership training, knowledge of areas of leadership strength and weakness, and practice and feedback of leadership skills. Any risks were mitigated by autonomy and confidentiality of limited data. The autonomy was available in the form of the voluntariness of the study and consent to participate. The data was only identifiable by the researcher, and participants were de-identified for purposes of the current study.

There was the possibility of ethical considerations concerning the use of motivational interviewing in a leadership context. Passmore (2011) explored ethical considerations in a coaching environment, which may occur within an organizational context. The author highlighted ethical situations that occur when a manager is concerned with performance issues of employees. Miller and Rollnick (2013) have expressed similar concerns about the application of motivational interviewing when there is a power differential evident, such as an employer-employee relationship. Motivational interviewing, done purely, would reduce this from being a concern. The managers involved in the training interventions were exposed to the concerns and the boundaries. The manipulation or control of an employee is outside the context of motivational interviewing. Manipulation carries its own ethical concerns, and control or directing behavior is sometimes necessary for leaders and would not appropriately involve the use of motivational interviewing. The four concepts of the spirit of motivational interviewing would likely remain during all situations, and a holding to them reduces the likelihood of manipulation.

## CHAPTER 4. RESULTS

### Introduction

The purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The justification for the current study stems from the research (Burns, 1978; Deci & Ryan, 2000; Heifetz, 1994; Kotter, 1996) that examined engaging followers in the solving of their own problems and of change occurring through the exploring of, and drawing on, followers' own intrinsic motivation. The current study explored a possible path to becoming a more transformational leader through the use of motivational interviewing and examined how the use of motivational interviewing might address the criticisms of transformational leadership.

The current study attempted to address the problem of clarity on how to become a more transformational leader. The current study utilized a quantitative approach to address the problem by proposing a research plan emphasizing training that places motivational interviewing as a clarifying element of traditional transformational leadership, in comparison to a more traditional approach. The current study examined the differences between traditional transformational leadership training, the Leadership Challenge, and a training that viewed transformational leadership through the lens of motivational interviewing.

This chapter begins with a description of the sample for the current study and presents the findings of the data analysis using a One Way Between Groups Analysis of Covariance (ANCOVA) to answer the research questions and test corresponding hypotheses. The particular analysis technique was selected to demonstrate the differences between leadership behaviors of the participants in each of the trainings post-intervention. The ANCOVA is particularly useful when there are small sample sizes, and when there is an inability to randomly assign participants to different groups. An additional statistical analysis, a paired sample *t*-test, was used to explore the impact of each training intervention on the participants' self-perceptions of leadership. The additional analyses, using paired sample *t*-tests, ended up being ancillary to the current study after the findings for the ANCOVA. The data were analyzed using the Statistical Package for Social Sciences (SPSS) version 24 software.

### **Description of the Sample**

The participants in the current study voluntarily registered for a free training on leadership. These trainings were distributed to multiple training email lists operated by the Correctional Management Institute of Texas. Agency leaders were invited to respond indicating interest for hosting the free trainings. Thirty-seven agency leaders requested to host the trainings in their jurisdiction. The only requirements were to offer free training space and to commit to at least 30 participants with a maximum of 60. Initially, four sites were chosen. Due to a need for participants, two other additional sites were selected.

The Correctional Management Institute determined six locations loosely based on the following criteria; agency commitment, larger geographic areas, and the ability to pair

back to back trainings. The pairings involved one Leadership Challenge training and one Motivational Interviewing training. The trainings were conducted in six different locations and were offered to criminal justice leaders. The six locations and pairings included the following counties in Texas: Midland/Lubbock; Dallas/Tarrant; and Travis/Gillespie.

A link to the Leadership Practices Inventory (LPI), along with ten demographic questions, was distributed to 281 registered training participants. The LPI was distributed through a private SurveyMonkey account, via the email address of each registered participant. The participants voluntarily registered for free trainings at the six locations and were aware that the trainings were a part of a research project. Three of these locations were designated to receive a traditional version of The Leadership Challenge, and 138 individuals registered for these trainings. Three of the locations were designated to receive a leadership training focused on Motivational Interviewing, and 143 individuals registered for these trainings.

The participants were not aware of the difference in the trainings at the time of registration. The participants were aware that the trainings would be focused on leadership behaviors, through the lens of transformational leadership. The locations for each type of training were chosen at random. Each of the registered participants was sent the LPI as a pre-measure of their perceived leadership behaviors. The return rate of the instruments at pre-test was 86%. Two hundred and forty pre-test instruments were returned from the two hundred eighty-one registered for all six trainings prior to the participants receiving a training intervention.



Each person who completed a pre-test instrument was given feedback about the meaning of their results within 30 days of having received a training intervention. Of those who completed a pre-test instrument, only 120 post-test instruments were returned. This resulted in a return rate of 50% of post-tests where there had been a pre-test. While the pre-test instruments were sent prior to the trainings, the feedback was given within 30 days after the training, and the post-test instruments were sent between 60 to 90 days post-training intervention to each of the 240 who completed training and a pre-test LPI. Only 107 of the 120 returned post-test instruments were fully completed, which resulted in 13 of the instruments being discarded from the analysis. The demographic information for the 107 participants who completed both the pre-test and post-test instruments included 55 individuals in the Leadership Challenge trainings and 52 individuals in the Motivational Interviewing trainings. The additional demographic information for the participants is included. Figure 1 displays the age range of the sample participants.

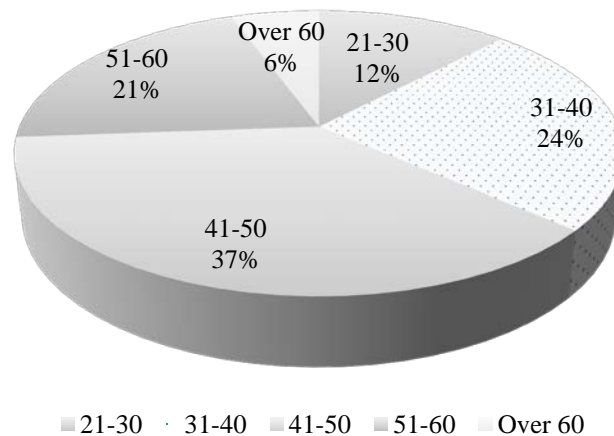
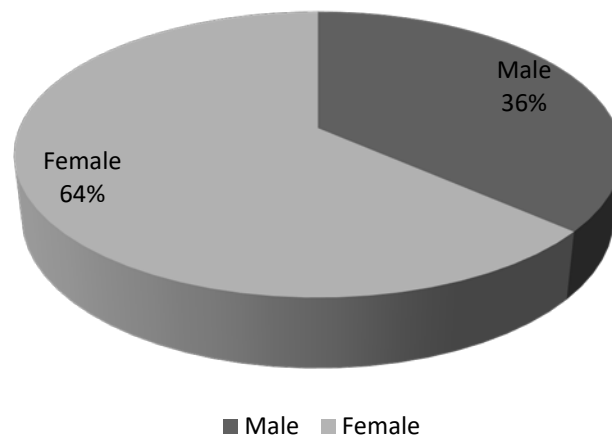


Figure 1. Age Range of Training Participants.

Most of the participants were over 41 years of age. The participants involved were likely a mature group of middle managers. There were six individuals over the age of 60.

Figure 2 displays the distribution by percentage of the participants' gender. The gender of the participants in the trainings was overwhelmingly female. The intervention was a training offered to mid-managers in a criminal justice setting. It is unlikely that the field is dominated by females. It is difficult to say why more females might sign up for a leadership training, or if they for some reason were more likely to follow through with the surveys.



*Figure 2. Gender of Participants by Percentage.*

Figure 3 displays the area of practice for the participants. The training was offered to mid managers in a criminal justice setting, and there was broad participation from various criminal justice settings. There was only a single law enforcement officer who followed through with a pre and post survey. Adult probation officers were the dominant representative among the training participants.

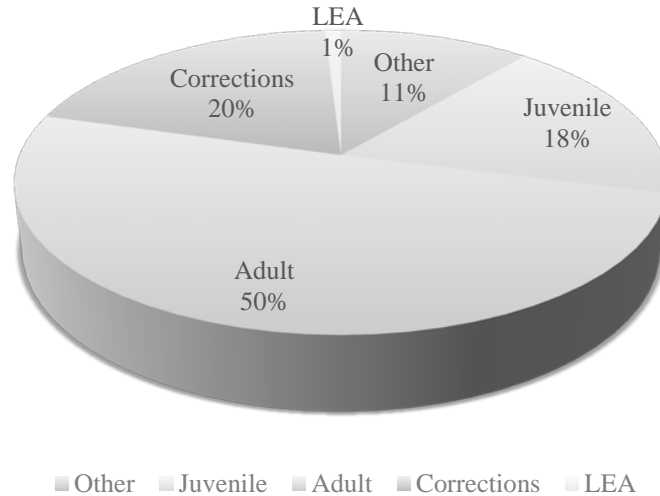


Figure 3. Area of Practice for Training Participants.

Figure 4 displays the tenure in the field of corrections by years. The training participants were not only a more mature group, in terms of age, but were also quite tenured. Almost 60% of the group had been in the criminal justice field for over 11 years. Over a quarter of the group had been in the field longer than 21 years.

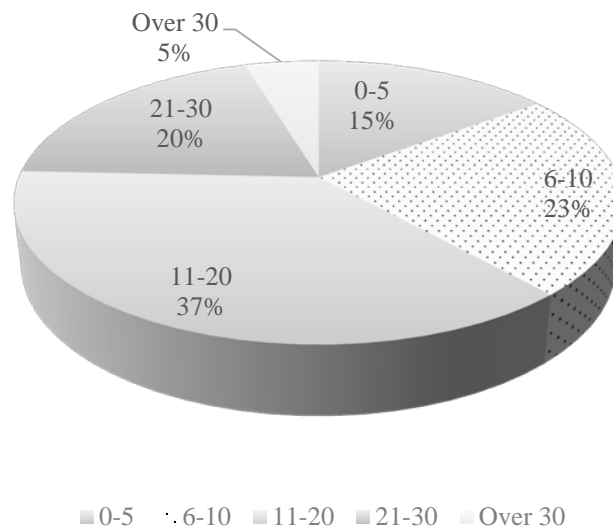
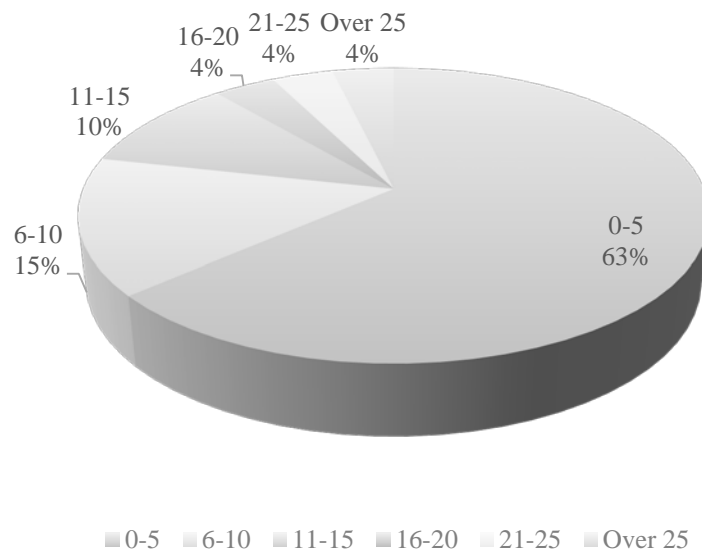


Figure 4. Tenure in Field of Corrections by Years.

Figure 5 displays the tenure of the participants' in a leadership position by years. The leadership tenure of this group was a departure from some of the other demographics in terms of maturity. Despite having an older group in terms of age, and a majority of the group having extensive experience, over two thirds of the training participants had been in leadership roles for less than a decade, with a majority having been in mid-manager roles less than five years.



*Figure 5. Tenure in a Leadership Position by Years.*

Figure 6 displays the level of education for the participants. The education level for the participants was primarily at the Bachelor's degree level. Those with graduate education experience were similar in percentage with those in the sample without a college degree.

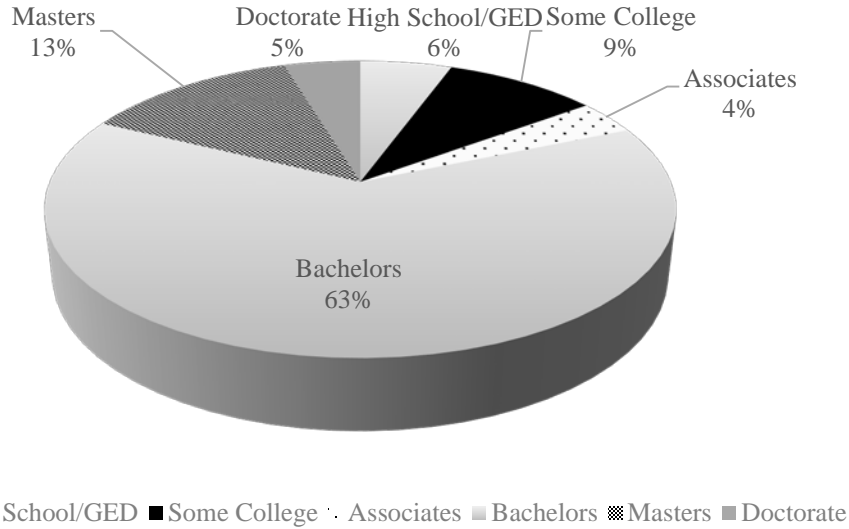


Figure 6. Level of Education of Training Participants.

Figure 7 displays the number of participants' attendance of previous motivational interviewing training sessions. Motivational interviewing training has been prominent in the criminal justice field (Clark & Stinson, 2017). Despite this prominence, 45% of the participants had never attended a single session. A slight majority of the participants had been exposed to motivational interviewing training of some kind. Over 40% of the participants had been to multiple trainings.

Figure 8 displays the number of participants' attendance of previous The Leadership Challenge training sessions. The Leadership Challenge training, though it has a fairly lengthy history, was not something the mid manager participants had been exposed to previously. Only 7% of the participants had been through a previous training. One hundred of the participants were exposed to these five practices of exemplary leadership behavior for the first time during the interventions.

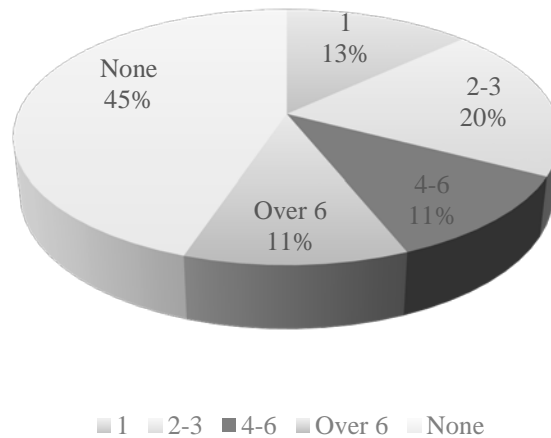


Figure 7. Number of Previous Sessions of MI for Training Participants.

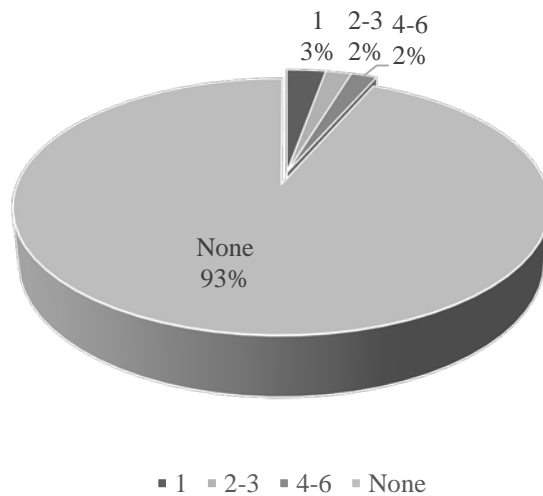


Figure 8. Number of Previous Sessions of TLC for Training Participants.

### Findings

In both groups, the overall LPI scores of the participants increased after the intervention. In the group receiving *The Leadership Challenge* (TLC) training, the overall LPI score increased by a little more than 31 points. This was a slightly larger increase in mean scores than the more than 21 point increase in overall LPI score for the

motivational interviewing (MI) group. The research question of the current study involved comparing the two interventions in order to determine if there were differences. The experimental group for the current study was the group that received a Motivational Interviewing (MI) intervention. The comparison group received The Leadership Challenge (TLC) intervention.

The analysis was conducted to examine the differences between the two interventions and addressed the research question. The ANCOVA statistical technique was used to answer the research question regarding statistically significant differences, if any, in the comparison of each intervention while accounting for the differences in each sample.

**Research Question 1 (RQ1):** Is there a significant difference between the mean LPI overall score and subscale scores of the experimental group and comparison group after training for mid-managers?

H<sub>10</sub>: There is no significant difference between the mean LPI overall score of the experimental group and the comparison group.

H<sub>1</sub>: There is a significant difference between the mean LPI overall score of the experimental group and the comparison group.

The hypotheses were evaluated using an ANCOVA comparing differences of the overall LPI score, which are obtained by adding the five subscales of the LPI, between participants attending transformational leadership training (TLC) and participants attending motivational interviewing and transformational leadership training (MI). Utilizing an overall leadership behavior score has been an established practice in research

(Bowles & Bowles, 2000; B. Posner, personal communication, August 19, 2016). The data was checked for accuracy and tests of normality were conducted. The data met the tests of normality. With regards to overall LPI score, the null hypothesis was not rejected and there was no significant difference between the overall LPI scores of the experimental group and the comparison group

Table 2 displays the one way between groups analysis of covariance of overall LPI score. A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of scores on the LPI administered after the intervention was completed. Participants' scores on the pre-intervention administration of the LPI were used as the covariate in this analysis.

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention scores on the LPI,  $F(1, 104) = 2.48$ ,  $p = .12$ , partial eta squared = .02. There was a strong relationship between the pre-intervention and post-intervention scores on the LPI, as indicated by a partial eta squared value of .47.

With regards to the Modeling the Way subscale scores, the null hypothesis was not rejected and there was no significant difference between the Modeling the Way



subscale scores of the experimental group and the comparison group.

Table 2

*Analysis of Covariance Summary for Overall LPI Scores*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	50280.903 <sup>a</sup>	2	25140.451	46.024	.000	.470
Intercept	44398.834	1	44398.834	81.280	.000	.439
LPI	49965.592	1	49965.592	91.471	.000	.468
Training type	1352.716	1	1352.716	2.476	.119	.023
Error	56809.265	104	546.243			
Total	6589192.000	107				
Corrected Total	107090.168	106				

\*\*p < 0.05

**Modeling the Way**

H2<sub>0</sub>: There is no significant difference between the mean Modeling the Way subscale scores of the experimental group and the comparison group.

H2: There is a significant difference between the mean Modeling the Way subscale scores of the experimental group and the comparison group.

Table 3 displays the Modeling the Way one-way between groups analysis of covariance.

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of Modeling the Way subscale scores on the LPI administered after the intervention was completed. Participants' scores on the pre-

intervention administration of the LPI Modeling the Way subscale scores were used as the covariate in this analysis.

Table 3

*Analysis of Covariance Summary for Modeling the Way*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1553.823 <sup>a</sup>	2	776.911	44.196	.000	.459
Intercept	2270.263	1	2270.263	129.148	.000	.554
Model the Way	1524.354	1	1524.354	86.715	.000	.455
Training type	47.386	1	47.386	2.696	.104	.025
Error	1828.196	104	17.579			
Total	273991.000	107				
Corrected Total	3382.019	106				

\*\*p < 0.05

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention Modeling the Way subscale scores on the LPI,  $F(1, 104) = 2.70$ ,  $p = .10$ , partial eta squared = .03. There was a strong relationship between the pre-intervention and post-intervention Modeling the Way subscale scores on the LPI, as indicated by a partial eta squared value of .46.

In the case of Challenging the Process subscale scores, the null hypothesis was not rejected and there was no significant difference between the Challenging the Process

subscale scores of the experimental group and the comparison group.

### **Challenging the Process**

H3<sub>0</sub>: There is no significant difference between the mean Challenging the Process subscale scores of the experimental group and the comparison group.

H3: There is a significant difference between the mean Challenging the Process subscale scores of the experimental group and the comparison group.

Table 4 displays the Challenge the Process one-way between groups analysis of covariance. A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of challenging the process subscale scores on the LPI administered after the intervention was completed. Participants' scores on the pre-intervention administration of the LPI Challenging the Process subscale scores were used as the covariate in this analysis.

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention Challenging the Process subscale scores on the LPI,  $F(1, 104) = 1.92, p = .17, \text{partial eta squared} = .02$ . There was a strong

relationship between the pre-intervention and post-intervention Challenging the Process subscale scores on the LPI, as indicated by a partial eta squared value of .47.

Table 4

*Analysis of Covariance Summary for Challenging the Process*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3331.735 <sup>a</sup>	2	1665.868	46.000	.000	.469
Intercept	2219.404	1	2219.404	61.284	.000	.371
Challenge the Process	3315.441	1	3315.441	91.549	.000	.468
Training type	69.395	1	69.395	1.916	.169	.018
Error	3766.340	104	36.215			
Total	247710.000	107				
Corrected Total	7098.075	106				

\*\*p < 0.05

With regards to the Inspiring a Shared Vision subscale scores, the null hypothesis was not rejected and there was no significant difference between the Inspiring a Shared Vision subscale scores of the experimental group and the comparison group.

**Inspiring a Shared Vision**

H4<sub>0</sub>: There is no significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and the comparison group.

H4: There is a significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and the comparison group.

Table 5 displays the Inspiring a Shared Vision one-way between groups analysis of covariance. A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of Inspiring a Shared Vision subscale scores on the LPI administered after the intervention was completed. Participants' scores on the pre-intervention administration of the LPI Inspiring a Shared Vision subscale scores were used as the covariate in this analysis.

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention Inspiring a Shared Vision subscale scores on the LPI,  $F(1, 104) = 1.48, p = .23, \text{partial } \eta^2 = .01$ . There was a strong relationship between the pre-intervention and post-intervention Inspiring a Shared Vision subscale scores on the LPI, as indicated by a partial eta squared value of .39.

With regards to the Encouraging the Heart subscale scores, the null hypothesis was not rejected and there was no significant difference between the Encouraging the Heart subscale scores of the experimental group and the comparison group.

### **Encouraging the Heart**

H5<sub>0</sub>: There is no significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

H5: There is a significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

Table 5

*Analysis of Covariance Summary for Inspiring a Shared Vision*

Source	Type III Sum of			F	Sig.	Partial Eta Squared
	Squares	df	Mean Square			
Corrected Model	2672.450 <sup>a</sup>	2	1336.225	32.976	.000	.388
Intercept	4565.158	1	4565.158	112.661	.000	.520
Inspire Vision	2649.381	1	2649.381	65.383	.000	.386
Training type	59.925	1	59.925	1.479	.227	.014
Error	4214.204	104	40.521			
Total	244379.000	107				
Corrected Total	6886.654	106				

\*\*p < 0.05

Table 6 displays the Encouraging the Heart one-way between groups analysis of covariance. A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of Encouraging the Heart subscale scores on the LPI administered after the intervention was completed. Participants' scores on the pre-intervention administration of the LPI Encouraging the Heart subscale scores were used as the covariate in this analysis.

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances,

Table 6

*Analysis of Covariance Summary for Encouraging the Heart*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3682.682 <sup>a</sup>	2	1841.341	47.397	.000	.477
Intercept	2534.517	1	2534.517	65.240	.000	.385
Encourage Heart	3680.436	1	3680.436	94.737	.000	.477
Training type	89.654	1	89.654	2.308	.132	.022
Error	4040.290	104	38.849			
Total	266397.000	107				
Corrected Total	7722.972	106				

\*\*p < 0.05

homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention Encouraging the Heart subscale scores on the Leadership Practices Inventory,  $F(1, 104) = 2.31, p = .13$ , partial eta squared = .02. There was a strong relationship between the pre-intervention and post-intervention Encouraging the Heart subscale scores on the LPI, as indicated by a partial eta squared value of .48.

With regards to the Enabling Others to Act subscale scores, the null hypothesis was not rejected and there was no significant difference between the Enabling Others to Act subscale scores of the experimental group and the comparison group.

## **Enabling Others to Act**

H<sub>0</sub>: There is no significant difference between the mean Enabling Others to Act subscale scores of the experimental group and the comparison group.

H<sub>6</sub>: There is a significant difference between the mean Enabling Others to Act subscale scores of the experimental group and the comparison group.

Table 7 displays the Enabling Others to Act one-way between groups analysis of covariance. A one-way between-groups analysis of covariance was conducted to compare the effectiveness of two different interventions designed to improve participants' awareness of leadership behaviors. The independent variable was the type of intervention and the dependent variable consisted of Enabling Others to Act subscale scores on the LPI administered after the intervention was completed. Participants' scores on the pre-intervention administration of the LPI Enabling Others to Act subscale scores were used as the covariate in this analysis.

Preliminary checks were conducted. The check was done to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, in addition to a reliable measurement of the covariate. After adjusting for pre-intervention scores, there was no significant difference between the two intervention groups for post-intervention Enabling Others to Act subscale scores on the LPI,  $F(1, 104) = 1.03$ ,  $p = .31$ , partial eta squared = .01. There was a strong relationship between the pre-intervention and post-intervention Enabling Others to Act subscale scores on the LPI, as indicated by a partial eta squared value of .40.



Table 7

*Analysis of Covariance Summary for Enabling Others to Act*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1313.981 <sup>a</sup>	2	656.990	35.167	.000	.403
Intercept	1041.722	1	1041.722	55.761	.000	.349
Enabling Others	1310.020	1	1310.020	70.122	.000	.403
Training type	19.215	1	19.215	1.029	.313	.010
Error	1942.916	104	18.682			
Total	294147.000	107				
Corrected Total	3256.897	106				

\*\*p < 0.05

### Ancillary Analyses

Despite there being no statistically significant differences between the scores for each intervention, there were increases for each intervention. Ancillary analyses was conducted to further examine the increase in scores within each intervention. Paired sample t-tests were conducted for both *The Leadership Challenge* (TLC) or comparison group pre and post-intervention and the Motivational Interviewing (MI) or experimental group pre and post-intervention to determine if the increases for each group's post-intervention were statistically significant. In other words, did each intervention have a significant impact on the leadership behaviors of the participants? Paired sample t-tests were conducted because they are useful when collecting data from a sample on two different occasions. The eta squared results for the paired sample t-tests were calculated

by hand. A pre/post-test experimental design is appropriate for this technique, and also provides a calculation for effect size (Pallant, 2013).

Table 8 displays the paired samples t-test for overall scores of the LPI for the TLC group. A paired-samples t-test was conducted to evaluate the impact of the TLC intervention on overall scores for the LPI. There was a statistically significant increase in overall LPI scores from pre-intervention (M = 216.58, SD = 37.15) to post-intervention (M=247.80, SD = 29.94),  $t(54) = 8.43$ ,  $p < .001$  (two-tailed). The mean increase in LPI scores was 31.22 with a 95% confidence interval ranging from 23.79 to 38.64. The eta squared statistic (.57) indicated a large effect size (Pallant, 2013).

Table 8

*Descriptive Statistics and Paired Samples t-test Results for the Overall Scores of the Leadership Practices Inventory (LPI) for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 TLC2 – TLC1	31.21818	27.47031	3.70410	23.79192	38.64445	8.428	54	.000

\* $p < 0.001$

Table 9 displays the paired samples t-test for the overall scores on the LPI for the motivational interviewing (MI) group. A paired-samples t-test was conducted to evaluate the impact of the Motivational Interviewing intervention on overall scores for the LPI. There was a statistically significant increase in LPI scores from pre-intervention (M = 223.06, SD = 39.13) to post-intervention (M=244.37, SD = 33.83),  $t(51) = 5.23$ ,  $p < .001$  (two-tailed). The mean increase in overall LPI scores was 21.31 with a 95% confidence

interval ranging from 13.13 to 29.48. The eta squared statistic (.35) indicated a large effect size (Pallant, 2013).

Table 9

*Descriptive Statistics and Paired Samples t test Results for the Overall Scores of the Leadership Practices Inventory (LPI) for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
1 MI2 - MI1	21.30769	29.36954	4.07282	13.13116	29.48423	5.232	51	.000

\*p < 0.001

In both interventions, there was a statistically significant increase in the LPI scores of the participants' post-intervention. The effect sizes of the differences before and after the interventions were also large. The self-perception from each group showed an increase in the overall leadership behaviors

For additional ancillary analyses, paired sample t-tests were conducted for each of the subscale scores of the LPI; Modeling the Way, Inspiring a Shared Vision, Challenging the Process, Encouraging the Heart, and Enabling Others to Act. These paired sample t-tests measured the impact of each intervention. The question asked for each subscale was did the intervention result in an increase in each of the five exemplary behaviors from the LPI? The training involving the Leadership Challenge (TLC) or comparison group for all five subscales, and the motivational interviewing (MI) or experimental group for all five subscales was analyzed. The paired sample t-tests for each

subscale allowed the examination for the impact of each training intervention on each of the subscales.

Table 10 displays the Modeling the Way for TLC paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the TLC intervention on overall the Modeling the Way subscale scores for the LPI. There was a statistically significant increase in Modeling the Way scores from pre-intervention (M = 45.25, SD = 7.38) to post-intervention (M=50.80, SD = 5.13),  $t(54) = 7.03$ ,  $p < .001$  (two-tailed). The mean increase in Modeling the Way subscale scores was 5.55 with a 95% confidence interval ranging from 3.96 to 7.13. The eta squared statistic (.48) indicated a large effect size (Pallant, 2013).

Table 10

*Descriptive Statistics and Paired Samples t test Results for Modeling the Way for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 MW2 - MW1	5.54545	5.85257	.78916	3.96328	7.12762	7.027	54	.000

\* $p < 0.001$

Table 11 displays the Modeling the Way for MI paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the MI intervention on the Modeling the Way subscale scores for the LPI. There was a statistically significant increase in Modeling the Way scores from pre-intervention (M = 45.83, SD = 8.07) to

post-intervention (M=49.75, SD = 6.25),  $t(51) = 5.07$ ,  $p < .001$  (two-tailed). The mean increase in Modeling the Way subscale scores was 3.92 with a 95% confidence interval ranging from 2.37 to 5.48. The eta squared statistic (.34) indicated a large effect size (Pallant, 2013).

Table 11

*Descriptive Statistics and Paired Samples t test Results for Modeling the Way for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 MW2 – MW1	3.92308	5.57602	.77325	2.37070	5.47545	5.073	51	.000

\* $p < 0.001$

Table 12 displays the Inspire a Shared Vision for TLC paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the TLC intervention on the Inspire a Shared Vision subscale scores for the LPI. There was a statistically significant increase in Inspire a Shared Vision scores from pre-intervention (M = 39.44, SD = 9.91) to post-intervention (M=47.56, SD = 8.05),  $t(54) = 7.78$ ,  $p < .001$  (two-tailed). The mean increase in Inspire a Shared Vision subscale scores was 8.13 with a 95% confidence interval ranging from 6.03 to 10.22. The eta squared statistic (.53) indicated a large effect size (Pallant, 2013).

Table 13 displays the Inspire a Shared Vision for the MI paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the MI intervention on the

Inspire a Shared Vision subscale scores for the LPI. There was a statistically significant increase in Inspire a Shared Vision scores from pre-intervention (M = 40.58, SD = 10.17) to post-intervention (M=46.63, SD = 8.12),  $t(51) = 5.19$ ,  $p < .001$  (two-tailed). The mean increase in Inspire a Shared Vision subscale scores was 6.06 with a 95% confidence interval ranging from 3.71 to 8.40. The eta squared statistic (.35) indicated a large effect size (Pallant, 2013).

Table 12

*Descriptive Statistics and Paired Samples t test Results for Inspiring a Shared Vision for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 SV2 - SV1	8.12727	7.74371	1.04416	6.03386	10.22069	7.784	54	.000

\* $p < 0.001$

Table 13

*Descriptive Statistics and Paired Samples t test Results for Inspiring a Shared Vision for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 SV2 - SV1	6.05769	8.42129	1.16782	3.71319	8.40220	5.187	51	.000

\* $p < 0.001$

Table 14 displays the Challenging the Process for TLC paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the TLC intervention on Challenging the Process subscale scores for the LPI. There was a statistically significant increase in Challenging the Process scores from pre-intervention (M = 41.09, SD = 9.32) to post-intervention (M=47.80, SD = 7.94),  $t(54) = 6.87, p < .001$  (two-tailed). The mean increase in Challenging the Process subscale scores was 6.71 with a 95% confidence interval ranging from 4.75 to 8.67. The eta squared statistic (.47) indicated a large effect size (Pallant, 2013).

Table 14

*Descriptive Statistics and Paired Samples t test Results for Challenging the Process for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 CP2 - CP1	6.70909	7.24613	.97707	4.75019	8.66799	6.867	54	.000

\*p < 0.001

Table 15 displays the Challenging the Process for MI paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the MI intervention on the Challenging the Process subscale scores for the LPI. There was a statistically significant increase in Challenging the Process scores from pre-intervention (M = 42.44, SD = 8.85) to post-intervention (M=47.02, SD = 8.49),  $t(51) = 5.03, p < .001$  (two-tailed). The mean increase in Challenging the Process subscale scores was 4.58 with a 95% confidence

interval ranging from 2.75 to 6.40. The eta squared statistic (.33) indicated a large effect size (Pallant, 2013).

Table 15

*Descriptive Statistics and Paired Samples t test Results for Challenging the Process for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 CP2 - CP1	4.57692	6.56594	.91053	2.74895	6.40489	5.027	51	.000

\*p < 0.001

Table 16 displays the Encouraging the Heart for TLC paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the TLC intervention on Encouraging the Heart subscale scores for the LPI. There was a statistically significant increase in Encouraging the Heart scores from pre-intervention (M = 42.98, SD = 9.82) to post-intervention (M=49.31, SD = 7.85),  $t(54) = 6.68$ ,  $p < .001$  (two-tailed). The mean increase in Encouraging the Heart subscale scores was 6.33 with a 95% confidence interval ranging from 4.43 to 8.23. The eta squared statistic (.45) indicated a large effect size (Pallant, 2013).

Table 17 displays the Encouraging the Heart for MI paired samples t-test. A paired-samples t-test was conducted to evaluate the impact of the MI intervention on the Encouraging the Heart subscale scores for LPI.



Table 16

*Descriptive Statistics and Paired Samples t test Results for Encouraging the Heart for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 EH2 - EH1	6.32727	7.02128	.94675	4.42916	8.22539	6.683	54	.000

\*p < 0.001

There was a statistically significant increase in Encouraging the Heart scores from pre-intervention (M = 45.58, SD = 9.91) to post-intervention (M=49.02, SD = 9.28),  $t(51) = 3.23$ ,  $p < .001$  (two-tailed). The mean increase in Encouraging the Heart subscale scores was 3.44 with a 95% confidence interval ranging from 1.30 to 5.58. The eta squared statistic (.17) indicated a large effect size (Pallant, 2013).

Table 17

*Descriptive Statistics and Paired Samples t test Results for Encouraging the Heart for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 EH2 - EH1	3.44231	7.68348	1.06551	1.30321	5.58140	3.231	51	.002

\*p < 0.001

Table 18 displays the Enabling Others to Act for TLC paired samples t-test. A paired-samples *t*-test was conducted to evaluate the impact of the TLC intervention on Enabling Others to Act subscale scores for the LPI. There was a statistically significant increase in Enabling Others to Act scores from pre-intervention ( $M = 47.82$ ,  $SD = 5.83$ ) to post-intervention ( $M=52.33$ ,  $SD = 5.48$ ),  $t(54) = 6.66$ ,  $p < .001$  (two-tailed). The mean increase in overall LPI scores was 4.51 with a 95% confidence interval ranging from 3.15 to 5.87. The eta squared statistic (.45) indicated a large effect size (Pallant, 2013).

Table 18

*Descriptive Statistics and Paired Samples t test Results for Enabling Others to Act for The Leadership Challenge Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 E01 - E02	4.50909	5.01801	.67663	3.15253	5.86565	6.664	54	.000

\* $p < 0.001$

Table 19 displays the Enabling Others to Act for MI paired samples t-test. A paired-samples *t*-test was conducted to evaluate the impact of the MI intervention on overall the Enabling Others to Act subscale scores for the Leadership Practices Inventory (LPI). There was a statistically significant increase in Enabling Others to Act scores from pre-intervention ( $M = 48.63$ ,  $SD = 6.58$ ) to post-intervention ( $M=51.94$ ,  $SD = 5.65$ ),  $t(51) = 4.67$ ,  $p < .001$  (two-tailed). The mean increase in Enabling Others to Act subscale

scores was 3.31 with a 95% confidence interval ranging from 1.88 to 4.73. The eta squared statistic (.30) indicated a large effect size (Pallant, 2013).

In both interventions, there was a statistically significant increase in each of the subscale scores of the participants' post-intervention. The effect sizes of the differences before and after the interventions were also large. The self-perception from each group showed an increase in each of the five subscale scores, or an increase in each of the five practices of leadership behavior.

Table 19

*Descriptive Statistics and Paired Samples t test Results for Enabling Others to Act for the Motivational Interviewing Group*

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 E02 - E01	3.30769	5.11261	.70899	1.88433	4.73105	4.665	51	.000

\*p < 0.001

### Summary

The purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The current study did not lead to overall differences between the participants in each training intervention in the LPI scores, or in subscale scores such as Modeling the Way, Challenging the Process, Inspiring a Shared Vision, Encouraging the Heart, or Enabling Others. However, each individual training intervention did show

the ability to impact the self-perceptions of transformational leadership in a criminal justice setting as indicated in the paired samples t-tests. There is a reason to believe that the current study did push the field of leadership further that will be discussed in Chapter 5. The reasons are due to significant increases in self-perceptions of leadership behaviors, including soft skills, after a brief leadership development training intervention.

## CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

### Introduction

The purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The current study identified differences in leadership behavior practices based on perceptions of individual leaders. The One way Between Groups Analysis of Covariance (ANCOVA) and paired sample *t*-tests were the two primary statistical measures that were used in the current study to examine this impact.

**Research Question 1 (RQ1):** Is there a significant difference between the mean overall LPI total scores or subscale scores of the experimental group and comparison group after training for mid-managers?

The current study's independent variable was the training intervention received: either *The Leadership Challenge* training or Motivational Interviewing and Leadership training. The dependent variable was the overall score for the LPI. The current study was conducted in six different counties throughout Texas and targeted criminal justice leaders. Chapter 5 presents a summary of the study and findings, a discussion of the results, implications, limitations, recommendations for future study, and conclusions.

## Summary of the Study

The literature indicating that transformational leadership is effective is robust (Avolio & Bass, 1998; Dvir et al., 2002; Northouse, 2010; Yukl, 2012). Less clear is how to become a transformational leader. Burns (1978), the seminal author on transformational leadership, stated that the study of leaders raised questions inherent in the complexity of the leadership process. The main purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The justification for this purpose stemmed from the research (Burns, 1978; Deci & Ryan, 2000; Heifetz, 1994; Kotter, 1996) that examined engaging followers in the solving of their own problems and changing through examining and drawing on their own intrinsic motivation. The current study explored a possible path to being a more transformational leader through the use of motivational interviewing. The current study attempted to address the problem of clarity on how to become a more transformational leader. The current study utilized a quantitative approach to address the problem through a research plan emphasizing training that places motivational interviewing as a clarifying element of traditional transformational leadership.

The method of research for the current study was a quantitative, quasi-experimental design. The goal was to establish whether or not there are differences between two groups; one with training in transformational leadership and the other with training in motivational interviewing and transformational leadership. The researcher

examined differences in self-perceptions of mid-managers, as rated by the individual managers.

The research design for the current study was a nonequivalent-groups pretest/posttest design. This design is often referred to as a quasi-experimental design and is commonly used in educational research (McMillan, 2008). A quasi-experimental design is similar to an experimental design but lacks the key ingredient of random assignment (Trochim, 2006). In addition, researchers are working in a field setting rather than a laboratory and have less control over the variables (Vogt, 2007).

For the current study, the design included an experimental group and a comparison group. The experimental group received an intervention of motivational interviewing and an introduction to transformational leadership training, while the comparison group received an intervention of a more traditional transformational leadership training. The trainings both described transformational leadership, with a focus on the five practices of exemplary leadership identified in *The Leadership Challenge*. The trainings also provided practical application of transformational leadership in everyday workplace situations.

The experimental group examined these practical applications through the lens of motivational interviewing. In both training interventions, the participants received 6.5 hours of training credit. In the experimental group, there was a one-hour introduction to transformational leadership, a one-hour introduction of the framework of the Leadership Challenge, and four and a half hours of motivational interviewing as the lens for the five leadership practices. In the comparison group, the participants received a one-hour

introduction to transformational leadership, and five and a half hours focused on the five leadership practices. The comparison group received a traditional one-day training of *The Leadership Challenge*. The experimental group received a training based on a curriculum developed by the researcher, with input from motivational interviewing experts interested in leadership, on Motivational Interviewing through a leadership lens.

Analysis of covariance, ANCOVA, can be used when there are two or more groups with a pre-test/post-test design. The current study utilized a pre-test and post-test design, comparing the impact of two interventions, taking before and after measures for each group. This is useful in situations where there are small sample sizes and only small or medium effect sizes. An ANCOVA is also useful when the researcher is unable to randomly assign the participants to the different groups but instead has to use existing groups (Pallant, 2013). The current study utilized a one-way between groups ANCOVA since there was one dependent variable and one independent variable. The dependent variable was the score on the LPI. The independent variable was the type of intervention. In addition, an ANCOVA was utilized with the dependent variable as each of the subscales from the LPI, and the independent variable remaining as the type of intervention. The additional variable, called a covariate, is a variable suspected of influencing scores on the dependent variable. The scores on the pre-test were treated as a covariate in that the pre-intervention scores control for possible pre-existing differences between the groups.

In addition, the current study included ancillary analyses and utilized a paired samples *t*-test for each of the interventions independently. A paired samples *t*-test was



used for each intervention after collecting data from the participants on two different occasions. The participants' mean overall LPI scores was measured pre-intervention and post-intervention for each type of training. In addition, each of the five subscale scores in the LPI was measured pre-intervention and post-intervention for each type of training.

### **Summary of Findings and Interpretation of Results**

The current study utilized the LPI. The LPI, which measures five transformational leader behaviors, was used to measure the impact of two specific training interventions: *the Leadership Challenge* training and Motivational Interviewing and Leadership training.

**Research Question 1 (RQ1):** Is there a significant difference between the mean LPI overall score and subscale scores of the experimental group and the comparison group after training for mid-managers?

H1<sub>0</sub>: There is no significant difference between the mean overall LPI score of the experimental group and the comparison group.

H1: There is a significant difference between the mean overall LPI score of the experimental group and the comparison group.

H2<sub>0</sub>: There is no significant difference between the mean Modeling the Way subscale scores of the experimental group and comparison group.

H2: There is a significant difference between the mean Modeling the Way subscale scores of the experimental group and comparison group.

H3<sub>0</sub>: There is no significant difference between the mean Challenging the Process subscale scores of the experimental group and comparison group.

H3: There is a significant difference between the mean Challenging the Process subscale scores of the experimental group and comparison group.

H4<sub>0</sub>: There is no significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and comparison group.

H4: There is a significant difference between the mean Inspiring a Shared Vision subscale scores of the experimental group and comparison group.

H5<sub>0</sub>: There is no significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

H5: There is a significant difference between the mean Encouraging the Heart subscale scores of the experimental group and comparison group.

H6<sub>0</sub>: There is no significant difference between the mean Enabling Others to Act subscale scores of the experimental group and comparison group.

H6: There is a significant difference between the mean Enabling Others to Act subscale scores of the experimental group and comparison group.

In the end, the null hypothesis failed to be rejected for the overall score, and all five of the subscales. In other words, the current study did not find significant differences between the experimental and comparison groups related to the research question. The effect size for each of the analysis of covariance was small. The post-scores for each analysis had a strong relationship to the pre-scores. Motivational Interviewing participants did not increase their self-perceived leadership behaviors more than the participants in The Leadership Challenge trainings.

Despite this being a brief one-day training for both sets of participants, the self-perceptions of leadership behavior did increase for both groups. As a result, the current study included ancillary analyses. In examining the groups independently through a paired samples *t*-test, there were significant findings. Each of the training interventions resulted in statistically significant findings. The Motivational Interviewing participants and *The Leadership Challenge* participants both showed significantly increased leadership behaviors post intervention as rated by the LPI self. This increase was seen in the mean LPI overall score, and in each of the subscale scores. For the paired sample *t*-tests, these effect sizes were large.

### **Implications**

Because of the small sample sizes in each of the comparison groups, the results are not generalizable. The current study focused on mid managers in a criminal justice setting. As a result, the findings are not generalizable outside of a criminal justice environment. The results are not generalizable to employees who are not mid-managers.

The impact of training on self-perceptions of mid-managers yielded a significant finding. The increased scores in the intervention focused on the Leadership Challenge might be somewhat expected due to this training intervention being focused specifically on the five leadership practices measured by the LPI. In other words, the instrument used to measure behaviors was used specifically to develop *The Leadership Challenge* framework. The motivational interviewing intervention also yielded significantly increased scores in the self-perceptions of mid-managers. This finding showed that a

brief intervention for leaders focused on learning motivational interviewing techniques increases the self-perceptions of improvement in leadership behaviors.

It might appear that the finding between interventions somewhat diminished the idea of motivational interviewing being a clarifying element in transformational leadership. However, the performance of the motivational interviewing intervention is somewhat surprising, as it performed similarly to a traditional leadership training. Ultimately, the contribution of the current study may well be the performance of the motivational interviewing participants in comparison to the participants involved in the traditional leadership training of *the Leadership Challenge*. The current study represented the first leadership analysis of a motivational interviewing infused leadership training in comparison to a traditional leadership training. It is also the first study of motivational interviewing utilizing a leadership inventory as a measure of outcomes for these skills. *The Leadership Challenge* training was established by the authors of the LPI, Kouzes and Posner, specifically for the purpose of teaching leaders how to more consistently exhibit the behaviors identified in the LPI. It is noteworthy that motivational interviewing, in one of the first trainings measured for leadership behaviors, performed in a comparable way with *The Leadership Challenge* training to the outcomes of the LPI. In both trainings, participants compared similarly in terms of changes in self-perception, and more important, the leaders' perceptions of their leadership behaviors improved.

The literature indicated an emphasis on leadership development, and mixed evidence about effectiveness of training and development in changing the leader, or in any changes by the leader actually being noticed by followers (Avolio, 2005; Avolio &

Bass, 1998; Conger & Benjamin, 1999; Dvir et al., 2002; Wang et al., 2011). Where there has been evidence of change in influence and stimulation, it has not typically been with how to motivate followers or show concern for others (Avolio & Bass, 1998; Carson, 2011). The current study provided additional evidence that brief training on leadership development resulted in statistically significant improvement outcomes in the LPI. In both training interventions, there was also a statistically significant improvement in self-perceived behaviors in the softer skills of encouraging the heart and enabling others. Previous research suggested that current training methods in transformational leadership did not tend to impact some of the softer, or social skills, such as concern for others and motivation (Avolio & Bass, 1998; Carson, 2011). Not only did the overall scores improve after each training intervention, but this improvement was seen in each sub-scale score. Brief training, combined with rudimentary coaching, was able to have a significant impact.

Motivational Interviewing research provides evidence of being able to impact change outside of a leadership context, and promise to do so within the leadership arena (Erichsen & Tolstrup, 2013; Iarussi, 2013, Kershaw et al., 2017; Richer, 2012). The evidence seems particularly potent within agencies that are trying to promote the use of motivational interviewing to help clients, and as a buffer to parallel processes for leaders, in that practitioners influencing clients through conversation can see this modeled by their conversations with leaders (Giordano et al., 2012; Koltz et al., 2012). In the current study, there seems to be evidence that motivational interviewing does, in fact, hold promise within a leadership context.

## Limitations

There were several limitations that affected the current study. According to the statistical analysis performed to test the hypotheses, the current study found no statistically significant differences between the training interventions. The lack of differences in the hypotheses could potentially be attributed to sample sizes, lack of randomization, the length of training interventions, a lack of a control group, and the self reported nature of the data.

The sample size of the current study ended up being just large enough for analysis that might result in a medium effect size for the ANCOVA. The initial population appeared to be fairly robust. However, the attrition from the time of registration to the point of completing a post intervention survey likely limited the study.

The sample was one of convenience. The individual participants were mid managers who self selected to be involved in the intervention. This likely resulted in a group of participants who were already interested in leadership development.

The training interventions were a full day, ultimately granting participants six and a half hours of training credit. The six and a half hours of training is above the minimum in research for both leadership training and motivational interviewing shown to have an impact (Avolio, 2005; Hettema, 2006; Miller & Mount, 2001). Despite being over the four hours research shows as being the threshold for impact, the training in the current study was still a relatively small amount of intervention for measuring impact with a total of 6.5 hours of training. In particular, motivational interviewing involved the practicing of skill that is limited in a single day. This amount of training being limited is likely

especially true for those participants who received their initial exposure to these concepts during the training interventions for this study. While knowledge of the skills can occur during a short timeframe, practice and proficiency in the skills improve with time.

The current study utilized a comparison group and an experimental group. Ideally, a control group would have also been utilized. The use of a control group not exposed to an intervention, but measured at two points in time on the Leadership Practices Inventory, and similar to the participants in terms of criminal justice leadership, would have likely improved the study. The use of a control group would have contributed to being able to control for effects of time and other events that might have influenced the results of the current study.

The LPI was designed as a 360 degree tool (Kouzes & Posner, 2002). Data from 360 degree tools are likely more impactful when a leader not only scores their behavior, but they also receive objective feedback from those who observe their behavior in the workplace. The individual participant typically has an inflated view of their own behaviors. An inflated perception is likely influenced to a greater degree when a leader learns of their LPI results and then completes their LPI survey for the second time, such as in a pre and post-test design.

### **Recommendations for Further Study**

While articles and research have emerged regarding the utility of motivational interviewing in a leadership context, the current study was the first attempt to measure the impact of training existing leaders in motivational interviewing, and further doing so through comparison to a traditional leadership training. The results are small but

promising. The Leadership Challenge group did not perform any better than the motivational interviewing group. Motivational Interviewing, being measured through a leadership measure for the first time, resulted in statistically significant increases in leadership behavior. There are several possible recommendations for further study. The results need to be further tested beyond the limited setting of criminal justice mid-managers. The other major recommendation would be to robustly measure leadership through a possible 360 degree process, particularly through the lens of followers.

In the current research study, there would have ideally been a third control group. A third control group would have been participants who did not receive an intervention. The third group would have involved simply measuring with the LPI at two points in time. A third control group in itself might be a recommendation for further study. As a result of the positive findings regarding improvement, an additional group might also be considered. A future recommendation would be to include a third comparison group. In a third comparison group, a truly combined development of leaders with both the Leadership Challenge and Motivational Interviewing with equal focus could be promising for the field.

Finally, there seems to be a consensus emerging from the literature that a context of psychological safety is necessary to fully develop leaders (Avolio, 2005; Dale & Trlin, 2010; Gagne & Deci, 2005; Grolnick & Ryan, 1989; Walker, 2011; Zuckoff, 2002). Motivational interviewing as a framework for having a conversation with people is claimed through the research to provide this sort of environment (Zuckoff, 2002). The current study participants showed significant improvement in enabling and encouraging



others. Since the current study did not examine follower perceptions, it is likely that further study in this area is needed to gain a follower perspective of how leader development in motivational interviewing might impact followers' perceptions of leader behavior, and as a result in followers' perceptions of psychological safety when relating and trusting those in leadership positions.

### **Conclusions**

In conclusion, the current study did not demonstrate a statistically significant difference in leadership behaviors based on two different training interventions. The purpose of the current study was to examine the impact of motivational interviewing training on self-perceptions of transformational leadership for mid-managers in a criminal justice setting. The current study found no statistically significant differences between participants in a transformational leadership training and a motivational interviewing and leadership training. However, each training intervention did show statistically significant increases in leadership behaviors as measured by the Leadership Practices Inventory.

The current study contributed to the knowledge base of leadership development. In a limited training intervention, both groups showed statistically significant improvement in their perceptions of their own leadership behaviors. Motivational interviewing performed in a manner that was not statistically different from a well-established leadership training intervention. The outcomes show that motivational interviewing could be a promising way to provide a path towards a leader becoming more transformational.

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## Appendix A

### Informed Consent and Confidentiality: Waived of signed consent

**Informed Consent and Confidentiality  
Waiver of signed consent  
DALLAS BAPTIST UNIVERSITY  
3000 Mountain Creek Parkway, Dallas, Texas 75211**

#### **Purpose of the Study**

As a result of you signing up for training, you are being asked to participate in a research study conducted by Greg Sumpter, a Ph.D. candidate from Dallas Baptist University. The title of the project is “Motivational Interviewing and Transformational Leadership: the impact of training on self-perceptions of leadership.” The purpose of this study will be to discover the intersection of *motivational interviewing and leadership*; and to see if a training intervention has an impact on transformational leadership behaviors. This study will contribute to the researcher’s quantitative research project under the supervision of Dr. Rodney Garrett, Adjunct Professor in the Gary Cook Graduate School of Leadership, Dallas Baptist University.

#### **Research Procedures**

If you decide to participate in this research study, please sign this consent form once all your questions have been answered. This study consists of a free training intervention, a pre and post assessment, and feedback on the initial assessment. The training intervention will be approximately 6.5 hours. The pre and post assessment will take approximately 30 minutes each to complete, and the feedback sessions will take no more than 30 minutes. The feedback session will take place over the phone, and at a time and date of your convenience. You will receive the results of your assessment of transformational leadership.

#### **Time Required**

Participation in this study will require approximately 8 hours, including: pre and post assessment, the training intervention, and a feedback session.

#### **Benefits**

The benefits include a free training on leaders, assessments indicating your leadership behaviors, and some feedback on your initial assessment. The hope is that the experience will inform your leadership approach.

#### **Risks**

The researcher does not perceive more than minimal risks involved in this study.

### **Confidentiality**

The collected data and results of this study will be coded in a way so that the identity of the respondent will not be connected to this study. The researcher retains the rights to use non-identifiable data. All data will be stored in a secure location for at least 5 years electronically and upon completion of the study, any data that could be identified with the respondent will be removed. Five years after the completion of the study, individual data will be destroyed.

### **Participation and Withdrawal**

If you choose to participate in this study, you will be able to withdraw at any time without any consequences of any kind.

### **Questions about the Study**

If you have any questions or concerns about your participation in this study or after its completion, please contact:

#### **Researcher**

Greg Sumpter  
PhD. Candidate in Leadership Studies at Dallas Baptist University  
2528 Royal Lane, Denton, Texas, 76209  
[gsump@gmail.com](mailto:gsump@gmail.com) or 940-453-1816

#### **Professor**

Dr. Rodney Garrett  
Professor of Higher Education, Gary Cook Graduate School of Leadership  
Dallas Baptist University  
3000 Mountain Creek Parkway, Dallas, TX 75211  
[rodney@dbu.edu](mailto:rodney@dbu.edu) or 214.333.6809

### **Giving Consent**

I have read this consent form, and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The researcher provided me with a copy of this form. I certify that I am at least 18 years of age.

I give my consent to participate in the study. \_\_\_\_\_ (Participant's initials)

\_\_\_\_\_ Printed name of Participant

\_\_\_\_\_ Signature of Participant \_\_\_\_\_ (Date)

\_\_\_\_\_ Signature of Researcher \_\_\_\_\_ (Date)

## Appendix B

### Permission letter for the LPI

April 6, 2015

Greg Sumpter  
2528 Royal Lane  
Denton, TX 76209

Dear Mr. Sumpter:

Thank you for your request to use the LPI®: Leadership Practices Inventory® in your dissertation. This letter grants you permission to use either the print or electronic LPI [Self/Observer/Self and Observer] instrument[s] in your research. You may *reproduce* the instrument in printed form at no charge beyond the discounted one-time cost of purchasing a single copy; however, you may not distribute any photocopies except for specific research purposes. If you prefer to use the electronic distribution of the LPI you will need to separately contact Eli Becker ([ebecker@wiley.com](mailto:ebecker@wiley.com)) directly for further details regarding product access and payment. Please be sure to review the product information resources before reaching out with pricing questions.

Permission to use either the written or electronic versions is contingent upon the following:

- (1) The LPI may be used only for research purposes and may not be sold or used in conjunction with any compensated activities;
- (2) Copyright in the LPI, and all derivative works based on the LPI, is retained by James M. Kouzes and Barry Z. Posner. The following copyright statement must be included on all reproduced copies of the instrument(s); "Copyright © 2013 James M. Kouzes and Barry Z. Posner. Published by John Wiley & Sons, Inc. All rights reserved. Used with permission";
- (3) One (1) **electronic** copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data must be sent **promptly** to my attention at the address below; and,
- (4) We have the right to include the results of your research in publication, promotion, distribution and sale of the LPI and all related products.

Permission is limited to the rights granted in this letter and does not include the right to grant others permission to reproduce the instrument(s) except for versions made by nonprofit organizations for visually or physically handicapped persons. No additions or changes may be made without our prior written consent. You understand that your use of the LPI shall in no way place the LPI in the public domain or in any way compromise our copyright in the LPI. This license is nontransferable. We reserve the right to revoke this permission at any time, effective upon written notice to you, in the event we conclude, in

our reasonable judgment, that your use of the LPI is compromising our proprietary rights in the LPI.

Best wishes for every success with your research project.

Cordially,



Ellen Peterson  
Permissions Editor  
[Epeter4@gmail.com](mailto:Epeter4@gmail.com)



## Appendix C

### Training Agenda

Transformational Leadership and Motivational Interviewing and Transformational Leadership Agenda (6.5 hours)

- A. Introduction to Leadership and Transformational Leadership – 1 hour
- B. Leadership Challenge framework
- C. Brief introduction of the LPI
- D. Practical applications of transformational leadership and Leadership Challenge framework
  - a. How to have difficult conversations
  - b. Coaching
  - c. Career development
  - d. Performance reviews
  - e. A structure for conversations with reports, peers, and supervisors.

The primary difference between the trainings was that the MI infused trainings used MI as the lens for the five exemplary practices – with an introduction to the 4 concepts of the spirit of MI and the technical aspects of active listening (open ended questions, affirmations, reflections, and summaries). The first hour of all sessions was identical. The Leadership Challenge session had five and a half hours of the five practices. The MI session had a one hour introduction to The Leadership Challenge framework, and four and a half hours of motivational interviewing training for leaders.

## Appendix D

### Permission Letter from Correctional Management Institute of Texas (CMIT)



SAM HOUSTON STATE UNIVERSITY  
CORRECTIONAL MANAGEMENT INSTITUTE OF TEXAS  
GEORGE J. BETO CRIMINAL JUSTICE CENTER

DOUG DRETKE  
EXECUTIVE DIRECTOR

HUNTSVILLE, TEXAS 77341-2296  
(936) 294-1676 • FAX (936) 294-1671

August 24, 2016

Gary Cook School of Leadership  
Dallas Baptist University  
3000 Mountain Creek Parkway  
Dallas, TX 75211-9299

Dear Sir or Madam,

It is my honor to write this letter on behalf of Greg Sumpter, Ph.D. candidate in your program. I am seeking your permission and consideration for Mr. Sumpter to partner with the Correctional Management Institute of Texas (CMIT) at Sam Houston State University for his dissertation work with Dallas Baptist University.

Mr. Sumpter has expressed a desire to offer leadership training with a comparison and an experimental group for managers serving within our Criminal Justice System. The Correctional Management Institute of Texas is charged with developing and delivering professional education and development programming for correctional professionals and issues specific training programs for personnel in juvenile and adult community and institutional corrections agencies. This partnership with Mr. Sumpter will be an opportunity to continue to provide training that meets these objectives. As the Executive Director of the Correctional Management Institute of Texas, I have granted permission for Mr. Sumpter to partner with us for these purposes.

The agreement with Mr. Sumpter is to assist in the planning and carrying out of at least four regional training sessions. The Correctional Management Institute of Texas will secure the locations of these trainings, will post an announcement of these trainings to our website, in addition to other possible marketing, and will proctor the registration process for attendees of these trainings. Also, we have agreed to allow Mr. Sumpter to partner with one of our internal training specialists, Ms. Carmella Jones. Ms. Jones is certified to provide the Leadership Challenge Training, and she will be involved in the planning and co-training of the content.

If you have any further questions, or if I can be of further assistance, please feel free to contact me.

Sincerely,

Doug Dretke  
Executive Director

## Appendix E

### LPI Coaching Script

#### Before the coaching conversation:

Ensure that the participant receives the report in advance of the call. 24 to 48 hours is ideal.

Ask the participant to review the report, and to identify 3-5 higher, and 3-5 lower ratings.

Ask the participant to have the action plan during the call.

Review the report prior to the call.

#### Beginning the coaching conversation

Introduce yourself and establish rapport

Share the purpose of the conversation

Provide an overview of what is covered in the LPI.

The LPI is meant to be developmental and not evaluative.

A snapshot in time

Explain that there is no such thing as a good or bad score, and that the LPI simply focuses on the frequency of behavior.

Feedback is a gift. Look for messages in the data, not focusing on numbers.

This session will focus on a few behaviors, but not all.

#### Facilitating the conversation

Ask for the leader's initial impression of the LPI report.

What messages are you taking away from the report?

What are you inclined to do with it?

What two things do you want to keep doing?

What two things do you want to work on doing more frequently?

What steps will you take to follow through on the above?

When will you take these steps?

How might you incorporate your training (transformational leadership or motivational interviewing and transformational leadership) to help you in these areas?

Review the action plan.

## Appendix F

### LPI Action Plan

Date: \_\_\_\_\_

My two top priorities for the next three months:

Behaviors to keep practicing:

- 1.
- 2.

Behaviors to do more frequently:

- 1.
- 2.

My goals (I want to achieve):

The benefits of achieving these goals:

How will I use the leadership training to assist me:

My measure of success (how will I know when I have reached them):

Actions I will take to achieve my goals:

Action(s):

Dates by which I will take the action(s):

People who will give me feedback:

People who will provide support: