How Will Interpersonal Communication Skills Training Impact Leadership Outcomes?

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Abstract

Existing theory and research have indicated a positive relationship between interpersonal communication skills (ICS) and relational leadership which in turn is foundational to successful leadership outcomes (Hargie, 2011; Northouse, 2010). It is unknown however, if ICS can be taught in such a way as to positively impact individual and group-level leadership outcomes. It is especially important to determine if ICS training and development can be used as an intervention to improve outcomes for low-relating leaders. A true experimental design using pretest, posttest, and control groups of 110 leaders is proposed. Independent and related-sample t-tests are used to compare results of the Multifactor Leadership Questionnaire, performance assessments, and the Group Development Assessment of control to treatment groups before and after training. It is expected that an evidenced-based training and coaching approach is effective in advancing both subjective and objective leadership outcomes at group and individual levels. Future research should extend the study to organizational levels and longitudinal analyses.
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Chapter 1. Introduction

Peter Northouse (2010) defines leadership as a “process whereby an individual influences a group of individuals to achieve a common goal”. According to Owen Hargie (2006), Influence is a key component of interpersonal communication skills (ICS). It is logical then, that a positive relationship should exist between ICS and leadership. Existing research does, in fact, show a positive relationship between some components of ICS, such as assertiveness or listening skills, and perceived leadership effectiveness (Ames & Flynn, 2000; Johnson & Bechler, 1998). Other research shows that a change in interpersonal communication styles can affect various outcomes of perceived leadership effectiveness (Hunt & Baruch, 2003). It remains unclear however, whether ICS skills training can be used as an intervention to improve both subjective and objective leadership outcomes. It will be shown that there are several limitations in the knowledge base when considering the impact of ICS training on leadership. The content and delivery methods of the various ICS training programs used in research thus far have been inconsistent due, in part, to varying definitions of interpersonal communication skills. The experimental measurements often used to measure leadership outcomes have been limited to individual-level assessments or employee perceptions and tend not to include tangible performance output measures or group-level outcomes (Derue, Nahrgang, Wellman, & Humphrey, 2011). The nature-nurture debate continues to thrive among leadership theorists who argue over the malleability of interpersonal communication skills (Derue et al., 2011; Dinh et al., 2014). These problems lead to the question as to whether evidence-based ICS training is an effective intervention to improve tangible and intangible leadership outcomes at individual and group levels especially for leaders who score poorly in the relational measures of leadership effectiveness.
The proposed study is focused on core elements of ICS (reinforcing, questioning, reflecting, listening, explaining, self-disclosure, assertiveness, persuasion, negotiating, and set induction and closure) as defined by Owen Hargie (2011). A comprehensive and systematic approach to measuring leadership outcomes at various levels as suggested by Derue, Nahrgang, Wellman, and Humphrey (2011) includes perceived individual leadership effectiveness, team development, leader performance, and group performance. The training intervention incorporates best practices in skill development drawing on social, cognitive, and behavioral learning in adult learning theory, leadership development and clinical psychology.

The output of this research may point to a practical and effective solution to the problem of leader derailment due to relational issues. It has the potential to prove the importance of incorporating ICS training into general leadership development programs in order to improve leadership outcomes and tangible business results for all leaders at all levels. Alternatively, the results may guide businesses in their decisions to invest in the ICS training or delivery methods used here.

In keeping with the tenants of scientific merit as described by Leedy and Ormod (2013), this proposal follows the hallmarks of good research in an effort to advance the knowledge base and contribute to theory on leadership, learning, and interpersonal communication skills. A review of the literature is presented first which includes historical theoretical background as well as related research. The research methodology is presented next followed by an analysis of the data and expected results. Conclusions and recommendations complete the proposal.
Chapter 2. Literature Review

The hypothesis that ICS training might improve leadership outcomes derives from an integration of theory and research in leadership, interpersonal communication skills, and learning. General leadership theory is presented first followed by theory and research supporting the importance of interpersonal communication skills to successful leadership. Finally, learning theory and research are discussed as support for the particular method of ICS development proposed here.

Leadership Theory

History of leadership theory. Leadership theories have grown in both number and complexity over time. Dinh et al. (2014) track the evolution of nearly 40 leadership theories in 17 thematic categories articulated in major journals during 2000 to 2012. Earlier, more simplistic leadership theories focused on global intractable traits of an individual leader. For example, an early leadership theory offered by Stogdill in 1948 identified eight essential leadership traits: intelligence, alertness, insight, responsibility, initiative, persistence, self-confidence, and sociability. Trait theories began to fall out of vogue however, in part because the list of important traits became unwieldy over time, trait theory failed to take situations into account, and because they were not helpful to leadership development (Northouse, 2010). Emerging leadership theories conceptualize a much more complex set of interactions and processes that evolve over time and impact various levels of the organizational system (Dinh et al., 2014). Derue et al. (2011) propose an integrated model in which leadership traits are mediated by leadership behaviors and processes differently depending on the situation and whether we study outcomes at an individual, group, or organizational level.
Interpersonal relations in leadership theory. One common theme that has remained consistent in leadership theory over time is the significance of both task-oriented constructs and interpersonal or relationship-oriented ones. Based on earlier trait research, Northouse (2010) includes “sociability” alongside intelligence, self-confidence, determination, and integrity as central to the list of traits necessary to be perceived as an effective leader. The skills approach places importance on the relational dimension of leadership from a behavioral perspective. Other researchers propose a model of managerial skills that include communication and interpersonal skills as two of the five essential skills for success (Davis, Skube, Lellervick, Gebelein, & Sheard, 1996). Katz (1955) describes three levels of leadership skills that align with a leader’s level within the organizational hierarchy: technical, human, and conceptual. The human category could be compared to this proposal’s definition of interpersonal skills in which communication skills are a subset. From a styles perspective, the best leadership style, according to Blake and Mouton (1985), represents a balance of focus on a leader’s concern for results on one axis of their managerial grid to a concern for people (or relationships) on the other axis. More recent theories, such as situational and transformational leadership, enhance these concepts by recognizing the need for adaptability according to the situation and also describing specific elements of task and relational concerns and support.

Derue et al. (2011) integrate the proliferation of leadership theories into three dimensions: task, relationship, and change-oriented behaviors and traits. Derue’s team placed interpersonal skills and communication skills in the Leader Traits and Characteristics section of their model and then divided the leader behaviors section into task-oriented, relational-oriented, and change-oriented behaviors. Derue et al. associate the relational-oriented component of
leadership behaviors with others’ satisfaction with the leader and the individualized consideration and charismatic components of individual leadership effectiveness.

The importance of interpersonal relations of which ICS are an integral part also extends to emerging leaders and team dynamics. Peter Northouse (2010) attributes leadership emergence to communication behaviors such as seeking others’ opinions, initiating new ideas, and being firm without being rigid. Chekwa and Thomas (2013) provide empirical support for the relationship between interpersonal conflict and team-building effectiveness. Most conflict models used to explain team dynamics strive for a collaborative approach that balances a high concern for task with a high concern for relationships (Lewicki, Weiss, & Lewin, 1992).

Just as the trait-behavior debate has evolved to appreciate a more complex interaction of nature and nurture, so has the relationship-task debate recognized that both are necessary for leadership effectiveness and that neither is sufficient without the other.

**ICS Theory and Research**

**ICS theory.** The terms social skills, interpersonal skills, and communication skills are sometimes used interchangeably (Hargie, 2011). *Social skills* is the term more commonly used in clinical or educational psychology. *Communication skills* often include technical aspects of communication including writing skills. Hargie (2011) defines *interpersonal skill* as “a process in which the individual implements a set of goal-directed, inter-related, situationally appropriate social behaviors, which are learned and controlled” (p. 6). Burleson (2010) defines *interpersonal communication* as a “complex situated social process in which people who have established a communicative relationship exchange messages in an effort to generate shared meanings and accomplish social goals” (p. 151). Interpersonal communication skills then, are those learned and controlled, situationally appropriate, communicative social behaviors and processes used to
exchange messages in an effort to generate shared meanings and accomplish social goals (Hargie, 2011). In leadership theory, those social goals are the shared goals to which Northouse (2010) described as the object of a leader’s influence efforts.

A skills model of interpersonal communication proposed by Hargie (2011) builds upon other earlier models and includes six elements: person-situation context, goal, mediating processes, response, feedback and perception. People who are skilled communicators have been shown to be upwardly mobile, more likely to receive pay raises and gain promotions, and perform better academically (Hargie, 2011). Yet despite its obvious importance, interpersonal communication was not seriously researched until the late twentieth century and not even considered a skilled ability until 1960 (Hargie, 2011). Research that specifically addresses interpersonal communication skills and leadership is sparse enough that it is necessary to look at interpersonal communications styles and general interpersonal skills research for background.

**Interpersonal communication styles and leadership.** De Vries, Bakker-Pieper, and Oostenveld (2010) found a significant positive relationship between interpersonal communication styles characterized by supportiveness, assuredness, preciseness, and expressiveness to perceived leader performance, satisfaction with the leader, and subordinate’s team commitment. A negative relationship was found to exist between styles characterized by verbal aggressiveness and argumentativeness to leadership outcomes. De Vries et al. (2010) also found that charismatic and human-oriented leadership styles are much more significant than task-oriented leadership to leadership outcomes. Multiple regressions showed highly significant relationships between communication styles and leadership styles but especially between a supportive communication style and human-oriented leadership. The authors go so far as to say that the relational leadership styles equal communication as if they are actually measuring the
same construct. Styles are not the same as skills however, and the study was relational and not experimental. In addition, such claims may assume a limited definition of leadership even within the relational leadership styles (Abrell, Rowold, Weibler, & Moenninghoff, 2011).

**Interpersonal skills and leadership.** Research studies that measure interpersonal skills often include a range of skills beyond just communication. Derue et al. (2011) studied what they call interpersonal skills but upon closer examination they mix interpersonal attitudes, competencies, behaviors, and specific skills. Interestingly, this experimental study demonstrated that a training intervention had the most impact when the topic had “clear objective and outcome criteria and could be segmented into a step-by-step routine based on a memorable model or theory” as opposed to “soft and feely” topics (Derue et al., 2011, p. 745). Despite the sub-optimal training structure, the results show that what look like true interpersonal communication skills may be developed through training and positively impact followers’ satisfaction and perceptions of leader effectiveness.

**Interpersonal communication skills and leadership.** Research on true interpersonal communication skills and leadership is limited to certain kinds of leadership or certain aspects of communication. Both the receiving and sending ends of the basic communication skills model are important as they relate to career success (Hargie, 2011). Emergent leaders, as perceived by others in a group, are observed displaying more listening behaviors than others (Johnson & Bechler, 1998). They are also more prone to promote dialogue and summarize group activities. On the other side of the send-receive equation, Foste and Botero (2010) found that the method of delivering a request (aggressive versus non-aggressive) and the content of that request (self-focused or company-focused) can anchor a new employee’s personal reputation with his or her manager. Foste and Botero provide empirical evidence showing that new employees who use
INTERPERSONAL COMMUNICATION SKILLS

non-aggressive, company-focused arguments create positive impressions that help them manage up more effectively. Botero and Foste link Language Expectancy Theory (LET) to leader-member exchange theory and to empowering perceptions such as competence, status, and trustworthiness. Once again however, this study focuses more on styles than on skills and on perceptions rather than tangible performance outcomes.

In addition to laying the groundwork to the proposed research question, the existing research provides direction as to what areas of ICS should be emphasized in a development program. Listening skills and those communication skills designed to convey support and avoid aggressiveness require as much or more focus than some of the more technical communication skills such as voice pitch or volume.

Leadership outcomes in these studies have focused heavily on the leader’s own personal success but the very definition of leadership necessitates a look at group outcomes. Behfar, Peterson, Mannix, and Trochim (2008) demonstrated the importance of conflict resolution skills to team outcomes by showing a positive relationship between the two. Conflict resolution skills are a sub-component of interpersonal communication skills by definition (Hargie, 2011).

One of the problems with prior experimental research that connects ICS training to leadership outcomes is the eclectic content and approach to teaching ICS. As early as 1997, researchers have complained that many leadership development programs rely on theoretical and experimental research to stress the importance of positive relational perspectives but they do not necessarily provide help with how to operationalize those concepts (Medsker & Fry, 1997). Instead, they leave it up to the participant to determine how to put theory into practice and transfer the desired behavior to the job. This proposal seeks to address this problem by drawing
Best Practices in ICS Training

Adult learning theory. Adult learning theory suggests that adults learn best when the content is learner-centered and performance based (ASTD, 2006b). That is, when the focus is on the learner’s needs, goals, constraints, prior knowledge, ability, and/or motivation and when the outcomes will result in the timely achievement of valuable results. Reporting on evidence-based adult learning, Clark (2010) advises that transfer of skills to the workplace requires training participants to retrieve the right behaviors in the right order at the right time. This requires embedding the right retrieval cues into long-term memory at the time of learning through attention, processing in working memory, management of mental load, and practice. For procedural, skills-based learning, Clark recommends repeated demonstration of the desired skill or behavior with examples (behavior modelling), presentation of supporting principles, breaking learning into manageable chunks, working from simple to complex behaviors, and participant practice with feedback and positive reinforcement. Immersive lessons, experiential learning, and action-learning approaches are listed among the preferred methods for transfer of training to the job (Clark, 2010).

Leadership development. Research in developing leaders has lagged considerably behind leadership theory itself (Day, Fleenor, Atwater, Sturm, McKee, 2014). As in all adult learning, leadership development should move from simple to complex as a leader advances from novice, to intermediate, and expert skill acquisition over time. Mumford, Campion, and Morgeson (2007) found that specific skill requirements vary from cognitive to interpersonal to business to strategic levels as a leader progresses up the organizational hierarchy. One of the
most researched topics in leadership development literature is the 360-degree feedback assessment. Day, Fleenor, Atwater, Sturm, and McKee (2014) report that when done right, it is a highly effective form of feedback that advances leadership development. The MLQ is a highly researched form of 360 degree leadership assessment.

**ICS development.** As was apparent in the Derue et al. (2011) experiment, some interpersonal skills are more conducive to training than others. Specifically, Derue and his team found that concrete, “step-by-step” skills methods of training transferred better than trying to teach “soft and feely” concepts. Years earlier however, Bohart, Landeros, Hewitt, and Heilman, (1979), found that the problem might not be the soft and feely content but the soft and feely approach to teaching it. Specifically, Bohart’s team compared two approaches to learning the interpersonal skills of expressing warmth, empathy, genuineness, and helping skills in an experiment that divided subjects into conceptual or cognitive-based training and a more behavioral response-oriented approach. Those in the response-oriented approach to learning were rated higher at making others feel comfortable to be around them. The research showed that the conceptual approach could not be easily generalized to various situations as well as the response-oriented approach. Hunt and Baruch (2003) also found support for focusing on specific, step-by-step routine-based approaches to learning interpersonal skills as did Medsker and Fry (1997).

Medsker and Fry (1997) advocate for a behavioral modeling approach to teaching step-by-step communication skills that integrate best practices in learning theory from cognitive, behavioral, and social learning theory. Specifically, Medsker and Fry suggest teaching a process approach to communication moving from enhancing others’ self-esteem, to empathy, to problem-solving that is modelled through role-plays or video. Then participants practice and
receive individual coaching and feedback in successively more complex scenarios. Baldwin (1992) also demonstrated the benefits of both positive and negative behavioral ICS modelling using videos in training.

Baggs and Spence (1990) successfully experimented with booster sessions provided intermittently after the initial training in assertiveness skills to reinforce and build upon prior learning. These sessions can take the form of presenting new material of increasing complexity and/or as group coaching to discuss the successes and challenges of application as in an action-learning process.

A potential model for developing interpersonal communication skills that incorporates many of these learning techniques may be found in clinical practice. An effective treatment for Borderline Personality Disorder (BPD) and a growing list of other clinical behaviors is Dialectic Behavior Therapy (DBT; DiGiorgio, Glass, & Arnkoff, 2010; Feigenbaum, 2007; Huffman, Stern, Harley, & Lundy, 2003; Kirby & Baucom, 2007; Panos, Jackson, Hasan, & Panos, 2014). The skills component of DBT (in which ICS is a major part) is twice as effective as the group therapy component in reducing negative outcomes (Soler et al., 2009). DBT is effective in increasing the application of ICS in the real world and the increase of ICS in the real world contributes directly to positive outcomes of BPD patients (Neacsiu, Rizvi, & Linehan, 2010). DBT integrates several learning methodologies: individual therapy, group skills training, and individual telephone support all delivered over a period of about one year. The Interpersonal communication skills component is usually about three months long in a typical DBT program. It is a very structured, step-by-step approach to learning that is supported with one-on-one role plays, behavior modelling, booster sessions, and coaching. The therapy component of DBT
relies heavily on a humanistic approach that models the desired interpersonal communication skills being taught and enables supportive learning and coaching (Linehan, 1993).

Therapy is to Dialectic Behavior Therapy as coaching may be to ICS development. Supplemental coaching that uses a humanistic approach (as in DBT) to providing goal-focused, behavioral skill-building is more appropriate to development in a non-clinical setting and is more likely to be acceptable in the business world than a psychoanalytic coaching model (Grant, 2006; Ives, 2008; Stevens, 2005; Stober, 2006).

Beyond just providing training support, the coaching engagement itself provides a behavioral model of interpersonal communication skills for the client (Hargie, 2011; Stober, 2006). Ives (2008) found that common to all of the various coaching approaches, whether goal-oriented or developmental, are the required skills of both listening and questioning (p. 104). The ICF (2011) core competencies are made up of such skills as active listening, questioning skills, action learning, and goal setting. The American Society of Training and Development (ASTD, 2006a) also cite the importance of communication skills.

The proposed research brings all of these elements together so that the training content and methodology draws from the best practices of learning theory and research in general and interpersonal communication skills in particular. Content will focus on a core set of interpersonal communication skills (reinforcing, questioning, reflecting, listening, explaining, self-disclosure, assertiveness, persuasion, negotiating, and set induction and closure) presented through processes applied to leadership applications such as giving and receiving feedback and motivated through the presentation of social and cognitive concepts in leadership theory and research. Group training and coaching will be supported by individual coaching and reinforcement reminder emails.
Critical Analysis and Alternative Explanations

At first glance, existing research appears to already answer the research question in this proposal. The closest comparisons can be found in the studies by De Vries et al. (2010) and by Hunt and Baruch (2003). De Vries et al. (2010) focused on styles rather than skills however, and Hunt and Baruch did not isolate the communications component of interpersonal skills, did not use best practices in learning, and did not look at multiple levels of leadership outcomes.

Emerging leadership theory recognizes that leadership is not an event but evolves and develops over time (Derue et al., 2011; Dinh et al., 2014). Any positive gains made from training in ICS may not be sustained over time. Most of the research discussed here involved testing outcomes one year or less after the training. Some of the research required delivery of skills training over several months. This introduces potential moderators or mediators into the outcomes that may not be associated with ICS. Participants in prior research showing a relationship between ICS training and leadership effectiveness may have improved simply by modelling the superior communication skills of their teachers and coaches. Subordinates and peers may have perceived communication skills in the subjects merely because the survey methods brought such skills to their attention or because improvements were expected.

Although studies show that DBT skills training has shown positive results among participants, leadership outcomes and interpersonal skills are not among those outcomes measured. Hong (2003) did not find any impact on outcomes of the interpersonal skills component of DBT by itself on a sample of BPD patients.

Most of the early research studies done in ICS were American-based (Vaught & Abraham, 1992). One study done in India however, indicates that ICS is related to satisfaction with the supervisor which is also related to reduced potential for job burn-out (Rajesh &
Suganthi, 2013). Vaught and Abraham (1992) discovered that for most ICS skills, perceptions of American capabilities were similar to those of Indian supervisors. Still, the research reviewed here has largely ignored the potential effect of cultural, gender, or ethnic diversity on ICS training and leadership. For this reason, the proposed study may not be generalizable to all subgroups within the population.

In summary, the literature provides a compelling argument for the potential impact of ICS training on certain leadership outcomes. In particular, listening and supportive communication skills training appears to positively impact subordinate’s perceptions of their leader. Many of the studies have sacrificed some element of best practices in training either at the behest of the organizations in which the training took place or for practical reasons. Few, if any have invested the time to incorporate an evidence-based comprehensive development program as proposed here.
Chapter 3. Methods

Objective

The purpose of this study is to answer the research question as to what extent evidence-based ICS training improves individual and group leadership outcomes particularly for leaders who are perceived as having low relational effectiveness. The proposed methodology aims to support the hallmarks of good research by aligning the design to the research question, unequivocally answering the research question, using psychometrically sound measurement instruments, and applying appropriate data analysis.

Research Design

Any objective that seeks to measure improvements made by an intervention necessitates a causal research design rather than a relational or descriptive one (Leed & Ormrod, 2013). The proposed methodology employs a true experimental pretest, posttest, control group design using random selection and random assignment. According to Leedy and Ormrod (2013), such a design is intended to show “that change occurs following, but only following, a particular treatment” (p. 246). In this case, the treatment is the ICS development program and the pre and post measures are the individual and group leadership outcome assessments.

Target Population

Because effective leadership characteristics, styles, and behaviors are contextual and longitudinal (Dinh et al., 2014), attempting to generalize the impact of any leadership development intervention to all leaders in all situations is unrealistic. Therefore, the theoretical sample for this study includes leaders in mid to large-sized organizations (over 3,000 employees) in the US. For ease of access, the sampling frame will include leaders in organizations whose head offices are based in Houston, Texas but that also have regional offices in multiple locations.
across the United States. Such an organizational structure may increase the generalizability of the results beyond the limits of the Houston market. Houston is the home of many large oil and gas companies and financial companies that meet these criteria. Alternatively, including geographically dispersed leaders may introduce more uncontrolled variables.

Sample

The sample itself will include 110 randomly selected leaders from within a single organization within the sampling frame so that selected participants may be from the head office in Houston or any of the divisional offices in other states. Although a single organization may limit the organizational generalizability of results, the sacrifice is made to ensure consistent measures of leadership outcomes such as organizational performance reviews and to control for prior training in communication or interpersonal skills. Leaders in the sample will come from any of the functional areas within the company and various levels from supervisor to executive. Although this introduces some potential for uncontrolled variables, varied backgrounds provide a more typical representation of the target population and are necessary to ensure a large enough sample. An effect size of at least .5 with a one-tailed significance value of $p = .05$ and statistical power of .8 are used as input criteria to obtain the required sample size of at least 51 participants in each group. Scientific merit is improved if the control group and experimental groups are the same size (Leedy & Omrod, 2013). An extra eight participants are selected for the study in case of attrition bringing the total to 110 with 55 in each group.

Procedures

A randomized, controlled trial will be conducted using pretest-posttest measures at 6 months for behavioral measures and at one year for performance measures following the initial day of training. The six-month time lag was chosen for subjective behavioral observations based
on other research and the researcher’s own experience indicating that it typically takes up to six months for transformational behavior to be perceived and acknowledged by others (Abrell et al., 2011). The year-long time interval for performance outcomes is selected to more closely match the company’s natural performance review cycle. Because different outcomes are being measured at the two time frames (behavior at 6 months and performance at 12 months), there is only one independent variable (treatment condition) for each test. In addition, the comparison of means will also be conducted for the sub-group of low-relating leaders (leaders scoring in the bottom third percentile of the norm-referenced group for the MLQ). Independent samples t-tests will be used to compare the treatment group to the control group and repeated measures t-tests will be used to compare the behaviors and performance of the same subjects before and after training. One-tailed tests will be applied at a significance level of $p = .05$ in all cases which makes the assumption that the training will improve (and not degrade) measured outcomes.

A computer-based randomizer will be used to select the sample of 110 leaders from the company’s entire leadership staff and to randomly assign 55 of them to the treatment group and 55 to the control group. Random selection and assignment are key criteria for true experimental design (Leedy & Ormrod, 2013). Behavioral instruments will be administered via internet survey. Performance review data will be collected through electronic reports created by the company’s online performance review system as part of their normal performance review process.

**Instruments**

Past research has focused on the effectiveness of various training interventions on perceived leadership behavior at an individual level (Derue et al., 2011; Dinh et al., 2014). Current authors advocate for a more comprehensive assessment of both subjective and objective
outcomes at individual, group, and organizational levels (Derue et al., 2011; Dinh et al., 2014). The proposed study will measure subjective and objective outcomes at the individual and group levels. Because only a sample of leaders will actually be trained in ICS, a true organizational-level assessment is not possible. See Table 1 for a summary of the proposed instruments.

Subjective leadership outcomes at the individual leader level will be captured using the Multi-factor Leadership Questionnaire (MLQ) primarily because of its strong psychometric support. The MLQ measures effective and ineffective leadership behaviors including non-leadership, management by exception, transactional leadership, and four dimensions of transformational leadership: individualized consideration (IC), idealized influence (II), inspirational motivation (IM), and intellectual stimulation (IS). It also includes several leadership effectiveness questions such as “this leader is effective in meeting others’ job-related needs” or “this leader gets others to do more than they expected to do” (Bass & Avolio, 2013). The IC, IS, and IM dimensions of transformational leadership will be used to identify leaders who score in the bottom 3rd percentile of normed relational leadership behaviors. Idealized influence is not used to identify low-relaters because it pertains more to individual characteristics and less to leader-follower communicative interactions (Bass & Avolio, 2013). Pre-training and post-training comparisons will be evaluated as a whole and repeated for the group identified as low-relaters.

The reliability and validity of the instruments used are key indicators for assessing whether the study possesses the hallmarks of good research (Leedy & Ormrod, 2013). Reliability demonstrates that the assessment is consistent across raters and that the performance measures are stable over time. Validity demonstrates that the assessment accurately and correctly predicts the targeted outcomes (Kaplan & Saccuzzo, 2009). Reviews of the MLQ are
generally positive citing criterion validity ranges as high as .45 and .60 (Bessai, 1995; Fleenor & Sheehan, 2007). Inter-rater reliability of the MLQ has been measured at $\alpha = .95$ and the internal consistency of individual dimensions of the MLQ in pre and post-testing have ranged from .87 to .95 (Abrell et al., 2011; Hassan, Fuwad, & Rauf, 2010). Because the MLQ is widely used in research, it has been normed across multiple cultures, is provided in five languages, and is regularly updated based on current findings (Bass & Avolio, 2013).

Company performance appraisal systems can be fraught with measurement issues such as the halo effect, recency error, leniency/severity error, and central tendency restriction errors (Kline & Sulsky, 2009). For this reason, individual leader performance will be measured using only the objectives component of the company’s existing performance review system which measures attainment of specific and measurable goals (on time, on budget, and meeting project specifications or standards of performance). The objectives component of the performance review is first calculated as a weighted average attainment of specific and measurable goals and standards of performance and then subjectively synthesized into an overall rating on a Likert scale from 1 to 4: needs improvement, somewhat effective, effective, and highly effective. It should be noted that the host company is not in the habit of using force ranking where only a specific percentage of employees within a department are permitted to be ranked at each level. Wall et al. (2004) found that similarly derived performance ratings by supervisors were valid predictors of objective employee outcomes such as total sales and return on assets at $r = .79$ and $r = .80$ respectively. They also found the product-moment correlation between performance ratings and outcomes to be high ($r = .41$) for accountant positions. Internal consistencies using Cronbach’s alpha were $\alpha = .83$ in the Wal et al. analysis. Other studies have confirmed that even
the more subjective components of well executed performance ratings tend to correctly predict performance outcomes (Zimmerman & Triana, 2010).

Performance review ratings of leaders in the subject company are approved by the second-level manager of the leaders giving the ratings and by the HR manager for quality of supporting detail. This practice may improve inter-rater reliability or alternatively, it may also threaten the criterion validity of the performance rating because it is not an objective aggregation of individual ratings. For purposes of this study, all raters will be required to have completed identical training in how to evaluate objective performance goal attainment. The reliability of the company’s objective performance ratings will be checked using test-retest methods against a threshold of at least $r = .70$ as recommended by Kaplan and Saccuzzo (2009).

If reliability and validity measures of individual objective ratings allow, tangible group outcomes may be calculated by aggregating the objectives component of individual employee assessments within a leader’s team. The psychometric properties of aggregated assessments are not equivalent to an average of the properties of individual assessments however, and must be adjusted accordingly (Howell, 2011).

The Group Development Assessment (GDA) by HRDQ (2009) will be used to measure team effectiveness because it is a true group-level assessment rather than an aggregation of individual assessments and because it is based on theoretical foundations. The GDA is built upon Tuckman’s (1965) team development model which identifies five sequential phases of group development: forming, storming, norming, and performing. It also draws on models of leadership and conflict that separate task-oriented behaviors from relational ones such as the Blake-Mouton (1985) managerial grid and the Thomas-Kilman (1990) conflict model (HRDQ, 2009). Test reviewers Ito and Brotheridge (2008) have found the GDA to be “reasonably
reliable” with reliability ranges between $\alpha = .73$ and $\alpha = .90$ for most items (p. 227). Norm groups are not available however and confirmatory factor analysis was upheld for only three of the four factors measured. For this reason, results using the GDA must be qualified as being “hypothetical” (AERA, APA, & NCME, 1999, p. 131). See table 1 for a summary of the proposed assessments.

Table 1

*Proposed Assessment by Purpose*

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<th>Assessment Purpose</th>
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<td>Group Outcomes</td>
<td>Aggregation of objectives component of team members’ individual performance reviews</td>
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**Research Questions and Hypotheses**

Prior research has demonstrated a positive correlation between subjective leadership outcomes and some interpersonal communication skills or styles (De Vries, Bakker-Pieper, & Oostenveld, 2010; Johnson & Bechler, 1998). It is not known if these supportive communication styles can be operationalized in a way that improves both subjective and objective leadership outcomes particularly for the relationally-challenged leader (that is, leaders who score in the bottom third percentile of the relational measures of the MLQ). Therefore, the primary research question is: can leadership outcomes be improved by an evidence-based ICS development program. An important sub-question is: can leadership outcomes of low-relating leaders be
improved by ICS development. The null hypotheses will be tested for each of the following alternative hypotheses:

Hypothesis 1: Leader effectiveness will improve within six months for all leaders who received ICS training as measured by the MLQ.

Hypothesis 2: Leader effectiveness will improve within six months for low-relating leaders who received ICS training as measured by the MLQ.

Hypothesis 3: Leadership outcomes will improve within one year for all leaders who received ICS training as measured by company performance reviews.

Hypothesis 4: Leadership outcomes will improve within one year for low-relating leaders who received ICS training as measured by company performance reviews.

Hypothesis 5: Group dynamics will move to a more advanced level of development as measured by the GDA within six months for teams reporting to leaders who received ICS training.

Hypothesis 6: Group outcomes will improve within one year for teams whose leaders completed ICS training as measured by the aggregation of team member’s individual objective performance review ratings.

Implementation

**Test administration.** All tests should be administered according to the *Standards for Educational and Psychological Testing* so that participants are protected from harm, the validity and reliability of the tests are maintained, and to uphold the credibility and trustworthiness of the proposed study and its authors (AERA, APA, & NCME, 1999). Key standards in test administration include those ensuring standardization of administration to avoid biased results, test-taker confidentiality and privacy, and informed consent. In keeping with standard 11.3, all
administrators and assistants will be thoroughly trained in the administration of all tests before testing takes place including any special instructions for language barriers, disabilities, or norm groups (AERA, APA, & NCME, 1999). As recommended by Drummond and Jones (2006), all administrators will take the MLQ and GDA assessments themselves and then read and practice the directions for answering questions. Checklists will be used to ensure all tests are administered according to the test instructions and to ensure consistency across groups.

Privacy and confidentiality are important in the administration of all tests not only to the leader but for employees who complete the MLQ survey or GDA survey on their leader or group. Standard 5.7 outlines the rights of all test-takers to privacy in keeping with the APA (2010) ethics principle to do no harm. Of particular concern in the proposed study is the question of who will have access to and be responsible for maintaining and protecting the test data. It is not necessary to the success of the study itself to share the test results with the company or with test participants. Both the APA (2010) and the International Test Commission (2005) however, advocate for the timely sharing of results of any psychological test with test-takers. Because of the investments involved, the company executive and participant supervisors may also want to see MLQ and GDA results. Companies typically have secure systems for protecting performance review results but may have no such mechanisms for storing MLQ or GDA results. For purposes of this study then, it will be proposed that individual MLQ and GDA data be provided only to participants and their supervisors on an individual level and that aggregated results only be provided to the company executives.

In accordance with psychological testing standards 8.4 and 8.5, all participants will be required to provide their informed consent before participating in the MLQ and GDA tests (AERA, APA, & NCME, 1999). Participants will be provided with information that will pre-
empt questions about the purpose, use, publication, or process associated with the test procedure. Within the process description, instructions for any accommodations for disabilities will be provided. Because a regular review of performance is implied with acceptance of employment, informed consent for a performance review is not typically required. In this case however, the use of the performance review in this particular context as associated with a specific training intervention promotes erring on the side of disclosure. Because of the imbalance of power of the company or supervisors over the study participants, coerced participation will be a concern. Study participants may not feel they have a choice to participate in testing. For these reasons, the company will be coached on how to communicate the entire process to the employees including the use of performance review data in the analysis. The selection of more participants than needed in the sample group allows for voluntary withdrawal on the part of participants.

**Treatment condition.** ICS training and coaching will be provided by an expert leadership coaching and facilitation provider who specializes in ICS development. The training will consist of one full day of in-person group training followed by three one-hour remote group-coaching sessions and three individual coaching sessions. Group coaching sessions will take place in two-week intervals following the initial training and consist of 30 minutes of content reinforcement plus 30 minutes of group coaching. Individual coaching will occur during the alternate two-week interval. Five-minute reinforcement exercises will be e-mailed to participants four days per week over the duration of the program (60 days) and once per quarter for three quarters. Leaders in the control group will be given training in a different topic by the same facilitator in order to control for modeling by the facilitator. Topics taught to the control group may include safety and security, drug-free-workplace, health and wellness, and/or sexual harassment depending on what training has already been provided by the company. The control
group will receive the same type of support for the topic presented in the initial training as the experimental group. Class sizes for both groups will be limited to 10 people due to the feedback and coaching requirements of in-class ICS training.

Despite the potential for DBT to provide a model for developing ICS in leaders, using it as a model in this experiment cannot be allowed to tempt researchers to practice therapy on leaders with relational issues under the guise of coaching. The International Coaching Community requires knowledge of what distinguishes coaching from counseling or psychotherapy as one of its core competencies (ICC, 2013). Ives (2008) differentiates a therapeutic counselor from a goal-oriented coach as a distinction between a feelings-focus versus a goal-focus. Ives suggests that in coaching, improvements in affect may come as a result of coaching but not necessarily as a goal of coaching. Given that even DBT is often used outside of its original diagnostic use (Hoffman, Fruzzetti, & Swenson, 1999; Huffman et al., 2003; Kirby & Baucom, 2007), the training approach proposed here should not pose a significant ethical risk if applied correctly. In keeping with a true coaching model, the program guides will be designed to keep the coach and client focused on future-oriented development rather than analyzing past feelings and experiences (Stober, 2006).

Data Analysis

Descriptive statistics (mean and standard deviation) will be computed for the control groups and experimental groups for each outcome measure at time one (immediately before training) and at time two (six months for the behavioral measures using the MLQ and GDA and 12 months for the leader and group performance reviews). Descriptive statistics within each outcome measure will be reported for the low-relating subgroup. The independent variable is training or no training and the dependent variables are the assessments of leadership behavior,
performance, group behaviors, and group outcomes. Because t-tests assume basic parametric data, the experimental and control statistics will be checked at both times for homogeneity of variance and normal distribution (Howell, 2011). The assumption for homogeneity of variance will use the Levene Test and the assumption for normal distribution will be tested using the Shapiro-Wilk test for samples under 2,000. This is especially important for the expected small sample in the low-relating subgroup. Because the training is only useful if it improves outcomes, only one side of the normal distribution is of interest and a one-tailed test will be used at a significance of $p = .05$.

If the null hypotheses are rejected, then effect sizes will be calculated using Cohen’s $d$ which measures the standardized impact of the treatment from the mean before and after training (Howell, 2011). An effect size of .20 is considered a small effect size, of .5 is considered medium, and .8 is considered large (Howell, 2011).

**Ethical Considerations**

There are several ethical considerations in the design of this research. There is a concern that the researchers, test administrators, or facilitator/coach may have an interest to positively influence the results of the study. Standard 12.2 of the *Standards for Educational and Psychological Testing* warns against such conflicts of interest (AERA, APA, & NCME, 1999). For this reason, an independent third party data analysis firm will be engaged to analyze and report results.

There is a potential for wasting valuable leadership time and resources on training that is unnecessary especially in the control group. Alternatively, low-relating leaders in the control group may not immediately receive what may be a job-saving intervention. Using Ford’s (2006) ethical reasoning model, the principle of nonmaleficence and standard to avoid and minimize
harm to the individual is weighed against the principle of beneficence or potential benefit that the research can provide to the whole (APA, 2010). This dilemma is minimized by ensuring that the leaders in the control group are receiving training for something that is useful to their jobs and by providing ICS training as soon as possible to the control group after the results of the study indicate.

It is important to the outcomes of this research that the researchers, facilitators, and coaches employed are multiculturally competent. According to the APA (2003), a multiculturally competent practitioner is culture-centered and responsive to the fact that all individuals are influenced by different cultural contexts (p. 12). Rosinski (2003) defines a given group’s culture as “the set of unique characteristics that distinguishes its members from another group” such as members of the same gender, religion, race, country, geography, profession, or company among other things (p. 20). This is especially important for interpersonal communication skills coaches and facilitators for a variety of reasons. Personal biases and prejudices can interfere with the ability to connect and empathize with the client (Forsyth, 2013). The humanistic approach to coaching requires unconditional positive regard that transcends cultural differences (Stober, 2006). It is important that clients believe that coaches can relate to their own experience of the world (Stevens, 2005). For example, some cultures prefer a more directive versus non-directive approach to both learning and communication (Rosinski & Abbot, 2006). Perhaps most common and often overlooked however, are the communication differences between genders. For example, the same level of assertiveness may be seen as a positive attribute in male leaders and as a negative attribute in female leaders (Berdahl, 2006; Short, Holmes, & Garner, 2008). It will be imperative for the professionals executing this proposed study to be sensitive to their own
cultural biases regarding the “right” or “wrong” interpersonal communication skills and teach evidence-based skills appropriate to the general context or situation of participants.

Multicultural competence is “the ability to understand and constructively relate to the uniqueness of each client in light of the diverse cultures that influence each person’s perspective” (Stuart, 2004, p. 3). APA (2003) multicultural guidelines cite Fiske’s (1998) observation that “automatic biases can be controlled with motivation, information, and appropriate mood” which indicates that multicultural competence can be taught (p. 23). Multicultural competence can be used as one of the selection criteria in screening coaches and facilitators but this might compromise the repeatability of the research. Instead, some training on multicultural competence should be incorporated into the coach/facilitator orientation as part of the train-the-trainer preparation.

In summary, the proposed methodology is designed to provide sound empirical support for the efficacy of interpersonal communication skills training in improving leadership effectiveness and outcomes. It is designed to use the hallmarks of good research while upholding the ethics of the profession and maintaining multicultural considerations.
**Chapter 4. Expected Results**

Based on prior theoretical and empirical research, it is expected that ICS training will have a statistically significant positive impact on multiple leadership outcomes for the experimental sample group of leaders. The largest effect sizes are expected to occur among the low-relating leaders. This is theoretically logical because current trends in leadership theory place as much or more emphasis on the relational aspects of leadership as they do on task-oriented ones (Derue et al., 2011; Dinh et al., 2014). In addition, interpersonal communication skills represent the operationalization of the relationship management component of emotional intelligence which has also been linked to a number of positive outcomes including GPA and income level (Goleman, 2005).

Positive findings are also indicated by existing empirical research. If relationship-oriented leadership is essentially equivalent to a supportive communication style as some authors suggest, then training in ICS should have a similar effect on MLQ measurements as does training in transformational leadership (De Vries et al., 2010). In an experiment done by Hassan, Fuwad, and Rauf in 2010, the effect sizes using Cohen’s d for a change in transformational leadership behavior and satisfaction with the supervisor after training were 1.16 and 2.11 respectively. Other interpersonal skills training has produced relatively modest effect sizes with larger impacts occurring where the training was presented using best practices in learning as this proposal suggests (Hunt & Baruch, 2003). For these reasons, the effect sizes using t-tests and the MLQ measures of individual leadership effectiveness are all expected to be significant and positive but greater for the low-relating leaders in the sample who have more room to improve. A moderate to high effect size of .5 to .8 is predicted for the experimental group as a whole with higher effect sizes predicted for low-relating leaders.
Because interpersonal skills are so important to leadership effectiveness, it is likely that many leaders are already highly skilled and may not have as much room for improvement as the working population as whole. In addition, the theoretical models and much of the research discussed here also support the importance of task-oriented behavior (Derue et al., 2011; Dinh et al., 2014). Interpersonal communication skills may be necessary for highly effective leadership but they may not be sufficient enough to make a difference in all cases for all measures. Specifically, limitations in the performance measurement instruments may make the impact on tangible leadership outcomes more modest. Because the performance review measures have only four ordinal levels representing interval data, improvements in performance may be too small to be detected. The Group Development Assessment (GDA) is similarly disadvantaged but the GDA is more subjective than the performance review outcomes and specifically measures relational-oriented factors. It may be more sensitive to training impacts for those groups that were stuck in the “storming” stage of Tuckman’s (1965) group development model. Effect sizes using t-tests for individual and group performance are expected to be in the low to moderate range (d = .2 to .5).

Leedy and Ormrod (2013) point out that the statistical power (probability of avoiding a type II error) of an experimental result is dependent in part on the effect sizes, statistical significance, and the precision and accuracy of the measurement instruments used. Having lower effect sizes and lower instrument precision for performance output and group measures of the experimental group as a whole means that the statistical power for these analyses may be as low as .2. If the results are as expected, the scientific merit of the findings for low-relating leaders will be greater than for the experimental group as a whole. Ethically, the APA code requires disclosure of any limitations and clear qualifications of the statistical validity of results
where indicated (APA, 2010). It may not be possible to reject the null hypothesis in all of the proposed analyses but this in itself, is information that extends the knowledge base and provides the basis for further research.
Chapter 5. Discussion

Key Results

This study contributes to multiple areas of existing research. It is anticipated that this will be the first study to demonstrate that evidence-based development of a full range of interpersonal communication skills is helpful to the success of all leaders and especially effective as an intervention for improving tangible and intangible outcomes of relationally-challenged leaders. This result is in line with multiple leadership models supporting the importance of both relational and task-oriented behaviors (Derue et al., 2011; Northouse, 2010). It is also supported by correlational and experimental research linking interpersonal skills or styles or communication skills to leadership effectiveness (De Vries et al., 2010; Hargie, 2011; Hunt & Baruch, 2003; Johnson & Bechler, 1998).

The present study is distinguished from past research however, in several ways. Interpersonal communication skills as defined here include reinforcing, questioning, reflecting, listening, explaining, self-disclosure, assertiveness, persuasion, negotiating, and set induction. Existing experimental research such as that conducted by Johnson and Bechler (1998) tends to focus on only one element of ICS such as listening. Correlational research compares communication styles or related measures instead of skills (De Vries et al., 2010; Hargie, 2011). The present study also incorporates more levels of assessment than similar studies (Dinh et al., 2014). Findings are expected to show that ICS training improves leadership outcomes at both individual and group levels of assessment.

The proposed research is expected to add to the evidence supporting an integrated cognitive and behavioral approach to developing interpersonal communication skills. Although the approach taken here does not compare alternative methods of learning, it does apply methods
previously supported by both theoretical and empirical research including booster sessions, group and individual coaching, behavioral modelling, and group skills training (Arbes & Hubbell, 1973; Baggs & Spence, 1990; Bohart, Landeros, Hewitt, & Heilman, 1979; Clark, 2010; Panos et al., 2014). Some qualifications however must be noted when taking this proposal into consideration as presented in the following section.

**Limitations**

How to best measure leadership performance has long been the subject of debate (Dinh et al., 2014; Kline & Sulsky, 2009). Although performance appraisals have proven to be reliable indicators of performance, there may be too few discrete intervals used here to detect a change due to ICS training (Kline & Sulsky, 2009; Zimmerman & Triana, 2010). Continuous data such as project variance from budget may have been a better choice than performance review ratings. If the supervisor performance appraisals are not truly reflective of individual performance then their aggregation for group outcome measures certainly will not be either. In addition, recent theoretical research shows support for both sequential group development through Tuckman’s (1965) 5-stage development model and a structure that would be better measured using categorical analyses and Chi-Square testing instead of t-tests with the GDA using interval data assumptions (Chang, Bordia, & Duck, 2003). Both approaches are theoretically supported. If and when other instruments are validated for emerging leadership theories and alternative group development theories, this study should be repeated using those instruments. This study is also likely to be limited in its generalizability to other diverse populations due to its sample size. The research should be replicated using samples with other ethnic representations in other locations.

Dinh et al. (2014) point out the need to complete research at all levels including organizational impacts. Future research should include organizational analyses to determine the
cultural impact of training all or most leaders in ICS. Other extensions of the proposed study might include long-term performance indicators such as income level and promotions to assess the longitudinal effects of ICS training beyond one year.

Despite its limitations, the scientific merit of this proposal is supported by a review of the literature and by the use of a research design that exhibits the hallmarks of good research. The results of this study will add to the knowledgebase and contribute to theory using an experimental design and validated measurement instruments.
References


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