2013

Examining the effects of leader social intelligence on employee engagement

Josh Dazel

EXAMINING THE EFFECTS OF LEADER SOCIAL INTELLIGENCE ON EMPLOYEE ENGAGEMENT

A Research Project

Presented to the Faculty of

The George L. Graziadio

School of Business and Management

Pepperdine University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

in

Organization Development

---

by

Josh Dazel

August 2013

This research project, completed by

JOSH DAZEL

under the guidance of the Faculty Committee and approved by its members, has been submitted to and accepted by the faculty of The George L. Graziadio School of Business and Management in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE
IN ORGANIZATION DEVELOPMENT

Date: August 2013

Faculty Committee

Committee Chair, Kevin Groves, PhD

Committee Member, Miriam Y. Lacey, PhD

Linda Livingstone, Ph. D., Dean
The George L. Graziadio School of Business and Management

Abstract

This study evaluated the effects of leader social intelligence (SI) on employee engagement (EE) by measuring 36 leaders' SI and interviewing 10 leaders. Although managers were rated as utilizing SI competencies, there were no direct relationships with follower EE ratings. Findings suggested that Empathy may be the most effective SI for EE. Findings suggested that the SI competency of Teamwork also may have some impact. Mixed support was generated for the other five SIs. Support was inconclusive regarding direct relationships between leader SI and EE. However, 17 leaders with the highest EE scores exhibited significant relationships between EE and the SIs of Teamwork, Organizational Awareness, Empathy, and Social Awareness. Further research is necessary to examine other variables that may impact EE, such as job design. Practical implications of this study are that training and coaching investments in leader Empathy and Teamwork may enhance EE outcomes.

Table of Contents

List of Tables

Table Page

Chapter 1

Introduction

Since the start of the global recession in December 2007, employers began to increasingly scrutinize their operating costs and a steady stream of layoffs followed. The Bureau of Labor Statistics counted the total number of jobs lost from the pre-recession peak to be 8.8 million (Goodman & Mance, 2011). Following reductions, the remaining workforce is often left to cope with similar workload demands and drastically reduced resources. The result can be a significant decrease in employee engagement, which research has shown to be a key indicator of positive business outcomes (Harter, Hayes, & Schmidt, 2002). Employee engagement is defined as "the extent to which employees are motivated to contribute to organizational success and willing to apply discretionary effort to accomplish tasks important to achieving organizational goals" (Wiley, 2010, p. 1).

It is important to note that employee engagement is strongly influenced by the employee's manager (Harter et al., 2002). Hughes, Thompson, and Terrell (2009) explained that engaging people at work requires an ongoing series of activities that stir employees' caring and involvement related to the organization and their work. They speculated that leaders' emotional intelligence is critical to this effort. Moreover, examining the work of leadership theorists such as Bass (1990), Kobe, Reiter-Palmon, and Rickers (2001), and Mayer and Salovey (1993) further indicates that the associated construct of social intelligence also plays an important role in engagement.

E.L Thorndike first used the term *social intelligence* in a 1920 article for Harper's Magazine (as cited in Thorndike & Stein, 1937). In his literature review of social intelligence, Bar-On (2006) concluded that the majority of social intelligence definitions and conceptualizations since then have focused on five competencies: (a) the ability to

recognize, understand and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated.

For the purpose of this study, social intelligence is defined as "a set of interpersonal competencies built on specific neural circuits (and related endocrine systems) that inspire others to be effective" (Goleman & Boyatzis, 2008). This definition of social intelligence is adopted because it describes the construct as an antecedent to the effective performance of others, similarly to Harter et al.'s (2002) definition of employee engagement, which specifies engagement as being under the direct influence of an employee's manager. Current research suggests that leader social intelligence, including clusters of competencies like Social Awareness (recognizing and understanding the emotions of others) and Relationship Management (applying emotional understanding in our dealings with other) differentiate outstanding performers from average performers because they indicate an ability to understand the emotions of others and apply this understanding when dealing with them (Boyatzis & Goleman, 2012).

Goleman and Boyatzis (2012) have proposed that a relationship exists between the observable interpersonal behaviors (such as social intelligence) and engagement indicators. They explained that emotional and cognitive engagement are influenced by (a) the social intelligences of empathy and coaching and mentoring, (b) knowledge of what is expected of them, (c) what they need to do their work, (d) being given opportunities to have an impact and feel fulfillment in their work, (e) perceiving they are part of something significant with coworkers whom they can trust, and (f) having chances to improve and develop.

By measuring and taking action to develop social intelligence in leaders, Goleman and Boyatzis (2008) noted corporate performance gains similar to those identified by Harter et al. (2002). Additionally, the social intelligence competencies identified in the Goleman and Boyatzis (2008) model largely address all six of Harter et al.'s employee engagement indicators. These conditions suggest that leader social intelligence is a likely predictor of employee engagement.

Purpose

The purpose of this study was to examine the relationship between leader social intelligence and employee engagement at a Nordic telecommunications company that operates in the United States. Three research questions were examined:

1. What is the leader's composite engagement score? Engagement score was calculated based on his or her direct reports' responses on the company's annual employee survey.
2. What is the leader's social intelligence? Social intelligence was assessed through self-report and rater-report as a means of validating the self-report.
3. What relationships exist between leader social intelligence and composite engagement score?

Although the existing literature implies a correlation between employee engagement and emotional intelligence (Hughes et al., 2009), there is little empirical evidence supporting the correlation with competencies specifically related to social intelligence. Social intelligence is a broader construct than emotional intelligence. Kobe et al. (2001) posited, "It may be that social intelligence is a primary component of leadership and therefore would account for more variance in leadership than would emotional intelligence" (p. 158).

The results of this study have the potential to advance the field's knowledge. Also, an interpersonal set of competencies, like those relating to social intelligence, have

been selected for this study because they have the potential to be changed developmentally (Goleman & Boyatzis, 2008) over time. Thus, the present study's findings may help the organization identify and develop leadership candidates for the future. This is of particular interest to the researcher because of the potential for future leadership development applications, although such applications are beyond the scope of the current study.

Study Setting

The study organization is a telecommunications company headquartered in Europe. The company was founded in 1976 and now employs more than 108,000 staff (roughly 22,000 in research and development alone) in more than 175 countries. Roughly 40% of the world's mobile telephone traffic now passes through its networks. Net sales in 2011 were US$35 billion, with a large part of the profits being derived from the global business unit responsible for fixed and mobile networks. It is within this unit, business unit networks, that a large portion of the sample population is employed.

Organization of the Study

This chapter provided the study background, purpose, and setting. The next chapter provides a literature review on social intelligence and employee engagement. Chapter 3 describes the methods used in this study, including the research design, variables, and procedures related to sampling, surveys, interviews, and data analysis. Chapter 4 provides a description of the sample and reports the survey and interview results. Chapter 5 provides a discussion of the results, including primary findings, implications for social intelligence theory, recommendations for practice, limitations, and suggestions for future research.

Chapter 2

Literature Review

In this chapter, the origin and progression of social intelligence as an area of study will be described, including how the definition has matured since the first use of the term by Thorndike in 1920. Second, the neurobiological underpinnings of social intelligence will be explored. Third, the three most widely recognized contemporary assessment tools and corresponding models will be described, and the reasons for selecting the assessment and model used in the current study will be clarified. Finally, as employee engagement data from the study organization's annual Dialog survey will be leveraged as the dependent variable, the research behind the survey and its operating model will be explored.

Social Intelligence

History. In 1920, E.L Thorndike first defined social intelligence as the, "ability to understand and manage people" (Thorndike & Stein, 1937, p. 275). The language is quite similar to the contemporary definitions; however, in the years after Thorndike's article was first published, the way social intelligence came to be defined deviated significantly from this initial definition (Kobe et al., 2001). By 1937, when Thorndike and colleague Saul Stein published an article in the psychological bulletin titled, *An Evaluation of the Attempts to Measure Social Intelligence,* few assessment tools for effectively measuring social intelligence, in the context of Thorndike's original definition, had been created. Thorndike and Stein describe the challenges researchers faced in even attempting to determine what to include in discussions about social intelligence, and how to assess it. Up to the time the article was written in 1937, they stated that many related topics had often been confused with and erroneously included in social intelligence models. They

organize these commonly confused topics into three categories: (a) instances where the word *social* is used with a different meaning; (b) attempts to estimate social interest or attitude; and (c) those measuring items of acquired information, which could be as simple as knowledge of current events. The idea that the word *social* was being used with a different meaning up to that time is exemplified by the fact most assessments could be categorized as tests of character. Character is a relative term that is defined by the society and is not focused on individual-to-individual interactions, which is a trademark of the contemporary definition of social intelligence (Bar-On, 2006; Goleman & Boyatzis, 2008). It is with this individual-to-individual interaction in mind that the current study defines social intelligence as, "a set of interpersonal competencies built on specific neural circuits (and related endocrine systems) that inspire others to be effective" (Goleman & Boyatzis, 2008, p. 1).

As previously stated, a large number of studies leading up to 1937 also focused on estimating social interest, attitude, and adjustment. Examples are questionnaires like the Introversion-Extroversion Questionnaire developed by Flanagan, the Sociability Scoring Key by Guilford, and Washburn's questionnaire relating to Social Adjustment. Washburn's questionnaire was designed to measure purpose, socialness, sympathy, poise, and impulse judgment (Thorndike, Stein, 1937). Most of these are self-focused and do little to assess the interpersonal components of social intelligence. If we accept the premise that interpersonal competencies are key aspects of the contemporary definition of social intelligence (Goleman & Boyatzis, 2008), then the quality of individual-to-individual interactions should be a critical component. Measures of acquired information, known as "information tests," were designed as tests of things like ethical vocabulary, knowledge of sports, and knowledge of government and customs. These seem to be tests

of the absorption or awareness of social information, rather than tests of social intelligence proper. Therefore, subsets of questions relating to this were subsequently dropped from tests like the George Washington Social Intelligence Test, which was the first widely used measure of social intelligence. However, the shift did not occur uniformly across the field. By the time Thorndike and Stein wrote their article in 1937, the test of social intelligence developed by the Bureau of Public Personnel Administration still contained an information sub-test. Although a shift toward the contemporary definition of social intelligence could be observed by this time, it was being unevenly applied.

In their article, Thorndike and Stein (1937) state the George Washington Social Intelligence Test was the most commonly used and deeply studied test of social intelligence at the time. Created by F.A. Moss and his colleagues at George Washington University in 1926, The test was composed of the following subtests: (a) judgment in social situations, which consists of multiple choice questions relating to common social relationships issues; (b) recognition of mental state of speaker, which comes in the form of a matching test of short speeches and common emotions; (c) observation of human behavior, a true/false test of generalizations about human behavior; (d) memory for names and faces, again in the form of a matching test, but in this case names and faces are studied and then identified among a larger number; (e) sense of humor, a multiple-choice test where respondents are asked to complete jokes; (f) identification of emotional expression, a matching test of pictures and potential emotions they express; and (g) social information, a true/false test of topics of social interest (Thorndike & Stein, 1937).

As previously stated, the George Washington Social Intelligence Test was widely studied. In Hunt's (1928) work *The Measurement of Social Intelligence*, it was argued the

test was valid because of the high level of reliability in indicating a link between the social demands of an individuals' occupation and their test scores (i.e., those in occupations with high demands for social intelligence score higher on the test than those in occupations with less demand), and the link between test scores and the number of extracurricular activities respondents participated in. Other scholars (e.g., Strang, 1930; McClatchey, 1929) were not able to repeat Hunt's findings, which lead to criticism of the study and test in general. McClatchey explained that he found "no appreciable difference in test scores between a group of college girls who were selected as making the best social adaptation of any in their sorority and an unselected group of college students" (as cited in Thorndike & Stein, 1937, p. 280).

In addition, Thorndike and Stein (1937) pointed out two additional criticisms of the George Washington test. First, the results do not correlate with other existing tests of an individual's social side. For example, when the social intelligence test results were correlated with the Gilliland Sociability Questionnaire, there was little connection between the two. This seems to indicate the two tests were not measuring the same thing and that just because a person has an interest in people does not mean they have the ability to understand them. Second, the high correlation with measures of abstract intelligence lead Thorndike and Stein, "to conclude that the George Washington Social Intelligence Test is so heavily loaded with ability to work with words and ideas, that differences in social intelligence tend to be swamped by differences in abstract intelligence" (p. 282). As a result, the test was deemed invalid because it does not accomplish the goal of measuring, "the ability to deal with people" (p. 284). Lowman and Leeman (1988) commented,

> Although . . . [social intelligence] has been discussed sporadically in the literature [since Thorndike's first mention of the construct] (MacDonald & Cohen, 1981; Reardon, Foley & Walker, 1979; Thorndike & Stein, 1937; Walker & Foley, 1973) . . . [it] has been especially scant compared to the voluminous literature on general intelligence, spatial abilities, verbal reasoning, and even such highly circumscribed abilities as music and art. (p. 281)

Lowman and Leeman further described the existing literature as being divided into two major areas:

> basic social and interpersonal skills generically needed to get along in the world, and occupationally relevant social abilities and personality variables, the possession of which would presumably propel a person into the choice of a career that requires social intelligence. (p. 282)

The second area aligns with occupational demands described by Hunt (1928), indicating that although the definition of social intelligence shifted significantly over the years, there are key components that remain in the contemporary definition.

Several precursors have been linked to the concept of social intelligences. These are discussed in the sections below.

Leadership constructs. Although social intelligence proper was inconsistently studied in the years between Thorndike's (1937) first article on the subject and Goleman's (2006) work, the inter-relational aspects of leadership began to be emphasized within various leadership constructs, including transformational leadership (Bass, 1998), charismatic leadership (Conger & Kanungo 1987), leader-member exchange (Bernerth, Armenakis, Feild, Giles, & Walker, 2007; Graen &Uhl-Bien, 1995), connective leadership (Lipman-Bluman 1996), and socially responsible leadership (Komives & Wagner, 2009; Komives, Lucas, & McMahon, 2007). Each showed benefits of positive social interactions with leaders.

Emotional intelligence. Most directly, social intelligence in its contemporary form, is a continuation of the extensive research into emotional intelligence, beginning in

1995. Emotional intelligence is defined as "the essential mix of emotional, personal, and social competencies that influences our ability to be personally effective and professionally productive" (Hughes et al., 2009, p. 784). As a leading social intelligence scholar and author of the 2006 book, *Social Intelligence: The New Science of Leadership*, Goleman began his work as a result of his extensive contribution to studies in the field of emotional intelligence. Kobe et al. (2001) commented, "Goleman (1995, 1998) defined emotional intelligence as the ability to handle one's emotions in varying situations" (p. 155). He proposed that the key skills include self-awareness, self-regulation, motivation, empathy, and social skill.

In 1997, Bar-On included social intelligence as a component of his emotional intelligence model of which personal, emotional, and social competencies were the key components. He indicates emotional intelligence should be a predictor of success because those with strong emotional intelligence should be capable of applying knowledge in real time. This aligns with Feldman's (1999) work, *The Handbook of Emotionally Intelligent Leadership: Inspiring Others to Achieve Results*, where he suggests that emotionally intelligent leaders are more effective because they are aware of the needs of those they interact with and this grants them the ability to respond appropriately to a given situation. Similarly, Mayer and Salovey stated, "emotionally intelligent individuals recognize emotions in themselves and others and are able to respond appropriately" (as cited in Kobe et al., 2001, p. 155). They agreed with the findings of Goleman (2006), Bar-On (1997), and Kobe et al. (2001), in that they separated emotional intelligence from the construct of general intelligence and, like Bar-On, their studies indicate that emotional intelligence, not general intelligence, is the stronger indicator of performance (Kobe et al., 2001).

Social intelligence shifts the focus from single person psychology. Goleman (2006) commented,

> When I wrote *Emotional Intelligence*, my focus was on a crucial set of human capacities *within* us as individuals, our ability to manage our own emotions and our inner potential for positive relationships. [With social intelligence] the picture enlarges beyond a one-person psychology—those capacities an individual has within—to a two-person psychology: what transpires when we connect. (p. 5)

Kobe et al. (2001) noted that two components comprise social intelligence: (a) being aware of or noticing others' needs and problems and (b) responding or adapting to different social situations. Just as in the early work surrounding emotional intelligence, there was debate about whether social intelligence could be separated from the construct of general intelligence. Over time, researchers came to the conclusion that social intelligence, like emotional intelligence, is separate from general intelligence and might be used to predict behavior.

Neurobiological underpinnings. Studies in neuroscience have enabled detection and measurement of the brain's reaction to leaders' social cues. The available evidence suggests the minds of leaders and followers almost seem to merge into one interconnected system (Boyatzis & Goleman, 2008). Goleman (2006) explained,

> Our social interactions . . . play a role in reshaping our brains through "neuroplasticity," which means that repeated experiences sculpt the shape, size, and number of neurons and their synaptic connections. By repeatedly driving our brain into a given register, our key relationships can gradually mold certain neural circuitry. In effect, being chronically hurt and angered or being emotionally nourished, by someone we spend time with over the course of years can refashion our brain. (p. 197)

This suggests that leaders' social intelligence may have profound influence on employees; therefore, it is important to measure and enhance such competencies. This serves to add validity to the social intelligence construct in general and the relevance of the current study. Reader and Laland (2002) described the link between behavioral and

social learning ability and brain size in mammals and noted that a correlation seems to exist between innovation and the size of the brain, although causality could not yet be determined. As the executive brain ratio increased, innovation frequency and social learning increased. This would give mammals the ability not only to understand the intricacies of interactions, but may have granted the ability to intentionally adapt their behavior and influence the behavior of others through newly identified concepts like mood contagion.

Goleman and Boyatzis (2008) explained, "Mood contagion stems from neurobiology. Positive behaviors—such as exhibiting empathy—create a chemical connection between a leader's and followers' brains. By managing those interconnections adroitly, leaders can deliver measurable business results" (p. 1). However, it is important to note these interactions must be genuine, as attempts at social manipulation can be sensed by the amygdala. When people are not being truthful, their micro-expressions do not match the words they are speaking. This disparity reveals the lie. Attempts to suppress the emotional expression are ineffective, extremely unhealthy, and result in dangerous medical conditions such as high blood pressure and increased cardiovascular risk (Goleman, 2006). Goleman describes this natural interpersonal radar as being critical to our early survival as a species. The *emotional tango* it creates releases a rush of hormones, which regulate our biological systems. Therefore, the strong interplay between the qualities of our relationships our health has become clear. High quality connections have been shown to improve immune system functioning, cardiovascular health, and patterns of neuroendocrine activity.

The study of social intelligence may be more important than ever, since some of the cornerstones of modern society appear to be in direct conflict with the importance of

human sociability. Social corrosion among the young is being observed as technological advances push us further apart. As of 2006, 40% of 2-year-olds watched 3 hours of television per day. Goleman (2006) points to studies that predict that associate increased time in front of the television during childhood with increased inclinations toward violence. The loss of human connection appears to be, at least, partly to blame. The Internet, emails, iPods, and even new global organizations continue to distance people from each other, creating an effect Goleman (2006) describes as "social autism." This is just one potentially harmful side effect of the influx of new technology into our lives; however, the ultimate impact of this decreasing social connection remains to be seen. It may indicate that work around social intelligence in organizations is now more important than ever. As Millennials continue entering the workforce, it will be even more critical for leaders to have a sharply attuned set of skills with which to keep them engaged.

As researchers attempt to make sense of how the human brain reacts to social interactions, there have been some fascinating findings. For example, when we look into the eyes of someone we love or are impacted by the negative effects of bigotry, our social brains synchronize (Goleman, 2006). Discoveries in the field have made the connection observable and begin to help us understand exactly how the synchronization occurs:

> The spindle cell, acts the most rapidly . . . guiding snap social decisions for us—and has proven to be more plentiful in the human brain than in any other species. A different variety of brain cells, mirror neurons, sense both the move another person is about to make and their feelings, and instantaneously prepare us to imitate that movement and feel with them. (Goleman, 2006, p. 9)

Recent advances in functional magnetic resonance imaging (fMRI) show that when followers recall experiences with "resonant" leaders, parts of the brain that are associated with mirror neurons are activated. These areas of the brain include the bilateral insula, right inferior parietal lobe, and the left superior temporal gyrus. Conversely, the

recollection of interactions with "dissonant" leaders creates a negative reaction in the right anterior cingulate cortex and activated the right inferior frontal gyrus, bilateral posterior region of the inferior frontal gyrus, and bilateral inferior frontal gyrus/insula. These regions of the brain have been shown to be associated with the mirror neuron system and specifically relate to negative emotional responses, including avoidance, narrowed attention and decreased compassion. This is a strong example of how leaders with low social intelligence can unintentionally negatively affect the emotions, and in turn behavior, of their followers (Boyatzis, Passarelli et al., 2012).

This interplay results in what Goleman (2006) describes as an *emotional economy*. Since emotions are contagious there are inner gains and losses. Every human interaction, without exception, contains an unspoken subtext and the mood resulting from the exchange remains in place well after interactions occur. Viewing a picture of a smiling face causes our facial expressions to mirror it and creates a subconscious stirring of emotion. In effect, the act of smiling itself can create a sense of well-being in the person taking the action. The amygdala plays an important role as the brain's early warning system by deriving emotional meaning from social interactions and facial expressions, but through conscious action we can fine-tune our reactions. This is one example of the potential benefits of evaluating and ultimately developing social intelligence in leaders. Building awareness of mood triggers can allow leaders to use them to their advantage when attempting to increase employee engagement.

Social intelligence and leadership. From a leadership perspective, Bass

> declared that good leaders are those individuals who are best able to understand and interact with their followers. Good leaders show empathy for and understanding of the needs of their followers . . . and spend time assessing the groups' attitudes and motivations and are concerned about their levels of satisfaction. These components of good leadership are captured by the social

> intelligence construct. It seems plausible then that social intelligence is an essential component of leadership. (as cited in Kobe, Reiter-Palmon & Rickers, 2001, p. 157)

Mayer and Salovey's (1993) research seems to confirm this idea. Since leadership is broad and social intelligence is a broader construct than emotional intelligence, "it may be that social intelligence is a primary component of leadership and therefore would account for more variance in leadership than would emotional intelligence" (Kobe et al., 2001, p. 158). This is one key reason the current study will focus on the effect of leader social intelligence on employee engagement.

The way leaders interact with the people around them can have a direct impact on the wellbeing of the team members. When our "biological dance" is in sync, our brain's response is to attune. This creates a feeling of rapport that helps people be creative, efficient, feels pleasant and increases the bond between the two individuals. In these instances, non-verbal communications have a much greater impact than what is being said. This "non-verbal duet" creates physical synchrony between two people and the more unconsciously in sync they are, the more comfortable people feel interacting with one another. Getting in sync helps generate emotional matching and attempts to fake synchrony have been shown not to work. It creates challenges similar to communicating by phone or email (Goleman, 2006).

Attempts have been made to identify the area of the brain that contributes to effective and ineffective personal and social interactions. In the 2003 article *Exploring the Neurological Substrate of Emotional and Social Intelligence* by Bar-On, Tranel, Denburg, and Bechara, it was found that damage to the ventromedial prefrontal cortex leads to poor decision making, especially in people's personal lives and when interacting with others. Patients with lesions in the somatic marker circuitry, part of the ventromedial

prefrontal cortex described earlier, had markedly lower emotional intelligence and social functioning.

Social intelligence models and assessment tools. Edgar Doll published the first instrument intended to measure social intelligence in 1935 (as cited in Bar-On, 2006) and over the years, various attempts were made to measure social intelligence utilizing a variety of methods. These testing methods included but were not limited to: true/false, Likert scale, and multiple-choice questionnaires and picture recognition. The three common contemporary assessments that have emerged are (a) the Emotional Quotient Inventory (EQ-i), (b) the Emotional and Social Competency Inventory (ESCI) measure created by Goleman and Boyatzis (2012), and (c) the Mayor-Salovey-Caruso Emotional Intelligence Test (MSCEIT) inventory (Bar-On 2006; Goleman 2006).

Social intelligence in general appears to improve with age, allowing for a degree of age bias (Bar-On, 2006). There are also discrepancies between the innate competencies of men and women. Although statistically insignificant when looking at ESCI as a whole, there are certain competencies that are on average stronger in women (awareness of emotions, empathy, interpersonal relation, and social responsibility) and those that are stronger in men (self-regard, self-reliance, coping with stress, flexibility, problem solving and optimism). Although these variances exist, there is little to no statistical significance when looking at overall ESCI. Similarly, it has been found there are no statistically significant deviations in the emotional-social intelligence levels across various ethnicities, which allows for consistent application irrespective of gender and ethnicity. However, due to common increases as people age, the EQ-I test and ESCI construct cannot be applied to children (Bar-On, 2006).

The Emotional Quotient Inventory. The Emotional Quotient Inventory or EQ-I was created by Reuven Bar-On (2006) and used in an effort to design a tool that would effectively measure emotional and social intelligence jointly. This resulted in the creation of the Bar-On model of emotional intelligence, which "stresses the importance of emotional expression and views the outcome of emotionally and socially intelligent behavior in Darwinian terms of effective adaptation" (p. 3). It was the first peer-reviewed and widely used measure of emotional and social intelligence and is comprised of 5 composite scales and a total of 15 subscale scores. The scales are: (a) intrapersonal (with subscales of self-regard, emotional self-awareness, assertiveness, independence, and self-actualization); (b) interpersonal (subscales of empathy, social responsibility and interpersonal relationship); (c) stress management (subscales of stress tolerance and impulse control); (d) adaptability (subscales of reality-testing, flexibility, and problem solving); and (e) general mood (subscales of optimism and happiness).

Using a sample of thousands of people from a variety of countries, there were six stages to the model's creation. First, an effort was made to identify the competencies to include in a model and organize them into related clusters. Second, the key clusters that surfaced were clearly defined. Third, information was gathered from more than 1,000 items from experience, a literature review, and information from health care providers. The five primary strategies of the Bar-On model of ESI are: (a) valuing self (self-regard, emotional self-awareness, empathy, flexibility, happiness, and optimism); (b) valuing others (emotional self-awareness, empathy, interpersonal relations, flexibility, optimism, social responsibility, and reality testing); (c) responsible awareness (emotional self-awareness, assertiveness, empathy, flexibility, impulse control, stress tolerance, reality testing, and social responsibility); (d) courage (emotional self-awareness, self-

actualization, stress tolerance, assertiveness, independence, reality testing, impulse control, optimism); and (e) authentic self (self-regard, emotional self-awareness assertiveness, independence, self-actualization, empathy, social responsibility, interpersonal relationships, stress tolerance, impulse control, reality testing, and flexibility).

Over time, Bar-On (2006) refined the model to 10 factors: self-regard, interpersonal relationship, impulse control, problem solving, emotional self-awareness, flexibility, reality testing, stress tolerance, assertiveness, and empathy. The remaining five factors (optimism, self-actualization, happiness, independence, social responsibility) are viewed as facilitators of emotional intelligence and are, therefore, correlated but are not included as their own factors because of the degree to which they overlap the other 10 factors.

Since the initial design of the instrument was completed, it was tested on more than 3,831 adults in North America and also was evaluated across various cultures. Ultimately, per the Bar-On model of emotional intelligence, emotional and social intelligence is comprised of both emotional and social competencies, which cannot be fully evaluated, independent of each other (Bar-On, 2006). This is a key reason the Bar-On model and assessment will not be used in the current study.

The Mayor-Salovey-Caruso Emotional Intelligence Test. The Mayor-Salovey-Caruso Emotional Intelligence Test Version 2.0 (MSCEIT V2.0) intends to measure four groups of emotional intelligence abilities: (a) perceiving information accurately, (b) using emotion to facilitate thought, (c) understanding emotion, and (d) managing emotion (Mayer, Caruso, Salovey, & Sitarenios, 2003). It was developed based on a series of existing scales intended to measure emotional creativity, social intelligence, and

nonverbal perception. Utilizing a 141 item scale it uses two tasks to measure each of the four groups of skills noted previously.

> Perceiving emotions is measured with the faces and pictures tasks; facilitating thought is measured with the sensations and facilitation tasks; understanding emotions is measured with blends and changes tasks; and managing emotions is measured with emotion management and emotional relationships tasks. (p. 98)

This is a normed assessment rather than a self-assessment inventory.

Similarities can be seen to previously existing measures of social intelligence, dating nearly all the way back the 1920 emergence of social intelligence as topic of study. For example, the Perceiving emotions task uses picture recognition similar to the technique noted by Thorndike and Stein in 1937. The current researcher quickly eliminated the MSCEIT V2.0 as an appropriate measure for this study because the major components of the test appear to apply predominantly to self-focused emotional intelligence skills and attributes, as opposed to the inter-relational aspects of social intelligence that have been described earlier as the primary focus of the current study.

Emotional and Social Competency Inventory. Dan Goleman and Richard Boyatzis created the ESCI and first published it in 2007. ESCI is a multi-source assessment commonly referred to as *a 360°*. Here, peers and subordinates indicate the frequency with which the leader demonstrates the desired behavior. There are 12 competencies in the model: (a) emotional self-awareness, (b) adaptability, (c) achievement orientation, (d) emotional self-control, (e) positive outlook, (f) empathy, (g) organizational awareness, (h) inspirational leadership, (i) influence, (j) conflict management, (k) coach and mentor, and (l) teamwork (Boyatzis, Good, & Massa, 2012).

One of the key challenges with the tool is involved with the selection of responders. Since the person completing the assessment is often involved with the

selection of participants, there may be associated bias; however, “it is believed that any bias in those asked to complete the surveys would be distributed across the sample” (Boyatzis, Good et al., 2012), similarly to the previously described findings of Bar-On. A more recent study published in 2012 by the Hay Group and written by Richard Boyatzis (Boyatzis, 2012) found that ESCI competencies were positive indicators of leader performance.

The ESCI test was developed after some level of criticism developed in the field regarding previous emotional intelligence assessments, (ECI-2 and ECI-U). In response, the tests were re-conceptualized as measure of emotional and social intelligence combined (Boyatzis, 2012). A pilot study, comprised on 116 participants and 1022 raters confirmed the ESCI measures that contribute most to effective performance and the “focus on the use of one’s ability to understand and use emotions about oneself from the ability to apply emotional understanding when dealing with others” (p. 4). This is a key reason why the ESCI assessment tool has been selected for use within the current study. Although the test is intended to measure both emotional and social competence, the clusters in which the competencies have been organized make it simpler for the researcher to isolate those relating to social intelligence, the focus of this study. Table 1 presents all four ESCI clusters and their individual competencies. Only the Social Awareness and Relationship Management Clusters were examined in this study.

Table 1

Emotional and Social Competency Inventory Clusters

Self-Awareness Cluster	Self-Management Cluster	Social Awareness Cluster	Relationship Management Cluster
Emotional Self Awareness	Achievement Orientation Adaptability Emotional Self-Control Positive Outlook	Empathy Organizational Awareness	Conflict Management Coach and Mentor Influence Inspirational Leadership Teamwork

Note. Adapted from material presented in the "Emotional Social Competency Inventory," by the Hay Group, 2012.

Employee Engagement

Employee engagement indicates "the extent to which employees are motivated to contribute to organizational success and are willing to apply discretionary effort to accomplishing tasks important to achieving organizational goals" (Wiley, 2010, p. 5). Wiley adds that employee engagement should lead to improved performance because "a more engaged employee is more conscientious about his or her work, more committed to achieving organizational goals, more productive, and less likely to be absent or resign voluntarily" (p. 940). Harter et al.'s (2002) work shows this willingness results in significant positive business outcomes. It also states the effect is shown to be generalizable across business units regardless of the employee demographics, making employee engagement a particularly versatile indicator of corporate performance.

Harter et al. (2002) explain that engagement is present when employees: (a) are emotionally and cognitively engaged, (b) know what is expected of them, (c) have what they need to do their work, (d) have opportunities to have an impact and feel fulfillment in their work, (c) perceive that they are part of something significant with coworkers whom they can trust, and (d) have chances to improve and develop. Each of these employee engagement indicators is under the direct influence of an employee's manager

and each of the components appear to relate to the Social Awareness and Relationship Management clusters identified in the ESCI, the assessment tool used in this study. The competencies included in these clusters are empathy, organizational awareness, conflict management, coach and mentor, influence, inspirational leadership, and teamwork. These skills have been shown to develop over time and are not simply static characteristics (Goleman & Boyatzis, 2008). This makes them of particular interest, since the ambition beyond the current study is to ultimately identify skills that can be improved.

The study organization's employee engagement levels are measured via the annual employee survey, Dialog. The survey was created by Kenexa, based on work with Jack Wiley. In his 2010 book, *Strategic Employee Surveys: Evidence-Based Guidelines for Driving Organizational Success,* Wiley shares his views regarding why employee surveys are conducted. They are to (a) identify warning signs of trouble within an organization; (b) evaluate the effectiveness of specific programs, policies, and initiatives; (c) gauge the organization's status or strength as an employer of choice among its workforce; and (d) predict and drive organizational outcomes, including customer satisfaction and business performance. It is within the third component that Wiley embeds employee engagement.

A five-point Likert rating scale is used to measure the following items:

1. I am proud to work for my organization
2. Overall, I am extremely satisfied with my organization as a place to work
3. I rarely think about looking for a new job.
4. I would gladly refer a good friend or family member to my organization for employment. (Wiley, 2010, p. 941)

Wiley (2010) goes on to describe the espoused drivers of each of the four engagement items. "Employee engagement results when leaders and managers inspire

employee trust and confidence; provide recognition, respect, and opportunities for growth and development; and match the work to the abilities and interests of employees" (p. 1965).

Summary

Based on the literature reviewed in this chapter, this study predicts that a leader's social intelligence is associated with his or her direct reports' employee engagement. This prediction is supported by past literature. For example, Hughes et al. (2009) find that

> engaging people at work is not the end result of any single initiative. It usually involves a comprehensive set of activities that, when well-coordinated, get people caring and involved. Understanding emotional intelligence and how emotion permeates the workplace at both the individual and the group level is the first step in employees' engagement. (p. 3317)

Although this clearly links the construct of emotional intelligence with employee engagement, there is little empirical evidence linking competencies specifically related to social intelligence. Therefore, this study will add to the knowledge in the field by identifying key interpersonal social intelligence competencies that have the potential to be changed developmentally (Goleman & Boyatzis, 2008) over time and influence the results of the engagement component of the Dialog survey developed by Kenexa. The next chapter provides a description of the precise methods used in the study.

Chapter 3

Methods

The current study examined the relationship between leader social intelligence and employee engagement at a Nordic telecommunications company, with operations in the United States. Three research questions were examined:

1. What is the leader's composite engagement score? Engagement score was calculated based on his or her direct reports' responses on the company's annual employee survey.
2. What is the leader's social intelligence? Social intelligence was assessed through self-report and rater report as a means of validating the self-report.
3. What relationships exist between leader social intelligence and composite engagement score?

A total of 34 focal leaders employed in the US were involved in the study and 18 managers, 53 direct reports, and 25 peers (1 to 5 work colleagues each) also completed rater reports for these individuals. This chapter explains the methods that were used in the study, including the research design and variables as well as the procedures related to sampling, the survey, the interview, and data analysis.

Research Design

This study used a mixed-methods design and gathered both quantitative and qualitative data. "Quantitative data are numerical: they are information about the world in the form of numbers . . . and [their] function is to help us make comparisons" (Punch, 2004, pp. 55-56). Archival data, survey data, and interview data were gathered to answer the research questions. This study complied with guidelines approved by Pepperdine University's Institutional Review Board for research on human subjects.

Variables

The independent variable in this study was leader social intelligence, as measured through self-report and rater reports of Social Awareness and Relationship Management using the ESCI. Focal leaders were instructed to complete the online assessment and forward the link to at least two peers, two direct reports, and their manager, with the requirement that the peers and direct reports who participate must have worked with or reported to the focal leader for at least 1 year. This helped increase the validity of their responses. Collection of rater reports also helped validate the focal leaders' self-reported social intelligence.

The dependent variable was the leader's composite employee engagement score drawn from the company's annual employee survey. Employee engagement is assessed annually using the four-item engagement scale (reliability coefficient for the scale provided by the publisher is 0.86):

1. I am proud to work for my organization.
2. Overall, I am extremely satisfied with my organization as a place to work.
3. I rarely think about looking for a new job.
4. I would gladly refer a good friend or family member to my organization for employment.

The answer choices for each item range from 1 (strongly disagree) to 5 (strongly agree). The frequency of respondents reporting Agree and Strongly Agree are then reported as the item score. Each respondent's engagement score is then calculated as the average of the scores for the four items. Moreover, a composite employee engagement score is calculated as the average engagement score across the leader's direct reports. These data were retrieved as archival data from the company's database for the present study.

Sampling

The focal leader population for the present study were people managers in the organization. The designation of people manager means the individual had at least six direct reports as of the August 6, 2012, administration of the annual employee survey.

After gaining consent from the human resources business partners in the North American region to conduct the study, the researcher sent an email invitation to participate in the study to the 409 qualifying focal leaders from across the region. The email invitation contained a description of the study along with the voluntary nature of participation. Participants were instructed they did not have to answer every question. They were informed that the participants' job status would not be affected by refusal to participate. They were told that they may withdraw from the study at any time, without penalty, and that all data collected would be kept confidential by the researcher: only aggregate data would be reported in the thesis. It was explained that all raw data would be kept in a locked file cabinet and/or password protected file to which only the researcher has access. They were informed that all raw data would be destroyed upon completion of the study.

The invitation also contained a link to the online survey. Leaders were instructed to complete the survey and also ask their immediate manager, two peers, and two of their direct reports to complete the survey. The first question of the survey obtained the survey respondents' informed consent to participate in the study. A total of 34 focal leaders, 18 managers, 25 peers, and 53 direct reports completed surveys, yielding response rates of 8.3% for focal leaders, 52.9% for managers, 36.8% for peers, and 77.9% for direct reports.

To draw the interview population, the researcher invited the first 30 focal leaders to complete a survey to also participate in an interview. The first 10 to volunteer and complete an interview were included in the sample.

Survey Procedures

The ESCI is published and administered by the Hay Group. The survey assesses four competency clusters, although only the Social Awareness and Relationship Management data were included in the present study. Table 2 presents the reliabilities of these scales published by the Hay Group.

Table 2

Emotional Social Competency Inventory: Social Awareness and Relationship Management Clusters

Social Awareness Cluster	Items	Reliability	Relationship Management Cluster	Items	Reliability
Empathy	5	0.79	Conflict Management	5	0.84
Organizational Awareness	5	0.76	Coach and Mentor	6	0.83
			Influence	6	0.74
			Inspirational Leadership	5	0.79
			Teamwork	6	0.87

Note. Adapted from *The Creation of the Emotional Social Competency Inventory*, by the Hay Group, 2012.

For this study, the researcher reproduced the Social Awareness and Relationship Management items from the ESCI in a separate online survey with the permission of the Hay Group. Completion of the ESCI took no more than 15 minutes per respondent.

Interview Procedures

The semi-structured interviews were conducted after collection of the survey data between January 28, 2013, and February 6, 2013. Interviews were conducted by phone or in person, depending on the geographical location of the focal leader. Each interview lasted 30 to 45 minutes. The interview consisted of five questions organized into three categories (see Appendix):

1. Demographic data. Three questions were asked to gather demographic data about the leaders' background in leadership and social intelligence training to help contextualize their responses.

2. Methods for driving engagement. Two questions asked leaders about the drivers of employee engagement to gather general information about how the dependent variable in this study may be influenced.

3. Relationship of leader social intelligence with engagement. One question was asked to assess leaders' views concerning the relationship between leader social intelligence and engagement.

Data Analysis

Quantitative data analysis was carried out using the following steps:

1. A frequency analysis of the demographic data was conducted to produce a profile of the sample.

2. Descriptive statistics, including range, mean, and standard deviation, were calculated for the participant group overall by rater.

3. Descriptive statistics were created based on all rater responses (i.e., manager, peer, and direct report data). A t-test was used to determine whether the self-reported means significantly differed from the rater means.

4. One-way analysis of variance (ANOVA) tests were used to compare the means for competency scores, cluster scores, and employee engagement groupings based on ethnicity and age groupings to detect any significant differences in the mean scores. An independent samples t-test was used to detect any significant differences in the mean scores based on gender.

5. The leaders were divided into high and low Social Intelligence groups based on their mean Social Intelligence score. An independent samples t-test was run to determine whether employee engagement was significantly different based on leader social intelligence.

6. Pearson correlations were used to detect the relationships between the leaders' employee engagement scores and their competency and cluster scores.

7. The leaders were divided into high and low engagement groups based on their employee engagement score and Pearson correlations were used to detect the relationships between the leaders' employee engagement scores and their competency and cluster scores within these groupings.

8. Pearson correlations were examined using self-ratings, manager ratings, direct report ratings, and peer ratings. Correlations were calculated for the sample as a whole as well as the sample by employee engagement groupings.

Content analysis as described by Miles, Huberman, and Saldaña (2013) was performed on the interview data using the following steps:

1. All the interview transcripts were read several times to gain familiarity of the overall nature of the data.

2. Meaning units were then identified and assigned a code (e.g., "getting to know employees" or "challenging assignments"). This step constituted the initial coding phase.

3. Following initial coding, the results were reviewed and similar codes were grouped into categories (e.g., "relationship building"). This step was repeated until the codes and code categories best reflected the data.

4. When coding was complete, the number of leaders reporting each theme was noted.

5. A second rater who holds a PhD in psychology and is an experienced researcher reviewed the results of the analysis, including the codes assigned and the raw data that corresponded to each. The second rater discussed any questions about the coding and the results were finalized. Five codes were changed as a result of this discussion.

Summary

This chapter described the methods that were used in the current study, explaining the research design, followed by the sampling, interviewing, and data analysis procedures. The study used both quantitative and qualitative methods of data collection. A total of 34 focal leaders and 1 to 5 five work colleagues for each (managers, peers, and direct reports) were identified to complete the ESCI test. The next chapter reports the results of the study.

Chapter 4

Results

This chapter reports the results of the study. A profile of the participants is provided first. Descriptive statistics from the leader self-reports and the three raters (managers, direct reports, and peers) are presented next. Comparisons of the means for competency scores, cluster scores, and employee engagement groupings based on demographic grouping are then reported. Correlations among the leaders' employee engagement scores and their competency and cluster scores as rated by themselves, their managers, their direct reports, and their peers are then reported. Finally, the results of the content analysis from the interviews are reported. The chapter closes with a summary and synthesis of the data.

Participants

Of the 409 leaders solicited, a total of 34 leaders were evaluated using the 360-degree process. Leader demographics are presented in Table 3. The leaders ranged in age from 34 to 67 ($M = 46.91$, $SD = 6.84$). Half the leaders were White, 23.5% were Asian, and 5.9% were Black. Ethnicity was not reported for 20.6% of the sample. More than three quarters of the sample (79.4%) were male. The leaders' employee engagement scores gathered from their direct reports ranged from 34 to 93 ($M = 74.76$, $SD = 14.26$).

Table 3

Participant Demographics

	N (%)	Range, Mean (SD)
Age		34-67, 46.91 (6.84)
30-39	5 (14.7%)	
40-49	17 (50.0%)	
50-59	9 (26.5%)	
60-69	1 (2.9%)	
Unknown	2 (5.9%)	
Ethnicity		
White	17 (50.0%)	
Asian	8 (23.5%)	
Black	2 (5.9%)	
Unknown	7 (20.6%)	
Gender		
Male	27 (79.4%)	
Female	6 (17.6%)	
Unknown	1 (2.9%)	
Employee Engagement Scores*		34-93, 74.76 (14.26)
0-59	5 (14.7%)	
60-69	4 (11.8%)	
70-79	11 (32.4%)	
80-89	8 (23.5%)	
90-99	5 (14.7%)	
Unknown	1 (2.9%)	

N = 34; * Archival engagement scores were retrieved from the study organization's database for use in the present study. Engagement score was calculated based on our items. Answer choices for each item ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). The frequency of respondents reporting Agree and Strongly Agree were then reported as the item score. Each respondent's engagement score was then calculated as the average of the scores for the four items. Composite employee engagement score was calculated as the average engagement score across the leader's direct reports.

Survey Results

Descriptive statistics. Descriptive statistics (range, mean, and standard deviation) for the Relationship Management cluster were calculated by responder group (i.e., leaders, managers, direct reports, peers; see Table 4). The mean competency and cluster scores were roughly similar across the four groups. Although individual respondents reported that the leaders used the competencies ranging from "sometimes" to

"consistently," on average, all responder groups reported that the leaders used the competencies "often." Moreover, standard deviations were rather low, indicating little variability in the scores. Mean scores ranged from 3.99 (manager's report for Conflict Management) to 4.63 (manager's report for Teamwork). The Cluster score similarly showed all responder groups reporting that the leaders used relationship management behaviors often: leader mean = 4.19, manager mean = 4.26, direct report mean = 4.36, and peer mean = 4.29.

Table 4

Descriptive Statistics for Relationship Management

Competency	Leaders $N = 34$ Mean (SD)	Managers $N = 18$ Mean (SD)	Direct Reports $N = 53$ Mean (SD)	Peers $N = 25$ Mean (SD)
Influence				
Range	3.17-5.00	3.17-5.00	3.17-5.00	3.67-4.83
Mean	4.11	4.14	4.31	4.30
SD	0.50	0.50	0.48	0.37
Teamwork				
Range	3.67-5.00	4.00-5.00	3.50-5.00	3.50-5.00
Mean	4.49	4.63	4.58	4.45
SD	0.39	0.29	0.44	0.47
Coach and Mentor				
Range	3.17-5.00	3.50-5.00	3.00-5.00	3.00-5.00
Mean	4.19	4.33	4.32	4.20
SD	0.52	0.35	0.58	0.56
Inspirational Leadership				
Range	2.80-5.00	3.00-5.00	2.80-5.00	3.40-5.00
Mean	4.08	4.21	4.30	4.27
SD	0.52	0.58	0.61	0.49
Conflict Management				
Range	3.20-4.80	3.20-4.80	3.00-5.00	3.20-5.00
Mean	4.11	3.99	4.26	4.19
SD	0.42	0.46	0.58	0.50
Relationship Management Cluster				
Range	3.44-4.84	3.69-4.79	3.46-5.00	3.61-4.93
Mean	4.19	4.26	4.36	4.29
SD	0.37	0.33	0.45	0.41

Scale: 1 = never uses, 2 = rarely uses, 3 = sometimes uses, 4 = often uses, 5 = consistently uses; Not every leader submitted a self-report. Each leader was evaluated by 0-2 managers, 0-3 direct reports, and 1-2 peers

Descriptive statistics for the Social Awareness cluster were calculated by responder group (see Table 5). Mean competency and cluster scores again were roughly similar across the four groups. Although individual respondents reported that the leaders used the competencies ranging from "sometimes" to "consistently," on average, all responder groups reported that the leaders used the competencies "often." Moreover, standard deviations were rather low, indicating little variability in the scores. Mean scores ranged from 4.00 (peers' report for Empathy) to 4.51 (direct reports for Organizational Awareness). The cluster score similarly showed all responder groups reporting that the leaders used social awareness behaviors often: leader mean = 4.18, manager mean = 4.22, direct report mean = 4.35, and peer mean = 4.23.

Table 5

Descriptive Statistics for Social Awareness

Competency	Leaders *N* = 34 Mean (SD)	Managers *N* = 18 Mean (SD)	Direct Reports *N* = 53 Mean (SD)	Peers *N* = 25 Mean (SD)
Organizational Awareness				
Range	3.20-5.00	3.40-5.00	3.00-5.00	3.90-5.00
Mean	4.28	4.38	4.51	4.47
SD	0.46	0.44	0.53	0.39
Empathy				
Range	3.40-4.80	3.00-4.60	3.00-5.00	2.60-5.00
Mean	4.08	4.06	4.17	4.00
SD	0.42	0.39	0.61	0.66
Overall				
Range	3.30-4.80	3.50-4.60	3.20-5.00	3.50-5.00
Mean	4.18	4.22	4.35	4.23
SD	0.35	0.36	0.54	0.48

Scale: 1 = never uses, 2 = rarely uses, 3 = sometimes uses, 4 = often uses, 5 = consistently uses; Not every leader submitted a self-report. Each leader was evaluated by 0-2 managers, 0-3 direct reports, and 1-2 peers

A "Rater" score was calculated for each variable using the average of the manager, direct report, and peer responses. A t-test was then performed to evaluate whether the self-reported scores were significantly different from the Rater scores. Table

6 presents the results. The descriptive statistics show that the leaders' self-reported mean scores varied little from the raters' scores and the t-test results show that no significant differences existed between the mean scores for each variable. Therefore, the remaining analyses in this chapter are based upon the raters' evaluations of the leader.

Table 6

Comparison of Self-Reported to Rater Scores by Variable

Competency	Leaders $N = 34$ Mean (SD)	Raters $N = 96$ Mean (SD)	t test results
Influence	4.11 (0.50)	4.23 (0.33)	t(28) = -1.24, p > .05
Teamwork	4.49 (0.39)	4.55 (0.36)	t(28) = -0.76, p > .05
Coach and Mentor	4.19 (0.52)	4.31 (0.36)	t(28) = -1.09, p > .05
Inspirational Leadership	4.08 (0.52)	4.25 (0.47)	t(28) = -1.44, p > .05
Conflict Management	4.11 (0.42)	4.17 (0.45)	t(28) = -0.53, p > .05
Relationship Management Cluster	4.19 (0.37)	4.30 (0.32)	t(28) = -1.30, p > .05
Organizational Awareness	4.28 (0.46)	4.41 (0.49)	t(28) = -0.98, p > .05
Empathy	4.08 (0.42)	4.07 (0.47)	t(28) = 0.03, p > .05
Social Awareness Cluster	4.18 (0.35)	4.24 (0.44)	t(28) = -0.64, p > .05

Comparison of the means. The competency scores, cluster scores, and employee engagement groupings were compared based on ethnicity, age, gender. For the most part, no significant differences in the mean were discovered based on demographic grouping (see Table 7). Non-significant differences are not reported in this chapter. Five social intelligences were found to have significant differences in the mean based on age: Teamwork $F(2,28) = 4.94$, $p < .05$, Coaching and Mentoring $F(2,28) = 8.84$, $p < .01$, Inspirational Leadership $F(2,28) = 3.72$, $p < .05$, Conflict Management $F(2,28) = 6.30$, $p < .01$, and Organizational Awareness $F(2,28) = 3.95$, $p < .05$. Both clusters also exhibited significant differences: $F(2,28) = 6.80$, $p < .01$ for Relationship Management and $F(2,28) = 3.52$, $p < .05$ for Social Awareness.

Table 7

Comparison of Social Intelligences Means by Age (Rater Scores)

Competency	30-39 N = 5 Mean (SD)	40-49 N = 17 Mean (SD)	50-59 N = 9 Mean (SD)	ANOVA Results
Teamwork	4.40 (0.49)	4.47 (0.32)	4.84 (0.14)	$F(2,28) = 4.94$, $p < .05$
Coach and Mentor	4.44 (0.26)	4.14 (0.32)	4.64 (0.27)	$F(2,28) = 8.84$, $p < .01$
Inspirational Leadership	4.12 (0.66)	4.16 (0.38)	4.60 (0.34)	$F(2,28) = 3.72$, $p < .05$
Conflict Management	3.98 (0.64)	4.04 (0.35)	4.56 (0.23)	$F(2,28) = 6.30$, $p < .01$
Relationship Management Cluster	4.20 (0.44)	4.21 (0.26)	4.60 (0.16)	$F(2,28) = 6.80$, $p < .01$
Organizational Awareness	3.94 (0.88)	4.47 (0.30)	4.60 (0.31)	$F(2,28) = 3.95$, $p < .05$
Social Awareness Cluster	3.91 (0.68)	4.24 (0.31)	4.49 (0.37)	$F(2,28) = 3.52$, $p < .05$

ANOVA = Analysis of Variance

Post hoc Tukey's tests revealed that the differences in the mean involved the 50- to 59-year-old participants being rated as using these behaviors more frequently than other age groups (see Table 8). Managers in their 50s were rated higher than managers in their 30s for three intelligences: Teamwork (mean difference = 0.44; 95% CI = .01, 0.87; $p < .05$), Conflict Management (mean difference = 0.58; 95% CI = .05, 1.10; $p < .05$), and Organizational Awareness (mean difference = 0.66; 95% CI = .06, 1.27; $p < .05$). They also were rated higher for both clusters: mean difference = 0.41; 95% CI = .03, 0.78; $p < .05$ for Relationship Management and mean difference = 0.58; 95% CI = .04, 1.13; $p < .05$ for Social Awareness.

Managers in their 50s were rated higher than managers in their 40s for four intelligences: Teamwork (mean difference = 0.37; 95% CI = .05, 0.69; $p < .05$), Coaching and Mentoring (mean difference = 0.50; 95% CI = .20, 0.80; $p < .01$), Inspirational Leadership (mean difference = 0.44; 95% CI = .01, 0.87; $p < .05$), Conflict Management (mean difference = 0.52; 95% CI = .13, 0.90; $p < .01$). They also were rated higher for the Relationship Management cluster (mean difference = 0.39; 95% CI = .12, 0.67; $p < .01$). No other significant differences emerged (see Table 8).

Table 8

Tukey's Post-hoc Analysis of Social Intelligences by Age (Rater Score)

Dependent Variable	(I) Age Group	(J) Age Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Teamwork	30-39	40-49	-0.07	0.16	0.91	-0.46	0.33
		50-59	-0.44*	0.17	0.05	-0.87	-0.01
	40-49	30-39	0.07	0.16	0.91	-0.33	0.46
		50-59	-0.37*	0.13	0.02	-0.69	-0.05
	50-59	30-39	0.44*	0.17	0.05	0.01	0.87
		40-49	0.37*	0.13	0.02	0.05	0.69
Coach Mentor	30-39	40-49	0.30	0.15	0.13	-0.07	0.67
		50-59	-0.20	0.16	0.47	-0.60	0.21
	40-49	30-39	-0.30	0.15	0.13	-0.67	0.07
		50-59	-0.50**	0.12	0.00	-0.80	-0.20
	50-59	30-39	0.20	0.16	0.47	-0.21	0.60
		40-49	0.50**	0.12	0.00	0.20	0.80
Inspirational Leadership	30-39	40-49	-0.04	0.21	0.98	-0.57	0.49
		50-59	-0.48	0.23	0.12	-1.06	0.10
	40-49	30-39	0.04	0.21	0.98	-0.49	0.57
		50-59	-0.44*	0.17	0.04	-0.87	-0.01
	50-59	30-39	0.48	0.23	0.12	-0.10	1.06
		40-49	0.44*	0.17	0.04	0.01	0.87
Conflict Management	30-39	40-49	-0.06	0.19	0.95	-0.54	0.42
		50-59	-0.58*	0.21	0.03	-1.10	-0.05
	40-49	30-39	0.06	0.19	0.95	-0.42	0.54
		50-59	-0.52**	0.16	0.01	-0.90	-0.13
	50-59	30-39	0.58*	0.21	0.03	0.05	1.10
		40-49	0.52**	0.16	0.01	0.13	0.90
Relationship Management	30-39	40-49	-0.02	0.14	0.99	-0.36	0.33
		50-59	-0.41*	0.15	0.03	-0.78	-0.03
	40-49	30-39	0.02	0.14	0.99	-0.33	0.36
		50-59	-0.39**	0.11	0.00	-0.67	-0.12
	50-59	30-39	0.41*	0.15	0.03	0.03	0.78
		40-49	0.39**	0.11	0.00	0.12	0.67
Organizational Awareness	30-39	40-49	-0.53	0.22	0.06	-1.08	0.02
		50-59	-0.66*	0.24	0.03	-1.27	-0.06
	40-49	30-39	0.53	0.22	0.06	-0.02	1.08
		50-59	-0.13	0.18	0.75	-0.58	0.31
	50-59	30-39	0.66*	0.24	0.03	0.06	1.27
		40-49	0.13	0.18	0.75	-0.31	0.58
Social Awareness	30-39	40-49	-0.33	0.20	0.25	-0.83	0.17
		50-59	-0.58*	0.22	0.04	-1.13	-0.04
	40-49	30-39	0.33	0.20	0.25	-0.17	0.83
		50-59	-0.25	0.16	0.28	-0.66	0.15
	50-59	30-39	0.58*	0.22	0.04	0.04	1.13
		40-49	0.25	0.16	0.28	-0.15	0.66

*significant at the .05 level; **significant at the .01 level

The leaders were divided into high and low Social Intelligence groups based on their mean Social Intelligence score, which was calculated as the mean across all the competencies. The social intelligence scores varied little, ranging from 3.57 to 4.89 (M = 4.31, SD = .32). The leaders were split into two groups based on the median score of 4.33. An independent samples t-test was run to determine whether employee engagement was significantly different based on leader social intelligence. The results indicated no significant difference based on leader social intelligence (see Table 9). It is important to note that the small sample size made the observed three-point difference non-significant, whereas a large sample size likely would have produced a significant t-test.

Table 9

Comparison of Employee Engagement based on Leader Social Intelligence

	Employee Engagement		
Group	Mean	SD	t test results
Lower Social Intelligence	73.29	13.48	t(32) = -..024, p > .05
Higher Social Intelligence	76.24	15.28	

Each group contained 17 leaders. Lower social intelligence was defined as scores ranged from 3.57 to 4.329. Higher social intelligence was defined as scores ranging from 4.33 to 4.89.

Correlation results. Pearson correlations were calculated to determine the relationships between employee engagement scores and the leaders' social intelligences (based on rater scores). Mean engagement was 74.76 (SD = 14.26). Mean social intelligence scores ranged from 4.09 for Empathy (SD = .44) to 4.58 for Teamwork (SD = .34). No significant relationships were found between employee engagement and any of the leader's social intelligences. However, all the social intelligences were positively and significantly related except for one pairing: coaching and mentoring was positively correlated to influence; however, the correlation was not significant (see Table 10).

Table 10

Correlations between Employee Engagement and Competency Scores: All Participants

	Mean (SD)	1	2	3	4	5	6	7	8	9	10
1. Engagement	74.76 (14.26)	1									
2. Influence	4.27 (.32)	.016	1								
3. Teamwork	4.58 (.34)	.033	.398*	1							
4. Coaching and Mentoring	4.33 (.35)	-.240	.271	.647**	1						
5. Inspirational Leadership	4.29 (.44)	.074	.451**	.776**	.687**	1					
6. Conflict Management	4.20 (.43)	-.027	.421*	.700**	.569**	.766**	1				
7. Relationship Management	4.33 (.31)	-.032	.605**	.866**	.781**	.921**	.868**	1			
8. Organizational Awareness	4.43 (.46)	.087	.566**	.677**	.343*	.646**	.595**	.697**	1		
9. Empathy	4.09 (.44)	-.098	.421*	.814**	.625**	.682**	.581**	.766**	.670**	1	
10. Social Awareness	4.26 (.41)	-.004	.541**	.814**	.527**	.726**	.644**	.799**	.918**	.910**	1

N = 34; *Correlation is significant at the 0.05 level (2-tailed);**Correlation is significant at the 0.01 level (2-tailed)

The leaders were divided into two groups based on their direct reports' employee engagement scores. Employee engagement scores ranged from 34 to 93 (M = 74.76, SD = 14.26). The leaders were split into two groups based on the median score of 78. Pearson correlations were run to determine the relationships among employee engagement and the social intelligences within these groupings.

For leaders in the low engagement group, a significant negative relationship was found between employee engagement and empathy (r = -.560, p < .05). This result suggests that as Empathy increases, employee engagement decreases, and vice versa. Additionally, fewer significant relationships were found among the social intelligences in this group when compared to the total leader sample (see Table 11).

Table 11

Correlations between Employee Engagement and Competency Scores: Low Engagement Leaders

	Mean (SD)	1	2	3	4	5	6	7	8	9	10
1. Engagement	64.41 (12.79)	1									
2. Influence	4.22 (0.29)	-.347	1								
3. Teamwork	4.50 (0.38)	-.436	.440	1							
4. Coaching and Mentoring	4.36 (0.38)	-.469	.366	.728**	1						
5. Inspirational Leadership	4.20 (0.40)	-.325	.483*	.823**	.616**	1					
6. Conflict Management	4.13 (0.47)	-.396	.542*	.764**	.470	.890**	1				
7. Relationship Management	4.28 (0.32)	-.471	.645**	.910**	.758**	.933**	.899**	1			
8. Organizational Awareness	4.37 (0.44)	-.243	.461	.716**	.287	.739**	.825**	.743**	1		
9. Empathy	4.07 (0.44)	-.560*	.488*	.871**	.669**	.777**	.637**	.826**	.577*	1	
10. Social Awareness	4.22 (0.39)	-.453	.534*	.894**	.540*	.854**	.822**	.884**	.886**	.889**	1

N = 17; *Correlation is significant at the 0.05 level (2-tailed);**Correlation is significant at the 0.01 level (2-tailed)

For leaders in the high engagement group, significant positive relationships were found between Employee Engagement and Teamwork (r = .532, p < .05), Organizational Awareness (r = .497, p < .05), Empathy (r = .584, p < .05), and Social Awareness (r = .575, p < .05). These results suggest that employee engagement increases as these

variables increase, and vice versa. Fewer significant relationships were found among the social intelligences in this group compared to the overall population (see Table 12).

Table 12

Correlations between Employee Engagement and Competency Scores: High Engagement Leaders

	Mean (SD)	1	2	3	4	5	6	7	8	9	10
1. Engagement	85.12 (5.31)	1									
2. Influence	4.31 (0.36)	.211	1								
3. Teamwork	4.65 (0.29)	.532*	.339	1							
4. Coaching and Mentoring	4.30 (0.33)	.252	.226	.626**	1						
5. Inspirational Leadership	4.37 (0.47)	.312	.404	.737**	.837**	1					
6. Conflict Management	4.27 (0.38)	.248	.292	.567*	.773**	.645**	1				
7. Relationship Management	4.38 (0.29)	.377	.567*	.804**	.871**	.920**	.822**	1			
8. Organizational Awareness	4.48 (0.49)	.497*	.629**	.645**	.436	.561*	.338	.646**	1		
9. Empathy	4.12 (0.45)	.584*	.367	.782**	.596*	.611**	.522*	.709**	.754**	1	
10. Social Awareness	4.30 (0.44)	.575*	.537*	.759**	.548*	.625**	.455	.722**	.941**	.931**	1

N = 17; *Correlation is significant at the 0.05 level (2-tailed);**Correlation is significant at the 0.01 level (2-tailed)

Interview Results

Ten leaders who had completed the ESCI were interviewed and asked to share their views regarding methods of driving employee engagement. They were asked open-ended questions to describe drivers of engagement. Then they were asked to evaluate the social intelligences regarding their impact on subordinates' engagement. The results are described in the sections below.

Engagement drivers. Four major themes emerged regarding drivers of engagement: relationship building (cited by 9 of the 10 leaders), empowerment and

autonomy (cited by 9 of the 10 leaders), feedback and communication (cited by 7 of the 10 leaders), and clear direction and leadership (cited by 6 of the 10 leaders). These major themes and their subthemes are presented in Table 13. The following sections describe these themes in detail.

Table 13

Engagement Drivers According to Interviewees

Theme	n
Relationship Building Getting to know the employee and supporting his or her needs, preferences, and goals (7 participants) Building trust (4 participants) Using soft skills (1 participant)	9
Empowerment and Autonomy Empowering employees (4 participants) Allowing autonomy (3 participants) Providing opportunities for growth and learning (3 participants) Involving employees in decision-making and other activities (3 participants) Allowing job fit and enlargement (3 participants)	9
Feedback and Communication Practicing respectful, transparent communication and feedback (5 participants) Giving recognition (3 participants)	7
Clear Direction and Leadership Creating a compelling vision—especially one that aligns with individual goals/is relatable on individual level (5 participants) Expressing clear values and principles (1 participant) Leading by example and exhibit accepted qualities/attitudes (1 participant)	6

Note. $N = 10$; Many participants reported multiple subthemes under each major theme

Relationship building. Nine of the 10 leaders reported relationship building as a driver of engagement. Specifically, they reported three subthemes. The first of these, mentioned by seven leaders, was getting to know the employee and supporting his or her needs, preferences, and goals. One participant shared that he likes to have candid conversations with his direct reports that cover:

> Why you come to work: What is it that you want? And be very open and honest about if there is some job out there which is going to pay you more and you're going to be more happy let me know and you feel free to go there and I won't be

> disappointed or discouraged because I would rather have you here happy and work towards it and work towards your future. And if there are things I can help you with, good, if I can't then I'll try to connect people, I'll get more mentors for your side.

Another leader explained that she likes to

> find out what makes them tick. What challenges them? What scares them to death? You start with what's within your comfort zone, but ultimately you start kind of challenging those borders. And that can only be done after they trust you. Within their comfort zone.

Four leaders described the importance of building trust. One leader emphasized, "You've got to build trust with your folks so that they know that they're, you know, they can rely on you." Finally, one participant stated that it was important to use soft skills.

Empowerment and autonomy. Nine of the 10 leaders reported empowerment and autonomy as another driver of engagement. They cited five subthemes related to this driver. Four leaders described the importance of empowering employees. One leader shared his own experience of how being involved in a challenging project as an employee boosted his own engagement:

> through my career, when I've been able to go off and do something, especially if it was counter to what was sort of the tribal knowledge of the group and be able to convince or prove a point to somebody that we could do this better this way or if you take this tact it would work better for you felt really good and engaging.

Another leader explained that engagement is heightened by "treating employees as thinking they are resourceful and creative and they are whole in their own personality and just taking chances with them, trusting them." Yet another leader summarized the essence of empowerment in a single word:

> *enable*. The job as a manager is to facilitate and grow people and then a leader, more importantly—you manage problems, you enable people. You've got to care about the people you want to lead and to be able to get them to buy in and make it something that they own. That it's always easy to get them motivated to do it. I think like people love—I mean, I think I see that a lot of times. I try to, what do you call, give people more responsibility. I want to say I delegate a lot more than

> most managers and so I think people love that because they now do those kind of things from their prior experience. And a lot of times I think that really helps because they feel like that they own the problem a lot more than when they first found the problem, gave it to the manager, then the manager then communicated it out and that should put them on a pedestal, it's always better.

Three participants stated it was important to allow employees their autonomy. One leader shared her experience:

> I've been quite fortunate to have managers who do not micromanage me. They basically say, "This is what I need you to do. Go do it." And if I need guidance, they're there. But typically I go on my own.

Three participants additionally shared that leaders need to provide opportunities for growth and learning. One leader described the importance of having had stretch activities throughout his career:

> You know, through my career I had a few really good managers that I think I've learned from them. Sometimes I got the opportunity to do a few things above and beyond the work that I perceived to be my responsibility that I enjoyed it. . . . A stretch activity is like Hey, they feel like they normally consider a managerial responsibility but here's a guy who's willing to share some of that with me.

Another three employees explained the importance of involving employees in decision-making and other activities. One leader expressed,

> I would say I see them hiring for example. I see that the hiring process is probably a good one because then the team also sees the candidate. It's not just the manager's responsibility to find the candidate, it's the team also. And they feel good about it that they got asked to weed out the guy who's coming into the team.

The final theme related to empowerment and autonomy was assuring employees' job fit and enlargement, also cited by three employees. These leaders discussed the importance of having employees enjoy their job, exposing them to how they contribute to the success of the whole, and giving them variety in their projects and work groups. One leader described how enjoying the job led to engagement:

> I guess a simple way to put it is, you don't notice the time or the effort you're putting in. It just flies and you get a result and you're happy with the result, you get recognition then the result achieves the goal. So, in other words, you're not

> sitting here for days saying, “I hate this” or “This is something I've got to do, but I don't really enjoy doing it.” You end up enjoying immensely your work.

Feedback and communication. Seven of the 10 leaders reported feedback and communication as another driver of engagement. They cited two subthemes related to this driver. Five leaders emphasized the importance of practicing respectful, transparent communication and feedback with employees. Leaders’ answers reflected the ideas of being transparent to the extent possible; giving candid, respectful, and balanced feedback and direction; and opening the flow of top-down, bottom-up and one-to-one communication. One leader expressed the importance of:

> providing feedback [and] having coaching conversations to say “This is where I see you strong. Do you agree or not agree? And while addressing weaknesses, also using the strengths to have a balance. Try and fix the weaknesses and try to build up their strengths. . . . I work best with my strengths. Even in a situation where I’m outside my comfort zone, I can always rely on the strengths. And I have because it’s applicable in every situation. And that’s what I try to promote with my employees.

Three participants additionally stated that it was important to give recognition and that it helped in stirring employee engagement.

Clear direction and leadership. The final major theme, cited by 6 of the 10 leaders, reported that clear direction and leadership was another driver of engagement. Three subthemes were related to this driver. Five leaders emphasized the importance of creating a compelling vision—especially one that aligns with individual goals and is relatable on individual level. One leader explained the link he saw between vision and engagement:

> basically, share a vision or a direction where you want to go and basically align with their individual goals of what they're interested in, in terms of that vision. So just saying the company needs to go there, that's well and good. But what's in it for me, what's in it for the individual person, why should we go there? And I think if they buy in that's the ultimate goal.

Another participant stated it was important to express clear values and principles. Yet another participant shared the importance of leading by example and exhibit accepted qualities and attitudes. He explained, "Employees perfectly engage when the leader is showing commitment as well. So, engagement starts from the leader."

Summary. In their open-ended responses, 9 of the 10 leaders emphasized the impact that relationship building and giving employees empowerment and autonomy had on engagement. Seven leaders expressed the importance of feedback and communication and six stressed the importance of clear direction and leadership for producing engagement. Examining their responses reveals several similarities with the social intelligences. Their descriptions of relationship building reflects the social intelligences of Empathy (understanding others) and Teamwork (being supportive). Empowerment and autonomy reflects the social intelligences of Coaching and Mentoring (caring about others and their development) and Teamwork (soliciting others' input and encouraging the participation of everyone present). Feedback and communication reflects the social intelligences of Coaching and Mentoring (providing helpful feedback) and Teamwork (being respectful of others). Clear direction and leadership reflects social intelligences of Inspirational Leadership. Overall, their open-ended responses indicated that Empathy, Teamwork, Coaching and Mentoring, and Inspirational Leadership helped produce employee engagement. Their open-ended responses did not reflect references to influence, Conflict Management, or Organizational Awareness.

Evaluation of the social intelligences. After identifying the drivers they believed essential for engagement, the interviewees were explicitly asked to evaluate the social intelligences studied in this project with regard to their impact on engagement. In general, the participants expressed difficulty with having to force rank the competencies with "1"

being the most impactful on engagement and "7" being the least impactful. Ultimately, this aspect of data collection was discontinued due to participants' difficulty with the rankings. One participant shared, "It was pretty challenging to rank them, by the way. It was quite challenging to rank one through seven. Because they're all equally important." Another participant explained, "all of those seven areas are very, they're all important, right. It's hard to separate them. . . . You have to be strong in each of those seven areas." The following sections describe the participants' responses related to each intelligence.

Inspirational leadership. Participants did not speak a great deal about Inspirational Leadership when asked directly and those who did offered limited support for this intelligence (see Table 14). Two leaders expressed that Inspirational Leadership was impractical and difficult to achieve. One of these leaders commented,

> I'm gonna toss that one under the bus. I think it is something that sounds really great and it's good at selling books. I think, though, for the most part, you find very few folks in the world who are truly what I would call inspirational leader. I don't know that I've come across one in my career. Um, so it's one of those things that, it's sort of like a unicorn. I mean they sound nice, but I'm not sure they really exist. Um, you know, even someone like a Jack Welch or somebody, you know, if you want to talk about him. It sounds like he was a great guy, but he's also—also a ruthless SOB from what you hear.

Nevertheless, three leaders suggested some ways to inspire employees, including leading by example and giving positive feedback. One leader explained,

> I think it goes back to lead by example. . . . People seeing that I would not ask them to do anything that I myself will not do. . . . I used to be in training and my ex-teammates would always tease me because I pushed the boundaries of what a typical trainer should be doing. We had night shifts: We had training for the evening and training in the morning and there was a situation where I had no one else left to do one class that was 3 days during the evening class. And there were three days where I worked both classes. So for them they couldn't complain to people because I've done double shifts already. . . . They don't mind doing it because they've already seen you do it.

In terms of outcomes, three leaders emphasized that Inspirational Leadership was insufficient for producing engagement by itself, explaining that it cannot be the "first weapon in the arsenal" and must be supported by talent and skills to be effective. One leader explained,

> inspirational leadership . . . inspires and it makes people follow them. But unless you have all the other talents and skills to back that up, the inspiration is only good so long, right. For example if you take Steve Jobs, everyone talks about how great of an inspiring leader he was but then you hear all these things where he's a terrible manager, people hated working for him, etc., but they thought of his vision. So it goes a certain way but you have to have the rest of it otherwise you got to have some fabulous results to show for your vision otherwise no one is going to follow you for sure.

Two leaders described the positive emotional outcomes that are associated with Inspirational Leadership, such as creating a sense of family, generating trust, and fostering motivation. One leader explained,

> So if don't have that inspirational leadership it's kind of like having a family where the parent is not trusted or looked on as having solid values or however you want to equate that. But I think it's at least the foundation for everything else.

Table 14

Interviewees' Evaluation of the Impact of Inspirational Leadership on Engagement

Theme	N
Impractical and difficult to achieve Inspirational Leadership is difficult to achieve (2) Not practical in day-to-day life (1)	2
Ways to Inspire	
Lead by example	2
Give positive feedback	1
Outcomes	
Insufficient for producing engagement by itself	3
Positive emotional outcomes	2

Note. $N = 10$; Many participants reported multiple subthemes under each major theme

Empathy. Leaders' responses about Empathy focused on how to demonstrate this intelligence and what it produces (see Table 15). Six leaders explained that Empathy

involves getting to know people on an individual level and learning what motivates them. Two leaders described how their awareness and sensitivity to their employees' personal lives enable her to better manage and engage their subordinates:

> There may be factors that contribute to how they may be outperforming this week versus next week and granted I can't reflect that in any formal documentation; however, I can take an opportunity to approach them and say "I know this is going on in your personal life, but snap out of it because it's affecting the way you're working.". . . I'm more empathetic with people when I've been in the same situation. I know how they feel so I'm able to say I've been there and I understand where you're coming from, but bottom line is this is a workplace and this is what we need to get done.

> We need to understand what they're going through and their obstacles and things that they face every day. But we still have to translate it into motivation for the employee. So I think it's very important because we have to recognize our employees as people and make sure that we're treating them as people and not as objects. But so it's very important, but I don't know that it has the most effect.

Five leaders explicitly stated that empathy helped build engagement. One leader stated, "And I think empathy is the most understated value that we must have as leaders. If you're empathetic, they will probably open up and talk candidly to you rather than just taking thing and going ahead and doing it. They'll be more engaged I think." Another expressed, "If you don't care and don't care to listen then the other person's going to kind of lose interest back and so I think it's important. It's probably one of the first steps to kind of getting engaged."

Table 15

Interviewees' Evaluation of the Impact of Empathy on Engagement

Theme	N
How to demonstrate Empathy: Get to know people on an individual level and learn what motivates them	6
Outcome: Builds engagement	5

Note. Many participants reported multiple subthemes under each major theme

Teamwork. Leaders' responses about Teamwork also focused on ways to produce teamwork and what teamwork produces in turn (see Table 16). Seven participants believed that Teamwork was best achieved by rallying behind a common cause and work toward a shared goal. One leader explained the nature of Teamwork, commenting that it cannot be effective without engagement being in place first:

> as a leader that is what you do, right, you have to create a team that follows a shared goal. So it's the objective and the means to an end. So I'm not sure you could have it, the comment is if you're a leader and no one is walking behind you then you're just going for a walk. If no one is following you you're just walking, right, so you have to have a team.

Another leader shared a similar sentiment:

> If you don't have teamwork, you got a bunch of individuals all working on their own little bits and pieces. And sometimes, some of their activities are actually influenced somewhere else, . . . so if you don't have teamwork, people wouldn't be right. But if I feel like I'm part of the team, and I'm treated like I'm part of a team, and I understand that if I do X, it causes a problem for somebody else, then I'm more inclined to do it anyway if I feel connected to that team. But to me I think that's—that's probably one of the more important ones we've talked about frankly. Um, is—is that building of that unit so that they—everybody understands they're part of the success of the whole group.

Other leaders explained that Teamwork is produced by leading by example and building relationships.

Although two leaders reported that Teamwork may results in synergistic effects, one leader believed that Teamwork may not necessarily inspire engagement. This leader explained,

> Teamwork again is important, right, but does it inspire engagement? I don't know. It's important to get your goals, but saying you're working in a team may not inspire the individual to be engaged. . . . [Teamwork] may not be as important...as the other [intelligences listed] above it.

Table 16

Interviewees' Evaluation of the Impact of Teamwork on Engagement

Theme	N
Ways to produce Teamwork	
Rally behind a common cause and work toward a shared goal	7
Lead by example	1
Build relationships	1
Outcomes	
Yields synergistic effects	2
May not inspire engagement	1

Note. *N* = 10; Many participants reported multiple subthemes under each major theme

Coaching and mentoring. When asked about Coaching and Mentoring, the leaders shared their general views about this intelligence as well as how it might be exhibited and what it might result in as an outcome (see Table 17). Three leaders shared that Coaching and Mentoring may not always be appropriate, due to one's level in the organization, limitations for career advancement within the organization, or because additional skills are not needed. One leader explained, "I believe that the employee who is already working for the company has the minimum skills to do the work so coaching and mentoring might be not super essential."

Regarding how to exhibit Coaching and Mentoring, one leader believed that leading by example was the most effective way. This leader explained,

> I think a lot of it's living by example and what they see you do something and they know it's the right thing. It's not "Do what I say, not what I do," because that's always a big turnoff for anybody. I think that's real important. So I think just by being to work every day on time, just the basics that people can relate to you better.

Four leaders believed that Coaching and Mentoring helped enhance employee achievement, such as efficiency and effectiveness. One leader explained,

> It provides a more effective employee because he's learning more tricks, more ways of doing the business and more, and I call them tricks because it could be directly work related, it could be organization related, it could be anything which

> could help, relationship related, right, it's all coaching and mentoring. And so it will make employee more efficient, make more efficient it will inspire him because it makes him more powerful.

Three leaders also explained how Coaching and Mentoring helped increase employees' sense of accountability. One leader explained,

> I think it makes that personal connection that drives the engagement. It's something the person on the team or the leaders take an active interest. They're spending time, they're investing in my future, so really it makes them feel accountable to fulfill those expectations that are set during mentoring.

Table 17

Interviewees' Evaluation of the Impact of Coaching and Mentoring on Engagement

Theme	N
Not always necessary or appropriate	3
Ways to coach and mentor: Lead by example	1
Outcomes	
Employee achievement	4
Employee accountability	3
Job variety for the leader	1

Note. Many participants reported multiple subthemes under each major theme

Influencing. When asked about Influencing behaviors, one leader voiced that this was not as important as other competencies and four leaders expressed that it was challenging to exert influence appropriately and without coercion (see Table 18). One leader explained,

> to force them to do something based on your authority, that usually backfires in the end. [I've seen that happen]. . . . I think personally the best approach and you know sometimes for lack of time, lack of thought, whatever you end up being direct, right. It happens, the world doesn't come to an end but you lose a few points of credibility. On the other hand the best way to do it is, I think if you've ever seen the movie *The Matrix*? They say that the humans like the power of choice. Whether it's perceived or whether it's real or not they like the power of choice so if you give them a choice, you could do this or this or I really need you to do this but what do you think, it goes a long way to just saying shut up and do it.

Another leader expressed,

> I think you either have the ability or you don't. . . . I think it's tough to develop. I think if you're flat on number one and number two then you don't know how to maneuver that space anyway. Um, I don't know, that's a tough one.

Other leaders offered suggestions on how to exert Influence. Three leaders believed that this intelligence was best expressed by leading by example:

> How can I expect them to do X number of things if I'm not doing it myself? When someone (I'm talking about myself) being a role model and doing things, I mean there are days when I'm not myself, but the moment I'm entering the campus I remind myself that have your game face on, whatever happened at home or other things, shape things up and have your game face on.

Two leaders additionally shared positive attitudes and behaviors had an influence on employees. One leader shared his view:

> Well, I believe that as a lead, you can have a positive or negative influence on your team. Correct? Being aware of that, and the importance of that, of course, will definitely—how you say—help you in the way how you behave or how you interact with the team. And then you understand. I mean, okay, if I go on talking about attitude or yelling at people or, you know, be rude or whatever, the influence is going to be negative. Of course, the results are going to be negative. Otherwise, I go in a good manner, you know, I treat people respectfully and try to engage them, try to create a positive influence, the results are going to be positive then. I think that is critical.

Two leaders shared that Influence involves helping employees see where they fit in the big picture.

> So we have to be able to influence our team members in a positive way so that they can see what they need to do to contribute to [the company's] future. . . . So it's more about the positive influencing techniques versus the collision influencing techniques to get everybody working towards the same goal.

A final leader response indicated that Influence means breaking down walls for the employee. This leader explained that it was important to use

> influence to break walls, because in many cases employee is trying to reach certain stuff and it might take them a longer time to reach or build bridges when the manager or upper manager can do it much faster for him. In this case it's also coming just as showing the commitment of the manger into the final product and showing the commitment of the manager and interest in increasing effectiveness of the process and effectiveness of the particular employee. So it's why the influence kind of works well together with coaching and mentoring.

Table 18

Interviewees' Evaluation of the Impact of Influencing Behaviors on Engagement

Theme	N
Not as important as other competencies	1
Challenging to exert influence appropriately	4
Ways to exert influence	
Lead by example	3
Exhibit positive attitudes and behaviors	2
Help employees see where they fit in the big picture	2
Break down walls for employee	1

Note. $N = 10$; Many participants reported multiple subthemes under each major theme

Conflict management. When asked about Conflict Management, five leaders voiced their belief that this intelligence was not as important as other competencies (see Table 19). One leader shared,

> Most people aren't operating in conflict all the time. When it happens, it's important, but when I look at what I need to do as a manager, I need to spend more time coaching them and mentoring them than I need to be doing conflict management. If I'm spending all my time on conflict management and resolution, I have a problem on my team, which is bigger than engagement. So from an engagement perspective, it's important to be able to be effective, but coaching and mentoring is far more important. You need to spend much more time doing that than you do conflict management.

Another leader shared,

> a lot of times you just kind of beat around and be there. You don't have to get up and say anything because I think most people know which direction they need to go to straighten things out internally. And knock on wood I haven't had to deal with anything serious, yet but you never know.

Despite this view, five leaders believed that conflict management could lead to improved performance. One leader shared,

> One on one, for example, if this is a key performer and during a conflict you turn it around to a positive thing rather than a conflict, all of a sudden this guy or this girl is engaged and participating even more so, and delivering better than they ever have. If you go the other way, they'll still do their job, but suddenly you lost the key contributors so to speak. So it's very important on that. If it's on a bigger scale, it happened to the whole project has got broken down because people get disengaged or they don't feel like performing anymore and yeah okay you'll get,

> they still get paid, they're still, they're professional but it's still not the same quality or output as it could have had.

Another leader expressed,

> Well definitely it's an important thing because conflicts are happening but if all others coming together conflicts are not happening very often. But conflict is part of a normal process, right, so conflict management is needed but it's not a high priority because I hope that by utilizing [the other skills], you will very seldom come to [conflict]. However it's a very important part of the skills because again conflict is a positive, right, it's not negative conflict also helping us to develop something better, conflicts also help us to make process more efficient, right?

Additionally, one leader shared that if Conflict Management is ineffective, it could cause the entire team to disengage. This leader shared,

> A lot of times, if you deal with it ineffectively the people involved in the conflict be it two or be it the whole team will be disengaged. So if it doesn't happen, great, but if it happens and you deal with it poorly it could have a very bad consequence.

Table 19

Interviewees' Evaluation of the Impact of Conflict Management on Engagement

Theme	N
Not as important as other competencies	5
Outcomes	
Can lead to improved performance	5
Ineffective Conflict Management can cause the entire team to disengage	1

Note. $N = 10$; Many participants reported multiple subthemes under each major theme

Organizational awareness. When asked about Conflict Management, six leaders voiced their belief that this intelligence was not as important as other competencies (see Table 20). One leader shared that there was no need to be adept at organizational analysis if everything else is solid:

> it's something that I don't spend a lot of time on it in my personal world. I don't even know if I put that much thought into it honestly. I think if there's a leader that is not the most adapt at dealing with those external politics [organizational awareness] I don't think that they're held in negative regard because of it, if the team is generally engaged and you know everything else is fairly solid anyway.

Another explained,

> I see that it also is needed. You need to make the teams aware of the organization. They need to know who are their superiors and information that is really required. But I don't consider it to be the top, at least for my needs from there. I think it's your point of view.

Two leaders believed that understanding others was a way to demonstrate or cultivate organizational awareness. One leader explained:

> there's a lot of dynamics that goes internally within a group. And you've kind of got to understand that and it helps you to manage. Kind of understand where everybody's at and as a group. And I think if they understand their position in the company or where they sit, I think that's real important because it gives you a sense of where you're at**.** So it's very important.

Two leaders reported that organizational awareness helps accomplish results. One of these leaders elaborated on how knowing where the influence, power, and decision making ability resides is important for accomplishing results:

> If you don't have that, things will move very slowly. Your team is not going to be very effective and you're going to be hitting a brick wall a lot of times. So you need that to get things moving and you need that to get the results you have to have. Without that, you're not going to be a very effective team, you're not going to be a very high-performing team. Every new project or every new meeting that you don't know the people in the room where the scenario that is going on, as soon as you walk in the room you got to engage really what you should say, what you shouldn't say, who you should build a relationship with from a project or influence point of view, who has the most power in what they're trying to achieve. A lot of times people show up at meetings or people show up at gatherings because they just show up, they have no influence, power or decision-making ability to any of that so talking your head off to someone who has absolutely no say in the matter is kind of not, really pointless so to speak. So it's best, it's in everyone's best interest that you understand where, what the concentration of efforts you need to do and what type of information, that's another thing to add. What information is needed to accomplish the results? So you're going to a group of directors or a group of VPs or what not, they need to hear some specific buzzwords, some specific information to go for a "yea" or "nay" rather than if you go to an engineer, what information do they need to hear to go for a "yea" or "nay," so it's really different depending on where and who you're talking to.

In contrast, two other leaders believed that organizational awareness promoted unhelpful office politics. One of these leaders elaborated,

> I see it, I'm aware of it, I don't work it because I think too much focus there just kind of perpetuates the whole political nature of organizational behavior. That line item is 100% politics, because you can recognize it and engage or you can recognize it and avoid. It's also one of those things that on the team you know you can still become engaged within your team.

Table 20

Interviewees' Evaluation of the Impact of Organizational Awareness on Engagement

Theme	N
Not as important as other competencies	6
Ways to develop: understand others	2
Outcomes	
Helps accomplish results	2
Promotes unhelpful office politics	2

Note. $N = 10$; Many participants reported multiple subthemes under each major theme

Summary. The participants generally agreed that all seven social intelligences were important for engagement. They offered several insights about each intelligence, including how they can be exhibited and what outcomes are associated with each.

Analysis of the results across the intelligences reveals additional findings. Notably, six of the seven intelligences were described as being impractical or difficult to achieve, not always necessary or appropriate, not as important as other intelligences, insufficient for producing engagement on their own, or not always leading to engagement. These competencies included Inspirational Leadership, Teamwork, Coaching and Mentoring, Influencing, Conflict Management, and Organizational Awareness. Only Empathy was not described in this manner.

Two behaviors were associated with several social intelligences: leading by example was believed to lead to Inspirational Leadership, Teamwork, Coaching and Mentoring, and Influencing. Building relationships and getting to know one's employees was associated with Empathy, Teamwork, and Organizational Awareness. In terms of

outcomes, the leaders believed that Coaching and Mentoring, Conflict Management, and Organizational Awareness had positive effects on employee achievement.

Triangulation of the Data

On average, managers were perceived by themselves and others as "often" using each social intelligence. No significant differences emerged when comparing the leaders' self-reported scores compared to scores given by their managers, peers, or direct reports.

Managers in their 50s were found to more frequently use Teamwork and Conflict Management than managers in their 30s or 40s. Additionally, managers in their 50s were found to more frequently use Organizational Awareness behaviors than managers in their 30s and more frequently use Coaching and Mentoring and Inspirational Leadership behaviors than managers in their 40s. Overall, they were rated higher in Relationship Management compared to managers in their 30s and 40s and higher in Social Awareness than managers in their 30s. No other significant differences emerged based on demographic variables.

No significant differences in employee engagement (the dependent variable) were found when the leaders were divided into high and low Social Intelligence groups (the independent variable). Moreover, Pearson correlations revealed no significant relationships between employee engagement and any of the social intelligences.

Leaders in the low engagement group exhibited a significant negative relationship between employee engagement and empathy. Leaders in the high engagement group exhibited significant positive relationships between Employee Engagement and Teamwork, Organizational Awareness, Empathy, Social Awareness.

Leaders' open-ended responses indicated that Empathy, Teamwork, Coaching and Mentoring, and Inspirational Leadership helped produce employee engagement. Their

open-ended responses did not reflect references to Influence, Conflict Management, or Organizational Awareness.

When asked directly about the social intelligences, the participants generally agreed that all seven were important for engagement. Empathy appeared to draw the least criticism, as the other six intelligences were described by several leaders as being impractical or difficult to achieve, not always necessary or appropriate, not as important as other intelligences, insufficient for producing engagement on their own, or not always leading to engagement.

Triangulating all three sources of data (survey results, open-ended interview results, direct questioning interview results) indicates that the strongest support was produced for Empathy as having a positive association with employee engagement. Teamwork also earned strong support from the survey and open-ended data, although participants disagreed about the necessity of this for engagement when they were asked directly. Although a correlation was found between engagement and Organizational Awareness and Social Awareness, leaders did not appear to strongly support this relationship in their open-ended or direct responses. Coaching and Mentoring as well as Inspirational Leadership was suggested in participants' open-ended responses; however, no correlation was found with employee engagement in the survey data and most leaders did not emphasize a relationship between this intelligence and engagement when asked directly. The data showed the least support for Influence: no correlation was found for these intelligences with employee engagement and leaders did not indicate support for these intelligences in their open-ended or direct responses. The next chapter provides a discussion of these findings.

Chapter 5

Discussion

The purpose of this study was to evaluate the effects of leader social intelligence on employee engagement. Three research questions were examined:

1. What is the leader's composite engagement score? Engagement score was calculated based on his or her direct reports' responses on the company's annual employee survey.
2. What is the leader's social intelligence? Social intelligence was assessed through self-report and rater report as a means of validating the self-report.
3. What relationships exist between leader social intelligence and composite engagement score?

This chapter presents a discussion of the study results. Conclusions are presented first, followed by practical recommendations, limitations, and suggestions for additional research.

Primary Findings

The leaders included in the study had received employee engagement scores ranging from 34 to 93 ($M = 74.76$, $SD = 14.26$), suggesting that they varied a great deal in the degree to which their employees were engaged. In the group as a whole, the leaders had rather high social intelligence scores. The leaders appeared to use the competencies and behaviors often, both according to their own perception as well as the perceptions of their managers, direct reports, and peers.

The only differences in these scores that emerged based on demographic variables were that managers in their 50s were evaluated to use (a) Teamwork and Conflict Management more frequently than managers in their 30s or 40s, (b) Organizational Awareness behaviors more frequently than managers in their 30s, and (c) Coaching and Mentoring and Inspirational Leadership more frequently than managers in their 40s.

Overall, they were rated higher in Relationship Management compared to managers in their 30s and 40s and higher in Social Awareness than managers in their 30s. No other significant differences emerged based on demographic variables. It is important to note that the small sample size made the observed three-point difference non-significant, whereas a large sample size likely would have produced a significant t-test. This warrants future research, as social intelligence may have an effect that could not be detected in the present study.

Employee Engagement scores were not significantly different when comparing leaders with higher social intelligence to leaders with lower social intelligence. No significant relationships were found between employee engagement and any of the social intelligences based on the 34 leader participants. However, significant relationships with employee engagement were detected with four social intelligences based on the 17 leaders with the highest engagement scores: Teamwork, Organizational Awareness, Empathy, and Social Awareness. Importantly, correlation neither indicates causality nor eliminates the presence of a third variable affecting both variables.

Additionally, leaders' open-ended responses indicated that Empathy, Teamwork, Coaching and Mentoring, and Inspirational Leadership helped produce employee engagement. Their open-ended responses did not reflect references to Influence, Conflict Management, or Organizational Awareness.

When asked to identify the methods that drive employee engagement in one-on-one interviews, the leaders shared that relationship building, empowerment and autonomy, feedback and communication, clear direction and leadership were effective. When asked directly about the social intelligences, leaders' responses were quite mixed.

The exception to this was Empathy, which the leaders in general did believe important for engaging employees.

Triangulation of the evidence suggests inconclusive support for the relationship of leaders' use of social intelligences and employee engagement. Although significant correlations emerged within the top engaging group of leaders, the fact that all the leaders (even those receiving low engagement scores) were reported by all raters as "often" using the social intelligences suggests that the ESCI may be subject to substantial response biases, leading to inflated scores. Additionally, it is possible that other variables are strongly affecting employee engagement. It is necessary to further examine these other factors and measure and investigate the impact of leader social intelligences versus these other factors.

Beyond this concern, examination of the qualitative and quantitative data reveals that Empathy had the strongest support with regard to its positive association with employee engagement. Teamwork also appeared to be associated with engagement, although the leaders disagreed about the necessity of this for engagement when asked directly. Limited support was found for Organizational Awareness, Social Awareness, Coaching and Mentoring, and Inspirational Leadership. Even less support was produced for Influence.

These findings indicate that the social intelligences vary in their association with engagement. Based on the results of this study, it appears that Empathy may be the most effective lever for engagement, potentially followed by Teamwork. Issues of small sample size, problems with data collection, and confounding variables may be at least partly responsible for these results (see Limitations section). Therefore, several suggestions for continued research are offered later in this chapter.

Implications for Social Intelligence Theory

Based on Goleman and Boyatzis (2012), it was predicted that all seven intelligences would be associated with engagement. Instead, strong support has been generated for Empathy and slightly less support has been generated for Teamwork. However, it is striking that the other five received such mixed support. These results cast doubt on the role and criticality of inspirational leadership, coaching and mentoring, influencing, conflict management, and organizational awareness for employee engagement. Although these are likely useful and even critical for other organizational outcomes, it is questionable what role they play in promoting and enhancing employee engagement. Alternately, these results also may reveal a limitation in the literature concerning the terms and definitions used. For example, in this study, the leaders did not always understand the intended definition of the social intelligence concepts they were describing, even when the researcher provided a definition. This suggests the need to clarify and possibly adapt the terminology surrounding these constructs. Moreover, this suggests that the ESCI used in this study may lack validity and requires further refinement to be established as a valid and reliable tool for assessing social intelligence.

Recommendations for Practice

Despite the inconclusive results generated by this study, what can be concluded at this time is that training and coaching investments in leader Empathy and Teamwork building skills are advisable for companies wishing to unleash the full potential of their workforces. Therefore, it is advisable to encourage leaders to exercise these behaviors. This could be accomplished through a three-prong effort of hiring for these competencies, providing training and development opportunities that enhance these

behaviors, and incorporating these behaviors in the performance evaluation process. Each of these recommendations are briefly outlined below:

1. Hire for the competencies of Empathy and Teamwork. Based on the results of this study, it appears that enhancing employee engagement may be linked to managers' ability to express empathy and build teamwork. Therefore, hiring practices should seek to determine candidates' competency in these areas. This could be gauged through behavioral interviewing, customized reference checking, and case scenarios that would solicit how the candidate would respond in certain situations.

2. Provide training and development opportunities that enhance Empathy and Teamwork behaviors. Various training experiences and career development opportunities could be offered to managers to develop the specific behaviors and cultivate the attitudes associated with Empathy and Teamwork. This could include basic soft skills training, mentoring, or other activities.

3. Incorporate evaluation and incentives related to Empathy and Teamwork behaviors in the performance planning process. Ultimately, for managers to understand the importance of these behaviors and dedicate time and energy to cultivating and practicing them, they need to be evaluated, recognized, and rewarded for these activities. Therefore, specific measures and criteria could be added to the performance evaluation process and incentives could be awarded for managers' successes in these areas.

Limitations

Several limitations affected this study. One issue was having drawn a small sample from one company. Although the researcher contacted and invited more than 400 leaders to participate, only 34 (8.5%) completed a survey. Additionally, the desired target of five raters per leader was not achieved. Based on this response rate, future studies that rely upon quantitative data collection and analysis need to expand the potential participant pool to roughly 4,530 leaders to achieve a reasonable sample size of 377 leader respondents, which would achieve a 95% confidence level according to Raosoft (2012) sample size calculator. Moreover, all the leaders were drawn from one company. It is possible that the leadership culture and development practices cultivate strong social

intelligence, thereby limiting potential differences in these competencies and subsequent analysis of the impact of the competencies on engagement.

Another issue with the study is that review of the interview responses suggests that the leaders did not always understand the intended definition of the social intelligence concepts they were describing. This misunderstanding appeared to persist, even though the researcher provided definitions of the concept to assure that the participants' responses would be accurate and relevant. For example, *influence* was defined in this study as using various tactics to convince others. At least one leader misunderstood this concept, explaining that a positive attitude has a good influence on the team. This could explain why leaders did not believe that the intelligences were always necessary for engagement.

Yet another issue with the research design was that the quantitative data relied upon self-report. Several problems have been noted with self-report (Creswell, 2009) such as socially desirable answering (providing answers that present themselves or their leaders favorably) and hypothesis guessing (participants providing answers they think the researcher wants to hear). These biases and problems with self-report data could explain why the leaders on average were reported as "often" using the social intelligences with little variation. At the same time, this limitation was mitigated by the collection of other raters' evaluations, including that of the focal leaders' managers, peers, and direct reports. Moreover, no significant differences in the ratings were found when comparing the leaders' self-evaluations to the other raters' evaluations.

Although the correlational analysis and content analysis suggested that the social intelligences are correlated with and may have some influence on employee engagement, the employee engagement scores across the leaders varied widely. This suggests that

other variables may explain and influence employee engagement beyond leaders' social intelligences. Identifying and examining the impact of these variables requires further research. Moreover, correlation does not indicate causality; nor does it eliminate the possibility that a third variable may be acting on both variables. However, it is important to remember that this result was produced using a very small sample size.

Suggestions for Future Research

Several suggestions for research are warranted based on the results of this study. First, the present study could be repeated using a much larger sample (e.g., a minimum of 377 leader participants). This is particularly necessary because it was likely the small sample size that made the observed three-point difference non-significant, whereas a large sample size likely would have produced a significant t-test. This warrants future research, as social intelligence may have an effect that could not be detected in the present study.

Additionally, it would be helpful to include leaders from various companies and assure that a balance of leaders with low and high engagement scores from subordinates as well a balance of those who are low and high in various social intelligences are included in the sample. If leaders' social intelligence does have an impact on subordinates' employee engagement, these results are more likely to be detected using a sample of this nature.

Another research design that might be more effective in identifying the impact of social intelligences on employee engagement is to study two similar groups within the same organization. At the start of the study, the leaders' social intelligence and their employees' engagement could be measured. Half the leaders could then be selected to participate in training and coaching to enhance their social intelligences. At the end of the

study period, the leaders' social intelligence and their employees' engagement would again be measured. To attempt to isolate the effect of the social intelligences and allow sufficient time for them to have effect, it will be important to gather data about other factors that may affect employees' engagement during the study time frame and also to conduct the study over a reasonable time period (e.g., 1 year).

This study only involved interviews with the leaders regarding the impact of social intelligences on employee engagement. Self-report is subject to several limitations (Creswell, 2009). Ultimately, the employees themselves may provide the most accurate and in-depth insights about what engages them. Therefore, future studies on this topic could expand to include interviews with direct reports regarding the impact of their leaders' social intelligences on their engagement.

Summary

This study evaluated the effects of leaders' social intelligence on their subordinates' employee engagement. This mixed-method study gathered quantitative data using the ESCI to measure 34 leaders' social intelligence based on self-report, manager report, subordinate report, and peer report. Ten leaders who had completed the social intelligence survey were interviewed and asked to share their views regarding methods of driving employee engagement. They were asked open-ended questions to describe drivers of engagement. Then they were asked to evaluate the social intelligences regarding their impact on subordinates' engagement.

On average, the managers had received a range of employee engagement ratings. The managers were perceived by themselves and others as "often" using each social intelligence. Triangulation of the evidence suggests inconclusive support for the relationship of leaders' use of social intelligences and employee engagement. Although

significant correlations emerged within the top engaging group of leaders, the fact that all the leaders (even those receiving low engagement scores) were reported by all raters as "often" using the social intelligences suggests that other variables are strongly affecting employee engagement. It is necessary to further examine these other factors and measure and investigate the impact of leader social intelligences versus these other factors.

Although limitations of a small homogenous sample, problems with data collection, and confounding variables affected the study and more research with subordinates; a larger, heterogeneous leader sample; and a field experiment design is recommended, this study still produced valuable insights about the impacts of leader social intelligence. Namely, the study findings suggested that Empathy, Teamwork, and Coaching and Mentoring behaviors among leaders had some association with employee engagement. Therefore, it is advisable to encourage leaders to exercise these behaviors and to incorporate these behaviors in the selection and development processes for leaders.

References

Bar-On, R. (1997). *The Emotional Quotient Inventory* (*EQ-i): A test of emotional intelligence.* Toronto, Canada: Multi-Health Systems, Inc.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18*, 13-25. Retrieved from http://www.eiconsortium.org/reprints/bar-on_model_of_emotional-social_intelligence.htm

Bar-On, R., Tranel, D., Denburg, N. L., & Bechara, A. (2003, May 21). Exploring the neurological subtrate of emotional and social intelligence. *Brain*, *126*, 1790-1800. http://dx.doi.org/10.1093/brain/awg177

Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact.* Mahwah, NJ: Erlbaum.

Bass, B.M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: The Free Press.

Bernerth, J., Armenakis, A., Feild, H. S., & Walker, H. (2007). Leader–member social exchange (LMSX): Development and validation of a scale. *Journal of Organizational Behavior, 28*(8), 979–1003. DOI: 10.1002/job.443

Boyatzis, R. (2012). *The creation of the emotional and social competency inventory (ESCI).* Philadelphia, PA: Hay Group.

Boyatzis, R. E., Good, D., & Massa, R. (2012, February 1). Emotional, social, and cognitive intelligence and personality as predictors of sales leadership performance. *Journal of Leadership and Organizational Studies*, *19*, 191-201. http://dx.doi.org/10.1177/1548051811435793

Boyatzis, R. E., Passarelli, A. M., Koenig, K., Lowe, M., Mathew, B., Stoller, J., & Philips, M. (2012). Examination of the neural subtrates activated in memories of experiences with resonant and dissonant leaders. *The Leadership Quarterly*, 259-272. http://dx.doi.org/10.1016/j.leaqua.2011.08.003

Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review, 12*, 637-647.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Feldman, D. A. (1999). *The handbook of emotionally intelligent leadership: Inspiring others to achieve results.* Paonia, CO: Leader Performance Solutions.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. [Kindle version]. Retrieved from www.amazon.com

Goleman, D., & Boyatzis, R. (2008). Social intelligence and the biology of leadership. *Harvard Business Review*, 1-8. Retrieved from https://hbdm.hbsp.harvard.edu/hbr/sub/subscribe5.html

Goleman, D., & Boyatzis, R. (2012). *Emotional and social competency inventory*. Philadelphia, PA: Hay Group.

Goodman, C. J., & Mance, S. M. (2011, April). Employment loss and the 2007-2009 recession: An overview. *Monthly Labor Review*, 3-12. Retrieved from http://www.bls.gov/opub/mlr/2011/04/art1full.pdf

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly, 6*, 219–247.

Harter, J. K., Hayes, T. L., & Schmidt, F. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, *87*(2), 268-279. http://dx.doi.org/10.1037//0021-9010.87.2.268

Hughes, M., Thompson, H. L., & Terrell, J. B. (2009). *Handbook for developing emotional and social intelligence*. [Kindle version]. Retrieved from www.amazon.com

Hunt, T. (1928). The measurement of social intelligence. *Journal of Applied Psychology*, *12*(3), 603-612. Retrieved from psycnet.apa.org/journals/apl/12/3/317.pdf

Kobe, L. M., Reiter-Palmon, R., & Rickers, J. D. (2001, Summer). Self-reported leadership experiences in relation to inventoried social and emotional intelligence. *Current Psychology: Development, Learning, Personality, Social*, *20,* 154-163. http://dx.doi.org/

Komives, S. R., Lucas, N., & McMahon, T. R. (2007). *Exploring leadership* (2nd ed.), San Francisco, CA: Jossey-Bass.

Komives, S. R., Wagner, W. & Associates. (2009). *Leadership for a better world: Understanding the social change model of leadership development. A publication of the National Clearinghouse for Leadership Programs.* San Francisco, CA: Jossey-Bass.

Lipman-Blumen, J. (1996). *The connective edge: Leading in an interdependent world.* San Francisco, CA: Jossey-Bass.

Lowman, R., & Leeman, G. (1988). The dimensionality of social intelligence: Social abilities, interests, and needs. *Journal of Psychology*, *122*(7), 279-290. http://dx.doi.org/10.1080/00223980.1988.9915516

Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence, 17*(4), 433-442.

Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (200*3*). Measuring emotional intelligence with MSCEIT V2.0. *Emotion, 3,* 97-105. http://dx.doi.org/10.1037/1528-3542.3.1.97

McClatchey, V. (19*2*9). A theoretical and statistical critique of the concept of social intelligence and of attempts to measure such a process. *Journal of Abnormal and Social Psychology*, *2*(24), 217-220. Retrieved from psycnet.apa.org/journals/abn/24/2/217/

Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook.* Thousand Oaks, CA: Sage.

Punch, K. F. (2004). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Raosoft. (2012). *Sample size calculator.* Retrieved from http://www.raosoft.com/samplesize.html

Reader, S. M., & Laland, K. N. (2002, April 2). Social intelligence, innovation, and enhanced brain size in primates. *Proceedings of the National Academy of Sciences*, *99*(7), 1-6. http://dx.doi.org/Retrieved from

Strang, R. (1930). Measures of social intelligence. *American Journal of Sociology*, *36*, 263-269. Retrieved from doi.apa.org/?uid=1930-05137-001

Thorndike, R. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *The Psychological Bulletin*, *34*, 275-285. Retrieved from psycnet.apa.org/journals/bul/34/5/275/

Wiley, J. W. (2010). *Strategic employee surveys: Evidence-based guidelines for driving organizational success*. [Kindle version]. Retrieved from www.amazon.com

Appendix: Interview Script

1. Describe any leadership assessments that you have completed, and/or any leadership training classes or programs in which you have participated during your time with [the company].

2. Within the assessments/training, were topics related to the interpersonal aspects of leadership included? For example, was the impact of the contagious nature of a leaders social behavior on his/her followers covered? If so, describe.

3. Please share your point of view regarding the most effective methods of driving employee engagement.

4. What role do leaders perform in driving their respective employees' level of engagement? What have you found works best for you and your team?

5. On a scale of 1-7, rank the following in order of their effectiveness as drivers of employee engagement. 1 being the most effective and 7 being the least effective. (see interview handout)