# Marquette University e-Publications@Marquette

College of Professional Studies Professional Projects

Dissertations, Theses, and Professional Projects

Spring 2012

Qualitative Study of the Relationship between the Employee Engagement of Certain Employees and the Emotional Intelligence of Their Respective Leaders

Ann Kulow Marquette University

Follow this and additional works at: http://epublications.marquette.edu/cps\_professional

# **Recommended** Citation

Kulow, Ann, "Qualitative Study of the Relationship between the Employee Engagement of Certain Employees and the Emotional Intelligence of Their Respective Leaders" (2012). *College of Professional Studies Professional Projects*. Paper 21.

# Running Head: EMOTIONAL INTELLIGENCE AND EMPLOYEE ENGAGEMENT

# QUALITATIVE STUDY OF THE RELATIONSHIP BETWEEN THE EMPLOYEE ENGAGEMENT OF CERTAIN EMPLOYEES AND THE EMOTIONAL INTELLIGENCE OF THEIR RESPECTIVE LEADERS

By

Ann Kulow

A Professional Project Submitted to the Faculty of the Graduate School, Marquette University, In Partial Fulfillment of the Requirements for The Degree of Master of Leadership Studies

> Milwaukee, Wisconsin May 2012

#### Abstract

The purpose of this ethnographic qualitative study was to explore the relationships between an employee's engagement and the emotional and social intelligence of the employee's manager. The participants were certain employees of a Midwest manufacturer who were chosen by purposeful, criterion sampling. Direct reports of the chosen and consenting leaders were asked to complete a survey designed to measure the employee's assessment of the social and emotional intelligence of their leaders. A total of 42 reports and 21 managers participated in this portion of the study. The emotional intelligence survey results were coded, reviewed and compared with the engagement survey scores provided by the participants and were analyzed to determine emerging themes. The consenting employees were also asked to complete a survey that scored their engagement at a point in time and these results were also coded and reviewed to determine any emerging themes. A total of 64 reports and 21 managers participated in this portion of the study. Additionally, eight consenting participants were selected to provide more in-depth information about their assessment of the emotional intelligence characteristics of their respective leaders and the associated affect on employee engagement. The results of this study support other research relating to the significance of an emotionally intelligent leader's ability to better engage his or her direct reports. Information obtained from this study may serve as a basis for the design of coaching and training techniques for individuals and teams.

#### **ACKNOWLEDGEMENTS**

I would like to thank my truly wonderful and emotionally intelligent family – my husband (and best friend at work) Bill, and my children Aaron, Alexander and Will, for their unyielding support, humor and kindness throughout my entire educational journey. They truly served as my inspiration to persevere and succeed. My dear friends Carolyn Stein and Nancy Sudoma, whose attentive listening and positive outlook and empathy competencies helped me to maintain my engagement throughout the course of the project. Roberta Colasanti, who served as an inspiration for this project. My in-laws and sister-in-laws, who generously gave up their free time to help care for my youngest son while I prepared by project. Dr. Eileen Sherman, my Capstone director who provided guidance, encouragement, and valuable insight throughout the process. Paul Herr for his guidance and for granting me access to the Horsepower<sup>TM</sup> tool used in this study. The Hay Group, for granting me permission to use the ESCI tool for measurement of the manager's emotional intelligence competencies. My employer for providing the means to obtain my master's degree and several of my employer's leaders for allowing me access to the employee base who served as the participants for my research. My 80+ coworkers, who actively participated in my study. Dotti Baker, Steve Boettinger, Paul Herr, Theresa Kulow, Mark LeMahieu, and Susan Russ-Belhumeur who graciously reviewed and edited my project. Emily Hernandez, Felisa Parris, Amanda Ahrndt and Dr. Jay Caulfield who helped to bring the project together.

# TABLE OF CONTENTS

ACKNOWLEDGMENTS		
LIST OF TABLES	vi	
INTRODUCTION	1	
Introduction, Focus and Purpose of the Study	1	
LITERATURE REVIEW	2	
Emotional Intelligence	2	
Employee Engagement	13	
Neuroscience of Emotions and Relevance to Leadership	24	
RESEARCH METHODS	32	
Design of Methodological Choice	32	
Selection of Participants for Data Collection and Informed Consent	33	
Procedures Implemented for Data Collection	35	
Selection of Participants for Interviews and Informed Consent	37	
Procedures Implemented for Interviews	38	
Selection of and Procedures Implemented Relative to Subject Company	38	
Data Relating to Phenomenon		
ANALYSIS	40	
Data Analysis Procedures	40	
FINDINGS	43	
Themes Uncovered	43	
CONCLUSION	76	
Problems Encountered	76	

Limitations of Study	78
Implications for Future Research	80
Implications for Practice	80
Conclusion	86
REFERENCES	89
APPENDICES	
Appendix A: Correspondence to Managers	98
Appendix B: Correspondence to Managers who are also Direct Reports	99
Appendix C: Consent of Managers	100
Appendix D: Introductory Letter from Paul Herr	102
Appendix E: Correspondence to Direct Reports	103
Appendix F: Consent of Direct Reports	104
Appendix G: Consent from the Hay Group, Inc.	106

Appendix I: Aggregate Average Scores Applicable to all Relevant Managers 108

Appendix H: Interview Protocol

# LIST OF TABLES

- TABLE 1:
   Emotional and Social Intelligence Traits
- TABLE 2: Emotional Styles
- TABLE 3:Emotional Styles and Relevant Brain Activity
- TABLE 4:
   ESCI Data and Self-Reported Engagement Data (Engaged Employed)
- TABLE 5:
   ESCI Data and Self-Reported Engagement Data (Employees Who are Not Engaged)
- TABLE 6:
   ESCI Data and Horsepower<sup>TM</sup> Data (Engaged Employees)
- TABLE 7:
   ESCI Data and Horsepower<sup>TM</sup> Data (Employees Who are Not Engaged)
- TABLE 8:Comparison of Emotional Intelligence Traits to Subject Company'sValues and Expected Behaviors
- TABLE 9:
   Preliminary Results of Managers and Workers Who Consented to

   Participation
- TABLE 10:
   Possible Ways to Increase Emotional Intelligence Competencies without

   Formal Training

Qualitative Study of the Relationship Between the Employee Engagement of Certain Employees and the Emotional Intelligence of their Respective Leaders

# Introduction

# Introduction, Focus and Purpose of the Study

Introduction and focus. This ethnographical qualitative study examined the cultural theme of the relationship between the employee engagement of certain salaried workers at a Midwest manufacturer and the level of emotional intelligence of the employee's respective manager (as assessed by the worker). The focus of this study examined the phenomena of how a leader's emotional intelligence competencies may directly affect the engagement and motivation of his or her direct reports. The purpose of the study was to examine whether there are certain emotional intelligence competencies that seem to have a greater impact on an employee's engagement. Additionally, since recent neuroscience research suggests that it is possible to increase one's level of emotional intelligence competencies, this study also examined ways to possibly do so, which could result in a more positive workplace environment with more engaged, motivated workers. For the purpose of this study, the Midwest Manufacturer is known as the "Subject Company;" the employees surveyed are referred to interchangeably as "workers," "reports," or "direct reports" and their managers are referred to as "leaders" or "managers."

# **Literature Review**

A review of literature was conducted to review the constructs of emotional intelligence and employee engagement and to explore the neoroscience of emotions. The literature was analyzed to examine the relationships among the three topics. Further, the literature was evaluated to understand how the three subjects relate to the workforce relationships.

# **Emotional Intelligence**

**History**. Emotional and social intelligence theories have emerged over the past 30 years; however, they developed from over a century of research. Generally, emotional intelligence relates to how individuals handle themselves emotionally (Goleman, Boyatzis, & McKee, 2002). Social intelligence relates to being intelligent not only about relationships but also about what transpires when people engage in relationships (Goleman, 2006). For the purpose of this study, when referring to the emotional intelligence competencies, the social intelligence competencies are included.

According to Reuven Bar-on (2007), emotional and social intelligence theories were inspired by the early work of Charles Darwin who theorized that emotional expression was necessary for survival and adaptation. Bar-on (2007) also attributes the roots of the emotional intelligence models to Edward Thorndike who set forth a description of social intelligence in 1920. In 1940, David Wechsler (developer of various intelligence tests) presented his observations related to how non-cognitive factors influenced cognitive intellect (Bar-on, 2007). Peter Sifneos' description of alexithymia (the inability to describe one's emotions) in 1967 (Bar-on, 2007) and Stephen Appelbaum's concept development of psychological mindedness ("a person's insight to see relationships among thoughts, feelings, and actions, with the goal of learning the meaning and causes of his experiences and behavior") (Bar-on, 2007, p. 36) also contributed to the basis of the theory (Appelbaum, 2007). Howard Gardner's much publicized work on the theory of multiple intelligences also impacted the development of the emotional intelligence models (Bar-on, 2007). More recently, the theory of emotional intelligence was popularized by the success of the 1996 book by Daniel Goleman (psychologist and science journalist) entitled, *Emotional intelligence: Why it* can matter more than IO. The book was listed on The New York Times bestseller list for a year-and-a-half, there are over 5,000,000 copies of the book in print and it has been translated into approximately 30 languages (Goleman, 2010a). Thus, the emotional intelligence theory quickly gained notoriety. Furthermore, the professional business envionment garnered great interest in the emotional intelligence theory due in large part to Goleman's high profile assertions that possessing a high level of emotional intelligence was more important than possessing high cognitive intelligence and that leaders who possessed high emotional intelligence were likely to be more successful, which equated to being better for business (Goleman, 1996).

**Emotional Intelligence models**. According to the *Encyclopedia of Applied Psychology* (Spielberger, 2004), the three most prominent models of emotional intelligence are (1) the model developed by John Mayer, Peter Salovey, and David Caruso, (2) the model developed by Reuven Bar-On and his associates, and (3) the model developed by Daniel Goleman, Richard Boyatzis, and Annie McKee. Each model has slightly different definitions and variations. In 2012, Richard Davidson and Sharon Begley introduced a model called Emotional Style that is based on neuroscientific research (Davidson & Begley, 2012).

The Mayer, Salovey & Caruso model is comprised of the following:

- Perceiving Emotions: the ability to perceive emotions in oneself and others as well as in objects, art, stories, music, and other stimuli;
- (2) Facilitating Thought: The ability to generate, use, and feel emotion as necessary to communicate feelings or employ them in other cognitive processes.
- Understanding Emotions: The ability to understand emotional information, to understand how emotions combine and progress through relationship transitions, and to appreciate such emotional meanings; and
- (4) Managing Emotions: The ability to be open to feelings, and to modulate them in oneself and others so as to promote personal understanding and growth (Mayer et al., 2002).

The measurement designed by the Mayer et al. researchers to measure emotional intelligence is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) (Mayer et al., 2000).

The model developed by Reuven Bar-on and his associates is defined as follows:

Emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how well we understand and express ourselves, understand others and relate with them, and cope with daily demands, challenges and pressures (Bar-on, 2007).

The measurements designed by Bar-on and his colleagues are the Bar-On EQ-i, EQ-360 and EQ-i:YV (Bar-on, 2007).

The Goleman et al. emotional intelligence model is defined as:

Emotional intelligence is the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others. An emotional competence is a learned capacity based on emotional intelligence that contributes to effective performance at work (Wolf, 2006).

A measurement designed by Goleman et al. to measure emotional intelligence is the Emotional and Social Competence Inventory (which was utilized for this research) (Wolf, 2006). Goleman (2006) asserts that social intelligence, which is related to emotional intelligence, includes abilities such as displaying authentic concern for others and accurately reading emotions and facial expressions of others.

The following table sets forth the traits that an emotionally intelligent individual may possess. Goleman asserts that generally, a person is considered skilled in emotional intelligence if he or she possesses a combination of traits from each subcategory listed below (Goleman, 2006).

Table 1. Emotional and Social Intelligence Traits	
Table 1. Emotional and Social Intelligence Trans	
EMOTIONAL INTELLIGENCE	
• Emotional self awareness	
• Emotional self awareness	
<ul> <li>Accurate self assessment</li> </ul>	
<ul> <li>Self confidence</li> </ul>	
• Self Management	
• Self control	
<ul> <li>Transparency</li> </ul>	
o Adaptability	
o Achievement	
o Initiative	
o Optimism	
SOCIAL INTELLIGENCE	
o Social Awareness	
• Empathy	
<ul> <li>Empathic accuracy</li> </ul>	
<ul> <li>Organizational awareness</li> </ul>	
o Service	
o Listening	
<ul> <li>Social cognition</li> </ul>	
<ul> <li>Relationship Management</li> </ul>	
o Inspiration	
o Influence	
<ul> <li>Developing others</li> </ul>	
o Concern	
o Influence	
• Presentation of self	
• Change catalyst	
<ul> <li>Conflict management</li> </ul>	
• Teamwork and collaboration	
(Goleman, 2006).	

Similar to the emotional intelligence theories is the Davidson and Begley (2012) emotional style model. The model is made up of six traits that are based on neuroscientific research (Davidson & Begley, 2012). The traits are as follows:

Table 2: Emotional Sty	les
Emotional Style	Description
Resilience	How slowly or quickly you recover from adversity
Outlook	How long you are able to sustain positive emotion
Social intuition	How adept you are at picking up social signals
Self awareness	How well you receive bodily feelings that reflect emotions
Sensitivity to context	How good you are at regulating your emotional responses to
	take into account the context you find yourself in
Attention	How sharp and clear your focus is
(Davidson & Begley, 20	)12).

Davidson's research on the Emotional Styles model will be discussed in greater detail in the section titled, "Neuroscience of Emotions and Relevance to Leadership."

**Divergence with the Emotional Intelligence models**. Not all researchers are in alignment with the science of the most prominent emotional intelligence models. Some researchers have attempted to dispell the theory of emotional intelligence as mere fiction, pseudoscience or misconception. According to Dasborough (2004), the theories are underdeveloped, the measurements are not adequate and applications are insufficient. Dasborough (2004) asserts that the theoretical foundation for emotional intelligence models "is often little more than a dating agency list of desirable qualities" (p. 531). However, Dasborough (2004) does state that myth can aid positively by advancing more rigorous research and sound measures. Demaree, Burns, & DeDonno (2010) assert that

cognitive intelligence is what really predicts success; not emotional intelligence. For example, their research indicates that one's cognitive intelligence predicted one's decision making ability which is necessary for business success, and there was an insigificant relationship between emotional intelligence and decision-making (Demaree et al., 2010). Joseph and Newman (2010) define emotional intelligence somewhat disparagingly as "(a) ability to perform emotional tasks, and (b) a grab- bag of everything that is not cognitive ability" (Joseph & Newman, 2010, p. 54). However, the majority of the current published scientific research is supportive the of validity of the emotional intelligence models.

**Emotional Intelligence, business performance and leadership**. Emotional intelligence became a popular topic in the business world because research supported that individuals who possessed a high level of emotional intelligence helped to positively impact business performance. Recent studies indicate that possessing a high level of emotional intelligence positively impacts performance in a given occupation (Bar-on, 2010 citing Druskat, Sala & Mount, 2006). Goleman asserts that his research indicates that a worker's level of emotional intelligence is strongly correlated with job performance (Goleman, 1996). Goleman, through independent study and studies he commissioned, found that possessing the emotional intelligence traits listed above were at least twice as important as cognitive abilities and experience when evaluating the professional business acumen of an individual (Goleman, 1998). Goleman (2011a) further asserts that those individuals employed in higher levels of professional occupations (i.e., professions that require a higher level of individual cognitive intelligence) will have greater success if

they also possess a high level of emotional intelligence. Goleman's research suggests that emotional intelligence models do not discount the importance of cognitive intelligence; however, possessing emotional intelligence sets apart the average worker (2011a).

In a preliminary study, the United States Air Force utilized the the Bar-On EQ-i. for recruitment purposes of a highly specialized military training course (Bar-on, 2010). The emotional intelligence measure was given to individuals to facilitate the prediction of performance in certain specialized training programs for pilots, air traffic controllers and parachute jumpers. The U. S. Air Force has estimated that there will be significant cost savings by screening the applicants for the specialized training and by utilizing the emotional intelligence measure because it will aid in selecting the people for the training who are most likely to succeed (Bar-on, 2010).

In addition to aiding to the success of an individual, a leader who possesses a high level of emotional intelligence may positively reflect on the success of his or her coworkers. A 2002 quantitative study examined the emotional intelligence of teams of workers collectively in relation to the emotional intelligence of the team leaders (Feyerherm & Rice, 2002). This study found that teams with high emotional intelligence were correlated with high performance and that high emotional intelligence of a team leader correlates to higher team outcome (Feyerherm & Rice, 2002).

Joseph and Newman (2010) have asserted that research indicates that not all jobs require a worker to possess a high level of emotional intelligence in order to be successful; however, jobs that are emotionally laborious do require the worker to have a high level of emotional intelligence. As a result of their meta-analysis, Joseph and Newman (2010) developed guidelines for using surveys that measure emotional intelligence that include in summary: (1) emotional intelligence measures should be carefully and cautiously chosen; (2) unless the job that the applicant is seeking is emotionally laborious, results of emotional intelligence surveys may not provide value to the selection process; (3) be aware that emotional intelligence measures seem to favor women and Whites and the tool may adversely impact men and African Americans (Joseph & Newman, 2010).

In a phenomenological qualitative study, research questions were asked of fulland part-time MBA studies to discover if emotional intelligence competencies were a predictor of leadership success (Fowlie & Wood, 2009). The findings suggest that welldeveloped self-management skills do not necessarily predict leadership success; however, the study indicated that a lack of relationship and self-management skills may lead to bad leadership. Further, the study indicated that leaders should focus on the relationship with reports and in-person communication is important, as well as listening skills. The leader must act genuinely when interacting with reports (Fowlie & Wood, 2009).

**Emotional Intelligence and gender**. While this study does not specifically address the gender of the participants associated with the data, it is nonetheless important to discuss the research related to emotional intelligence and gender. It is often commented that women possess more traits of emotional intelligence than do men. Related, women, more often than men are described as "emotional" (which is also sometimes used as a derogatory description). For example, women are sometimes

believed to be more collaborative, empathetic and better peacemakers. Neuroscientist Lise Eliot extensively researched differences and similarities between the female and male brain. Eliot indicates that in "quantitative terms, sex differences in emotions and interpersonal behavior fall mostly in the small-to-moderate range. ... They're noticeable but don't absolutely separate [males] from [females]" (Eliot, 2009, p. 293). Eliot states that the research suggests that women have slightly better relational strengths and females overall have higher emotional intelligence and may therefore be able to perceive the emotions of others more readily and reliably (Eliot, 2009, p. 293). To additionally support the premise, a 1992 study found that female professional mediators were slightly more effective at helping parties reach binding conclusions than were males due in part to their abilities of reading the emotions of the parties involved in the mediation process (Moore, 2003).

Research also indicates that a female who possesses greater emotional intelligence than her male counterpart does not indicate that she will be viewed as more successful. In a quantitative study using a population of 105 top-level male and female executives (the majority of whom were male) in one financial organization, the researchers used a 360° instrument to measure the participants' emotional and social intelligence (Hopkins & Bilimoria, 2008). The instrument was designed to determine whether there were gender differences in the demonstration of emotional and social intelligence competencies, and whether there was a relationship between emotional and social intelligence competencies and success (Hopkins & Bilimoria, 2008). It was suggested that males with higher levels of emotional and social intelligence competencies were considered more successful (Hopkins & Bilimoria, 2008). Further, even when males and females were equivalent in their level of emotional and social intelligence competencies, the study indicated that the male executives were rated as more successful (Hopkins & Bilimoria, 2008).

**Emotional Intelligence and organizational culture**. In a 2009 quantitative study, regression analysis suggested that there was a positive correlation between a manager's emotional intelligence and the affect on the organizational climate (Momeni, 2009). Momeni (2009) further asserted that more than 70% of an employee's view of the organizational climate of a company directly results from their manager's emotional intelligence. The study also indicated that a manager with a high level of emotional intelligence positively affected employee morale (Momeni, 2009).

A 2008 quantitative study examined the correlation between psychological workplace climate and emotional intelligence in a clothing manufacturing plant (Klem & Schlechter, 2008). A random cluster sample of workers were asked to evaluate the psychological climate of their workplace and the perceived emotional intelligence of their supervisor/line-manager using the SUEIT measure of emotional intelligence (Klem & Schlechter, 2008). It was found that there was a significant positive relationship between leader emotional intelligence and psychological climate (Klem & Schlechter, 2008).

**Emotional Intelligence and quality of life**. A 2009 quantitative research study examined the relationship between emotional intelligence levels and stress management (Ramesar, Koortzen, & Oosthuizen, 2009). The Feelings and Emotions domain of the Occupational Personality Questionnaire (OPQ32i) and the Emotional Quotient Inventory (Bar-On EQ-i) were administered to employees holding managerial positions in a South African financial institution who were chosen by non-probability sampling (Ramesar, Koortzen, & Oosthuizen, 2009). Multiple regression, using the step-wise method of regression, was calculated and the findings supported the researchers' hypothesis that stress management was a component of emotional intelligence (Ramesar, Koortzen, & Oosthuizen, 2009).

# **Employee Engagement**

Employee engagement has recently become a popular topic of interest within the business community because research has indicated that engaged employees financially benefit companies and help to drive the success of a company (Saks, 2006, citing Bates, 2004; Baumruk, 2004; Harter et al., 2002; Richman, 2006). According to Blacksmith & Harter (2011), seventy-one percent of American workers are emotionally disconnected (not engaged or actively disengaged) in the workplace, which was a stable trend during 2011 . Gallup, Inc. (2010) asserts that its research indicates that increasing employee engagement at a company will result in positive correlation with key business performance metrics. It has been touted that employees who are engaged feel fulfilled and challenged while exhibiting general well-being which all contribute to sustaining a workforce that is motivated to do their best for personal fulfilment and for the betterment of the company with whom they are affiliated. Jim Harter, Ph.D., Gallup Inc.'s Chief Scientist of workplace management and wellbeing, has indicated that his research indicates that, "engaged employees are more productive, safer, more customer-centric,

and more profitable. They are also 3.5 times more likely to be thriving in their overall lives, experience better days, and have fewer unhealthy days" (Nielsen, 2011).

Employee engagement definition. Experts disagree somewhat on the definition of employe engagement. Mastrangelo (2009) defines engagement as being comprised as both "micro level" elements (personal growth, perceptions of supervisor, performance feedback) and "macro level" elements (company leadership, honest communication, belief in future company success) and further that engagement is found in employees' minds, hearts, and hands. Other researchers purport that cognition is an important element of engagement instead of or in addition to the emotional elements. Schaufeli, Salanova, González -Roma, and Bakker (2002) define engagement "as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 74). However, in contrast to other researchers' findings, Schaufeli et al. assert that managers are not necessarily the drivers of an employee's engagement but rather that engagement is "a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior" (2002, p. 74). Researchers who study "burnout," which has been described as the opposite of engagement, purport that engagement consists of "energy, involvement, and efficiency" and "vigor and dedication" which is in direct contrast to burnout which consists of "exhaustion, cynicism, and inefficiency" (González -Roma et al., 2006).

As previously mentioned, the Subject Company contracted with the Gallup organization to administer the employee engagement survey. Therefore, the culturesharing group of this study was familiar with Gallup's definitions and viewpoints relating to employee engagement which were examined in this study and which is discussed at length below.

Gallup, Inc. and employee engagement. Participating workers provided an estimate of their overall combined score generated from their individual engagement survey administered by Gallup, Inc. on behalf of the Subject Company during September 2011. Gallup, Inc. is an industry leader in management and leadership consulting (including employee engagement research) (Harter, Schmidt, Killham, & Agrawal, 2009). The company was founded in 1935 by George Gallup and originated as a company that measured radio audiences (Gallup, 2011). The Gallup Organization has evolved into a global company that, among other things, studies the relationship of human nature and business (behavioral economics) and explores how humans make decisions and how the resulting behavior can affect a company's financial position (Gallup, 2011). The company further measures and analyzes emerging business trends and employs consultants who market the findings to businesses (Gallup, 2011). Specifically, Gallup's research involving employee enagement is derived from over 30 years of research of data which involves over 17 million employees from diverse companies (Gallup, 2010). In a 2009 meta-analysis, Gallup researchers studied the business outcomes of customer loyalty/engagement, profitability, productivity, turnover, safety incidents, shrinkage, absenteeism, patient safety incidents, and quality (defects) of 32,394 business/work units by surveying 955,905 employees (Harter, 2009). In a comparison of the engaged employees of top-quartile companies to the bottom-quartile, the following was indicated:

12% in customer ratings, 16% in profitability, 18% in productivity, 25% in turnover (high- turnover organizations), 49% in turnover (low-turnover organizations), 49% in safety incidents, 27% in shrinkage, 37% in absenteeism, 41% in patient safety incidents, and 60% in quality (defects) (Harter et al., (2009), p. 3).

The Harter et al. (2009) the study also indicated that businesses in the 99th percentile had almost a five times greater success rate as those businesses in the 1<sup>st</sup> percentile and the true score correlation between employee engagement and business performance was .48 (Harter et al., 2009). Overall, the research conducted by Gallup helps to confirm that engaged workers help to promote good business results.

The findings of the meta-analysis further helped to validate the Gallup  $Q^{12}$  engagement instrument (Harter et al., 2009). The instrument ( which was the instrument distributed to the employees at the Subject Company) was found to have a Cronbach's alpha of .91 at the business unit level. The meta-analytic convergent validity of the equally weighted mean (or sum) of the 12 statements to the equally weighted mean (or sum) of the 12 statements to the equally weighted mean (or sum) of additional items in longer surveys (measuring all known facets of job satisfaction and engagement) was .91. Harter et al. (2009) summarize that their analysis provided evidence that the  $Q^{12}$  instrument encompasses questions of longer surveys developed by other organizations. Harter et al. (2009) further found that the  $Q^{12}$  instrument had high convergent validity with affective satisfaction and other direct measures of work engagement. The  $Q^{12}$  instrument is based on Gallup's "12 Elements of Great Managing" that elicits responses relating to the following metrics and are summarzied as

follows: (1) understanding expectations, (2) having the right equipment and resources to successfully do the job; (3) having the occasion to do the work for which you are best suited; (4) getting recognition on a regular basis; (5) feeling that someone at works truly cares; (6) feeling that someone supports my goals; (7) feeling that my viewpoints are important; (8) feeling that the job is tied to the success of the company; (9) feeling that my co-workers do a good job; (10) congeniality of the work environment; (11) attention to feedback; and (12) attention to career development (Wagner & Harter, 2006, p. xi-xii).

**Employee engagement and the economy.** Focusing on employee engagement may be important for business; however, the state of the global economy is currently in disrepair which makes deployment of employee engagement improvement activities difficult. According to the United States Department of Labor, Bureau of Labor Statistics [U.S. Dept. of Labor], 12.8 million people are actively unemployed (U.S. Dept. of Labor, 2012). The current economy is in a crisis state and recovery has been inconsistent. According to the 2012 World Economic Situation and Prospects report produced by the United Nations [U.N.], the economy may continue to be in a downturn through 2013. Furthermore, the U.N. reports that the United States (which is still experiencing its worst recession since World War II), has been "experiencing the weakest recovery pace in its history" with full employment not expected to return for another four years (U.N., 2011). In the United States, the unemployment rate as of February 2012 was 8.3% (U.S. Dept. of Labor, 2012). As a result, employees have been expected to do more with less resources. Due to lay-offs, plant and business closures and general economic decline, employees sometimes feel trapped in their current job and stay with their current employer only for

financial necessity. Because of the state of the economy it can be difficult for a company to focus simultaneously on the engagement of its employees and the botom line. Additionally, economic factors cannot be ignored as contributors to the overall engagement of employees.

**Employee engagement and authenticity**. Employees must believe that the management at his or her employer are authentic in the quest for increased employee engagement. Further, management must be careful that employees do not receive inconsistent messages with regard to employee engagement. Mastrangelo (2009) warns that management must be careful not to confuse the act of surveying employees with actually taking authentic steps to increase employee engagement.

**Engagement and motivation**. Engaged employees feel motivated to do their best work and therefore it is important that managers understand what motivates his or her workers individually. Abraham H. Maslow, a humanistic psychologist, introduced his theory of human motivation in 1943 (Maslow, 1943). Maslow theorized that certain needs are required to be cumulatively realized before one could feel self-actualized or reach one's full potential (Maslow, 1943). Maslow presented his theory in the format of a pyramid with the bottom level representing physiological needs (which include food, water and sleep); the second level representing security needs (which includes safety and shelter); the third level representing social needs (which include safety and love); the fourth level representing esteem needs (which include self worth and recognition); and the top level representing self actualization (Maslow, 1943). More recently, Maslow's framework was revised based on cumulative research. Much of Maslow's pyramid remains intact, but most notably, the top level (self-actualization) is replaced with three different levels (mate acquisition, mate retention, and parenting) (Kenrick, Griskevicius, Neuberg, & Schaller, 2010). Kenrick, et al. (2010) theorize that the revised top level ("Parenting") reflects not only child rearing, but an individual's human motivation to move away from selfishness and towards consideration of others, not only in family life, but in other social relationships and networks. Interestingly, a parallel can be drawn between the Kenrick, et al. model human motive of "Parenting" (2010) and the emotional intelligence competency of empathy (understanding the motives and emotions of others) and it could be argued, therefore, that one has not reached the top of the pyramid until he or she has developed the empathy competency.

Paul Herr has researched human motivational theory and employee engagement for over 35 years, is the author of the book, *Primal Management* and the inventor of the Horsepower<sup>™</sup> Metric that was used as part of this study (Herr, 2009). He asserts that an underlying motivator of employee engagement stems from biological and social survival or the "bio/social survival system" (Herr, 2009, p. 3-5). Herr has identified the following "social appetites" that complement underlying biological drives (nutrition, energy conservation, protection of the body (sensory pain), breathing, and reproduction) to comprise the bio/social survival system:

 Cooperation: enforced by the warm feelings we experience when we are with the persons, places, and things that are important to us and painful feelings of alienation when we are excluded ....

- 2. Skill mastery or competency: enforced with feelings of high or low selfesteem.
- 3. Skill deployment and goal attainment: enforced with the euphoria of a win and the dysphoria (pain) of a loss.
- 4. Innovation: enforced with curiosity and the eureka pleasure when we get an idea; and
- Self-protection: enforced with pleasant feelings when we achieve security and fearful and anxious feelings when we feel our survival is at risk. (Herr, 2009, p. 4-5).

Herr's Horsepower<sup>™</sup> tool was designed, in part, to measure an employee's level of engagement at a point in time and relay the aggregate results to managers. The manager can use the information to remain up-to-date on his or her workers' level of engagement, to better understand how to serve the workers' needs and wants, and to help identify the workers' motivations.

**Subject Company motivation**. According to Goleman (2006), through his research conducted with chief executive officers throughout the world, a good manager exhibits the following qualities: great listener, enourager, communicator, courageous, sense of humor, shows empathy, decisive, takes responsibility, humble, shares authority. These qualities are closely related not only to the emotional intelligence competencies, but also to the Subject Company's Expected Behaviors: (integrity, accountability, teamwork, creativity, and diversity) and Values (tell the truth, be fair, keep your promises, respect the individual, and encourage intellectual curiosity) (see Table 8).

Annually, a 360° survey is sent to direct reports (among others) of leaders who are identified as members of the Subject Company's senior leadership group. The survey is designed to elicit responses on how well the leaders exhibit the Expected Behaviors. Depending upon the results of the 360° survey, the incentive bonus of the leaders may increase or decrease accordingly. Therefore, at the Subject Company a manager who is successful in engaging his or her direct reports can be rewarded monetarily, in addition to the intrinsic rewards gained from leading a motivated, engaged staff. Further, all employees are encouraged to demonstrate how they have incorporated the expected behaviors into their work goals and commitments by providing concrete examples in their quarterly performance reports that are shared with their respective manager. Since workers are rewarded by the Subject Company monetarily and/or through recognition in a quarterly employee review, it could be determined that management at the Subject Company purport that the Values and Expected Behaviors are motivational tools that are ultimately beneficial for the Subject Company.

Subject Company employee engagement. As previously disclosed, the employee engagement measures used in this study are derived from the results of a survey conducted by the Subject Company during September 2011. Each participant in this study also participated in the employee engagement survey distributed by Gallup Consulting on behalf of the Subject Company. The engagement survey utilized Gallup's  $Q^{12^{(0)}}$  employee engagement instrument described earlier. The  $Q^{12^{(0)}}$  engagement instrument was distributed to each employee at the Subject Company who had a business email address. The engagement measurement tool was distributed to employees once annually over two consecutive years. On each occasion, the Subject Company's senior management invited each employee to complete the online  $Q^{12^{(0)}}$  survey which consisted of the twelve statements designed to measure employee engagement described above. The employees were asked to indicate their agreement of each of the twelve statements on a Likert-type scale ranging from one to five (strongly disagree or extremely dissatisfied to strongly agree or extremly satisfied). The sixth point on the scale ("not applicable" or "don't know") was not scored.

The results of the first survey indicated that over 75% of the employee population participated in the survey and that overall there was a high percentage of employees who were disengaged. The managers at the Subject Company were encouraged to work with their direct reports to develop actions items with the goal of increasing employee engagement. The managers were provided with guidelines and information from both the Subject Company and Gallup to facilitate discussions with their workers and to assist with formulation of formal action items to address the low employee engagement. The employees were encouraged to include the engagement action items into their work goal plans.

Approximately one year after the first survey was administered, the employees of the Subject Company were encouraged to participate in another engagement survey. The percentage of the employee population who completed the survey increased to 86%; however, the results again indicated that the majority of the participants were not engaged (although the scores did raise slightly). Additionally, the results of the study also indicated to the work groups that the scores of the employees who participated in the engagement action item activities were higher (indicating greater engagement) than those employees who did not participate in the engagement activity assignment.

**Engagement and wellness/happiness**. Studies indicate that engaged employees are healthier and happier (Thrive by Gallup.com, 2011). Data collected from Gallup's engagement index and the Gallup-Healthways Well-Being Index suggested that engaged employees are happier, are in better health and have fewer negative emotions (Thrive by Gallup.com, 2011). On the other hand, disengaged indivuals were as unhappy as indiviuals who were dealing with unemployment (Thrive by Gallup.com, 2011). In a sixmonth longitudinal study it was found that individuals were happier when they persistently maintained need-satisfying goals or, over time, maintained experiences deemed to be rewarding (Sheldon et al., 2010).

The Subject Company's management appears to support wellness initiatives for its employees and offers various educational opportunities and wellness programs for its employees. The Subject Company also operates fitness facilities at each of its locations. Psychotherapist Roberta Colasanti has assisted the Subject Company with developing wellness programs for certain of its employees. Colasanti has also developed and offers wellness education programs to companies nationwide. The mission of her wellness education programs is, "Improved Performance Through Improved Well-being" (Colasanti, n.d.). Colasanti asserts that "productivity, health and satisfaction are intimately tied to the quality of the relationships a company fosters" (Colasanti & Associates, LLC, n.d.). Colasanti counsels employees how to change certain behaviors in order to build relationships. For example, one of Colasanti's training sessions teaches employees to discriminate between facts and assessments of others and encourages asking one's self, "what is my action for the sake of, or for what purpose is my action" prior to making an inquiry or assessment of another (R. Colasanti, personal communication, March 16, 2012). Managers at the Subject Company were encouraged to support employees' decisions to take part in the wellness classes that are generally offered over a period of three sessions lasting approximately four hours each. The classes continue to be popular choices for employees. In unstructured conversations, this researcher has received feedback that the classes have positively changed the lives of certain participants who practice Colasanti's teachings.

## **Neuroscience of Emotions and Relevance to Leadership**

Emotions are frequently associated with the soft side of humanness. Being labeled as "emotional" oftentimes carries a negative connotation; however, emotions are, in part, what differentiate humans from other animals. Further, emotions help to bring purpose and fulfillment to our lives and help us to appreciate one another (Davidson & Begley, 2012, p. 252). Scientists disagree on the definition of emotions. In research, emotion is sometimes described as a "process that involves the pathway of a response to a stimulus including its appraisal or evaluation and a subsequent elaboration of arousal levels in the nervous system that evoke particular reactions in thought, feeling, and behavior" (Siegel, 2012, p. 32-1).

According to Siegel (2012), our emotions are responsible for shaping our overall "state of mind" and are responsible for how humans connect with one another (p. 32-1).

Further, Siegel (2012) purports that emotions could be viewed more as a verb -- as a flow rather than a "thing" (p. 32-3). Siegel (2012) suggests that the word "emotion" can be replaced with the word or the idea of the term "integration" whereas a high degree of integration is associated with positive emotions (p. 32-5). For example, the emotions of "joy, love, and gratitude" constructively increase integration into our lives and negative emotions decrease degrees of integration and our connections with others (Siegel, 2012, p. 32-6). Siegel (2012) further theorizes that one cannot separate thinking (or cognition) from emotion, and that emotion is essential to "all that is the mind" (p. 32-7).

Brain research relative to emotion has become more sophisticated in recent years due to technical advances in brain imagery and brain mapping. There are many parts of and locations within the brain that have been found to be relevant to emotions. For example, the brain's limbic system (which includes the amygdale and striatum) and the cortex help to determine our moods and emotional states (Davidson & Begley, 2012). Davidson and Begley (2012) report how each of the Emotional Styles in their model that they have identified through research are related to specific brain pattern activity as described below. They also theorize that an individual's Emotional Style is developed from a mixture of inherited DNA and childhood experiences, but due to the evidence of the brain's neuroplacticity (or the brain's ability to reprogram itself), one can positively change levels of Emotional Styles by changing patterns of brain activity (as further discussed in the "Summary" section of this report (Davidson & Begley, 2012).

 Table 3: Emotional Styles and Relevant Brain Activity

Table 3: Emotional Styles and Relevant Brain Activity		
Related Brain Activity		
Risilience is represented by the "signals from the prefrontal		
cortex to the amygdala, and from the amygdala to the		
prefrontal cortex " (p.71).		
"The prefrontal cortex and the nucleus accumbens in the		
ventral striatum form the reward circuit. Signals from the		
prefrontal cortex maintain high levels of activity in the ventral		
striatum, a region critical for generating a sense of reward,		
and thus a positive outlook. Low activity, due to less input		
from the prefrontal cortex, is a mark of negative outlook" (p.		
84).		
"Low levels of activity in the fusimorm and high levels in the		
amygdala" are characterised of the extreme form of social		
intuition (defined as "puzzled") and "high activity in the		
fusiform and low to moderate levels in the amygdala" are		
representative of a socially intuitive brain (p. 73).		
"The insula receives signals from the visceral organs" and		
high levels of this activity are predictive of greater levels of		
self awareness (p. 79).		
Low activity in the hippocampus is related to the "turned out"		

Table 3: Emotional Styles and Relevant Brain Activity		
	extreme and high activity in the hippocampus is related to	
	"tuned in" style (p. 76).	
Attention	"At the focused extreme of the attention dimension, the	
	prefrontal cortex exhibits strong phase-locking in response to	
	external stimui as well as moderate activation of the P300	
	signal. At the unfocused extreme, the prefrontal cortex shows	
	little phase-locking and an extremely weak or extremely	
	strong P300 signal" (p. 89).	
(Davidson & Begley, 20	12).	

Goleman, citing research conducted by Richard Davidson, stated that Davidson's research supported that when one is in an optimistic mood and is energized by his or her goals, brain imaging has suggested that brain activity is focused in the prefrontal cortex, on the left side of the brain behind the forehead (Goleman, 2010b). When our motivation is reduced and our energy is low, the right side of the prefrontal cortex is activated (Goleman, 2010b). Goleman parallels this information with providing feedback to employees. When feedback only focuses on the negative and is not balanced with the positive (or when positive feedback is delivered in a negative way) the right side of the prefrontal cortex is activated and we generally do not focus on doing our best. Additionally, the manner and tone of voice in which feedback is given is important. Research has suggested that when negative feedback was presented with a warm positive

outlook, the recipient felt optimistic (Goleman, 2010b). Goleman further references the work of psychologist Samuel A. Culbert at the UCLA Anderson School of Management who states that generally annual reviews create undue stress for employees and result in less productivity (Goleman, 2010b).

Leadership and brain functionality. To facilitate a manager's understanding of the emotional reactions of his or her reports and to understand how to interact with the employee to increase his or her engagement, it is helpful to be aware of relevant brain functioning. Research compiled and conducted by neuroscientist Jonah Lehrer as set forth in his book, How we decide (2009), indicates that the brain oftentimes works contrary to our benefit or, at least, inconsistently. One point made by Lehrer is that people try to make sense of unfamiliar data by deleting what is not understood (2009). Further, the prefrontal cortex can only handle approximately seven things simultaneously and the brain attempts to lump things together to make thoughts more manageable, often to our detriment (Lehrer, 2009). The brain's prefrontal cortex has not yet evolved to handle all of the facts and statistics that are available with just an inquiry to a search engine. Because we all have a multitude of information available with just the click of a mouse we have grown to believe that we need a lot of information to make a decision and that more information will help us to make a better decision. Unfortunately, the prefrontal cortex becomes overloaded when too many facts are presented all at once and when asked to make a decision in this state on the facts that seem important, good decisions are generally not made (Lehrer, 2009).

Interestingly, research indicates that the brain's natural tendency is to be biased (Lehrer, 2009). In fact, the prefrontal cortex blocks out points of view that are in disagreement or in competition with certain viewpoints (Lehrer, 2009). To help counteract the occurrence of bias, attention must be paid to the data that makes us feel uncomfortable and unconfident, and that challenges our ingrained beliefs. It is important to take time to listen to what all the different parts of the brain are trying to say. The sympathetic instinct is found in the temporal sulcus and other parts of the brain that help one to empathize with others (Lehrer, 2009). Lehrer (2009) further reported that scientists have indicated that there is a range of individual variation with the activity of the sympathetic parts of the brain among the subjects studied that seems to indicate that some people are so in tune with another person's feelings that they want the other person to feel better even at their own expense.

Doing good for others generally makes us feel good. This was scientifically proven by a brain imaging experiment that showed more activity in the pleasure centers of the brain when someone was acting altruistically in contrast to when he or she received an award (Lehrer, 2009). The research on altruism also illustrates the importance of leaders and team members meeting face-to-face. Unless an individual is autistic or if there is damage to the sympathetic circuits of the brain, people react to another by mirroring their feelings (due to the brain's mirror neurons) (Lehner, 2009). For example, if a person witnesses another person smiling, the witness' mirror neurons will "light up" as if they were experiencing the happy thought themselves (Lehner, 2009, p. 185). Lehrer (2009) states that the sympathetic nervous system is "hard-wired" to make moral decisions. For example, people generally strive to do the right thing, to avoid causing others pain and to act in a fair manner. However, one should be mindful that certain experiences can interfere with an individual's ability to make moral decisions. Scientific data suggests that child abuse may permanently damage the part of the brain that recognizes morality (Lehrer, 2009). Generally, adults who were seriously abused (physically and/or mentally) as children do not live in the same sympathetic sphere as others who were not abused (Lehrer, 2009). Further, it has been discovered that neglected children have vastly reduced levels of vasopressin and oxytocin, which are hormones that are both critical for the development of social attachments (Lehrer, 2009). Some adults who were abused as children have difficultly both recognizing emotions of themselves and the emotions of others and do not necessarily become upset when they witness another experiencing distress (Lehner, 2009).

Another important aspect of the moral mind that should be considered by a manager is that when parties are separated rather than face-to-face, the party with greater power is prone to increased selfishness, impulsiveness and insensitivity because the sympathetic part of the brain is not activated (and the brain acts in a similar way to the brain of individuals with autism – e.g., silent mirror neuron circuits and inactive fusiform face area, which means that an autistic person views the face much like an inanimate object such as a desk or couch) (Lehner, 2009). Therefore, holding face-to-face meetings with the others may positively affect their engagement.

The review of the literature relating to emotional intelligence, employee engagement, and the neoroscience of emotions indicates that a leader with a high level of emotional intelligence may intrinsically understand how to engage employees. The review revealed the intraconnectedness of the three topics and served as an important basis for conducting the research. Because this researcher does not have a professional background in psychology or in the human resources fields, it was critical to understand the current neuroscientific theories relating to emotions and engagement in order to confidently analayze the results of the studies.

## **Research Methods**

## **Design of Methodological Choice**

This study was originally designed as a mixed methods study. Due to certain circumstances, however, the study was redesigned and continued as an ethnographic qualitative study. This is further discussed under the section titled, "Problems Encountered." According to Harris (1968), in ethnographical research the "researcher describes and interprets the shared and learned patterns of values, behaviors, beliefs, and language of a culture sharing group" (as cited in Creswell, 2007, p. 68). Ethnographical research consists of observations of a targeted cultural group over an extended period of time (Creswell, 2007). Creswell also states that ethnographic studies are distinct from other forms of qualitative studies because of the advocated use of surveys and other measures for data collection (as was used in this study), along with other means of data collection such as observations, interviews, and the collection of documents (Creswell, 2007). It also involves "participant research" in which case the researcher is completely immersed in the daily activities of the cultural group (Creswell, 2007, p. 68). This researcher (and this researcher's spouse) have been interactive members of the broad culture-sharing group (the Subject Company) for almost a decade and have therefore personally experienced the phenomena being studied. Ethnographies combine the views of the consenting participants ("emic") and also the views of the researcher ("etic") that culminate in a "holistic cultural portrait" of the culture-sharing group (Creswell, 2007, p. 72). Various members of the Subject Company's leadership served as "gatekeepers"

(Creswell, 2007, p. 71) to allow this researcher to conduct the fieldwork and access to study the cultural group who were the consenting participants of this study. By allowing this research to proceed, the gatekeepers illustrated both their interest in the phenomena and the possible recommended outcomes.

# Selection of Participants for Survey and Informed Consent

Selection of survey participants. The Subject Company's intranet listing of employees was used as the population for the sample. The participants for this study were chosen by purposeful, non-proportional quota, criterion sampling with the following criteria: (1) each manager/direct report workgroup has at least five members; (2) each employee was salaried; (3) each employee worked at the headquarters facility; (4) the manager was not a member of the Subject Company's senior leadership; (5) the employee participated in the Subject Company's 2011 engagement survey; (6) the manager quota was between 30-50 participants. Demographic information relating to age, race, and gender was not collected. It should be noted that the manager quota of between 30-50 participants was not met. See the "Problems Encountered" section of this study for additional information.

## Informed consent.

*Managers*. Each manager selected for the study was sent correspondence via email that requested their participation in the study (see Appendices A and B). The correspondence summarized the purpose of the study, how and why the manager was chosen as a potential participant, and the confidential treatment of the data and voluntary nature of the study. The correspondence further explained that the manager would not be asked to complete any surveys and participate in an interview, but that his or her direct reports would be invited to do so. Attached to the correspondence were a copy of the Manager Consent approved by Marquette University on November 9, 2011 (see Appendix C) and an introductory letter from Paul Herr (inventor of the Horsepower<sup>TM</sup> survey tool) (see Appendix D). The Manager Consent contained an invitation to participate in the study, a description of the purpose of the study, the procedures of the study, the duration of the study, the risk involved, the potential benefits, a summary of how confidentiality would be maintained, a statement expressing the voluntary nature of the study and contact information.

*Direct reports*. After the respective manager agreed to participate in the study, each of his or her direct reports was sent correspondence via email that requested their participation in the study (see Appendix E). The correspondence stated that their manager had consented to their participation in the study, summarized the purpose of the study, how and why their manager/worker group was chosen as potential participants, and the confidential treatment of the data and voluntary nature of the study. The correspondence further explained that they would be invited to complete two surveys and possibly participate in an interview, but that their manager would not be invited to do so. Attached to the correspondence were a copy of the Direct Report Consent approved by Marquette University on November 9, 2011 (see Appendix F) and an introductory letter from Paul Herr (see Appendix D). The Direct Report Consent contained an invitation to participate in the study, a description of the purpose of the study, the procedures of the

study, the duration of the study, the risk involved, the potential benefits, a summary of how confidentiality would be maintained, a statement expressing the voluntary nature of the study and contact information.

# **Procedures Implemented for Survey Data Collection**

A spreadsheet was created to populate the following information (1) for each manager: last name of manager, first name of manager, email address, consent email sent, consent received and (2) for each direct report of the respective manager: last name, first name, email address, consent email sent, consent received, ESCI (defined below) survey sent, ESCI survey received, Horsepower<sup>TM</sup> survey sent, engagement score, ESCI scores and Horsepower<sup>TM</sup> survey scores.

Two surveys were administered to the direct reports of the population of leaders identified who consented to participating in the study. The surveys were the Horsepower<sup>TM</sup> tool and the ESCI tool.

Horsepower<sup>™</sup> tool. The Horsepower<sup>™</sup> tool was used to measure engagement in a point in time. This researcher became aware of the tool after reading Herr's book, *Primal Management* (2009). The tool was tested against employee engagement surveys sold by Quantum Market Research in 2008 which surveys were co-administered to 1,000 employees at 100 companies in November, 2008 (P. Herr, personal communication, March 25, 2012). The correlation coefficient between the two surveys was 0.74 which demonstrates strong convergent validity between the intrinsic (affective) rewards measured by Horsepower<sup>TM</sup> Survey with the concept of employee engagement as measure by the Quantum survey (P. Herr, personal communication, March 25, 2012).

An email was sent to Mr. Herr to describe the purpose of the research and to request his participation. After corresponding by both email and telephone on numerous occasions, Mr. Herr provided guidelines for the spreadsheet that was required to send the survey to participants and to gather the corresponding data.

A spreadsheet file containing the name and email address of each consenting direct report was sent to Paul Herr (inventor of the Horsepower<sup>TM</sup> tool) utilizing encrypted email delivery. An email was sent to each participant reminding them that they had consented to receive the tool via email from Herr. Herr then sent each participant an email with a link to the Horsepower<sup>TM</sup> tool that invited each partipant to complete the survey. The survey was open for ten days. Herr sent email correspondence to update this researcher on the progress of the completed surveys. After seven days, this researcher sent a reminder email to each of the participants who had not complete the survey closed, Herr provided this researcher with a copy of the engagement scores attributed to each participant.

**ESCI tool**. The Emotional and Social Competence Inventory – Version 3 (ESCI) (2007) tool was developed by the Hay Group and was used to assess emotional intelligence competencies of the managers. The ESCI tool is copyrighted by the Hay Group. Therefore, in order to use the tool for this study, an application was required to be filed with the Hay Group to obtain conditional use of the ESCI tool. After the Hay Group representative reviewed the application and research proposal, permission was

granted to us the tool (see Appendix G). After consent was received, the ESCI tool was sent via email to the participants. The participants were instructed to complete the survey and return it to this researcher by email or paper copy. Each survey was individually scored and the results were transferred to an Excel spreadsheet.

Assessment of employee engagement. The direct reports were instructed to report their average level of engagement as per the employee engagement survey administered by the Subject Company in September 2011. After consent to participate in the study was received, an email was sent requesting the participant to report their average level of employee engagement. Engagement levels were reported via email, telephone and in person. The engagement levels were added to the spreadsheet that tracked survey information.

#### **Selection of Participants for Interviews and Informed Consent**

Selection of interview participants. Interview participants were selected by purposeful, criterion sampling. Each participant was an employee of the Subject Company who fit the following criteria: (1) each employee was salaried; (2) each employee worked at the headquarters facility; (3) the employee was not a member of the Subject Company's senior leadership; and (4) the employee participated in the Subject Company's 2011 engagement survey. Another consideration to selection was the participant's availability to meet face-to-face for at least a 30 minute conversation within a condensed time period. Eight participants were chosen to participate in the interview portion of this study. Each participant received a copy of the Direct Report Consent described above and consented to participation. Three of the participants were male and five were female although the gender of the participants was not a criterion for selection. With regard to the managers of the participants, three were female and five were male although the gender of the managers was not a criterion for selection. Demographic information relating to age and race was not collected.

#### **Procedures Implemented for Interviews**

Employees received personal invitations to participate in the interviews via email, telephone or in person. A face-to-face interview was arranged at a convenient time. Prior to commencing the interview, the participants were reminded about the procedures in place to protect the identity of the participant and his or her manager. Each participant was informed that he or she would have the opportunity to review their respective data disclosed in the research study report and to omit any passages that made them feel uncomfortable or interfered with confidentiality. Each participant was asked the interview questions included as Appendix H in the same order. The responses were transcribed concurrently with the interview. The interview lengths ranged from 30 minutes to one hour.

# Selection of and Procedures Implemented Relative to Subject Company Data Relating to Phenomenon

A search was conducted on the Subject Company intranet and email system to discover intra-company correspondence to employees from leadership that exemplified the Subject Company's leadership's commitment to employee engagement. The following types of documents were retrieved from the Company's intranet, or email system and then reviewed to determine emerging themes. Great consideration was given to the confidential nature of the documentation that was reviewed. No information contained in this report discusses material, nonpublic information.

- Emails sent to the entire employee population that related to employee engagement and leadership;
- Tools, guidelines, and resources distributed to managers to assist employees with employee engagement-related activities;
- Articles on employee engagement and leadership included in the Subject Company's newsletters;
- Information posted to the Subject Company's intranet specifically related to employee engagement and the Gallup survey;
- Press releases available to the public; and
- Articles posted on the intranet relevant to the Subject Company's reorganization efforts.

## Analysis

#### **Data Analysis Procedures**

**Engagement score**. Participating workers provided an estimate of their overall combined score generated from their individual engagement survey administered by Gallup. This score was transferred to an Excel spreadsheet so that this and other data could be easily referenced and analyzed. For the purpose of this study, workers who reported scores greater than 3.5 were considered engaged and workers who reported scores below 3.5 were considered not engaged.

# Surveys.

*ESCI tool.* As previously described, the ESCI tool was used in this study to determine the level of emotional intelligence of the leaders who consented to participate. Each individual survey received from a direct report was scored in accordance with the ESCI Scoring Instructions that accompanied the Emotional Competence Inventory (ECI) Technical Manual (Wolf, 2006). The ESCI contained 68 questions. Each survey received was scored, averages were computed and the results were transferred to an Excel spreadsheet. Each survey required approximately 30 minutes of processing time.

The Hay Group developed guidance on the equivalence to high, medium and low levels of emotional intelligence competencies based on analysis of research from thousands of managers (Wolf, 2006, p. 7). The Hay Group further developed an algorithm to assess a manager's overall level of emotional intelligence (2006). According to the Emotional Competence Inventory (ECI) Technical Manual, all competencies in the Self Awareness cluster must exist, in the Self Management cluster, Emotional Self Control is mandatory. A manager must also exhibit Empathy, Influence and either Conflict Management or Teamwork (Wolf, 2006). The Hay Group guidance was incorporated into the analysis to determine the level of emotional intelligence based on the average score attributed to the manager. Thirty-seven managers were asked to participate in the study and 25 managers consented to the study. One hundred thirtyseven reports were asked to participate, 79 consented to the study and 42 workers returned an ESCI survey. No data was received from workers relative to four of the 25 consenting managers and, therefore, the total number of managers used for this study was 21. The data relating to each of the 21 managers used for this study reflect survey results from at least one worker.

*Horsepower*<sup>™</sup>*tool.* This tool measured the level of an employee's pleasure/pain at a given point in time. Positive scores equate to positive (pleasurable) feelings and negative scores equate to negative (painful) feelings. It also measured how sufficiently the employees' basic drives (as discussed in more detail in the Literature Review section) are being satisfied or starved. Scores were based upon a +10 to -10 scale. The last question on the survey, "How do you feel overall" is similar to the employee engagement question asked of employees after they initially consented to participation. After the survey results were processed by Paul Herr, they were routed to this researcher. The results of the surveys were added to the Excel spreadsheet that tracked the survey data. Thirty-seven managers were asked to participate in the study and 25 managers consented to the study. One hundred thirty-seven reports were asked to participate, 79 consented to the study and 64 workers participated in this survey. No data was received from workers relative to five of the 25 consenting managers and, therefore, the total number of managers used for this study was 20. The data relating to each of the 20 managers used for this study reflect survey results from at least one worker.

**Interviews**. The data transcribed from the eight in-person interviews was reviewed, revised, and redacted to remove any references to gender, names, department, or any other identifying items that would obstruct the confidentiality of the participant. The information collected from the interviews was then arranged in charts that allowed for comparisons of the data relevant to the four emotional intelligence cluster competencies of Self-Awareness, Self-Management, Social Awareness and Relationship Management as described in the materials provided by the Hay Group (Wolf, 2006). Each participant was assigned a number (e.g., Participant 1, Participant 2, etc.) at the time the interview appointment was made in order to maintain confidentiality. The data was then analyzed to identify emerging themes between emotional intelligence competencies of the manager and the employee engagement of the worker.

**Review of Subject Company data**. A review was conducted of the Subject Company's data described in the preceding section that discussed employee engagement directly and/or that may have affected employee engagement. Further, as a participant of the phenomenon, observations made over the course of this researcher's employment with the Subject Company were also analyzed to suggest emerging themes.

#### Findings

## **Themes Uncovered**

Survey data. A total of 42 reports returned ESCI surveys, relevant to 21 managers and a total of 64 reports returned Horsepower<sup>™</sup> surveys relevant to 20 managers. Regarding the ESCI portion of the study, out of the 21 managers, 13 workers reported that they were engaged (reported scores over 3.5) and eight workers reported they were not engaged (reported scores 3.5 and under). The aggregate average scores applicable to all of the relevant managers are attached to this study as Appendix I.

*ESCI data and engaged employees*. As previously discussed, the Emotional Competence Inventory (ECI) Technical Manual (Wolf, 2006) suggests that an emotionally intelligent individual must at least possess the following: self awareness, emotional self control, empathy, influence and either conflict management or teamwork. The following chart reflects average scores of the emotional intelligence competencies described above. These scores were attributed to managers whose workers reported engagement scores over 3.5 and are arranged from the highest to lowest engagement scores attributed to the respective manager. The chart is also color-coded to indicate high, medium, and low levels of emotional intelligence as indicated in the Emotional Competence Inventory (ECI) Technical Manual (Wolf, 2006). <u>MEDIUM EI</u> HIGH EI

1		Emotional Intelligence Scores					
	Self Reported Employee Engagement Score	Self Awareness Cluster	Emotional Self Control	Empathy	Conflict Management	Influence	Teamwork
MANAGER 1	5.00	4.67	5.00	4.67	4.00	4.00	4.67
MANAGER 9	4.00	3.66	5.00	4.40	4.40	3.50	4.66
MANAGER 8	4.00	3.72	4.44	4.28	4.22	4.27	4.44
MANAGER 7	4.00	4.17	4.55	4.27	4.27	4.11	4.61
MANAGER 5	4.50	4.50	4.83	4.20	4.60	4.83	4.83
MANAGER 3	4.75	4.08	4.42	4.20	3.60	3.72	4.92
MANAGER 2	4.25	3.75	4.92	4.13	3.70	3.83	4.41
MANAGER 19	4.00	3.93	4.65	4.70	4.47	4.33	4.75
MANAGER 18	3.67	4.08	4.72	4.40	4.37	4.33	4.67
MANAGER 17	4.00	4.17	4.83	3.40	3.20	4.00	5.00
MANAGER 15	4.67	3.83	4.19	4.07	3.91	3.78	4.22
MANAGER 14	3.86	3.33	4.20	3.49	4.08	3.93	4.17
MANAGER 10	3.75	3.40	4.72	3.47	3.90	3.86	4.87
AVERAGE	4.19	3.94	4.65	4.13	4.05	4.04	4.63
KEY							
LOW EI							

 Table 4: ESCI Data and Self-Reported Engagement Data (Employees Who are Engaged)

A manager must at least have the medium competency to be considered emotionally intelligent. Therefore, the chart indicates that 77% of the managers whose workers had high engagement scores could be determined to be emotionally intelligent. Overall, the managers met at least the medium level of the competencies. Every manager scored high on the Conflict Management competency. This indicates that the managers did not allow conflicts to fester, brought conflicts out into the open, attempted to deescalate emotion, and tried to solve conflicts by bringing the conflicts out into the open (Wolf, 2006). Each manager also scored highly on the Emotional Self Control competency. This indicates that the managers maintained control under stressful situations and remained patient, calm and composed under stress (Wolf, 2006). All managers scored either high or medium in the Teamwork competency. This indicates that the managers are supportive of their workers, respectful of others, and encourage cooperation (Wolf, 2006). Interestingly, the Self Awareness, Empathy, and Influence scores were very mixed, with each having at least one instance of a low score. It is further interesting to note that engaged workers who assessed their manager as possessing emotional intelligence competencies oftentimes indicated "don't know" for their answers to questions in the ESCI that relate to the conflict management competency. This occurrence could indicate that either conflict was not a regular occurrence or that conflicts were resolved quietly, behind the scenes.

*ESCI data and low employee engagement*. The following chart reflects the ESCI data attributed to managers whose workers indicated low engagement (under 3.5). It indicates the average scores of the following emotional intelligence competencies: self awareness, emotional self control, empathy, influence and either conflict management or teamwork. The Emotional Competence Inventory (ECI) Technical Manual (Wolf, 2006) suggests that all the listed competencies must be achieved to be considered emotionally intelligent. The data is arranged by highest to lowest engagement scores attributed to the workers' respective managers:

MEDIUM EI HIGH EI

		Emotional Intelligence Scores						
	Self Reported Employee Engagement Score	Self Awareness Cluster	Emotional Self Control	Empathy	Conflict Management	Influence	Teamwork	
MANAGER 6	3.50	2.92	4.00	3.90	3.70	3.67	4.08	
MANAGER 11	3.50	3.75	4.00	4.10	3.80	4.17	4.43	
MANAGER 12	3.00	2.66	3.00	2.80	2.80	3.00	3.66	
MANAGER 16	3.00	3.00	4.33	3.20	3.60	3.33	4.83	
MANAGER 20	3.00	2.80	2.50	2.80	1.80	3.60	3.16	
MANAGER 21	3.00	3.00	4.66	3.80	2.80	4.16	4.83	
MANAGER 13	2.75	3.44	3.77	3.67	2.93	3.78	4.33	
MANAGER 4	2.50	2.67	3.67	3.33	2.80	3.20	3.75	
AVERAGE	3.11	3.08	3.75	3.47	3.06	3.67	4.19	
KEY								
LOW FI								

 Table 5: ESCI Data and Self-Reported Engagement Data (Employees Who are Not Engaged)

The research indicated that 75% of the managers whose workers were not engaged were not emotionally intelligent (scored at least one "low" score in the competencies listed above). The lowest consistent scores were in the Empathy competency category. This may indicate that the managers did not understand the workers' feelings or motivations, or did not actively listen to their workers. It was interesting to note that the managers scored fairly well in the teamwork category, with 50% of the managers considered to have high levels of the competency. Without these high levels, it could be possible that the employees could be considered even less engaged.

*Horsepower* <sup>™</sup>*tool data and high employee engagement*. The following chart indicates the data collected for the managers whose workers indicated a high level of engagement. (The top thirteen highest scores were chosen from the Horsepower<sup>™</sup> tool

data so that the data could be compared to the self reported engagement scores.) No worker attributed to Manager 1 participated in this part of the study and therefore Manager 1 data is not reflected in the chart below.

	Emotional Intelligence Scores						
	Horsepower Score - Engagement	Self Awareness Cluster	Emotional Self Control	Empathy	Conflict Management	Influence	Teamwork
MANAGER 9	9	3.66	5.00	4.40	4.40	3.50	4.66
MANAGER 3	8	4.08	4.42	4.20	3.60	3.72	4.92
MANAGER 5	6.2	4.50	4.83	4.20	4.60	4.83	4.83
MANAGER 8	6.16	3.72	4.44	4.28	4.22	4.27	4.44
MANAGER 10	5.8	3.40	4.72	3.47	3.90	3.86	4.87
MANAGER 13	5.7	3.44	3.77	3.67	2.93	3.78	4.33
MANAGER 15	5.57	3.83	4.19	4.07	3.91	3.78	4.22
MANAGER 2	5.4	3.75	4.92	4.13	3.70	3.83	4.41
MANAGER 7	5.33	4.17	4.55	4.27	4.27	4.11	4.61
MANAGER 18	4.92	4.08	4.72	4.40	4.37	4.33	4.67
MANAGER 11	4.8	3.75	4.00	4.10	3.80	4.17	4.43
MANAGER 6	4.4	2.92	4.00	3.90	3.70	3.67	4.08
MANAGER 19	3.27	3.93	4.65	4.70	4.47	4.33	4.75
AVERAGE	5.73	3.79	4.48	4.14	3.99	4.01	4.55
KEY							
LOW EI							
MEDIUM EI							
HIGH EI							

Table 6: ESCI Data and Horsepower<sup>TM</sup> Data (Engaged Employees)

The data indicates that 69% of the managers whose workers reported high engagement could be considered emotionally intelligent. The Teamwork and Conflict Management competencies indicated the highest scores, similar to the results of the self reported engagement scores. Interestingly, the data from this chart indicates that one manager who had very poor emotional intelligent scores had workers who reported high engagement. This appears to be the result of one of the manager's workers reporting very high engagement and it may have presented a skewed result. *Horsepower*<sup>™</sup>*tool data and low employee engagement*. The bottom seven

scores attributed to the managers were considered the managers whose workers reported low engagement. These results are similar to the data collected from the self-reported engagement data.

	Emotional Intelligence Scores						
	Horsepower Score - Engagement	Self Awareness Cluster	Emotional Self Control	Empathy	Conflict Management	Influence	Teamwork
MANAGER 14	2.27	3.33	4.20	3.49	4.08	3.93	4.17
MANAGER 17	2	4.17	4.83	3.40	3.20	4.00	5.00
MANAGER 16	1.2	3.00	4.33	3.20	3.60	3.33	4.83
MANAGER 20	-0.1	2.80	2.50	2.80	1.80	3.60	3.16
MANAGER 4	-0.2	2.67	3.67	3.33	2.80	3.20	3.75
MANAGER 12	-2.2	2.66	3.00	2.80	2.80	3.00	3.66
MANAGER 21	-2.6	3.00	4.66	3.80	2.80	4.16	4.83
AVERAGE	0.05	3.09	3.88	3.26	3.01	3.60	4.20
KEY							
LOW EI							
MEDIUM EI							
HIGH EI							

 Table 7: ESCI Data and Horsepower<sup>TM</sup> Data (Employees Who are Not Engaged)

The data indicates that 85.7% of the managers did not possess the competencies that suggest that the managers are emotionally intelligent. One-half of the low scoring managers scored well in the Teamwork competency category. The managers indicated in the chart above did not score well in the remaining competencies.

Additionally, certain participants anonymously provided the following

suggestions to promote engagement:

• A daily morning huddle with our department [could be scheduled] to get a sense of everyone's day and if there is new priority.

- When being developed and there is a more challenging project opportunity, to be allowed to have that work be the focus this could change stress into pleasantly challenged.
- Building relationships with coworkers helps make it an inviting place to work.
- Letting me do my job and leave me alone! No micromanaging please!

Interview data. The organized interview data was reviewed to determine emerging themes among the data. The data was based strictly from the interviews conducted and did not incorporate results from ESCI or Horsepower<sup>™</sup> tools. The themes are discussed below.

#### How a manager's high Self Management competency level positively affected

*employee engagement*. Managers with high Self Management competencies seemed to be well-respected by their workers and helped the worker feel appreciated. A manager who promoted flexibility in the workplace also seemed to engage workers because they seemed to feel understood. Participants expressed the following:

• I admire and respect [my manager's] work ethic. [My manager] definitely has goals and is held accountable to reach them. It makes me feel that I can respect [my manager] and I appreciate it when [my manager] notices that I put effort into something. One of [my manager's] strengths is that [my manager] is a good problem solver. When I am feeling overwhelmed, [my manager] will remind me that people are comfortable with my ability and that's why they give me so much work and that helps me feel appreciated. I think [my manager] works hard to do a good job and it is important to [my manager] so it makes me want to help (Participant 1, personal conversation, February 24, 2012).

- [My manager] is very flexible and that is bonus for me because then I know if I have a doctor appointment or something, I never feel that it will be a problem. ... [My manager] is protective of me when it comes to standards and policies. I feel safe and protected .... [My manager] is generally calm in stressful situations because I am largely affected by people who lose their temper. The fact that [my manager] is able to handle stress makes it much easier for me to do my job. Someone who is nervous makes me feel nervous. [My manager's] got a good positive attitude in every sense of the word. If I am concerned about something at the job, [my manager] finds the positive in it and that's helpful. (Participant 2, personal conversation, February 24, 2012).
- I have seen the way that [my manager] measures [my manager's] own goals. [My manager] is very achievement oriented and ... is always looking for ways to improve and [my manager] doesn't just say it. [My manager] takes notes and looks back on them. It makes me encouraged knowing that [my manager] is striving for bettering the department. [My manager] is very adaptable and we are going through the same changes together and [my manager] verbalizes the difficulty and associated challenges ... and has acknowledged that we can't do everything ... and the impact that it has on us. [My manager's] organizational skills help to balances the change and it helps our balance with

work and life as best as possible. [My manager] is able to remain calm and I wish that I could have that characteristic. [My manager] has control of [my manager's] body language. ... [My manager] remains calm and pauses before responding and helps me look at the situation to make me rethink why I am responding the way that I am. [My manager] gives me different scenarios and forces me to look at the bigger picture which it seems that [my manager] is able to do in an instance. Don't know if it is learned, but I have never seen it differently. I thing it's a huge leadership quality. [My manager is approachable, insightful and I personally am in awe how [my manager] handles certain situations. [My manager] is able to de-escalate emotion ... rather than blowing up about it and making it something bigger. [My manager] makes me see the bigger picture. I try to be the same way. [My manager] always says, "Let's try it," and, "How can we do it differently," rather than saying, "We can't." [My manager] is very positive. It's nice not to be with a negative ninny that drags you down. ... No tunnel vision (Participant 4, personal conversation, February 29, 2012).

• [My manager] gets us all pulling in the same direction and helps to align our actions to achievement levels and to get where we need to be. We are often all working on ten different priorities at once. [My manager] helps sort out time management and delegation. There is always a new fire being fought somewhere. It could have a negative effect if you are required to keep changing without your manager looking out for you. In our team, myself and

others are easily able to share ideas without concern that there will be a blow up. There is no bad idea. You have a lot better sharing that way. Also, when your boss is frantic that would carry over to all of us. There would be a lot more ambiguity. When [my manager] is calm, I can become calm. [My manager] acts as a motivator and always finds the positive even in a bad situation (Participant 6, personal communication, March 2, 2012).

- I like how [my manager] reaches out to me even though [my manager] is busy. ... We work in a very dynamic environment and we just have to work through it and [my manager] helps to take a different approach. ... I am way too emotional and [my manager] is more level headed. I have never really seen [my manager] get mad. [My manager] looks at the big picture and at the opportunities and reminds me to step back (Participant 7, personal communication, March 2, 2012).
- My manager does view the future with hope. [My manager] does try to look for the light at the end of the tunnel. [My manager] encourages me to see the benefits of change. This helps me to feel more positive about the future (Participant, personal communication, February 25, 2012).

How a manager's low Self Management competency level negatively affected employee engagement. A negative assessment of a manager's Self Management competency seems to have a greater impact on engagement than a perceived positive level of this competency. Workers who view their manager as having low levels of this competency view their manager as inauthentic and inflexible and workers feel that communication is stifled and sometimes it is not worth the fight to communicate. Participants 1, 5, and 8 expressed the following:

- I don't think [my manager] is very adaptable. The lack of it affects my engagement because there have been a few times when I asked for something a bit out of the ordinary, and I don't ask for much, but it wasn't received well. [My manager] reacts negatively or it seems as though [my manager] would prefer that I don't even ask. It greatly affects my engagement that [my manager] doesn't exercise emotional self control. I actually lose respect in that regard. Where there is a lot of respect for work ethic [for my manager], there is a lack of respect for emotional self control. I dread certain situations and try to solve things myself or try to keep certain situations away from [my manager]. That leaves me feeling dissatisfied. I have to stifle my true personality and that's hard (Participant 1, personal communication, February 24, 2012).
- [My manager] is open to improvement on anything but it seems like [my manager] gets praised for the idea and the work is always put back on me. ... I feel like it discourages me not to care. [My manager] does set goals but doesn't make me align with them. If you make it transparent I can try to do the same thing tailoring to myself. ... [My manager] is gossipy sometimes. [My manager's] opinions of others tend to affect my opinions of people and things. Not that I don't develop my own opinion I just wonder what they know about that person that I don't that is giving them the inside scoop. I

think [my manager] tries to see the positive in situations. With the gossipy side you do see the threats and the negatives (Participant 3, personal communication, March 5, 2012).

[My manager] only does engagement things when corporate requires those ٠ initiatives which [my manager] describes as "feel good endeavors." Even though [my manager] gives it lip service, you can see through it. [My manager] even made a statement that said [my manager] was surprised [my manager] actually learned something [from a training exercise]. It affects overall engagement of the team. I find it disingenuous. Either get behind it or don't. The way of dealing with an issue is only when it absolutely has to, when someone is ready to go "postal." ... Very against change and adopting different standards for different people and definitely wants consensus that everyone has to follow. [My manager is] scared of going outside corporate norms. People feel they are being compared to people not doing the same work as them. You don't feel like someone supports you. I would say [my manager] is generally under control for the most part, however, in rare instances [my manager] loses it and reacts very erratically and unprofessionally, such as throwing the pen down on the desk or sighing heavily. People feel diminished and invalidated by these actions and again don't feel supported at work. [My manager] generally has a grounded optimism. I think [my manager] feels that by working hard [my manager] can

affect positive change. [My manager] doesn't really want to hear about the bad (Participant 5, personal conversation, March 3, 2012).

[My manager] is achievement oriented. That characteristic is admirable. However, [my manager] doesn't seem to align [my manager's] goals with the team. [My manager] wants things to improve without asking for input from the team members. [My manager] gets visibly upset when things do not go [my manager's] way. When [my manager] gets upset, [my manager] does not listen to other's suggestions. [My manager] tends to jump to conclusions (Participant 8, personal conversation, February 25, 2012).

#### How a manager's high Self Awareness competency level positively affected

*employee engagement*. Workers whose managers' level of Self Awareness competency positively affected their engagement expressed that their manager's awareness helped the team focus on goals and openly engage in conversation. Participants 3, 4, and 6 remarked as follows:

- How [my manager] is aware of [my manager's] own feelings makes [my manager] better able to judge other people and can gear them towards completing certain tasks (Participant 3, personal correspondence, March 5, 2012).
- I feel that [my manager] is able to acknowledge [my manager's] weaknesses even though [my manager] is a perfectionist. If [my manager] did not acknowledge any weakness and get help [my manager] would not be able to

get done with too much on [my manager's] plate (Participant 4, personal conversation, March 2, 2012).

• It allows for better brainstorming sessions and dialogue (Participant 6, personal conversation, February 29, 2012).

Participants also vocalized that their manager's competency promoted an atmosphere where the worker felt comfortable, safe and enjoyed coming to work. Participants 4 and 6 remarked as follows:

- [My manager] is a perfectionist but is open to saying so and talks about weaknesses. Making me aware of the weaknesses of [my manager] makes me feel that I also can vocalize my weaknesses rather than cover them up in fear that they could affect my job. Knowing that [my manager] feels comfortable and open enough to acknowledge [my manager's] own weakness also makes me feel like I can do the same. That's a good thing (Participant 4, personal conversation, February 29, 2012).
- I think it's pretty important that [my manager] has this. It helps minimize [my manager's] frustration and [my manager] knows when to ask for help when put in the position of increased stress. It allows for better brainstorming sessions and dialogue. It's positive for sure. I love coming to work. It's the next best thing to winning Powerball (Participant 6, personal conversation, February 29, 2012).

How a manager's low Self Awareness competency level negatively affected employee engagement. A manager who did not communicate feelings with his or her worker created a barrier to communication. Participants whose managers chose to remain distant or unemotional felt distanced from their manager. Participants seemed to be confused when their manager acted emotionally detached with them, but not with their peers or others in higher positions. The lack of a personal connection with the manager led to the worker to feel insecure. Participants 1, 2, 3, 5, 7, and 8 expressed the following:

- I don't think [my manager] is really in touch with [my manager's] emotional side. It does affect my engagement because I am a sensitive person. I feel like I am not [my manager's] ideal match. There are people that we naturally click with. [My manager's detachment is] a barrier .... I think it's a personality trait. I think [my manager] doesn't do it intentionally but also think [my manager] wants to be emotionally unattached (Participant 1, personal conversation, February 24, 2012).
- It is hard to connect with [my manager] sometimes because [my manager] keeps things to [my manager's] self so there is that much less to talk about because [my manager] doesn't talk about what is going on in [my manager's] life. It doesn't breed conversation. It doesn't give us anything outside of work to discuss. We can't joke around; it cuts down on that type of thing (Participant 2, personal conversation, February 24, 2012).
- [My manager] is not a feelings person. [My manager] doesn't like talking about feelings or emotions and in fact [my manager] makes fun of people behind their back when they are having an emotionally bad day. By not

dealing [with] others' emotional ups and downs it allows issues in ourdepartment to fester and it affects the team's overall engagement (Participant5, personal conversation, March 3, 2012).

- I really do like [my manager] as a person, but I don't know [my manager's] feelings. I think [my manager] does this on purpose to a certain extent. I can tell sometimes that [my manager] is very caring, but when [my manager] gets in decision mode, [my manager] takes emotion out of it to a small extent (Participant 7, personal conversation, March 2, 2012).
- I find it strange that [my manager] doesn't bring in the emotional aspect of [my manager's] strengths and weaknesses (Participant 8, personal conversation, February 25, 2012).

Managers who do not acknowledge weaknesses had the appearance that the manager was perfect and that the worker would not be able to live up to expectations.

• [My manager] doesn't seem to acknowledge weaknesses and kind of hides them. I know what my weaknesses are. I get the feeling that if I want to be in this job I need to be perfect. I'm never going to be that. It's hard to achieve perfection (Participant 3, personal conversation, March 5, 2012).

One worker conceded that it may be appropriate to remove emotions from the manager/worker relationship in order for work to get done:

It's [our manager's] job to hold critical conversations .... If we were all too touchy-feely and blowing bubbles we'd all be happy but in bankruptcy (Participant 7, personal conversation, March 2, 2012).

*How a manager's high Social Awareness competency level positively affected employee engagement*. Workers who assess their managers to be empathic and socially aware appear to be more engaged. They seem to feel that their managers understand and respect them as individuals which help to encourage collaboration and a positive work environment. The workers feel comfortable and the workplace feels less stressful. It also appears that workers who profess to hold high levels of this competency are very positively affected by their manager's high level of this competency. Participants 3, 4, 5, and 6 expressed the following:

- I think [my manager] understands others' perspectives and subtle feelings and it is just nice to know [my manager] understands. I think I can understand people pretty well most of the time. When you are working with someone who can also pick up on that it's helpful for engagement (Participant 3, personal conversation, March 5, 2012).
- [My manager's] listening skills are amazing. [My manager] listens with [the] full self. [My manager is] not listening while looking at a Blackberry or other technology. I get full time attention [my manager] just listens and doesn't interrupt ... even though [my manager] is busy. [My manager] will turn [the] chair around and actively listen. ... And [my manager] will do little things like leave a note on the desk or bring something in for me about something we were discussing. It makes me want to talk to [my manager]. ... [My manager] is very passionate about the business and the people in it and knows what the approach needs to be depending upon the audience. [My manager]

understands how people in one department are more rigid, some more formal. [My manager] doesn't hawk over us and respects that we know what we are doing ... doesn't micromanage. Our team is informal, friendly, not real rigid and [my manager] knows who to approach for the benefit our team (Participant 4, personal conversation, February 29, 2012).

- [My manager] tries really hard to work though each person's own personality and understands we might need to get things done. [My manager] does push back on unreasonable requests from others and protects us that way. [My manager] helps us prioritize things to get things done (Participant 5, personal conversation, March 3, 2012).
- Just like anything, understanding allows us to connect more ... It allows easier communication and ensures better focus because if I'm worried about my broken car or something like a big final, [my manager] presents me with info at the right time so I focus on it and still get the job done. My pyramid of needs is met first. Its helps ensure that my communications and coordination and work with others is efficient and not interpreted wrong. [My manager] understands how the culture works and how someone else would interpret something. It keeps me out of trouble! (Participant 6, personal conversation, March 2, 2012).

How a manager's low Social Awareness competency level negatively affected employee engagement. A manager's perceived lack of empathy and organizational awareness seems to be very impactful on an employee's engagement. The lack of an emotional connection with their managers seems to cause workers additional stress and causes them to feel like they have to put up a false persona at work. A business only philosophy does not generally seem to promote an atmosphere of teamwork and collaboration and seems to hinder worker's production. The manager's lack of organizational awareness seems to promote a feeling of exclusion and confusion as to the worker's place within the team and organization. This results in the worker making the assessment that the manager is unaware or "clueless." Participants 1, 2, 5, and 8 expressed the following:

- Unfortunately, I feel there is a lack of empathy and it leaves me pretending to be something I am not at work because I don't want to deal with [my manager's] negativity. It's very stressful and it affects my engagement very much. I think generally speaking [my manager] avoids thinking about the team. I think that [my manager] wants to hear that the team is operating smoothly and I don't dare mention otherwise. It affects my engagement because I am pretending that the situation is something that it is not (Participant 1, personal conversation, February 24, 2012).
- I don't think [my manager] has a lot of empathy. [My manager] doesn't really want to hear the whole story. I don't think [my manager] really wants to put himself in other peoples' shoes. I don't think [my manager] has a clue. If I come to him and say I am concerned about something personally, [my manager] seems to listen, but that is all that [my manager] does. It doesn't go anywhere; [my manager] doesn't go to people above. [My manager] has no

clue about unspoken rules or how things get done. [My manager] just wants them done somehow (Participant 2, personal conversation, February 24, 2012).

- [My manager's] empathy is strained and will sort of go through the motions but gives off the impression that [my manager] doesn't really care. [My manager] is very work and production driven and is concerned about the cog in the wheel not pulling their share without regard to the reason. Wants to find a way to move on without a care to the person. It's very linear thinking that results with people feeling like they don't have a friend at work or a manager that cares about them and they don't want to stay in the department (Participant 5, personal conversation, March 3, 2012).
- [My manager] has mischaracterized my emotions on many occasions and I feel that [my manager] really doesn't try to understand me. I feel stifled because [my manager] doesn't seem to value my perspective. [My manager] doesn't seem to consider or put much thought into the informal structure of our team. When I try to explain what I think are some of the nuances of the team, [my manager] seems dismissive of my viewpoints. I find this very frustrating (Participant 8, personal conversation, February 25, 2012).

How a manager's high Relationship Management competency level positively affected employee engagement. Managers who excel at conflict resolution seem to have workers with positive engagement. Workers who receive appropriate coaching, direction and follow up are also generally more engaged. Many workers who stated that their managers excelled at this competency discussed the friendly relationships among team members and good communication among the team in a very positive way. These workers also remarked positively about their managers' commitment to teamwork, both within the team and among the Subject Company at large. Participants 3, 4, and 6 expressed the following:

- [My manager] knows I don't get along with another coworker ... and does
   [my manager's] best to work with the conflict to try to address it without getting in the middle. I know that I am disengaged, but knowing that [my manager] is trying to help me helps to engage me a little bit more (Participant 3, personal conversation, March 5, 2012).
- I would like to follow [my manager] anywhere! [My manager] has gained respect from others and has built relationships and is respected. There has been no conflict in my department for over a year that I remember. [My manager] understands my development goals and even brings in books for me or recommendations on classes. [My manager] always has something at the ready. No matter what I wanted to work on, I know [my manager] would find a way to help me. When [my manager] would hear about anything that would be good for me, [my manager] thinks about opportunities for me that we discussed in past conversations and suggests me to work on special projects because of things I have said. [My manager] is a phenomenal mentor. [My manager] has built relationships and is able to utilize people and their other departments when [my manager] feels it would be beneficial for our

department. They do so willingly. [My manager] knows how to build relationships ... and trust all over the company. ... [My manager] doesn't just recognize our team, but I have watched [my manager] do things for others who may have helped our team and [my manager] personalizes the [acknowledgement] to the person. A card, a cake, a note that is left for them ... it reminds me to say thank you. I might not bake a cake but it reminds me to take time to give a memento to thank others. ... When we have team meetings, everyone is open to share and regardless of what it is, nothing is off the table. [My manager] makes everyone feel like part of our team, even if they are from different departments because [my manager] includes them and cares about what they feel. ... Even though our team has changed, [my manager] has brought our team together and I feel very comfortable. No pitting against anybody and I feel that we all feel safe to say what we want to say when we are together. ... The company benefits from people like [my manager] and I am very glad that [my manager] is my manager (Participant 4, personal conversation, February 29, 2012).

[There are] no conflicts in my team. [My manager] encourages me to take on more responsibilities, try new things, and develop skills. [My manager] invites me to get outside my comfort zone, but I'm not out there by myself and I'm not going to get thrown under the bus. ... When your boss wants you to develop, that's huge. That's what makes a manager a leader. You have a friend in the department. ... I'm not scared to offer outside the box ideas. I'm

not constrained to just the normal solutions, because of the relationships we have with each other and we don't have to use the traditional avenues to solve problems. [My manager] provides excitement and gets everyone optimistic and happy. It makes you want to go above and beyond without being asked because you [want] to make them proud. When you are inspired to do well, you are more encouraged to do better. When you have [positive] relationships it makes it easier to move towards the same goal. [My manager] proactively goes out to other teams and the days of the silos are over. We are trying to break out of it to get that synergy (Participant 6, personal conversation, March 2, 2012).

*How a manager's low Relationship Management competency level negatively affected employee engagement*. Managers that avoided conflict had a negative effect on the worker's engagement. The Participants' remarks indicated conflict avoidance caused them to have less respect for their manager and it made their relationships seem unauthentic and terribly strained. The remarks of the workers experiencing unresolved conflict within a work group indicated they were unhappy. Participants 1, 2, 3, 5, and 8 expressed the following:

Conflict is a complete joke. [My manager] doesn't want to hear about conflict. ... I would be a complete idiot to ever talk to [my manager] about conflict. It obviously affects my engagement because I don't want to pay the price for appearing to be difficult to get along with others in my manager's] eyes. I had to seek outside assistance to deal with a very bad situation at work

rather than confiding in my boss. I didn't feel that I could talk to my boss. That kind of sucks. ... Sometimes I hope that I am not disappointing [my manager] by not having higher goals. I do worry sometimes that ... I am not setting my goals high enough to meet [my manager's] standards. ... [My manager's] influence seems more like manipulation sometimes. ... [My manager] said you had to pretend to be friends with people you don't like. ... I don't really respect that. ... Sometimes what I feel as a lack of respect leaves me feeling disengaged (Participant 1, personal conversation, February 24, 2012).

I don't think [my manager] wants to be involved. ... I can talk to [my manager] about a problem but there is no conflict resolution. [My manager] doesn't like conflict so [my manager] ignores that it is out there. Not a lot of coaching. My [reviews] are a joke. If they last five minutes, that is something. [My manager] has never approved any of my goals. ... If I don't think we are having an authentic conversation it's worse than not having any conversation at all. [My manager] might have a compelling vision, but I don't think [my manager] will get people to follow. [I] don't think it ever crosses [my manager's] mind to bring out the best in others. ... There is no camaraderie. ... There are some people that [my manager] really clicks with and [my manager] is great with. But it doesn't help my engagement. It kind

of makes me wonder if it is because I am not a peer [of my manager's] (Participant 2, personal conversation, February 24, 2012).

[My manager] is horrible with conflict and is completely incapable of dealing with issues with others, especially if they involve emotional conflict. It erodes relationships and promotes in-fighting amongst the group, and issues fester or explode. Nothing is ever really resolved. [My manager] feels and has stated that everyone's career is in their own hands and they should promote themselves and not rely on anyone else. There is no real coaching or mentoring. Just chastising for mess-ups and a reprimand to not do it again. [There are] no real instructions on how to do it better or improve or understand the reason why it occurred in the first place. People have to look elsewhere to get mentoring and coaching. [It feels like some] sort of a black hole or that you are stuck in your position without any knowledge on where to go or how to get better from here. [My manager] explains [my manager's reasons] why [decisions are made], but doesn't give you room to disagree. [My manager's] rally cry is "got to get it done" instead of trying to promote teamwork to get it done or inspire or lead. [My manager's approach is] not a team approach. [I] don't feel like we have a servant leader who will kick in and help us. [My manager is] very results driven no matter what the process is to get there. [My manager] does not provide a compelling vision. [It seems as if] people aren't inspired at work and [it] feels like they are going through the motions. [It seems like] You have to do this or you will get fired. [My

manager] is not generating any great sense of purpose. ... When putting a team together [my manager] doesn't really look at issues between the members but puts them together and [conflicts or problems arise, my manager] says figure it out. People [in our department] who already have unresolved conflict have to work together (Participant 5, personal conversation, March 3, 2012).

• My manager is very good at helping me de-escalate my emotions. However, there have been conflicts in my department that have been smoldering for some time and are basically ignored. The conflicts are not addressed. It seems that instead that the people involved in the conflict are blamed. It is confusing to me why some of the people who seem to be causing the conflict are not held accountable for their actions. This might be the biggest barrier to my engagement. The conflict makes me feel unhappy about coming to work. I love my job, but the conflict makes me feel overwhelmed at times. I don't think [my manager] believes in me. I get mixed messages. Sometimes after the end of a coaching session I am confused on whether I am doing a good job or if I am missing the mark. [My manager] doesn't seem to respect the roles of the worker bees in addition to management-types (Participant 8, personal conversation, February 25, 2012).

In summary, the analysis of the interview data seems to indicate that the Social Awareness competency was very important for an employee's engagement. For example, Participant 3 expressed that [he/she] often felt disengaged. However, when speaking about the manager's empathy, Participant 3 indicated that the relationship held with the manager made Participant 3 feel more satisfied. Workers who professed to hold high levels of the Social Awareness competency whose managers also held the competency were the most engaged. Workers who professed to hold high levels of Social Awareness competency whose managers did not appear to possess the competency were the least engaged.

A manager with a high level of the Self Management cluster competency did not seem to improve the worker's engagement to a high degree. The workers seemed to indicate that they found the traits in their managers admirable but did not necessarily translate the traits to increased engagement. Further, managers who were assessed as holding high levels of the Achievement competency who did not discuss goals and development with workers were considered inauthentic. The data indicated that workers who assessed that their managers had low levels of the Self Control competency negatively affected the worker's engagement significantly.

Workers who indicated that their managers were not proficient at conflict resolution generally indicated they were not engaged. The data indicated that when unresolved conflict existed in a work environment the workers did not feel that they worked in a safe, trusting environment. Workers who professed the most engagement indicated that conflict did not seem to exist in the workplace. Additionally, workers whose managers spent time developing their workers were also more engaged than workers whose managers did not mentor and/or coach. In summary, every Participant remarked that their respective manager had a perceived high level of at least one measure of each competency. Workers who generally felt like they worked in a safe and friendly environment, felt listened to, understood and appreciated were more engaged overall. Managers who acted in a genuine, authentic manner, showed flexibility and effectively communicated goals also helped workers to feel engaged. Workers who felt stifled, felt like they had to mask their true personality, and/or felt like their needs were not being considered were less engaged. Interestingly, workers who referred to their work group as "we" generally tended to be more engaged.

**Subject Company data**. A review of the Subject Company's data on the phenomena indicated that senior leadership was invested in promoting employee engagement. Research was also conducted, reviewed and analyzed to provide a historical background of recent events that occurred at the Subject Company that may have affected employee engagement. This historical summary is helpful to understand the shared culture of the group studied.

Over the last few years, the Subject Company underwent various reorganizations and, coupled with the uncooperative economic environment, management deemed it necessary to reduce the workforce. Those who remained had to find to ways to work more effectively with fewer resources while living with the gnawing uncertainty of who may be next to be "RIF'ed" (reduction in force). In addition, similar to what transpired at most businesses, raises, bonuses and benefits were also curtailed. These reasons alone may cause an employee to "disengage."

Additionally, over the past decade while employed with the Subject Company, this researcher observed a sort of cultural shift had taken place with the onset of the new senior leadership. The Subject Company encouraged employees to understand the business strategy and a greater emphasis was placed on continuous improvement processes and measures throughout the corporation, in both the manufacturing and office environments. The Subject Company demonstrated its shift to a more process-oriented mindset by devoting resources to educate employees on project management methodology and a continuous improvement strategic framework. This researcher observed that the concepts and acronyms taught in the project management methodology course and the strategic framework were quickly integrated into everyday business. Additionally, the terms and concepts were regularly referred to during business meetings and there was an expectation that employees understand and use the project methodology lingo. Employees were also encouraged to provide examples of continuous improvement in their performance review to demonstrate how their actions helped to reduce waste and costs. Further, a formal recognition program was established to reward employees who demonstrated successful continuous improvement efforts.

After the first employee engagement survey scores were revealed in 2010, managers and their reports were tasked with developing plans that would, if put into action, could ultimately result in increased engagement. Different managers approached this opportunity in various ways. In unstructured conversations with employees of the culture-sharing group, it was discovered many work groups approached the activities as a necessary task but were unable to understand the benefit of doing so. However, on one extreme end, some managers seemed angry at their reports for providing low scores on the survey and approached the engagement development rather like a punishment. On the other end of the spectrum, some managers (who also generally seemed to score better) seemed to learn from the scores received and used the engagement development to better understand their employees and to re-ignite passion for the Subject Company and its brand.

The Subject Company has also strongly encouraged salaried employees to embrace manufacturing-types of process improvements. For example, the work stations are being reconfigured at the headquarters to be a smaller size and cubicle walls will be lowered to encourage collaboration. Additionally, employees will be encouraged to adopt "Lean Office" methodologies (based on lean manufacturing principles) and"5S" strategies (sort, set in order, shine, standardize and sustain) for organizing their new work spaces. Along with the other process improvement initiatives adopted by the Subject Company, employees who are not sufficiently educated about the new mindset, who are slow to adopt, or who are not integrated into the new culture pursuant to a change management process that considers the personality type of the individual, may feel less engaged.

Interestingly, taking into account different personality styles, and specifically the affective neuroscience research reported by Davidson & Begley (2012), consideration should be given to where employees may be on the Attention/Focus Emotional Style and how a 5S environment may cause stress for some employees and have a negative effect on engagement. However, research has indicated that it may be able to swing the

pendulum with regard to this Emotional Style to become more focused by practicing certain forms of meditation (Davidson & Begley, 2012).

Over the past few years, the Subject Company has dedicated significant resources to training managers on various subjects relating to leadership and has committed to continuing to do so. The Subject Company's leadership has also framed communication relating to the employee engagement survey results as an opportunity to "unite and liberate the power of all of our employees" (Subject Company internal communication, 2012). A member of senior leadership suggested in a recent employee communication that all employees adopt the Servant Leadership concept and the mindset of "who do I serve?" (Subject Company internal communication, 2012). Interestingly, developing Social Awareness cluster competencies of empathy and organizational awareness seem to be integral to being a successful Servant Leader.

It appears evident that the Subject Company's leadership understands the importance of wellness education to ultimately drive positive business results by offering various classes to its employees at no charge during the work day. Further, the Subject Company provides extensive leadership training programs to employees at manager level and above. The recipients of the education are encouraged to communicate what they have learned from leadership training with their reports in order to continuously improve team dynamics and supplement employee development.

It is interesting to note that the Subject Company's guiding principles partner with the emotional intelligence competencies as is illustrated in the chart below.

Table 8: Comparison Of Emotional Intelligence Traits To Subject Company's Values										
And Expected Behavio	ors									
Emotional	Emotional Comparable Subject Company Foundational Beliefs									
Intelligence Trait	Values     Expected Behaviors									
8	values	Expected Benaviors								
Emotional self		Creativity								
awareness										
Achievement		Creativity								
orientation										
Adaptability	Be fair	Integrity								
	Respect the individual	Accountability								
Emotional self		Integrity								
control	Accountability									
Positive outlook	Teamwork									
Empathy	Be fair									
	Respect the individual									
Organizational	Be fair	Teamwork								
awareness										
Conflict management	Be fair	Integrity Diversity								
	Respect the individual	Accountability Teamwork								
		Creativity								
Coaching and	Respect the individual	Integrity								
mentoring	Tell the truth	Creativity								
	Be fair									
	Encourage intellectual curiosity									
Influence	Be fair	Integrity								
		Creativity								
		Diversity								
Inspirational	Tell the truth	Integrity Diversity								
leadership	Be fair	Accountability Teamwork								
		Creativity								
Teamwork	Respect the individual	Teamwork								
	Be fair									
	Respect the individual									
	Keep your promises									

Table 0. Cam ariaan Of Emotional Intelligence Traits To Subject **1 1 1** 

## KEY:

Emotional Intelligence Competency Cluster:

Self Awareness Self Management Social Awareness Relationship Management The Subject Company appears to have resources, procedures and programs in place to provide employees with a positive work environment. Certain Subject Company initiatives may result in increased negative stress for employees. This is especially true when an employee is not informed about where they may fit within the new initiative, if it results in reduced resources or other changes for which the employee is not prepared. Managers can help their workers learn to adopt and embrace the initiatives by regular communication that include active listening, conflict resolution, and relationship building activities.

#### Conclusion

### **Problems Encountered**

As previously disclosed, this study was originally designed as a mixed methods study. Due to certain circumstances, the study was redesigned as a qualitative study. In the initial design of this study, surveys designed to measure emotional intelligence were to be sent to the direct reports of the leaders designated as the "emerging leaders" of the Subject Company (as identified by the Subject Company). The survey results were to be correlated with the emerging leaders' employee engagement survey results compiled from the September 2010 employee engagement survey organized by the Gallup Organization on behalf of the Subject Company. Further, the emotional intelligence survey results were also to be correlated with the results of the scores received by the emerging leaders from a 360° survey from the prior year that measured the leader's adherence to the Company's Expected Behaviors. Although the initial design of the study was approved by Subject Company personnel, due to certain circumstances the initial study had to be revised so as to not interfere with the Subject Company's planned education and training to be administered to the emerging leader group. Therefore, the sampling method for the leader population was re-developed to exclude certain leaders as suggested by the Subject Company human resources department personnel. Further, the correlative analysis of the emotional intelligence survey results to the 360° Expected Behavior survey results was removed from the study. In order to have a statistically relevant study, it was necessary for a minimum of 30 leaders to consent to participate in

the study. Further, at least four direct reports of the respective leader must have consented to participate, for a total population ranging between 150 and 250 individuals. On November 9, 2011, the revised study was approved by the Marquette University Institutional Review Board and the research commenced. Unfortunately, after a twomonth period the possibility of a valid quantitative study seemed unlikely as indicated in the table below:

Table 9. Preliminary Results of Managers and Workers Who Consented to Participation									
Overall	Number of		Number of						
Number of	Managers	Number of	Managers	Number of					
Requests	(meeting	Managers	Still	Reports who					
for Consent	criteria) who	who	Required	Consented to					
to	were Sent	Consented to	for Valid	Participate	Number of				
Participate	Requests for	their Reports'	Correlation	(out of 126	Surveys				
Sent	Participation	Participation	(= 35)	requests sent)	Returned				
168	42	23	12	55	32				

Over the two month period, various attempts were made to achieve consent through a combination of telephone calls, emails and personal visits. Still, the response was underwhelming. Considering timing constraints, the response gave rise to concern that the research design could continue as a quantitative study. In order to achieve a valid correlative study, an additional twelve more managers were required to consent to allow their workers to participate. Because the Subject Company had imposed limitations on the sample population (e.g., could not solicit senior managers and their reports to participate in the study) identifying additional manager/worker groups under the sampling criterion was unlikely. In addition to lack of consenting participants other set-

backs occurred including manager/worker group not having enough reports to be "valid" (required four reports per manager to consent and return a survey in order for the emotional intelligence results to be viewed as valid (Wolf, 2006). Further data collected from certain manager/report groups had to be omitted due to (a) workers leaving the company, (b) workers no longer reporting to the consenting manager, and (3) poor response from worker population whose managers had consented.

Selecting and obtaining the necessary rights to use the tools to measure emotional intelligence was also challenging. There are a variety of valid survey tools designed to measure emotional intelligence, each with varying degrees of reliability and validity. The tools were designed to support the model of emotional intelligence that the developers were most closely aligned with. Obtaining the rights to use the tool proved to be an involved process. Because research funds were limited, the tools used for this study had to be available to license for a nominal fee, if any. After the tool selection was narrowed, application had to be made for conditional use. For example, the ESCI tool that was ultimately used in this study is copyrighted by the Hay Group, Inc. Permission was granted after submitting a research proposal to the Hay Group. The time lapse between application and acceptance of usage of the tool for this research was almost two months.

#### **Limitations of Study**

There were various limitations to this study. The participants of this study were gathered from a very narrow slice of the total employee population of the Subject Company and also considering the qualitative design of the study, the results are not necessarily generalized to a population at large. Additionally, due in part to copyright restrictions, the employee engagement scores are not the actual scores attributed to each of the questions in the 2011 Gallup employee engagement survey, but are rather an estimate of the employee's overall engagement. Further, this researcher and the spouse of this researcher are current employees of the Subject Company and have been employees for almost ten years. While being a member of the culture-sharing group provides the opportunity for valuable insight it also presents the occasion for bias. In my role as an employee of the Subject Company most of the participants were personally known or familiar with this researcher, and/or knew or were familiar with the spouse of this researcher. This research was required to be completed within a certain timeframe which placed certain limits on the methodological design. The emotional state of the worker who took the surveys may have skewed results (for example, if a particularly stressful event occurred prior to taking the survey(s)). Certain employees who were selected and consented to participate later withdrew from the study and expressed their hesitancy to participate because they feared that somehow their survey results would get communicated to their managers, leadership or to human resources department personnel. Lastly, resource competition such as heavy workload commitments of the participants negatively influenced participation of those invited to partake in the research.

#### **Implications for Future Research**

There are many opportunities for future research that were borne of this study. For example, this study did not consider the age, gender or race of the participants and it would be interesting to explore whether those factors have an affect on a worker's assessment of his or her leader's emotional intelligence. Further research could also consider whether the level of emotional intelligence of the worker had an affect on how the worker assessed his or her manager. Further, it would be interesting to study the phenomenon with hourly employees who were not included in the population sampled for this study. A similar study could also be performed at other manufacturing facilities in other global locations. Similar studies could be developed using different emotional intelligence and/or engagement measures. Further, a quantitative study could be developed for a statistical evaluation of the phenomena.

### **Implications for Practice**

Various researchers have indicated that a manager's high level of emotional intelligence can increase employee engagement and ultimately positively affect financial business results. Considering that having a high level of emotional intelligence is good for business, can increase employee engagement, decrease stress, and have a positive effect on overall wellness, it could be desirable for a corporation to assist its employees with acquiring the tools for learning how to develop the competencies. Additionally, there are certain behaviors that anyone could adopt or practice, with or without the assistance of an employer that could possibly increase certain emotional intelligence competency levels.

Formal emotional intelligence training: Various training programs designed to increase the emotional intelligence of leaders have been tested in recent years with generally positive results. For example, an 11-week program designed to increase emotional intelligence was developed to train leaders based on the Mayer and Salovey (1997) model of emotional intelligence and was validated by experts (Groves, McEnrue, & Shen, 2008). The training program concentrated on perception and appraisal of emotions, facilitating thinking, understanding emotions and management of emotions. The study used a total of 535 fully employed business students which included a sample of 135 fully employed business students in a treatment/control group research design where by the treatment group was given an intense 11 week emotional intelligence training session and the control group was not. Additional samples of 270 and 130 fully employed business students were used to develop and validate the emotional intelligence development measure. The remaining subjects were the control group. All groups had comparable demographics. All participants provided informed consent and participation was voluntary. Using the Mayer-Salovey-Caruso Emotional Intelligence Test as a measure, the researchers found that the training provided to the leaders was successful in increasing the emotional intelligence of the leaders (Groves, McEnrue, & Shen, 2008).

In an initial quantitative empirical study, a program was designed to test the results of training that was developed to increase emotional intelligence (McEnrue, Groves, & Shen, 2009). The study sample consisted of 135 fully-employed business

undergraduate students who each had at least one year of managerial experience, the majority of whom were female. Those tested completed the Emotional Intelligence Self-Description Inventory measure both at the beginning and end of an 11-week period. A factor analysis was used to verify the dimensionality of the openness to experience, selfefficacy, receptivity to feedback scales, and four subscale measures which included perception and appraisal, facilitating thinking, understanding, and regulation of emotions. The study found that accepting feedback positively plays a significant role in developing leadership qualities. Interestingly, the men in the study reported greater self-efficacy concerning emotional intelligence development than women (McEnrue, Groves, & Shen, 2009).

Attention to Subject Company's guiding principles. The Subject Company could consider developing additional training that focuses on developing the emotional intelligence leadership traits that are relative to its Values and Expected Behaviors.

**Engagement action item activities**. The Subject Company could communicate or training could be developed that stresses the importance of authenticity in the development of employee engagement-related activities. Employees should feel that their managers are committed to increasing employee engagement and improving team dynamics. Employees should not get the impression that the manager is developing engagement action items only to "check the box" to meet a performance commitment. Further, it may be beneficial for managers to survey employees on their engagement more frequently than annually. This could be accomplished formally; with the assistance

of a tool such as the Horsepower<sup>™</sup> metric, or informally during regular employee/manager check-ins or huddles.

Leadership training. As discussed in the Findings section, the Subject Company is committed to providing leadership training to certain of its leaders. The training elements are encouraged to be shared in the manager's report. In addition to the benefit of a more informed workforce, discussing the training with workers could help improve team dynamic and communication. Feeling included is a basic need that should not be ignored.

Show appreciation to increase engagement. The findings of my study suggest that when employees feel appreciated they are more engaged. In clinical psychologist Noelle Nelson's book, *The power of appreciation in business: how an obsession with value increases performance, production and profits*, Nelson purports that "appreciation removes resistance" (Nelson, 2005, p. 25). For example, Nelson suggests that a manager could refrain from finding fault or blaming an employee but rather appreciate the effort (2005, p. 25). This method helps to remove the tendency of the employee to react with "it's not my fault" or to blame another (p. 25). Another method that Nelson suggests as a way to show appreciation is to enact a suggestion box, or alternatively, an "open door policy" if the manager is certain that employees feel comfortable raising concerns (2005, p. 95-99). She states that it is critical to an employee's well being to be able to express their distress and concerns about their job (2005, p. 95). Managers should be cognizant that some employees may not be comfortable raising concerns without anonymity. Further, suggestions made by employees must be addressed (to the employee or brought

forth to the work group for discussion) in order for the employee to feel that his or her opinion mattered and achieve the positive psychological benefit (2005, p. 95-99).

### Simultaneously improve employee health and increase emotional intelligence

**levels**. In recent years there has been an abundance of research on the positive effects that practicing certain wellness activities has on brain health. The following are examples of wellness activities that may assist in increasing emotional intelligence competencies.

*Exercise*. Recent research indicates that aerobic exercise facilitates brain functioning in many ways, specifically including the protection and generation of neurons, creation of synapses and, branching of dendrites (Lojovich, 2010). Aerobic exercise also positively affects the part of the brain relevant to dealing with conflict resolution (Lojovich, 2010).

*Wellbeing/Meditation*. Research also suggests that meditation helps practitioners experience more positive emotions and satisfaction in life (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). Participants in the study took a seven-week medication course during which time they reported their levels of positive and negative on a daily basis and also tracked life events and rated the emotions associated with the event (Fredrickson et al., 2008). Compared to the control group, the more time they participated in meditation, the more positive emotions they reported and resulting in an increase of positive emotion three-fold over the seven week period, especially in social interactions (Fredrickson et al., 2008).

*Yoga*. Along with the health benefits relating to increased strength, stamina and flexibility, the regular practice of yoga may activate the brain's right hemisphere (Broad, 2012). The right hemisphere manages, in part, intuition and the sensing and expression of emotions which are required for the empathy competency (Broad, 2012).

Additionally, research conducted by Ganpat & Nagendra (2011) has indicated that yoga therapy can be practiced to increase emotional intelligence.

*Communication*. This study and other recent studies described herein stress the importance of authentic relationship and communication. Even adopting seemingly small changes such as striving to maintain a positive outlook, providing feedback in a positive manner, and meeting face-to-face (in order to get the benefit of activating the brain's mirror neurons), can have a positive effect on employee engagement.

The chart below sets forth actions and/or practices that individuals may undertake to increase emotional intelligence competencies without formal training. Each suggested action is supported by recent neuroscientific research.

Table 10 Possible Ways to Increase Emotional Intelligence Competencies Without										
Formal Training										
	Affected Emotional	How The Postive								
	Intelligence	Action Affects The								
Action	Competency	Brain	Reference(s)							
Meditation /	Empathy	Activates the insula in	Williams. &							
Mindfulness		the brain	Penman, 2011							
	Emotional Self	Enhances left	Davidson & Begley,							
	Control	prefrontal lobe	2012, p. 224							
	Positive	Strengthens								
	Outlook/Empathy	connection between								

Table 10 Possible	Ways to Increase Emot	ional Intelligence Compet	tencies Without
Formal Training	•		
Action	Affected Emotional Intelligence	How The Postive Action Affects The Brain	Deference(a)
Action	Competency	prefrontal cortex and other brain regions that are relative to empathy	Reference(s)
Yoga	Self Awareness	Helps control the emotions relating to feeling safe and protected.	Broad, 2012
	Empathy	The right hemisphere of the brain is activated	
Aerobic Exercise	Conflict Resolution	Helps brain functioning in many ways, specifically including "neurogenesis, synaptogenesis, dendritic branching, and neuroprotection." Also positively affects the part of the brain relevant to dealing with conflict resolution.	Lojovich, 2010

### Conclusion

This ethnographic qualitative study explored how the perceived emotional intelligence of an employee's manager affected the employee's engagement at the Subject Company. It also studied the workplace of the Subject Company to provide additional context of its culture and environment. This researcher is a member of the culture group studied and thus was able to observe and study the phenomena from not only the perspective of the participants and the Subject Company, but also from the perception of this researcher. However, being a member of the culture group also presented various problems and limitations such as the increased opportunity for both researcher and participant bias due to the participants' familiarity with this researcher. This researcher strived to reduce the possibility of bias by ensuring participant confidentiality.

The results of this study provide a valuable insight into how workers (both engaged and disengaged) assess certain leadership behaviors of their respective managers. The research suggests that the emotional intelligence of a manager could have an effect on his or her worker's emotional intelligence. There are many ways that one could attempt to increase his or her level of emotional intelligence, either with formal education or by adopting new practices.

It was observed that most of the managers studied scored well in the Teamwork competency. This could be, in part, a result of the Subject Company's pervasive philosophy and Expected Behavior that teams would work together towards the same goal. The managers whose employees were most engaged were generally adept at managing conflict and understanding their employee's needs. The managers whose employees were least engaged consistently scored low in the Empathy competency category and this may indicate that some of the workers feel that they are not being listened to or are not understood by their manager. Managers should strive to promote a positive workplace environment to help increase employee engagement. The research suggested that holding meaningful conversations, practicing active listening, and preparing employees for change were critical for employee/manager relationships. The importance of relationship building and compassion cannot be overemphasized. Albert Einstein theorized that practicing compassion and kindness led to clearer thinking and a more productive way of working (as cited in William & Penman, 2011, p. 210). The Subject Company, through its training materials, wellness programs, and communication endeavors to maintain an engaged workforce. Workers can be engaged without a manager who is not emotionally intelligent, but managers who are emotionally intelligent intrinsically seem to better understand how to motivate and engage their workers.

#### References

- About Gallup. Gallup, Inc. website (2011). Retrieved from http://www.gallup.com/corporate/115/About-Gallup.aspx.
- Appelbaum, S. A. (2007). Psychological-mindedness: word, concept and essence. *International Journal of Psychoanalysis*, 54, p. 35-46.
- Bar-On, R. (1997). Bar-On Emotional Quotient Inventory (EQ-i): A test of emotional intelligence. Toronto, Canada: Multi-Health Systems.
- Bar-On, R. (2005). The Bar-On model of Emotional-Social Intelligence (ESI). Issues and Recent Developments in Emotional Intelligence. Retrieved from www.eiconsortium.org/research/baron\_model\_of\_emotional\_social\_intelligence.p df.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, supl., p. 13-25.
- Bar-on, R. (2007a). Theoretical foundations, background and development of the Bar-On model of emotional intelligence. Retrieved from http://www.reuvenbaron.org/bar-on-model/essay.php?i=1.
- Bar-on, R. (2007b). A broad definition of emotional-social intelligence according to the Bar-On model. Retrieved from http://www.reuvenbaron.org/bar-onmodel/essay.php?i=2.
- Bar-on, R. (2010). Preliminary report: A new U.S. Air Force Study explores the costeffectiveness of applying the Bar-On EQ-i. Retrieved from

http://www.eiconsortium.org/reprints/documents/USAFPeliminaryPJStudy--Revised-b.doc.

Bates, S. (2004). Getting engaged, HR Magazine, 49(2), p. 44-51.

- Baumruk, R. (2004). The missing link: the role of employee engagement in business success, *Workspan*, 47, p. 48-52.
- Blacksmith, N. & Harter, J. (2011). Majority of American workers not engaged in their jobs: Highly educated and middle-aged employees among the least likely to be engaged. Retrieved from http://www.gallup.com/poll/150383/Majority-American-Workers-Not-Engaged-Jobs.aspx.
- Broad, W. J. (2012). *The science of yoga: The risks and the rewards*. New York, NY: Simon & Schuster.
- Colasanti & Associates, LLC website, (n.d.). Retrieved from

http://colasantiassociates.com/bio2.html.

Colasanti, R. (n.d.). Biography. Retrieved from

http://colasantiassociates.com/colasanti.html.

- Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Dasborough, M. T (2004). Emotional intelligence: Science and myth. *Personnel Psychology*; 57(1), p. 246.
- Davidson, R. J., & Begley, S. (2012). *The emotional life of your brain*. New York, NY: Hudson Street Press.

- Demaree, H. A., Kevin J. Burns, K. J., & DeDonno, M. A. (2010). Intelligence, but not emotional intelligence, predicts Iowa gambling task performance. *Intelligence*, 38(2), p. 249-254.
- Druskat, V. U., Sala, F., & Mount Linking emotional intelligence and performance at work: Current research evidence with individuals and groups, G. (2006).
  Mahwah, NJ: Lawrence Erlbaum.
- Eliot, L. (2009). Pink brain, blue brain: How small differences grow into troublesome gaps—and what we can do about it. New York, NY: Houghton Mifflin Harcourt Publishing Company.
- Emotional and Social Competence Inventory Version 3 (ESCI) (2007). Hay Group, Inc.
- Feyerherm, A. E., & Rice, C. L. (2002). Emotional intelligence and team performance: the good, the bad and the ugly. *International Journal of Organizational Analysis* (1993 - 2002); *10*(4), p. 343.
- Fowlie, J. & Wood, M. (2009). The emotional impact of leaders' behavior. Journal of European Industrial Training. 33(6), p. 559.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, p. 1045- 1062.
- Ganpat, T. S., Nagendra, H. R. (2011). Yoga therapy for developing emotional intelligence in mid-life managers. *Journal of Mid-life Health*; 2, p. 28-30.

- Gallup (2010), What's your engagement ratio? Employee engagement overview brochure. Gallup, Inc.
- Gallup (2011). George Gallup, Founder. Retrieved from http://www.gallup.com/corporate/21364/George-Gallup-19011984.aspx,
- Goleman, D. (1996). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam.
- Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Dell.
- Goleman, D. (2006). Social intelligence: Beyond IQ, beyond emotional intelligence. New York, NY: Bantam Dell.
- Goleman, D. (2010a). Biography. Consortium for Research on Emotional Intelligence inOrganizations. Retrieved from

http://www.eiconsortium.org/members/goleman.htm.

- Goleman, D. (2010b). Performance reviews: It's not only what you say, but how you say it. Retrieved from http://danielgoleman.info/2010/10/15/performance-reviews-itsnot-only-what-you-say-but-how-you-say-it/.
- Goleman, D. (2011c). *The brain and emotional intelligence: New insights*. Northampton, MA: More Than Sound LLC.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Learning to lead with emotional intelligence*. Boston, MA: Harvard Business School Press.

- González-Roma, V., Schaufeli, W.B., Bakker, A., & Lloret, S. (2006). Burnout and engagement: Independent factors or opposite poles? *Journal of Vocational Behaviour, 68*, p. 165-174.
- Groves, K.S., McEnrue, M.P. and Shen, W. (2008). Developing and measuring the emotional intelligence of leaders. *The Journal of Management Development*, 27(2), p. 225.
- Harris, M. (1968). The rise of anthropological theory: A history of theories of culture.New York, NY: T. Y. Crowell.
- Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. A., & Agrawal, S. (2010).Causal impact of employee work perceptions on the bottom line of organizations *Perspectives on Psychological Science*, 5(4), p. 378-389.
- Harter, J. K., Schmidt, F. L. and Hayes, T. L. (2002), "Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis, *Journal of Applied Psychology*, 87, p. 268-79.
- Harter, K., Schmidt, F., Killham, E., & Agrawal, S. (2009). Q<sup>12®</sup> Meta-Analysis: The Relationship Between Engagement at Work and Organizational Outcomes.
  Retried from http://www.gallup.com/consulting/126806/Q12-Meta-Analysis.aspx.
- Helliwell, J. F., & Huang, H. (2011). Well-being and trust in the workplace. *Journal of Happiness Studies*, *12*(5), p. 747-767.
- Herr, P. (2009). *Primal management: Unraveling the secrets of human nature to drive high performance.* New York, NY: AMACOM.

- Hopkins, M. M., Bilimoria, D. (2008). Social and emotional competencies predicting success for male and female executives. *The Journal of Management Development*, 27(1), p. 13.
- Joseph, D. L. & Newman, D. A. (2010). Emotional intelligence: An integrative metaanalysis and cascading model, *Journal of Applied Psychology*, 95(1), p. 54–78.
- Kenrick, D., Griskevicius, V., Neuberg, S. & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5(3), p. 292-314
- Klem, C., & Schlechter, A. F. (2008). The relationship between leader emotional intelligence and psychological climate: An exploratory study. *South African Journal of Business Management*, 39(2), p. 9.
- Lehrer, J. (2009). *How we decide*. New York, NY: Houghton Mifflin Harcourt Publishing Company.
- Lojovich, J. M. (2010). The Relationship Between Aerobic Exercise and Cognition: Is Movement Medicinal? *Journal of head trauma rehabilitation*. Vol. 25, No. 3, p. 184–192.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, p. 370-396.
- Mastrangelo, P. M. (2009). Will Employee Engagement Be Hijacked or Reengineered? *OD Practitioner*, 4(2).
- Mayer, J. D., Salovey, P., & Caruso, D. (2002). Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), Toronto, Ontario: Multi-Health Systems, Inc.

- Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. InR.J. Sternberg (Ed.), *The handbook of intelligence*, (p. 396-420). New York, NY:Cambridge University Press.
- McEnrue, M.P., Groves, K.S. and Shen, W. (2009). Emotional intelligence development: leveraging individual characteristics. *The Journal of Management Development*, 28(2), p. 150.
- Momeni, N. (2009). The relationship between managers' emotional intelligence and the organizational climate they create. *Public Personnel Management*, 38(2), p. 35-48.
- Moore, C. (2003). *The mediation process: Practical strategies for resolving conflict*. California: Jossey-Bass.
- Nelson, N. C. (2005). The power of appreciation in business: How an obsession with value increases performance, productivity and profits. Malibu, CA: Mindlab Publishing.
- Nielsen, E. (2011), Twenty-Nine Organizations Receive the Fifth Annual Gallup Great Workplace Award. Retrieved from http://www.gallup.com/consulting/146753/Gallup-Great-Workplace-Award-Press-Release.aspx.
- Otake, K., Shimai, S., Tanaka-matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. Journal of Happiness Studies, 7(3), 361-361-375. doi:10.1007/s10902-005-3650z.

- Ramesar, S., Koortzen, P., & Oosthuizen, R. M. (2009). The relationship between emotional intelligence and stress management. SA Journal of Industrial Psychology/ SA Tydskrif vir Bedryfsielkunde, 35(1), p. 443.
- Richman, A. (2006), Everyone wants an engaged workforce how can you create it. *Workspan*, *49*, p. 36-9.
- Saks, A. (2006). Antecedents and consequences of employee engagement, *Journal of Managerial Psychology 21*(7), p. 600-619.
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., and Bakker, A.B. (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach, *Journal of Happiness Studies*, 3, p. 71-92.
- Sheldon, K. M., Abad, N., Ferguson, Y., Gunz, A., Houser-marko, L., Nichols, C. P., & Lyubomirsky, S. (2010). Persistent pursuit of need-satisfying goals leads to increased happiness: A 6-month experimental longitudinal study. *Motivation and Emotion*, 34(1), p. 39-48. doi:10.1007/s11031-009-9153-1.
- Siegel, D. J. (2012). Pocket guide to interpersonal neurobiology: An integrative handbook of the mind. New York, NY: W. W. Norton & Company, Inc.
- Spielberger, C. (2004). *Encyclopedia of Applied Psychology*. Maryland Heights, MO: Academic Press.

Subject Company internal communication (2012).

Thrive by Gallup.com (2011). Like your job? If so, you're likely happy and healthy. Retrieved from http://thrive.gallup.com/2011/04/like-your-job-if-so-youre-likely-happy.html. United Nations World Economics Situation and Prospects (2012). Retrieved from <a href="http://www.un.org/en/development/desa/policy/wesp/index.shtml">http://www.un.org/en/development/desa/policy/wesp/index.shtml</a>.

United Nations World Economics Situation and Prospects (2011).

http://www.un.org/en/development/desa/policy/wesp/archive.shtml#2011.

United States Department of Labor, Bureau of Labor Statistics (2012). *The employment situation – February 2012*. Retrieved from

www.bls.gov/news.release/pdf/empsit.pdf.

- Wagner, R., & Harter, J. K. (2006). *12: The elements of great managing*. New York, NY: Gallup Press.
- Williams, M. & Penman, D. (2011). *Mindfulness: An eight-week plan for finding peace in a frantic world*. New York, NY: Rodale, Inc.
- Wolf, S. B. (2006). Emotional Competence Inventory (ECI) Technical Manual. Hay Group McClelland Center for Research and Innovation.

#### Appendix A: Correspondence to Managers

Hello, my name is Ann Kulow, and in addition to being an employee of Harley-Davidson, I am also pursuing my Master's degree at Marquette. I am working on my final Capstone project (which is similar to a thesis). My project focuses on how the emotional intelligence of a leader affects the engagement of his or her reports. It also explores ways that leaders can potentially increase their emotional intelligence to positively affect their direct reports' engagement and the engagement of the leaders' team as a unit. It further discusses the neuroscience of emotions and engagement.

I have received approval to proceed from (among others) [name], [name], [name] and my manager, [name]. In addition, because you were selected based on the criteria discussed below as a Manager-level employer or higher, I need <u>YOUR</u> approval to proceed with my project. You will <u>not</u> have to complete a survey or answer any questions; however, I need to survey your direct reports. After obtaining your consent and the consent of your direct reports, I will send each of your direct reports two surveys that should collectively take approximately 20-25 minutes to complete. Please note that no employee of Harley-Davidson other than I will have access to the individual survey results; however, HR and Talent Management may choose to review the aggregate data. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. Participating in this study is completely voluntary (you may withdraw from the study and stop participating at any time).

I would like to begin administering the surveys as soon as possible.

I have attached a formal consent to this email that contains additional detailed information. If you consent to helping me with this study, please acknowledge by responding to this email.

Please note that I am happy to share my final Capstone project with your team, if you so request. Thank you very much for your help!

Regards,

Ann Kulow x-4468

Please note that I consulted with various members of the Company's Human Resources Department while designing my study but the survey population was not ultimately decided by the Human Resources Department. I chose the population by purposeful, nonproportional quota, criterion sampling with the following criteria: (1) each manager/direct report workgroup has at least five members; (2) each employee is salaried; (3) each employee works at the Juneau Avenue facility; (4) the manager is not in career band S80 or above; (5) the manager quota of between 30-50 participants. The final report will not identify Harley-Davidson by name, nor will it disclose the identity of any person participating in the study. The results will be presented in aggregate form. Marquette has also formally approved my study and a copy of the approved protocol will be provided upon your request.

#### Appendix B: Correspondence to Managers who are also Direct Reports

Hello, my name is Ann Kulow, and in addition to being an employee of Harley-Davidson, I am also pursuing my Master's degree at Marquette. I am working on my final Capstone project (which is similar to a thesis). My project focuses on how the emotional intelligence of a leader affects the engagement of his or her reports. It also explores ways that leaders can potentially increase their emotional intelligence to positively affect their direct reports' engagement and the engagement of the leaders' team as a unit. It further discusses the neuroscience of emotions and engagement.

I have received approval to proceed from (among others) [name], [name], [name], and my manager, [name]. In addition, because you were selected based on the criteria discussed below as a Manager-level employer or higher, I need your approval to proceed with my project, both as a manager and a direct report. In your capacity as a manager, you will not have to complete a survey or answer any questions (you simply need to consent). However, since <u>your</u> manager was also selected to be a participant of the research, I am requesting that you complete two surveys that should collectively take approximately 20 minutes to complete. I will also request that you provide me with your average employee engagement score to be used in the statistical correlation of your manager's average emotional intelligence scores. Please note that no employee of Harley-Davidson other than I will have access to the individual survey results; however, HR and Talent Management may choose to review the aggregate data. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. Participating in this study is completely voluntary (you may withdraw from the study and stop participating at any time). I would like to begin administering the surveys as soon as possible.

I have attached two formal consents to this email that contain additional detailed information. If you consent to helping me with this study, please acknowledge by responding to this email. After I receive your consent, I will arrange for the surveys to be sent to you (they will arrive in two separate emails, one from my Marquette email address and the other from Paul Herr (containing a link to the Horsepower<sup>™</sup> survey). Also attached to this email is a memo from Paul Herr (the developer of the Horsepower survey metric) that briefly discusses the metric.

Please note that I am happy to share my final Capstone project with your team, if you so request. Thank you very much for your help!

Regards,

Ann Kulow x-4468

Please note that I consulted with various members of the Company's Human Resources Department while designing my study but the survey population was not ultimately decided by the Human Resources Department. I chose the population by purposeful, nonproportional quota, criterion sampling with the following criteria: (1) each manager/direct report workgroup has at least five members; (2) each employee is salaried; (3) each employee works at the Juneau Avenue facility; (4) the manager is not in career band S80 or above; (5) the manager quota of between 30-50 participants. The final report will not identify Harley-Davidson by name, nor will it disclose the identity of any person participating in the study. The results will be presented in aggregate form. Marquette has also formally approved my study and a copy of the approved protocol will be provided upon your request.

Appendix C: Consent of Managers

### MARQUETTE UNIVERSITY AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS

Study of the correlation between engagement survey results and emotional intelligence scores of certain leaders at a Midwest manufacturer Ann Kulow

Department of Leadership Studies

You have been invited to participate in this research study. Before you agree to participate, it is important that you read and understand the following information. Participation is completely voluntary. Please ask questions about anything you do not understand before deciding whether or not to participate.

**<u>PURPOSE</u>**: The purpose of this research study is to examine the correlations, if any, between emotional intelligence and employee engagement. The information gathered from this study may be beneficial in the development of future training and/or coaching techniques. You will be one of approximately 250 participants in this research study.

**PROCEDURES:** As a manager, you will not have to complete any survey or questionnaire. Your direct reports are being asked to complete a seven question on-line survey that measures social intelligence, a 68-question survey that measures emotional intelligence and to indicate their level of employee engagement. Your direct report(s) may also be contacted for a personal interview after completion of the surveys. No employee of Harley-Davidson other than I will have access to the individual survey results; however, Human Resources and/or Talent Management may choose to review the aggregate data. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. The final report will not disclose your identity. However, although no names or other identifiable descriptions (such as the department where you work) will be disclosed in the final report, it is possible that direct quotes obtained from a personal interview that are included in the final report may be identifiable. All information will be kept confidential. Your employment status will not be affected as a result any information obtained during the interview or survey.

**<u>DURATION</u>**: Your participation will consist of agreeing that your direct reports may participate in this study.

**<u>RISKS</u>**: The risks associated with participation in this study are minimal and are no more than one would encounter in everyday life. The final report will not disclose your identity. However, although no names or other identifiable descriptions (such as the department where you work) will be disclosed in the final report, it is possible that direct quotes obtained from an interview that are included in the final report may be identifiable. Your employment status will not be affected as a result of this study.

**BENEFITS:** The benefits associated with participation in this study may include a better understanding of emotional intelligence and its relationship to employee engagement. This study may also be beneficial in the development of future training and/or coaching techniques.

**CONFIDENTIALITY:** All information you reveal in this study will be kept confidential. All data will be assigned an arbitrary code number rather than using names or other information that could identify you or your direct reports as individuals. When the results of the study are published, neither you nor your direct reports will be identified by name. Strict procedures are in place to protect your privacy and confidentiality. No data used in the presentation of the study will be linked to your identity. The electronic data collected will be saved on my private home computer and/or a password protected flash drive. Any paper documentation collected will be saved in a locked filing cabinet in my home office. I will destroy all electronic and paper documents in my possession three years after publishing the study by shredding paper documents and deleting electronic files. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. The aggregate, coded data may also be available to Harley-Davidson Human Resources for further evaluation for potential development of coaching and training. The Human Resources Department will keep all personal information strictly confidential. If Harley-Davidson chooses to use the aggregate data, it will be stored confidentially in locked file cabinets in the Harley-Davidson Resources Department at the Juneau Avenue location or secured electronically. All data provided to Harley-Davidson will be stored pursuant to Harley-Davidson's record retention policy relating to confidential employee records. Your research records may be inspected by the Marquette University Institutional Review Board or its designees, and (as allowable by law) state and federal agencies.

**VOLUNTARY NATURE OF PARTICIPATION:** Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. If you would like to withdraw from the study, please send me an email at <u>ann.kulow@marquette.edu</u>. If you choose to withdraw from the study prior to the coding process, all data collected from you will be immediately destroyed and will not be used in the study. Further, the individual results of the emotional intelligence survey will not be provided to the Harley-Davidson Human Resources Department. Please note that if the data has already been coded (i.e. no longer identifiable by participant name) it may be difficult to remove the data from the research study.

**CONTACT INFORMATION:** If you have any questions about this research project, you can contact Ann Kulow at 414-343-4468 during work hours or on my cell phone (voice or text) at 414-469-4889. You can also contact me via email at <u>ann.kulow@marquette.edu</u>. If you have questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT.

YOUR RETURN EMAIL TO ME WILL SERVE AS YOUR AGREEMENT TO PARTICIPATE IN THIS STUDY.

### EMOTIONAL INTELLIGENCE AND EMPLOYEE ENGAGEMENT

### Appendix D: Letter from Paul Herr to Employees

### SUBJECT: Message from Paul Herr regarding The Horsepower Survey

My name is Paul Herr, and I am the developer of The Horsepower Survey, a short survey that measures how motivated employees feel at work.

The survey is based upon the notion that human beings have the following five needs:

- A need to explore, experiment and innovate (Innovation Appetite),
- A need to feel skilled and respected in one's profession (Competency Appetite),
- A need to experience rewarding wins on a regular basis (Achievement Appetite),
- A need to feel part of a tightly-bonded team characterized by authentic relationships (Cooperation Appetite), and
- A need to feel safe and secure (Self Protection Appetite).

When these needs are met we feel good and when they are starved we feel bad. We are partly responsible for our own motivation, but the work environment has a big impact as well. I discuss my theory of motivation in my book, Primal Management. Chapter 1 describes the theory behind the survey, Chapter 2 describes the survey itself, and Chapters 4-8 describe practical tips for creating an idea workplace where employees and managers look forward to coming to work.

Please do your part by treating your co-workers and supervisors with respect (remember, what goes around comes around). If you have future concerns about the survey, don't be afraid to contact me directly (peherr@chorus.net).

Warm Regards,

Paul Herr

#### Appendix E: Correspondence to Direct Reports

Hello, my name is Ann Kulow. In addition to being an employee of Harley-Davidson, I am also pursuing my Master's degree at Marquette. I am working on my final Capstone project (which is similar to a thesis). My project focuses on how the emotional intelligence of a leader affects the engagement of his or her reports. It also explores ways that leaders can potentially increase their emotional intelligence to positively affect their direct reports' engagement and the engagement of the leaders' team as a unit. It further discusses the neuroscience of emotions and engagement.

I have received approval to proceed from (among others) your manager, [name], [name], [name] and my manager, [name]. Your manager was selected for this leadership study based on the criteria discussed below and has provided consent to participate in the study. I now need your approval to proceed with my project. You will be asked to complete two surveys that should collectively take approximately 20-25 minutes to complete. One survey will be sent to you from my Marquette email address and one will arrive from Paul Herr with a link to the Horsepower<sup>™</sup> survey. Also attached to this email is an introductory letter from Paul Herr (developer of the Horsepower survey and author of the book, *Primal Management*). I will also request that you provide me with your average employee engagement score to be used in the statistical correlation of your manager's average emotional intelligence scores. Please note that no employee of Harley-Davidson other than I will have access to the individual survey results; however, HR and Talent Management may choose to review the aggregate data. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. Participating in this study is completely voluntary (you may withdraw from the study and stop participating at any time).

I would like to begin administering the surveys as soon as possible, but I am happy to work with your schedule if you consent to participate.

I have attached a formal consent to this email that contains additional detailed information. If you consent to helping me with this study, please acknowledge by responding to this email.

Please note that I am happy to share my final Capstone project with you, if you so request.

Thank you very much for your help!

Regards,

Ann Kulow x-4468

Please note that I consulted with various members of the Company's Human Resources Department while designing my study but the survey population was not ultimately decided by the Human Resources Department. I chose the population by purposeful, nonproportional quota, criterion sampling with the following criteria: (1) each manager/direct report workgroup has at least five members; (2) each employee is salaried; (3) each employee works at the Juneau Avenue facility; (4) the manager is not in career band S80 or above; (5) the manager quota of between 30-50 participants. The final report will not identify Harley-Davidson by name, nor will it disclose the identity of any person participating in the study. The results will be presented in aggregate form. Marquette has also formally approved my study and a copy of the approved protocol will be provided upon your request.

### Appendix F: Consent of Direct Reports

#### MARQUETTE UNIVERSITY AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS Study of the correlation between engagement survey results and emotional intelligence scores of certain leaders at a Midwest manufacturer Ann Kulow Department of Leadership Studies

You have been invited to participate in this research study. Before you agree to participate, it is important that you read and understand the following information. Participation is completely voluntary. Please ask questions about anything you do not understand before deciding whether or not to participate.

**<u>PURPOSE</u>**: The purpose of this research study is to examine the correlation, if any, between emotional intelligence and employee engagement. The information gathered from this study may be beneficial in the development of future training and/or coaching techniques. You will be one of approximately 250 participants in this research study.

**PROCEDURES:** You are being asked to complete a seven question on-line survey that measures social intelligence, a 68-question survey that measures emotional intelligence and to indicate your level of employee engagement. You may also be contacted for a personal interview after completion of the surveys. The survey results will not be shared with any other employees of Harley-Davidson and the final report will not disclose your identity. No employee of Harley-Davidson other than I will have access to the individual survey results; however, Human Resources and/or Talent Management may choose to review the aggregate data. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. The final report will not disclose your identity. However, although no names or other identiable descriptions (such as the department where you work) will be disclosed in the final report, it is possible that direct quotes obtained from the qualitative portion of the study that are included in the final report may be identifiable. All information will be kept confidential. Your employment status will not be affected as a result any information obtained during the interview or survey.

**<u>DURATION</u>**: Your participation will consist of completing survey questions that can be completed in approximately 20 minutes. You may also be contacted for a follow up interview which would last no longer than 30 minutes.

**<u>RISKS</u>**: The risks associated with participation in this study are minimal and are no more than one would encounter in everyday life. The final report will not disclose your identity. However, although no names or other identiable descriptions (such as the department where you work) will be disclosed in the final report,, it is possible that direct quotes obtained from the qualitative portion of the study that are included in the final report may be identifiable. Your employment status will not be affected as a result of this study.

**BENEFITS**: The benefits associated with participation in this study may be to provide you with a better understanding of your manager's emotional intelligence. This study may also be beneficial in the development of future training and/or coaching techniques.

**CONFIDENTIALITY:** All information you reveal in this study will be kept confidential. All your data will be assigned an arbitrary code number rather than using your name or other information that could identify you as an individual. When the results of the study are published, you will not be identified by name. Strict procedures are in place to protect your privacy and confidentiality. No data used in the presentation of the study will be linked to your identity. The electronic data collected will be saved on my private home computer and/or on a password protected flash drive. Any paper documentation collected will be saved in a locked filing cabinet in my home office. I will destroy all electronic and paper documents in my possession three years after publishing the study by shredding paper documents and deleting electronic files. Paul Herr (administrator of the Horsepower survey) will provide me with a spreadsheet of the raw data collected from the surveys; however, he will not interpret or retain the data. The Harley-Davidson Human Resources Department will not have access to your individual data; however, the aggregate data may also be available to Harley-Davidson Human Resources for further evaluation for potential development of coaching and training. The Human Resources Department will keep all information strictly confidential. If Harley-Davidson chooses to use the data, it will be stored confidentially in locked file cabinets in the Harley-Davidson Resources Department at the Juneau Avenue location or secured electronically. All data provided to Harley-Davidson will be stored pursuant to Harley-Davidson's record retention policy relating to confidential employee records. Your research records may be inspected by the Marquette University Institutional Review Board or its designees, and (as allowable by law) state and federal agencies.

**VOLUNTARY NATURE OF PARTICIPATION:** Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. If you would like to withdraw from the study, please send me an email at <u>ann.kulow@marquette.edu</u>. If you choose to withdraw from the study prior to the coding process, all data collected from you will be immediately destroyed and will not be used in the study. Further, the result of your emotional intelligence survey will not be provided to the Harley-Davidson Human Resources Department. Please note that if the data has already been coded (i.e. no longer identifiable by participant name) it may be difficult to remove the data from the research study.

**CONTACT INFORMATION:** If you have any questions about this research project, you can contact Ann Kulow at 414-343-4468 during work hours or on my cell phone (voice or text) at 414-469-4889. You can also contact me via email at <u>ann.kulow@marquette.edu</u>. If you have questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT.

YOUR RETURN EMAIL TO ME WILL SERVE AS YOUR AGREEMENT TO PARTICIPATE IN THIS STUDY.

### Appendix G: Approval from Hay Group, Inc.

From: Elizabeth Nolan [mailto:Elizabeth.Nolan@haygroup.com] Sent: Thursday, September 08, 2011 8:52 AM To: Kulow, Ann Subject: RE: ESCI Research

#### Hi Ann,

Thank you for your response. You don't need to add peers and managers if the participants have enough direct reports to provide sufficient data. Everything else looks good, so I have attached the following documents:

- 1. ESCI 360 Version This is a copy of the ESCI 360 rating booklet. You may print or copy this document as needed for your research.
- 2. ESCI Self Version This is a copy of the ESCI Self rating booklet. You may print or copy this document as needed for your research.
- 3. ESCI Scoring Instructions This document contains the instructions necessary for you to calculate the ESCI scores.
- 4. ESCI Scoring Key This contains the scoring key (list of items for each competency and cluster) for the ESCI. Use this document to create variables in your statistical program for each ESCI competency and cluster score.
- 5. The ECI 2.0 Technical Manual and article by Richard Boyatzis discussing the update from the ECI 2.0 to the ESCI.

We look forward to hearing about your results. When you have completed your study please email or send a hard copy of your research paper or publication to the following address:

ESCI Research Contact (ESCIResearch@haygroup.com) Hay Group 116 Huntington Ave. Fourth Floor Boston MA 02116

Please let me know if you have any questions.

Best Regards,

Elizabeth

### Appendix H: Interview Protocol

- 1. Tell me about how your manager's emotional self awareness (etc., aware of feelings, can describe feelings, acknowledges strengths & weaknesses describes reasons for feelings) affects your engagement:
- 2. Tell me about how your manager's achievement orientation (etc., initiates actions to improve performance, seeks to improve self by setting measurable and challenging goals, seeks ways to do things better) affects your engagement:
- 3. Tell me about how your manager's adaptability (etc., adapts to shifting priorities and change; adapts by applying being flexible about standards; smoothly juggles demands; adapts strategy goals or project to fit situation or unexpected events) affects your engagement:
- 4. Tell me about how your manager's emotional self-control (etc., remains calm in stressful situations; controls impulses; acts appropriately in emotionally charged situations) affects your engagement:
- 5. Tell me about how your manager's positive outlook (etc., sees possibilities more than problems; sees the positive in people situations and events more than the negative; views the future with hope; sees opportunities more than threats; sees the positive side of a difficult situation; believes the future will be better than the past) affects your engagement:
- 6. Tell me about how your manager's empathy (etc., understands different perspectives; listens attentively; understands subtle feelings; understands another's motivation; can put self into another's shoes) affects your engagement:
- 7. Tell me about how your manager's organizational awareness (etc., understands information processes by which works gets done; understands the unspoken rules; understands the values and culture of the team; understands the social networks; understands the informal structure of the team) affects your engagement:
- 8. Tell me about how your manager's conflict management (etc., resolves conflict instead of allowing it to fester; resolves conflict by bringing it into the open; deescalates the emotions in a situation; openly talks about conflict with those involved) affects your engagement:
- 9. Tell me about how your manager's coaching and mentoring (etc., spends time developing me; cares about my development) affects your engagement:
- 10. Tell me about how your manager's influence (etc., anticipates who others will respond when trying to convince them; develops behind the scene support; gets support from key people; appeals to my interests; uses multiple strategies to influence) affects your engagement:
- 11. Tell me about how your manager's inspirational leadership (etc., inspires followers; articulates a compelling vision; builds pride in the group; tries to bring out the best in me & others) affects your engagement:
- 12. Tell me about how your manager's teamwork (etc., encourages cooperation; is supportive; solicits' others input; encourages participation; is respectful of other) affects your engagement:

			Emotional Intelligence Scores														
	Self Reported Employee Engagement Score	Horsepower Engagement Score - Average Drive	Self Awareness Cluster	Achievement Orientation	Adaptability	Emotional Self Control	Positive Outlook	Self Management Cluster	Empathy	Organizational Awareness	Social Awareness Cluster	Conflict Management	Coach and Mentor	Influence	Inspirational Leader	Teamwork	Relationship Management Cluster
MANAGER 1	5.00		4.67	4.50	4.80	5.00	4.20	4.63	4.67	5.00	4.84	4.00	4.50	4.00	4.00	4.67	4.23
MANAGER 2	4.25	5.40	3.75	4.33	4.30	4.92	4.40	4.49	4.13	4.60	4.36	3.70	3.95	3.83	3.63	4.41	3.90
MANAGER 3	4.75	8.00	4.08	4.83	4.08	4.42	4.17	4.37	4.20	4.90	4.55	3.60	4.84	3.72	4.00	4.92	4.21
MANAGER 4	2.50	(0.20)	2.67	3.42	2.59	3.67	2.58	3.06	3.33	3.30	3.32	2.80	3.42	3.20	2.53	3.75	3.14
MANAGER 5	4.50	6.20	4.50	5.00	4.33	4.83	3.83	4.50	4.20	4.60	4.40	4.60	4.83	4.83	3.80	4.83	4.58
MANAGER 6	3.50	4.40	2.92	3.84	3.83	4.00	3.59	3.81	3.90	3.70	3.80	3.70	3.83	3.67	3.30	4.08	3.72
MANAGER 7	4.00	5.33	4.17	4.83	4.61	4.55	4.68	4.67	4.27	4.47	4.37	4.27	4.34	4.11	4.40	4.61	4.34
MANAGER 8	4.00	6.16	3.72	4.39	4.44	4.44	4.62	4.47	4.28	4.33	4.31	4.22	4.50	4.27	4.67	4.44	4.42
MANAGER 9	4.00	9.00	3.66	4.60	4.33	5.00	3.83	4.44	4.40	4.25	4.33	4.40	4.16	3.50	4.40	4.66	4.22
MANAGER 10	3.75	5.80	3.40	4.67	4.61	4.72	4.61	4.65	3.47	4.67	4.07	3.90	4.55	3.86	4.40	4.87	4.32
MANAGER 11	3.50	4.80	3.75	4.17	4.27	4.00	4.34	4.19	4.10	4.53	4.31	3.80	4.25	4.17	4.10	4.43	4.17
MANAGER 12	3.00	(2.20)	2.66	2.66	3.00	3.00	3.16	2.96	2.80	3.00	2.90	2.80	2.16	3.00	2.40	3.66	
MANAGER 13	2.75	5.70	3.44	3.99	4.16	3.77	4.22	4.04	3.67	4.20	3.93	2.93	3.33	3.78	3.27	4.33	3.53
MANAGER 14	3.86	2.27	3.33	4.80	4.23	4.20	4.68	4.47	3.49	3.51	3.50	4.08	3.87	3.93	4.00	4.17	4.01
MANAGER 15	4.67	5.57	3.83	4.16	4.05	4.19	4.11	4.13	4.07	3.93	4.00	3.91	4.16	3.78	3.58	4.22	3.93
MANAGER 16	3.00	1.20	3.00	4.40	3.66	4.33	4.00	4.10	3.20	4.00	3.60	3.60	4.00	3.33	3.80	4.83	
MANAGER 17	4.00	2.00	4.17	4.17	4.00	4.83	4.83	4.46	3.40	4.20	3.80	3.20	3.17	4.00	3.80	5.00	3.83
MANAGER 18	3.67	4.92	4.08	4.17	4.39	4.72	4.29	4.39	4.40	4.40	4.40	4.37	4.18	4.33	4.40	4.67	4.39
MANAGER 19	4.00	3.27	3.93	4.45	4.58	4.65	4.20	4.47	4.70	4.53	4.61	4.47	4.02	4.33	4.30	4.75	4.37
MANAGER 20	3.00	(0.10)	2.80	4.00	3.00	2.50	3.50	3.25	2.80	4.00	3.40	1.80	3.40	3.60	2.60	3.16	
MANAGER 21	3.00	(2.60)	3.00	2.50	3.33	4.66	4.83	3.30	3.80	3.80	3.80	2.80	2.50	4.16	3.20	4.83	3.67

# Appendix I: Aggregate Average Scores Applicable to All Relevant Managers