UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE EFFECT OF EMOTIONAL INTELLIGENCE AS IT RELATES TO ARMY CIVILIAN LEADERS' USE OF CONSIDERATION AND INITIATING STRUCTURE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

CATHERINE J. HAND
Norman, Oklahoma
2010

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/319190

THE EFFECT OF EMOTIONAL INTELLIGENCE AS IT RELATES TO
ARMY CIVILIAN LEADERS'
USE OF CONSIDERATION AND INITIATING STRUCTURE

A DISSERTATION APPROVED FOR A DEGREE IN

THE GRADUATE COLLEGE

BY

_____
Dr. Jorge Mendoza, Chair

_____
Dr. Catalina Herrerias

_____
Dr. Richard Little

_____
Dr. Joseph Rodgers

_____
Dr. Robert Terry

©Copyright by CATHERINE J. HAND 2010
All Rights Reserved.

Acknowledgements

"Always bear in mind that your own resolution to succeed is more important than any other one thing" ~~

While I like this quote, I don't entirely agree with it. My resolution to succeed pushed me to return to Norman time after time, despite the "positive correlation" of each of my visits with a natural disaster; including a flood, a record ice storm, a tornado, and a tornado warning or two.

But I don't agree that my resolution was more important than any other one thing. It took more than just my resolution to reach this goal, and I wish to express my most sincere gratitude to those whose support, help, patience, and encouragement actually made it possible.

Although Dr. Dan O'Hair moved and left the committee, he introduced me to the concept of Emotional Intelligence, my chosen area of study, and I will remain ever-grateful. Thanks to Dr. Catalina Herrerias, my APA "whiz", and Dr. Richard Little whose smile and confidence in me always put me at ease. Thank you to the statisticians on my committee; Dr. Robert Terry, Dr. Joe Rodgers, and particularly my chair, Dr. Jorge Mendoza. Thank you for staying with me over the long-term, when my "work world" and my "student world" failed to mesh time after time. Without your constructive feedback, suggestions, and patience, I would never have learned Statistics! Thank you also to Dr. Lee Williams, Dean of the Graduate School, who granted extensions beyond my time limit until my two worlds finally came together.

I also owe a debt of gratitude to Dr. Moira Waterbury. Moira not only offered me a home during my visits to campus, but ended up taking care of me after I was taken to the hospital during one visit.

Most importantly, I thank the love of my life, Greg. Thank you for your never-ending love, sacrifice, tolerance, and belief in me. I could not have made it through the years of study without you. No more tuition!

Table of Contents

Acknowledgements iv

Abstract viii

Introduction 1

Tracing the Great Divide: The Study of Leadership, Rational Thought and Emotion 4

Purpose of the Research 12

Methodology 12

Participants 12

Instruments 13

360 Degree Survey 13

Consideration and Initiating Structure 13

The Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT). 14

Results 14

Discussion 24

Limitations 27

Conclusion 29

References 30

Appendix A: 360 Leader Survey Questions 33

Appendix B: Regressions 35

List of Tables

Table 1 Overall EI Score As Reported To Participant 16

Table 2 Component Matrix for Supervisor 17

Table 3 Component Matrix for Peer 18

Table 4 Component Matrix for Subordinate 19

Table 5 Cronbach's Alphas for Research Variables 20

Table 6 Pearson r Correlations 21

Table 7 Multiple Regression Predicting Initiation Peer 22

Table 8 Multiple Regression Predicting Initiation Subordinate 23

Table 9 Independent Sample t tests 24

Table 10 Multiple Regression Predicting Consideration Supervisor 35

Table 11 Multiple Regression Predicting Initiation Supervisor 36

Table 12 Multiple Regression Predicting Consideration Peer 36

Table 13 Multiple Regression Predicting Consideration Subordinate 37

Abstract

This study provides an analysis of the impact emotional intelligence (EI) has on a leader's consideration (concern and consideration of individuals) and initiating structures (planning, coordinating, managing work, etc.); important leadership behaviors described by the Michigan and Ohio State studies. A 360-degree leadership survey (with feedback data from self, supervisors, peers, and subordinates,) and the Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) were correlated to identify the relationship. Principle component factor analyses were conducted to identify the 360-degree survey items that loaded on consideration and on initiating structure. The first branch of EI, perceiving emotions, had a significant relationship with consideration peers, and with initiating structure with both peers and subordinates. The second branch of EI, using emotion, had a significant relationship with consideration subordinate and initiating subordinate. The third branch, understanding emotion, had a significant relationship with consideration peer. The fourth branch, managing emotions, had a significant relationship with consideration peer and initiating peer. It appears that EI abilities do impact the use of consideration and initiating structure, and that particular branches of EI have more impact in given situations. Screening for prior active duty versus no prior active duty revealed a significant relationship with managing emotion in those with no prior active duty service. Overall, the results reveal important information regarding Army civilian interpersonal relationships with peers and subordinates

Introduction

A search of the Library of Congress online catalog displays nearly 10,000 books on leadership, revealing a keen desire to unlock the secrets of how to do it well. Leadership has been studied since the time of Socrates, yet we still debate both how to define it and how, or even if, we can create it. Perhaps Bass (1990) said it best, "The study of leadership rivals in age the emergence of civilization, which shaped its leaders as much as it was shaped by them. From its infancy, the study of history has been the study of leaders—what they did and why they did it."

The insightfulness of that statement is profound. Indeed, Tierney, Kagan, and Williams (1992) argue that the work of historians is that of confronting "live issues not dead facts." The live issues around leadership range from the freedom to agree or disagree with authority and the ability to participate in events that impact one's life, including reason, free will, power, control, and relationships. The very issues that leaders struggle to understand and balance. The issues that, as Bass said, leaders shape and that shape leaders.

To shape the Army of the future, Army civilian leaders must be proficient in what is described by a 2003 Army Training, Leadership, and Development Panel (ATLDP) study as "interpersonal skills." The report defines interpersonal skills as, "motivating and inspiring people, fostering commitment from subordinates, building strong working relationships and teams, and shaping a positive and productive organizational climate through communication, support, and understanding".

According to the study, Army civilian supervisors are generally seen as effective in many conceptual, technical, and organizational skills, but they are seen as less effective in their interpersonal skills and their ability to lead people. Army civilian exit surveys seem to confirm the lack of interpersonal skills, citing two of their top five reasons for leaving the Army as dealing with management and dealing with supervisors. Dealing with management refers to the frustration of adhering to rigid rules, procedures, and regulations perceived to be imposed by management. Dealing with supervisors refers to the day-to-day interaction with immediate supervisors (ATLDP Report, 2003.)

The perceived deficiency is important to analyze, as the overwhelming majority of ATLDP respondents also indicated a belief that interpersonal skills are among the most critical leadership skills to have (ATLDP Report, 2003).

To examine this perceived lack of interpersonal skill, we looked to the landmark University of Michigan (Katz, Maccoby, Gurin, & Floor, 1951) and Ohio State (Stogdill & Coons, 1957) studies identifying two dimensions of leadership generally referred to as consideration and initiating structure. Consideration is behavior focused on the individual, demonstrating concern and respect, monitoring their welfare; for example, work /life balance, and communicating appreciation for employees' work and support. Consideration seems to be what the ATLDP study describes as interpersonal skills. Initiating structure behavior focuses on the processes involved in attaining a product, or the outcome of the work performed, rather than on the person doing the work; i.e., dealing with management, as cited by the study.

We also looked at the ability model of emotional intelligence (EI) that defines EI as the ability to recognize the meanings of emotion and their relationships and to

reason and problem-solve on the basis of the emotion(s) (Mayer, Caruso, Salovey, 1999). In other words, emotionally intelligent leaders are able to correctly identify the emotions that are present, use that information to motivate, or engage an employee, understand the likelihood of how an employee's emotion may change due to intervention by a supervisor, and to be able to manage the emotion to achieve a desired outcome. It would seem then, that leaders with high ability in EI would consider how a subordinate feels about a task, would be skilled at using that emotion to facilitate interest and reason about the task, to understand the balance of how much structure to provide, and how to manage the balance for the best outcome. (Note: Ideally theories, or constructs such as EI should be consistent within a discipline. One issue in studying EI is that there are several theories using the name. When using the term "emotional intelligence" in this paper, we are referring to the ability model attributed to Mayer and Salovey. In choosing the term Mayer and Salovey purposefully meant to imply a weaving together of intelligence; i.e., the ability to reason with abstract concepts, and a discreet set of emotional abilities.)

Tracing the Great Divide:
The History of Leadership, Rational Thought and Emotion

Ancient Greece provides perhaps our earliest lessons in leadership. Historically there had been little need for political power in Greece. Each village's world was literally the village itself. As families and villages developed, they grew close to each other, and handled issues almost like a large extended family. With the discovery of silver and increasing trade with the East, Greece became prosperous and that brought cultural change. Rural settlements grew into city-states, and the elite learned to communicate in writing. The elite soon began to question and even reject some ancient customs and traditions. Social tensions between the classes began to build until the Greeks were on the brink of civil war. They had to find a way to adapt, to change their customs, distribute power and restrain crime and warfare (Menn, 2002; Osborne, 2006; Futter, 2009; Maggio, 2010).

A man named Solon who was not associated with nobility or farming, (the two main disputing classes) was chosen for this test of leadership and mediation. He wanted what he termed "good order," not just for the government but for everyday behavior. He was not looking for an ideal society but for the way that things "should be." He drew up a constitution with each class being allocated official posts. Candidates were proposed and chosen. Democracy and the first set of written laws were born.

In one of history's earliest leadership lessons, Solon's concept of what "should be" incorporated the need for people to have some sort of personal control of their destiny and lives, and the need for leaders to listen and respond to follower's needs, emotional or otherwise (Osborne, 2006; Ehrenberg, 1973). Then as now, however, there was a struggle with what "should be" regarding leadership. Over the years leading to

Socrates' time, some of the principles established by Solon eroded. Socrates wanted a return to the "good order" that had been established. He differed from Solon in how to get there. Socrates believed good order could only be reached via rational debate and the acquisition of knowledge. In his opinion, spirituality, political action, and emotion had no role in decision making. He believed that morally inappropriate behavior, misjudgment, even evil, could be corrected if one were led to intellectual good order through reason and questioning. Accounts portray him as an inspirational, deeply moral, charismatic leader that inspired loyalty and affection. He was also known for asking challenging questions, and those questions were influential in building skepticism about mythology and building a reliance on rational thought and discussion as the sole source of human knowledge, tenets not popular with all Greek citizens.

So began the age of Stoicism and a strong anti-emotional preference in much of Western culture (Payne, 1986). It is sad and perhaps prophetic in its own way, that Socrates' concept of intellectual good order did not work with his enemies. He was put on trial and convicted of impiety and corrupting the young. He drank poison rather than dying at the hands of his accusers.

At this time in history Plato was Socrates' most fervent follower and student. Plato became very bitter by the trial and death of his mentor and opened "The Academy" to advance Socrates' work. There he wrote "The Republic," which reiterated his distrust of the senses and reinforced his belief in the rational mind. His philosophy, however, was more extreme than Socrates'. Plato advocated for a government that would be ruled by selected people from the class of Rulers. Only the educated philosophers would be allowed to rule. In fact, the future leaders would be specifically

bred for the purpose. His *ideal* was the ability to see through corruption and injustice (such as what had happened to Socrates) and he believed that only men of good intelligence that withdrew from the world, including distractions such as art, poetry, and theater, could reach such a state (Barker, 1906; Osborne, 2006).

The influence these early leaders had impacts us even today, not just in terms of our participatory democracy, but in organizational life as we continue the search for the leadership balance between pure reason and emotion intelligence. Solon recognized the human need for personal participation in decision making. Socrates believed in the goodness of mankind but had to have been devastated when his absolute belief in everyone's ability for purely rational thought failed. Plato saw the problems that resulted from emotional decision making, and wanted to take away participatory decision making and centralize power and control once again.

We typically think of the scientific study of leadership as having begun at the turn of the 20th century with the "great man" perspective, which saw history as being shaped by the greatest of men (Bass, 1990). Trait theorists analyzed great historical leaders, and hypothesized that they were born with personality traits that made them successful, i.e.; they were "naturally selected," beginning the long-standing debate about whether leaders are born or made. Although trait theorists did find common traits (i.e.; intelligence, and dominance) in effective leaders, traits proved to be hard to measure, especially in the 1930s. While some leaders possessed certain traits, not having those traits did not necessarily mean that the person was not seen as a leader. Some leaders even displayed what were considered "bad" traits, but were still successful.

As the Industrial Era (1760-1830) and factories replaced the agricultural economy, “the logic of efficiency,” became one of the primary goals of leadership. The quest was for more and more precise movement by employees, and employees began to be thought of as little more than machines. Managers believed employees were not very bright, that they lacked initiative, and needed to be controlled (Bell, 1960, Blum and Naylor, 1968, Neff, 1968). Once again, emotion and consideration of the employee were nearly banned.

The Modern Era (1900-1945) introduced us to Freud, Skinner, and Jung, and the concepts of psychological and behavioral impacts, including those of the leader (Clemens, Meyer, 1999). The groundbreaking Hawthorne studies (1924-1930s) analyzed the effects of working conditions and concluded that employees should not be treated like machines if maximum productivity was the goal. Employees brought more to the assembly line than just the skill to carry out instructions and to learn precise movements. They brought moods, emotion, social beliefs and attitudes. The Hawthorne studies refocused attention on motivation and the affective importance of social relationships (Neff, 1968).

In the 1940s behavioral theorists moved more in the direction of motivation, and came to believe it was the things that leaders do, the behaviors themselves, that made the difference for successful leadership. A quest for the “best” leadership style began. The University of Michigan (Katz, Maccoby, Gurin, & Floor, 1951) and Ohio State (Stogdill & Coons, 1957) studies identified two dimensions of leadership generally referred to as consideration and initiating structure. Consideration was defined as the degree to which a leader shows concern and respect for followers, looks out for their

welfare, and expresses appreciation and support. Initiating structure is the degree to which a leader defines and organizes his role and the roles of followers, is oriented toward goal attainment, and establishes well-defined patterns and channels of communication (Fleishman, 1973, Bass, 1990). The dimensions of consideration and initiating structure dominated leadership study over the following 30 years. Just as in trait theory, however, no absolute behaviors could be identified that equated to success in all leaders, every time. Some leaders were "successful," despite what were thought of as non-leadership behaviors. Although recognized for their significant contributions, the leadership research on consideration and initiating structure was critiqued for both method and concepts, and by the 1970s was believed to have limited validity (Korman, 1966; Northouse, 1997; Yukl, 1998; Yukl & Van Fleet, 1992; House & Aditya, 1997).

A 2004 meta-analysis (Judge, Piccolo, Ilies) of consideration and initiating structure behaviors revealed that both have moderately strong relations with leader outcomes, and interest in the two dimensions was revived. The analysis revealed that consideration correlates with follower satisfaction and initiating structure correlates more strongly with performance or effectiveness. Combining the two, it would seem that a leader's skill in influencing the behavior of followers would have a direct effect on performance outcomes (Humphrey, 2002; Pirola-Merlo, Hartel, Mann, and Hirst, 2002). In other words, a leader attempting to persuade, inspire, or motivate followers to reach objectives must understand how to use emotion effectively. Leaders must be able to recognize followers' emotional states, attempt to inspire certain emotions in followers, and then seek to manage followers' emotional states accordingly (Humphrey, 2002).

The ability to follow emotional states, attempt to inspire emotions, and manage emotional states as described by Humphrey is nearly identical to the four branches of the ability-based model of EI as researched and published by Salovey and Mayer in 1990.

Mayer and Salovey (1997) now define EI as:

> The ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth.

The four branches of EI are:

(1) Identifying, or perceiving emotion. The ability to accurately recognize the emotions you and those around you are experiencing. For example, if a supervisor publically chastises an employee, the employee may feel humiliated. The supervisor, however, may mis-identify the emotion, or not even perceive the tension in the employee or in the room.

(2) Using emotion to facilitate thought. This is the ability to open ourselves to what we are feeling, (to allow the emotions to direct our attention) and then to be able to assess the emotion(s) against other sensations or thoughts. Once an emotion is identified, an emotionally intelligent leader will take the emotion into consideration rather than ignoring it when making a decision. Using emotion to facilitate thought ties to the ability to have empathy with what an employee is feeling, and ultimately a leader's ability to motivate inspire, and engage employees. A supervisor with a relatively high score (or quotient) on this branch would recognize the impact of the employees reaction on employee performance, while a supervisor who humiliates an

employee in public would most likely have a low quotient because he is someone who purposefully chooses to block or ignore the recognition that he has hurt the employee, rather than allowing that emotion to direct his attention to a problem, and use that recognition to facilitate a reasoned way to handle the situation.

(3) Understand emotions. The ability to understand how basic emotions blend with others to form complex emotions and emotional "chains"; or how emotions shift from one stage to another. Emotions are "rule governed." We get angry when we feel that we are not treated fairly. With no intervention, that anger can turn to rage and be exhibited by behavior such as throwing a temper tantrum. If, however, the supervisor was open to recognizing the employee's anger, and intervened by admitting a blunder on his part, the anger can turn to being ashamed or embarrassment about having the tantrum. In a sense this branch is related to Maslows Hierarchy of Needs. In the case of the humiliated employee, the emotions felt are related to the "esteem" level, and will affect self esteem, confidence, achievement, respect by others, and respect of others. The employee didn't feel respected and lost respect for the supervisor.

(4) Managing emotions. The ability to manage, or regulate, emotions in oneself and in others and by doing so, be able to weigh alternatives to obtain a desired result. In simple terms, being able to calm yourself down when you're angry, or knowing the right thing to say or do to relieve anxiety in someone else. Someone who scores low in self-management is likely to misread their own emotions, blame others for causing them, and take no personal responsibility. They will also judge others for displaying a feeling, and will find it difficult to problem solve effectively using the emotion of

others. Those who score high will most likely take responsibility for their feelings, and actually do something to make themselves feel better.

Mayer et al. (2000) hypothesized that employees who have high levels of EI may have smoother interactions with members of their work teams. EI is crucial to a leader's ability to be socially effective (House and Aditya, 1996; George, 2000; Mayer et al., 1999) and is described in empirical literature as a key determinant of effective leadership (Ashkanasy and Tse, 2000; Boal and Hooijberg, 2000; George, 2000). Salovey, Beddell, Detweiler, and Mayer, (1999), found that individuals who rated highly in their ability to perceive accurately, understand, and appraise others' emotions were better able to respond with more flexibility to changes in their social environments, and to build supportive networks.

Purpose of the Research

The purpose of this study was to examine the impact that EI has on the balance and use of consideration and initiating structure behaviors by leaders. It was hypothesized that:

Leaders with overall EI scores in the "Competent," "Skilled," or "Expert" ranges will use both consideration and initiating structure.

2. Leaders with overall EI scores in the "Develop" or "Consider Developing" range will rely more on initiating structure.

3. Leaders with prior active duty service will rely more on initiating structure.

Methodology

The data utilized was from a pre-existing dataset, two instruments taken by a class of 133 adult students who attended a graduate-level college for civilian federal employees employed by the Army. All data was de-identified, and is not publicly available. Written permission from the Dean of the College was granted. Applicants to the college submit a packet that includes (among other documents) a biography/resume, and an essay outlining the applicant's leadership philosophy. A board convenes to select applicants with the best promotion potential.

Participants

The participants were senior level (GS-12 & 13 level) Dept. of the Army civilian leaders (employees) who had various supervisory and management roles at Army installations throughout the world. There were 78 males, and 55 females, with an average age of 48.

Instruments

360 Degree Survey.

Each student accepted for attendance at the college participates in a 360-degree leadership survey completed before the student attends class (Appendix A). The survey was developed specifically for the college by The Army Research Institute to provide feedback about current leadership skill. The student, the supervisor; four peers, and four subordinates complete the survey. (Note: Data reported by "self" was not used as we were looking for behavior correlations as perceived by others.) Some participants had fewer peers or subordinates. Participants with no subordinates were evaluated by 8 peers. Means were used in the analysis. The survey has 29 questions designed to cover communication skill, supervising, coaching and counseling, team development, technical and tactical proficiency, decision making, planning, use of technology, and ethics.

Consideration and Initiating Structure.

Consideration is behavior focused on the individual, demonstrating appreciation for work and support that is provided, and concern and respect for the overall well-being of employees. Initiating structure behavior focuses on the processes involved in attaining a product, or the outcome of the work performed, rather than on the person doing the work. The leader focuses on goals, processes, and timelines. Three principle component factor analyses were conducted to explore which questions from the 360 leader survey taken by participants loaded on consideration and initiating for supervisor, peer and subordinate.

The Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT).

The MSCEIT is a commercially available, Class B psychological instrument designed to provide one overall EI score, and four branch scores of emotional abilities, reported as EI quotients. The four branch scores are:

(1) Identifying, or perceiving emotion. The ability to accurately recognize the emotions you and those around you are experiencing.

(2) Using emotion to facilitate thought. The ability to generate an emotion, and then reason with the emotion.

(3) Understand emotions. The ability to understand complex emotions and emotional "chains", how emotions shift from one stage to another.

(4) Managing emotions. The ability to manage emotions in yourself and in others.

Students take the test after their arrival at the college as part of the leadership curriculum.

Results

We hypothesized that those with the highest overall EI scores would take a more balanced approach to the use of consideration and initiating behaviors. MSCEIT scores are reported in the same manner as cognitive intelligence (IQ) scales, (comparing individuals against a normative sample, or standard, not with the population in general). The average score is 100, with a standard deviation of 15 (Caruso, Mayer, & Salovey, 2002). Scores are provided to students on a continuum of develop, consider developing, competent, skilled, and expert. Of the 133 participants, 85 scored at the competent (average) level, nine scored at the skilled level, and one scored at the expert level.

Thirty-eight scored in the consider developing or develop level. This positive skewed distribution was most likely due to the fact that the participants were senior-level employees, and most of those with scores in the lower ranges would have been screened out for promotion during the interview process.

Table 1

Overall EI score as reported to participants

EIQ Overall Score	Qualitative Report	No. of Participants Per Score
69 or Less	Develop	0
70-89	Consider Developing	39
90-119	Competent	85
120-129	Skilled	9
130 and above	Expert	1

Three principle component factor analyses were conducted to explore which questions from the 360 leader survey taken by participants loaded on consideration and initiating for supervisor, peer and subordinate. A varimax rotation was used. The three factor solution accounted for 58.65% of the variance in the supervisor data, 66.80% of the variance of the peer data, and 72.40% of the variance in the subordinate data. To determine which questions load on a factor, the cutoff of .43 was chosen (twice the significant correlation of a sample of 160 at the .01 level). The factor loadings for supervisor, peer and subordinate are presented in Tables 2-4. When a question loaded on more than one factor, the largest factor loading was selected and incorporated on that factor.

Table 2

Component Matrix for Supervisor

Supervisor	Structure	
	Consideration	Initiating
Q1		.727
Q2		.780
Q3	.484	
Q4		.726
Q5	.457	.473
Q6		.835
Q7		.795
Q8	.557	
Q9		.688
Q10		.770
Q11	.560	.446
Q12		.622
Q13	.712	
Q14	.768	
Q15	.840	
Q16	.687	
Q17	.591	.513
Q18	.622	.489
Q19	.687	
Q20	.654	
Q21	.696	
Q22	.753	
Q23	.643	
Q24	.580	.451
Q25	.669	
Q26	.686	.438
Q27	.711	
Q28	.592	
Q29	.561	

Table 3

Component Matrix for Peer

Peer	Structure	
	Consideration	Initiating
Q1		.715
Q2		.883
Q3		.436
Q4		.775
Q5	.446	.643
Q6		.840
Q7		.776
Q8	.647	
Q9		.731
Q10	.529	.710
Q11	.590	.492
Q12		.790
Q13	.623	
Q14	.610	
Q15	.646	.468
Q16	.714	
Q17	.761	.480
Q18	.730	
Q19	.821	
Q20	.839	
Q21	.771	
Q22	.817	
Q23	.728	
Q24	.785	
Q25	.813	
Q26	.812	
Q27	.799	
Q28	.517	
Q29	.488	.545

Table 4

Component Matrix for Subordinate

Subordinate	Structure	
	Considering	Initiating
Q1	.743	
Q2	.679	.591
Q3	.469	.646
Q4	.499	.701
Q5	.686	
Q6	.733	
Q7	.770	
Q8	.714	.452
Q9	.591	.475
Q10	.782	
Q11	.525	.657
Q12	.598	.447
Q13	.511	.536
Q14		.684
Q15		.779
Q16	.561	.645
Q17	.670	.576
Q18	.709	.533
Q19	.800	
Q20	.819	
Q21	.798	
Q22	.790	.436
Q23	.852	
Q24	.846	
Q25	.861	
Q26	.873	
Q27	.823	
Q28		.793
Q29		.791

Composite variables were created by extracting survey questions with factors loadings greater than or equal to the absolute value of .43 then summing all items in each subscale and dividing by the overall number of observed items.

Cronbach's alpha tests of reliability and internal consistency was conducted on each component subscale (Table 5). George and Mallery (2003) suggests alpha coefficients are excellent.

Table 5

Cronbach's Alphas for Research Variables

Variable	α	Items
Consideration Supervisor	.921	9
Initiating Supervisor	.955	18
Consideration Peer	.945	10
Initiating Peer	.969	17
Consideration Subordinate	.932	7
Initiating Subordinate	.981	20

Pearson *r* correlations were conducted to assess if relationships exist between consideration supervisor, initiating supervisor, consideration peer, initiating peer, consideration subordinate and initiating subordinate with the EI branch scores of perceiving emotions, using emotions, understanding emotions, managing emotions and the overall EI score (Table 6). Perceiving emotions had a significant relationship with consideration by peers, initiating structure by peers, and initiating structure by subordinates, suggesting that as the branch score on ability to perceive emotions increases, peers view the individual as having higher consideration behavior. Using emotions had a significant relationship with consideration by subordinates, and

initiating structure by subordinates, suggesting that as the branch score on ability to use emotion increases, subordinates view the individual as having both higher consideration and initiating behaviors. Understanding emotions had a significant relationship with consideration peer, suggesting that as a participants score on understanding emotions increases, peers view the participant as having higher consideration behavior. Managing emotions had a significant relationship with consideration peer, and initiating peer, suggesting that as a participant's branch score on use of managing emotions increases, peers view the participant as having higher consideration behavior, and subordinates view the participant as having higher initiating structure behavior.

Table 6

Pearson r correlations with supervisor data regarding consideration and initiating behavior, peer data regarding consideration and initiating behavior, subordinate data regarding consideration and initiating behavior, with perceiving emotions, using emotions, understanding emotions, managing emotions and overall emotions

	Perceiving Emotions	Using Emotions	Understanding Emotions	Managing Emotions	Overall Emotions
Supervisory Ratings					
Consideration	.126	.049	.035	.133	.110
Initiating	.045	-.005	.057	.156	-.022
Peer Ratings					
Consideration	.216*	.023	.197*	.174*	-.084
Initiating	.175*	.063	.123	.237**	-.105
Subordinate Ratings					
Consideration	.174	.282*	.115	.128	.066
Initiating	.246*	.326**	.191	.084	-.032

Note. * $p < .05$, ** $p < .01$.

Regression analysis was done with the independent variables of perceiving emotion, using emotion, understanding emotion, managing emotion, overall emotion,

and consideration and initiating structure to determine if having prior active duty service made a difference in the use of consideration or initiating structure. No significant predictors were found (Appendix B), except for managing emotion with initiating structure/peer; and using emotion, initiating structure/subordinate.

The regression with managing emotions was significant, suggesting for every one unit increase in ability to manage emotions, initiation viewed by peers will increase by .01 units. The independent variables accounted for (R^2) 9.0% of the initiation peer. Table 7 presents the beta coefficients for the regression. The regression with perceiving emotion, using emotion, understanding emotion, and total emotion predicting initiation peer after controlling for active/prior duty was not significant, F (6 , 126) = 1.661, p = .061.

Table 7

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Peer Observation of Initiation

Independent Variables	B	SE	β	*T*	Sig.
Perceiving Emotion	0.003	0.002	.13	1.41	.160
Using Emotion	-0.002	0.003	-.09	-0.88	.380
Understanding Emotion	0.002	0.004	.06	0.63	.532
Managing Emotion	0.010	0.004	.24	2.50	.014
Overall Emotion	-0.002	0.002	-.09	-1.03	.305

N = 667

The regression with using emotion was significant, suggesting for every one unit increase in using emotion, initiating structure behavior viewed by subordinates will increase by .012 units. The independent variables accounted for (R^2) 14.3% of the

initiation subordinate. The regression with perceiving emotion, understanding emotion, managing emotion, and overall emotion predicting if subordinates perceived initiating behavior after controlling for active/prior duty was significant, F (6 , 73) = 3.594, p = .072. Table 8 presents the beta coefficients for the regression.

Table 8

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Subordinate Observation of Initiation

Independent Variables	B	SE	β	*T*	Sig.
Perceiving Emotion	0.005	0.004	.15	1.26	.212
Using Emotion	0.012	0.006	.29	2.23	.029
Understanding Emotion	0.007	0.007	.10	0.90	.373
Managing Emotion	-0.005	0.008	-.07	-0.57	.570
Overall Emotion	0.001	0.004	.28	0.25	.806

N = 240

Five two-sample *t* tests were conducted to assess if differences exist on perceiving emotion, using emotion, understanding emotion, managing emotion, and overall emotion between statuses (prior active vs. no prior active duty). The results of the *t* tests are presented in Table 9. The only significant difference was for managing emotions, t (132) = 2.71, $p < .01$, supervisors with no prior active duty had a larger mean on managing emotions (M = 94.81, SD = 8.84) than supervisors with prior experience (M = 90.71, SD = 8.57). No significant differences were obtained for perceiving emotion, using emotion, or overall emotion between statuses. Following the Bonferroni inequality, we used an alpha of .01 to control for the probability of type one error family wise.

Table 9

Independent Sample t tests on Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion between Statuses

				Prior		No Prior	
	t	*Df*	*p*	*M*	*SD*	*M*	*SD*
Perceiving Emotion	-0.50	132	.618	96.93	16.21	98.41	18.01
Using Emotion	-1.43	132	.156	95.07	13.93	98.32	11.82
Understanding Emotion	-1.18	132	.239	91.79	9.13	93.66	9.07
Managing Emotion	-2.71	132	.008	90.71	8.57	94.81	8.84
Overall Emotion	1.17	132	.243	110.84	15.02	107.73	15.53

Discussion

One of the purposes of this study was to add to the current body of knowledge concerning the relevance of EI to leadership. This study is believed to be the only study in existence that looked for a link between EI and the use of consideration and initiating structure behaviors by leaders. There does seem to be a connection, although different than the hypothesized.

The data suggests that peers observe both consideration and initiating structure behaviors in participants who score high in branch 1 perceiving, and branch 2 managing emotion, and they observe consideration behavior in those that score high in branch 3 understanding emotion. No significant results were identified with branch 2 using emotion. Interestingly, while using emotion was the only branch absent in the peer data, it was the only significant data identified in the subordinate information. Subordinates observe both consideration and initiating structure behaviors in participants who score high in branch 2 using emotion. No correlations were found from the data submitted by

supervisors of the participants. While there were significant results within each of the four individual branches of EI relating to consideration and initiating structure, there were also no significant results from the overall emotion score. It would appear that all four branches positively correlate to consideration and initiating structure behavior, but perhaps particular branches are more important to a particular interpersonal relationship.

When the three principle component analyses were conducted to identify which questions from the 360 leader survey loaded on consideration or initiating structure, the analyses were not forced to agree. Although the loadings showed large amount of overlap across analyses, the overlap was not complete. This may be due to sampling difference or a slight variation of the constructs as they apply to peers and subordinates. Because the sample sizes were not small enough to use confirmatory factor analyses a slight variation in constructs was assumed. This is a safer approach, makes no assumptions, and could explain the findings above regarding the slight differences between peers and supervisors. It may be that the perceptions of how much structure is wanted were perceived slightly differently by peers who work with the leaders/supervisors, and the subordinates of the leaders/supervisors.

Using emotion; i.e. paying attention to the emotion, was recognized by subordinates when supervisors used either consideration or initiating structure. In other words, validation of their feelings, along with the supervisor showing concern, gratitude, and clearly defined procedures, were important to subordinates. The implication is that subordinates will tolerate the bureaucratic initiating structure as long as they feel their supervisor is considerate of their feelings. For peers, understanding

what they are feeling when a participant used an initiating structure behavior was important, perhaps because it is a peer-to-peer relationship. Peers also seemed to value the participant knowing how a feeling will change based on intervention or a new sequence of events (understanding emotion), and then acting on that understanding to influence a change in the emotion and event (managing emotion). It appears that peers are looking for coaching or counseling from an equal that also comes across to them as caring, with clear guidance. Ironically, it seems that the supervisors of the participants did not observe any significant correlation between EI and consideration or initiating structure. It could be that they are geographically separate and don't have much personal interaction, or perhaps the supervisors themselves should enroll in the leadership courses.

We also hypothesized that those with prior active duty service time and training would rely on the use of initiating structure more than consideration because they would be less comfortable incorporating emotion into their problem-solving and decision making. The regressions identified correlations with using emotion and observed initiating behavior by subordinates, and managing emotion and observed initiating structure by subordinates. The t-tests revealed that supervisors with no prior active duty had a larger mean on managing emotions; i.e.; they are better at being able to influence a change in how they, and others, feel. It would seem then, that prior active duty service does inhibit the use of emotional information. This isn't necessarily a bad thing in tactical situations, it often necessitates the ability to shut out emotions. However, in an organizational environment subordinates in particular want a leader to pay attention to how they feel.

Limitations

Readers should bear in mind that this was a small, limited study, and used existing data as opposed to data specifically designed for this study. These explanations should remain tentative until further research can be done.

A 360 degree leadership survey such as the one used in this study gathers input from self, supervisors, peers, and subordinates of the participant. The quality of the information gathered is solely dependent upon how forthright the supervisor, peers, and subordinates are willing to be. The survey questions were on a Likert Scale, but there was a space for comments. The comments did not always match the score on the scale. It is highly probable, for example, that subordinates would not identify some weaknesses from fear that the participant would know who submitted that information. Another possibility is that participants selected peers and subordinates that they knew would provide more positive feedback than those who would not.

EI as a construct is still controversial and heavily debated. The concept is relatively new, having been coined as an intelligence only 11 years ago (Mayer, Caruso, Salovey, 1999). Researchers in the fields of personality, intelligence, and applied psychology (the fields primarily incorporated into the concept) seem to be increasingly more comfortable with the concept, but are still skeptical that EI as a body of knowledge could have been missed by all of them for over 100 years. Further, Spielberger's Encyclopedia of Applied Psychology (2004) lists three major theories using the term "EI," all with different definitions and measurement instruments. The

field itself should come together to clarify the terms so the scholarship can be less jumbled.

Conclusion

The responsibilities of leadership are significant, as are the impacts of leadership behavior. Yet most leaders have a “notoriously underdeveloped capacity for understanding and dealing with emotions” in spite of knowing that they should consider the important long and short term consequences of actions and be prepared to deal with them appropriately (Levinson, 1996).

The very act of leading requires social interaction and interpersonal skills. Yet from the time of Solon and Socrates, emotions, including empathy, have been seen as the antithesis of being rational and are considered a threat. Tichy and Sherman (1993) believe that since organizations don’t know how to deal with emotion, they try to pretend it doesn’t exist. This appears to be the case in the US Army environment, where one often hears “keep emotion out of the brief.” Even so, the ATLDP, the exit interviews, and this research demonstrate that employee’s value and want both consideration; i.e.; EI, and initiating structure from their supervisors, and will leave if they don’t get it.

References

Ashkanasy, N. M. & Tse, B. (2000). Transformational leadership as management of emotion: A conceptual review. In N. Ashkanasy, C. E. Hartel, & W. J. Zerbe (Eds), *Emotions in the workplace: Research, theory, and practice* (pp. 221-235). Westport, CT: Quorum Books.

Barker, E. (1906). *The political thought of Plato and Aristotle*. New York: J.P. Putnam's Sons.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3) 19-31.

Boal, K. B. & Hooijberg, R. (2000). Strategic leadership research: Moving on. *The Leadership Quarterly Yearly Review of Leadership, 11*(4), 515-550.

Caruso, D. R. & Mayer, J. D. (2002). Relation of an ability measure of emotional intelligence to personality. *Journal of Personality Assessment, 79*(2), 306-320.

Cummings, T. G. (2008). *Handbook of organizational development*. Los Angeles: Sage Publications.

Ehrenberg, V. (1973). *From Solon to Socrates: Greek history and civilization during the sixth and fifth centuries BC*. New York: Routledge

Fleishman, E. A. & Simmons, J. (1970). Relationship between leadership patterns and effectiveness ratings among Israeli foreman. *Personnel Psychology, 23,* 169-172.

Futter, D. (2009). The concept of persuasion in Plato's early and middle dialogues. *South African Journal of Philosophy*, *28*(2).

George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53,* 1027-1055.

George, D. & Mallery, P. (2003) *SPSS for Windows step by step: A simple guide and reference,* 11.0 update. Boston: Allyn & Bacon

Goffey, R. & Jones, G. (2000, September/October). Why should anyone be led by you? *Harvard Business Review,* 63-70.

Goffey, R. & Jones, G. (2001, December). Followership: It's personal too. *Harvard Business Review*, 148.

Hersey, P., Blanchard, K., & Johnson, D. (1996). *Management of organizational behavior*. Upper Saddle River, NJ: Prentice-Hall.

Higgs, M. J. & Rowland, D. (2000). Building change leadership capability: The quest for change competence. *Journal of Change Management, 1*(2), 116-131.

House, R. J. & Aditya, R. N. (1996). The social scientific study of leadership quo vadis. *Journal of Management, 23*(3), 409-443.

Humphrey, R. H. (2002). The many faces of emotional leadership. *The Leadership Quarterly, 13*(5), 493-504.

Jardin, L. (1996). *Worldly goods: A new history of the renaissance*. London: Macmillan.

Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology, 89*, 36-51.

Levinson, H. (1996, January/February). The leader as analysor. *Harvard Business Review*, 158.

Maggio, J. (2010). The birth of truth. *Philosophy & Social Criticism, 36*(5), 607-621.

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*, 267-298.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Emotional intelligence as zeitgeist, as personality, and as a mental ability. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace.* (pp. 92-117). New York: Jossey-Bass.

Menn, S. (2002). Plato and the method of analysis. *Phronesis, 47*, 193-223.

Neff, W. S. (1968). *Work and human behavior*. New York: Atherton Press.

Pirola-Merlo, A., Hartel, C., Mann, L., & Hirst, G. (2002). How leaders influence the impact of affective events on team climate and performance in R&D teams. *The Leadership Quarterly, 13*, 561-81.

Salovey, P., Bedell, B., Detweiler, J. B., & Mayer, J. D. (1999). Coping intelligently: Emotional intelligence and the coping process. In C. R. Snyder (Ed.), *Coping: The psychology of what works*. (pp. 141-64). New York: Oxford University Press.

Spielberger, C.D. (Ed.). (2004). *Encyclopedia of applied psychology*. Academic Press.

Stogdill, R. M. (1950). Leadership, membership, and organization. *Psychological Bulletin, 47*, 1-14.

U. S. Army. (2003). Army training and leader development panel report. Washington, D.C.

Appendix A: Leadership Survey Questions

360 Degree Leadership Survey Questions

Communication

1. Actively listens to others and takes their views into account.
2. Fosters teamwork and esprit de corps.
3. Develops and maintains a network of professional contacts.
4. Works effectively with people from functions/organizations outside their own.
5. Tailors communication style and medium to the type of audience and situation at hand.

Supervision

6. Entrusts work to others tactfully and expresses confidence in their ability to handle it.
7. Empowers others by giving responsibility, authority, and information.
8. Seeks out challenging assignments, diverse duties, or enhanced responsibilities.
9. Encourages and rewards others for a job well done.

Coaching and Counseling

10. Gives guidance and continuous feedback that enables others to improve their performance.

Team Development

11. Is self-assured with dealing with others.
12. Treats others with courtesy, tact, and respect.

Technical/Tactical Proficiency

13. Understands how politics, economics, geography, and other sociological factors influence national security policy.
14. Sees relationships between world, national, and local news (current events and Army operations).
15. Sees how own organization fits into the Army system.
16. Maintains a sense of mission in day-to-day activities.
17. Determines ways to successfully guide the organization through changes.
18. Anticipates consequences of a particular course of action.

Decision Making

19. Pinpoints key issues, problems, or concerns.
20. Incisively questions assumptions underlying a decision or plan.
21. Accurately evaluates the merits and deficiencies of ideas or proposals.
22. Understands the situation and determines the objective.

Planning

23. Plans/prioritizes activities and allocates resources.
24. Sets project milestones and accomplishes them.

Technology

25. Gathers, synthesizes, and summarizes data into useable management information.
26. Develops/identifies effective, workable solutions to problems.
27. Assesses organizational/program performance against objectives.

Ethics

28. Demonstrates commitment to support and defend the Constitution of the United States.

Appendix B: Regressions

The regression with perceiving emotion, using emotion, understanding emotion, managing emotion, and overall emotion predicting if a supervisor perceived consideration behavior in the participant, after controlling for active/prior duty was not significant, F (6 , 109) = 2.354, p = .585. The independent variables accounted for (R^2) 4.3% of the consideration of supervisor. Table 10 presents the beta coefficients for the regression where none were significant.

Table 10

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Consideration Supervisor

Independent Variables	B	SE	β	*T*	Sig.
Perceiving Emotion	0.005	0.004	.13	1.22	.224
Using Emotion	-0.002	0.006	-.04	-0.34	.732
Understanding Emotion	0.003	0.008	.04	0.35	.729
Managing Emotion	0.008	0.008	.11	1.01	.314
Overall Emotion	0.005	0.004	.12	1.24	.219

N = 123

The regression with perceiving emotion, using emotion, understanding emotion, managing emotion, and overall emotion predicting if a supervisor perceived initiating structure behavior by the participant, after controlling for active/prior duty was not significant, F (6 , 108) = 1.540, p = .693. The independent variables accounted for (R^2) 3.5% of the initiation with supervisor. Table 11 presents the beta coefficients for the regression where none were significant.

Table 11

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Supervisor observations of Initiation

Independent Variables	B	SE	B	*T*	Sig.
Perceiving Emotion	0.001	0.004	.03	0.32	.749
Using Emotion	-0.005	0.005	-.10	-0.87	.387
Understanding Emotion	0.002	0.007	.03	0.33	.740
Managing Emotion	0.013	0.007	.19	1.81	.073
Overall Emotion	-0.001	0.004	-.03	-0.03	.743

N=123

The regression with perceiving emotion, using emotion, understanding emotion, managing emotion, and overall emotion predicting if peers perceived consideration behavior after controlling for active/prior duty was not significant, F (6 , 126) = 2.077, p = .035. Table 12 presents the beta coefficients for the regression where none were significant.

Table 12

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Peer Observation of Consideration

Independent Variables	B	SE	B	*T*	Sig.
Perceiving Emotion	0.005	0.002	.20	2.14	.034
Using Emotion	-0.004	0.003	-.14	-1.43	.156
Understanding Emotion	0.007	0.004	.15	1.67	.097
Managing Emotion	0.007	0.004	.15	1.63	.106
Overall Emotion	-0.001	0.002	-.04	-0.41	.680

N = 667

The regression with perceiving emotion, using emotion, understanding emotion, managing emotion, and overall emotion predicting if subordinates perceived consideration behavior after controlling for active/prior duty was not significant, F (6 , 73) = 2.011, p = .222. Table 13 presents the beta coefficients for the regression.

Table 13

Multiple Regression with Perceiving Emotion, Using Emotion, Understanding Emotion, Understanding Emotion, Managing Emotion, and Overall Emotion Predicting Subordinate Observation of Consideration

Independent Variables	B	SE	B	*T*	Sig.
Perceiving Emotion	0.002	0.003	.08	0.66	.511
Using Emotion	0.010	0.005	.26	2.01	.048
Understanding Emotion	0.003	0.007	.05	0.40	.691
Managing Emotion	0.001	0.007	.01	0.08	.938
Overall Emotion	0.003	0.004	.10	0.89	.378

N = 240