UNIVERSITY OF DALLAS
Satis & Yasmin Gupta College of Business

Report of Final Dissertation Defense

This will be completed by your Dissertation Committee.

As with all official forms, the example included in this document is for your information only. Please check with the Gupta College of Business Student Services Office to see if there is an updated version.

Date of Defense: July 24, 2020

Name of Student: Bradley Winton

Exact Title of Dissertation:
Listen with Your Heart: Building Job Satisfaction through Emotional Intelligence

Signatures of Dissertation Committee:

Committee Chair: Scott Wysong

Committee Members: Benjamin L. Dilla

See comments on the attached sheet. If any conditions are specified on the sheet, please list the date all conditions must be met in order to satisfy DBA Program and Graduate Studies requirements.

Chair: Scott Wysong Date 7-24-2020

Director of Doctoral Programs: Benjamin L. Dilla Date 7-24-2020
LISTEN WITH YOUR HEART: BUILDING
JOB SATISFACTION THROUGH
EMOTIONAL INTELLIGENCE

The members of the Committee approve the doctoral dissertation of:

Official Student Name

______________________________

Bradley G. Winton, DBA, University of Dallas

Committee Chair Name

______________________________

Scott Wysong, PhD, University of Texas at Arlington

Committee Member Name

______________________________

Benjamin Dilla, PhD, Purdue University

Director of Doctoral Programs

______________________________

Benjamin Dilla, PhD, Purdue University

Dean of the College of Business

______________________________

Brett Landry, PhD, Mississippi State University
LISTEN WITH YOUR HEART: BUILDING
JOB SATISFACTION THROUGH
EMOTIONAL INTELLIGENCE

by

BRADLEY G. WINTON

Presented to the Faculty of the
The University of Dallas in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF BUSINESS ADMINISTRATION

THE UNIVERSITY OF DALLAS

July 2020
ACKNOWLEDGEMENTS

There are many unknowns in life. We try to control for those unknowns, but control is just an illusion. Former United States Secretary of Defense Donald Rumsfeld summed up this certainty of life best when he said that:

There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know.

My dissertation journey allowed me to wallow in this uncertainty, to be excited by the unknowns, and to strive to take control. The ups and downs of this journey were not mine alone to bear. First, and foremost, my wife is and always will be my rock. She reminds me every day of the love and friendship necessary to achieve one’s goals in life. Second, I would like to thank my Dissertation Committee, both Dr. Scott Wysong and Dr. Ben Dilla gave me the support and freedom to explore organizational topics that really matter to me. My academic support of this dissertation also includes my endless questions surrounding statistical methods to Dr. Julia Fulmore, my inquiries into whether this research really matters to Dr. Rosemary Maellaro, and a remarkable conversation about the CFA marker technique with Dr. Larry Williams. Thank you for freely offering your knowledge. Third, my Cohort of Doctoral Students includes people that I will depend on and trust long after we have all moved on to new adventures in life. I thank each of them for providing me the fodder for this dissertation and putting up with my constant push to indoctrinate them in the ways of emotional intelligence. Special thanks go to Matt for always selflessly picking up the phone to have a conversation. Finally, this journey into the unknown started with two little girls in mind. Their love gave me the strength to finish.

July 24, 2020
DEDICATION

I would like to dedicate this research to all of my girls, including my loving wife, Lauren, daughters, Brailey and Brynley, and my mother, Denise – you are the reason this goal was accomplished.
ABSTRACT

The changing environment of today’s organizations creates an atmosphere ripe for emotions. This ebb and flow of emotions need to be managed in order to facilitate positive outcomes such as job satisfaction. The literature provides evidence that emotional intelligence directly impacts one’s satisfaction at work. This research attempts to go beyond these higher-order findings to examine the dimensional aspects of emotional intelligence and the impact each one has on job satisfaction in U.S.-based workers. Further, the research adds to the conversation about emotions and job satisfaction by examining the leader-follower relationship and its enhancement of follower job satisfaction. The results confirmed previous findings of higher levels of emotional intelligence increasing levels of job satisfaction, whether that emotional intelligence is found in the leader or the follower. However, results could not confirm that all four emotional intelligence dimensions significantly and positively related to job satisfaction. Analysis of the leader-follower dyad indicated that the congruence between the leaders’ and followers’ emotional intelligence led to an enhancement of job satisfaction in followers, enhancing the effect both leader and follower emotional intelligence had on job satisfaction. These findings are significant in that they are among the first to elaborate on the dimensions of emotional intelligence and appear to be the first to indicate the importance of leader and follower emotional intelligence similarity in the improvement of one’s satisfaction at work.
LISTEN WITH YOUR HEART: BUILDING
JOB SATISFACTION THROUGH
EMOTIONAL INTELLIGENCE

Bradley G. Winton, DBA.
The University of Dallas, 2020

Supervising Professor: Scott Wysong, PhD
# TABLE OF CONTENTS

ABSTRACT........................................................................................................................................ iv

TABLE OF CONTENTS...................................................................................................................... vi

LIST OF ILLUSTRATIONS................................................................................................................ ix

CHAPTER 1 ........................................................................................................................................ 1

1.1 Business Problem.......................................................................................................................... 1

1.2 EI and Job Satisfaction.................................................................................................................. 3

1.3 A Model of Emotional Intelligence in a Modern Organization.................................................... 5

1.4 Research Questions: Emotional Intelligence and Job Satisfaction Overlap.............................. 7

1.4.1 RQ1a: The Influence of EI on Job Satisfaction......................................................................... 9

1.4.2 RQ1b: The Influence of the Leader-Follower Relationship on Follower Job Satisfaction........ 10

1.5 Contributions.................................................................................................................................... 11

1.6 Definitions of Key Terms and Acronyms...................................................................................... 13

1.7 Summary........................................................................................................................................ 13

CHAPTER 2 ........................................................................................................................................ 18

2.1 Emotional Intelligence .................................................................................................................... 18

2.1.1 Origins of EI............................................................................................................................... 18

2.1.2 Emotions.................................................................................................................................. 20

2.1.3 Intelligence.................................................................................................................................. 20

2.1.4 Original Model of EI.................................................................................................................. 22

2.1.5 Three Sides of EI..................................................................................................................... 25

2.1.6 EI Controversy.......................................................................................................................... 30

2.2 Job Satisfaction.............................................................................................................................. 38

2.2.1 Definition and Origins of Job Satisfaction................................................................................ 40

2.2.2 Affect and Job Satisfaction....................................................................................................... 44

2.3 Theoretical Options for EI and Job Satisfaction.......................................................................... 44

2.4 Affective Events Theory............................................................................................................... 46

2.5 Emotional Intelligence and Job Satisfaction................................................................................ 51

2.5.1 Dimensions of EI and Job Satisfaction...................................................................................... 54

2.6 Emotion Contagion Theory........................................................................................................... 55

2.7 Multi-Level Model of Emotion and Leadership........................................................................... 56

2.8 Leader-Follower Emotional Intelligence Congruence and its Impact on Job Satisfaction........... 59
CHAPTER 4 ......................................................................................................................... 92
  4.1 Introduction .................................................................................................................. 92
  4.2 Data Collection ........................................................................................................... 92
  4.3 Sample Representativeness Results ............................................................................. 94
  4.4 Statistical Assumptions Results .................................................................................. 95
  4.5 Measurement Model Analyses ..................................................................................... 97
     4.5.1 Common Method Variance Testing ................................................................. 104
  4.6 Descriptive Statistics .................................................................................................. 108
  4.7 Structural Equation Modeling Results ......................................................................... 110
  4.8 OLS Regression with PROCESS Results .................................................................... 113

vii
4.9 Hypotheses Summary ................................................................. 116
4.10 Additional Findings ................................................................. 118
4.11 Summary ............................................................................... 119
CHAPTER 5 .................................................................................. 121
  5.1 Introduction ........................................................................... 121
  5.2 Contributions ......................................................................... 121
  5.3 Implications of Findings ........................................................ 122
    5.3.1 Implications to Research .................................................. 122
    5.3.2 Implications to Practice .................................................... 124
  5.4 Limitations ........................................................................... 125
    5.4.1 Common Method and Social Desirability Bias .................. 125
    5.4.2 Data Collection and Sample Representativeness ............... 126
    5.4.3 Distinctiveness of Emotional Intelligence ......................... 127
  5.5 Future Research ..................................................................... 127
  5.6 Summary .............................................................................. 129
REFERENCES ............................................................................. 131
APPENDIX A .............................................................................. 171
APPENDIX B .............................................................................. 191
APPENDIX C .............................................................................. 192
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>16</td>
</tr>
<tr>
<td>2.1</td>
<td>22</td>
</tr>
<tr>
<td>2.2</td>
<td>27</td>
</tr>
<tr>
<td>2.3</td>
<td>35</td>
</tr>
<tr>
<td>2.4</td>
<td>39</td>
</tr>
<tr>
<td>2.5</td>
<td>48</td>
</tr>
<tr>
<td>2.6</td>
<td>49</td>
</tr>
<tr>
<td>2.7</td>
<td>58</td>
</tr>
<tr>
<td>3.1</td>
<td>86</td>
</tr>
<tr>
<td>3.2</td>
<td>87</td>
</tr>
<tr>
<td>4.1</td>
<td>111</td>
</tr>
<tr>
<td>4.2</td>
<td>112</td>
</tr>
<tr>
<td>4.3</td>
<td>114</td>
</tr>
<tr>
<td>4.4</td>
<td>115</td>
</tr>
<tr>
<td>4.5</td>
<td>116</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>The overlap between EI and different job satisfaction models</td>
<td>8</td>
</tr>
<tr>
<td>1.2</td>
<td>Definitions of key terms and acronyms</td>
<td>14</td>
</tr>
<tr>
<td>2.1</td>
<td>Updated mixed four-branch model of emotional intelligence</td>
<td>24</td>
</tr>
<tr>
<td>3.1</td>
<td>Population demographics</td>
<td>73</td>
</tr>
<tr>
<td>3.2</td>
<td>Survey instrument order</td>
<td>76</td>
</tr>
<tr>
<td>3.3</td>
<td>Sample questions from survey</td>
<td>78</td>
</tr>
<tr>
<td>3.4</td>
<td>G*Power analysis sample size</td>
<td>83</td>
</tr>
<tr>
<td>4.1</td>
<td>Sample representativeness comparison for BLS against the sample</td>
<td>95</td>
</tr>
<tr>
<td>4.2</td>
<td>Measurement model fit indices for the dimensional and higher-order data</td>
<td>98</td>
</tr>
<tr>
<td>4.3</td>
<td>Standardized path (P) and structure (S) coefficients for measurement model 1</td>
<td>101</td>
</tr>
<tr>
<td>4.4</td>
<td>Implied correlations, average variance extracted (AVE), and composite reliability (CR) for measurement model 1</td>
<td>102</td>
</tr>
<tr>
<td>4.5</td>
<td>Standardized path (P) and structure (S) coefficients for measurement model 4</td>
<td>103</td>
</tr>
<tr>
<td>4.6</td>
<td>Implied correlations, average variance extracted (AVE), and composite reliability (CR) for measurement model 4</td>
<td>104</td>
</tr>
</tbody>
</table>
4.7 Model fit indices and model comparisons for CFA models with marker variable ................................................................. 106

4.8 Factor correlations of the dimensional CFA marker technique analysis ............................................................. 107

4.9 Model fit indices and model comparisons for higher-order CFA models with marker variable ................................................................. 108

4.10 Descriptive statistics for the dimensional model ........................................................................................................ 109

4.11 Descriptive statistics for the higher-order model ....................................................................................................... 110

4.12 Fit indices for dimensional structural model ............................................................................................................. 112

4.13 Summary of personal EI regression results ............................................................................................................... 113

4.14 Summary of leader EI regression results .................................................................................................................. 115

4.15 Results of predicted hypotheses .......................................................................................................................... 117
CHAPTER 1
INTRODUCTION

1.1 Business Problem

Emotions create challenges for all organizations. Each worker deals with their own emotions, each team deals with dynamic emotions between individuals, and organizations deal with emotions at large. At each of these levels, emotions change constantly and these changes are highlighted by the changing conditions of today’s workplace. This dynamic environment necessitates a reexamination of how emotions impact the workplace (Ashforth & Humphrey, 1995; Ashkanasy et al., 2000).

Workplaces once represented a place of civility and formality (Johnson & Indvik, 2000), where colleagues were proper yet friendly, distant yet polite, and mutual respect came standard (Andersson & Pearson, 1999; Johnson & Indvik, 2000). Researchers posit a range of reasons why this no longer holds true, including globalization, employee diversity, downsizing, budgeting processes, the pressures of productivity, autocratic work environments, extended work hours, and the use of part-time employees (Andersson & Pearson, 1999; Baron & Neuman, 1996; Chen & Eastman, 1997; Johnson & Indvik, 2000, 2001; Neuman & Baron, 1997). More importantly in regards to the subtleties of emotions, organizations now utilize flatter structures and encourage a more casual atmosphere that makes it much more difficult for individuals to decide what constitutes proper business behavior (Martin, 1996; Morand, 1998). With these new workplace standards in place, it becomes necessary to focus on workplace emotional functioning
and the emotional competencies essential to succeed in the workplace (Diefendorff & Richard, 2003; Ashforth & Humphrey, 1995).

Ultimately, organizations hope that emotional competencies lead to a variety of positive outcomes. One of the most important of these outcomes is the satisfaction workers find in their jobs. Ashforth and Humphrey (1995) suggest that emotion is an integral part of organizational life and the appropriate management of these emotions can lead to greater job satisfaction. The challenge becomes, how do organizations and the individuals within those organizations manage emotions in order to create this increased job satisfaction? Aristotle reminds us of this challenge when he writes:

Anybody can become angry, that is easy; but to be angry with the right person, and to the right degree, and at the right time, and for the right purpose, and in the right way, that is not within everybody’s power, that is not easy. (Leonard et al., 1944, p.203)

This highlights the importance of individuals regulating and utilizing their emotions, whether positive or negative, in order to generate positive outcomes.

Daniel Goleman’s (1995) New York Times bestseller, Emotional Intelligence, proposes the concept of emotional intelligence (EI) as a tool for successfully using emotions in the workplace. The practical use of emotional intelligence in the business world has become so influential that the book is now considered by Time magazine to be one of the 25 most influential business management books of all time and an article by Goleman (1998a) became one of the most requested reprints from the Harvard Business Review in the last four decades (Sardo, 2004). Further, EI services have become big business, with a multimillion-dollar industry now in place (Grewal & Salovey, 2005). In fact, estimates suggest that more than 75% of Fortune 500 companies now utilize some form of EI-related product (Bradberry & Greaves, 2009). Why has
EI seen such a proliferation in the business world? With the constant changes highlighted above, there is an opportunity to save millions of dollars at the individual level and hundreds of millions of dollars at the organizational level.

A study of salespeople in 44 Fortune 500 firms, including global giants AT&T, IBM, and PepsiCo, found that those with better people skills earned sales $3 million more than the average salesperson, almost twice the average sales (Goleman, 1998a). Productivity is not the only place to find dollars for the companies’ bottom line. At the highest levels of leadership, the implications for missing on an executive hire without the proper emotional abilities can run into the hundreds of thousands or even millions of dollars. According to a Hay/McBer Research and Innovation Group, a hiring period of two years at a global consumer beverage firm saw a $4 million cost in the search for divisional presidents alone (Goleman, 1998a). These numbers pale in comparison to the costs at the organizational level. Intel provides an example of the perils of organizations that react on emotion and without control. The company needed to react to a flaw in its new Pentium processor. The original responses from the company included denials, followed by distress, and finally a realization to own the mistake, all of which cost the company $475 million to clean up (Goleman, 1998a). With high EI leaders in place at Intel, these losses may have been avoided as the original emotional responses may have been tempered with restraint, empathy, and knowledge of the reactions their actions would generate. These anecdotes highlight the importance of emotional decisions and events in the workplace. Despite a certain understanding of how EI plays a role in individual and company success, a myriad of questions still surrounds the use of EI in the workplace (Antonakis, 2004; Landy, 2005).

1.2 EI and Job Satisfaction
Emotional intelligence represents the abilities of individuals to monitor their feelings and emotions, to understand them, and to use this information to guide their behavior (Salovey & Meyer, 1990). These abilities break down into four individual dimensions that make up overall EI. These dimensions include the ability to manage emotions, perceive others’ emotions, understand these emotions, and facilitate thought using emotion (Mayer et al., 2016). Competing models of EI exist, including a trait-based model that focuses on personality characteristics and other noncognitive capabilities (Bar-On, 1997; Petrides & Furnham, 2001) and a mixed model of personality traits, motivational factors, and emotions (Goleman, 1995). Despite debates surrounding which model to follow, the ability-based model of EI provides construct validity (Brackett & Meyer, 2003; O'Connor & Little, 2003), discriminates itself from cognitive intelligence and personality (Davies et al., 1998; Miao et al., 2017a; Van Rooy & Viswesvaran, 2004; Wong & Law, 2002), and has been the basis for most EI scales to date (Côté et al., 2010; Spector & Johnson, 2006). Research utilizing this ability-based model of EI suggests EI as a pathway to personal and organizational success.

In particular, research suggests that EI provides a pathway to worker job satisfaction. Both individual studies and meta-analyses have shown a significant and positive relationship between EI and job satisfaction (Kafetsios & Zampetakis, 2008; Miao et al., 2017a, 2017b; Ouyang et al., 2015). With that said, some might question why more research on the topic of EI and job satisfaction needs to occur. First, job satisfaction represents one of the most studied and influential subjects in organizational behavior (Schleicher et al., 2011). Research presents many positive behavioral, attitudinal, and health-related outcomes of job satisfaction (Judge & Kammeyer-Mueller, 2008; Schleicher et al., 2011). These outcomes include a reduction in turnover intention (Shore & Martin, 1989; Tett & Meyer, 1993), an enhancement of
organizational citizenship behaviors (Fassina et al., 2008; Koys, 2001), greater organizational commitment (Meyer et al., 2002; Shore & Martin, 1989; Tett & Meyer, 1993), and a boost to job performance (Iaffaldano & Muchinsky, 1985; Petty et al., 1984). With organizations constantly on the search for additional ways to add shareholder value, the improvement of employee job satisfaction offers a productive way to help generate positive employee attitudes and behaviors.

Second, the existing literature on the relationship focuses on one’s overall EI and its effects on one’s individual attitudes and behaviors. This is particularly true with investigations of the ability-based model. To date, few researchers take a deeper dive into the EI construct to examine the individual dimensions. Of the over 60 studies utilizing a self-rated ability-based EI scale in their investigation, only 19 studies breakout the four dimensions of EI. Of these 19 studies, few focus their hypotheses on these dimensions. With a deeper understanding of the range of effect sizes, directions, and significances in these EI dimensions, research can suggest a more efficient and effective training direction for organizations focused on improving emotional abilities and achieving the positive outcomes that result. Further, few researchers look at the effects of the emotional intelligence of the leader-follower dyadic relationship on job satisfaction. Two studies dive into the ability-based model to explore how manager EI associates with subordinate EI and how this interaction affects subordinate job satisfaction (Miao et al., 2016; Sy et al., 2006), but a deeper understanding of this relationship needs to be found in order to help guide future research and practical application. Overall, in understanding the EI-job satisfaction relationship better, researchers can make better inferences and test more appropriate models of how EI affects other important organizational outcomes.

1.3 A Model of Emotional Intelligence in a Modern Organization
Looking at the bigger picture, when researchers better understand the relationship between EI and job satisfaction, a better understanding of how work environments and events drive employee attitudes and behaviors may result (Weiss & Cropanzano, 1996). According to emotional intelligence theory and the ability-based model of EI, individuals can utilize emotions to enhance their working lives (Salovey & Meyer, 1990). In a practical sense, when workers understand and control their emotions, they can better react to the stresses of work-life (Byron, 2007). In a personal sense, when workers empathize and utilize their knowledge of emotion to enhance others' work lives, individuals can create positive moods, positive mood states, and higher self-esteem (Schutte et al., 2002). Taken together and rooting these ideas in affective events theory (AET; Weiss & Cropanzano, 1996), the ability to wield emotions at work constitutes a powerful tool for shaping work attitudes and refining work behaviors.

Building on this model of individual EI, leaders play an important role in organizational life. Leaders inspire followers and transform their attitudes and behaviors through daily interactions (Bass, 1985). Leaders also exert control over followers as they mandate how time and resources are used in the workplace (Sy et al., 2005). At the same time, leaders are not immune to the emotions of the organization and the affective reactions that result. With all this, the emotions of a leader play an important role in shaping their followers. Workers can experience the emotions of those around them (Hatfield et al., 1992) and no emotions play a bigger role in the organization than that of a leader. As leader and follower interact at multiple levels (e.g., between-person, interpersonal), leaders can both lift up and drag down their followers as their control and use of emotions waxes and wanes (Ashkanasy, 2003; Ashkanasy & Humphrey, 2011a, 2011b; Ashkanasy & Jordan, 2008). Taking all this into consideration, a
model of EI and job satisfaction must go beyond the within-person level and include a consideration of how leaders’ and followers’ EI interacts.

1.4 Research Questions: Emotional Intelligence and Job Satisfaction Overlap

This study attempts to answer this call and asserts that EI plays an important role in enhancing work attitudes. In order to investigate this assertion, researchers must break down the EI construct into its constituent parts and address how leaders and followers interact to shape follower job satisfaction. This investigation is made all the more important in today’s organizations that continue toward ever more casual and unstandardized environments (Martin, 1996; Morand, 1998). The literature argues that satisfaction at work is ultimately driven by one’s response to work events and, tangentially, the features of the work environment (Butts et al., 2015; Dasborough, 2006; Weiss & Cropanzano, 1996). With that said, researchers need to better understand the abilities of workers to interpret, understand, and control their reactions while at work. A comparison of the overlap between common models of job satisfaction and the ability-based model of EI clarifies why EI might be a key pathway for any worker looking for greater fulfillment on the job (see Table 1.1).

Herzberg et al. (1959) utilize a simple two-factor model to explain how workers build or lose satisfaction in their jobs. Motivational factors of the job make people want to perform and in turn lead to satisfaction. These motivational factors focus on aspects of the job such as achievement, recognition, growth, and the enjoyment of the work itself (Herzberg et al, 1959). Hygiene factors relate to the qualities of the organization and the interaction inherent in the job. When looking at job satisfaction through the lens of EI, the relationships necessary to facilitate a job provide the single most influential aspect of job satisfaction. These relationships include interactions with colleagues, supervisors, and those leaders and administrators that enforce the
Table 1.1

The Overlap Between EI and Different Job Satisfaction Models

<table>
<thead>
<tr>
<th>EI model (Ability-Based)</th>
<th>Two-factor model (Herzberg et al., 1959)</th>
<th>Affect model (Locke, 1976)</th>
<th>Dispositional model (Judge et al., 1998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal and expression of emotions</td>
<td>Relationships</td>
<td>Relationships Leadership Practices</td>
<td>Self-esteem Neuroticism</td>
</tr>
<tr>
<td>Understanding others' emotions</td>
<td>Relationships Supervision</td>
<td>Relationships Supervision</td>
<td></td>
</tr>
<tr>
<td>Managing emotions</td>
<td>Relationships Company policies Work conditions</td>
<td>Relationships Advancement Feedback/Support Clear Direction Hygiene Factors</td>
<td>Self-esteem Self-efficacy Locus of control</td>
</tr>
<tr>
<td>Facilitating thought using emotion</td>
<td>Achievement Recognition Work itself Advancement Growth</td>
<td>Work</td>
<td>Self-esteem Self-efficacy Locus of control</td>
</tr>
</tbody>
</table>

*Note.* This table suggests the overlap between dimensions of EI and some job satisfaction models.

rules and regulations of the organization. Locke’s (1976) affect model of job satisfaction utilizes a similar set of criteria to gauge job satisfaction. However, affect theory decides whether these factors add or take away from one’s fulfillment, commitment, and engagement at work to create satisfaction or dissatisfaction (Locke, 1976). Judge et al. (1998) use a dispositional-based model to explore how characteristics of the individual affect job satisfaction. In doing so, the researchers provide an interesting new way to think about EI and job satisfaction. Self-esteem
has shown a positive connection to EI (Schutte et al., 2002), with self-esteem finding a natural connection to an individual’s abilities to manage and express emotions. Along those same lines, self-efficacy gauges one’s capability to motivate and control cognitive resources in order to regulate events in life (Judge, Locke, & Durham, 1997). As individuals harness EI and its connections to dispositional characteristics (e.g., self-esteem, self-efficacy, locus of control), they also hope to control their affective reactions at work. These ideas lead to two foundational research questions for this study.

1.4.1 RQ1a: The Influence of EI on Job Satisfaction.

Taking these models of job satisfaction and folding them into a new model to explore EI within modern organizations, this study asks what organizations can do to enhance employee job satisfaction and achieve all the positive outcomes that result? Emotions play an important role in the workplace (George, 1989). As any worker can attest, jobs have both positive and negative aspects, and these negative aspects can sometimes take control. Negative emotions in reaction to these aspects can hijack an individual, dragging their satisfaction at work increasingly lower (Levin & Stokes, 1989; Weiss, et al., 1999). Therefore, emotional intelligence is one factor that organizations can focus on to impact job satisfaction.

This research first discusses the impact of overall EI on job satisfaction before moving on to better understand the impact of individual dimensions of EI. To date, scholars wade into the shallow end of understanding these individual aspects without coming to a consensus on which aspects might have the most influence on work attitudes. Going back to the question of what organizations can do, it stands to reason that as researchers better appreciate the role each dimension plays in molding worker satisfaction, they might also provide a better path forward for organizations to successfully make interventions. For example, Martin and Hine (2005) find
that workplace incivility associates with lower satisfaction with co-workers, supervisors, and impacts personal well-being and health. With a greater understanding of the impact of understanding others’ emotions, organizations might help alleviate workplace incivility through empathy training. This is just one example of the answers that might be found in a more in-depth study of EI. Potential answers like these lead to the primary research question in this study: *To what extent does an individual’s overall emotional intelligence lead to personal job satisfaction and what role do individual dimensions of emotional intelligence play in how individuals generate this satisfaction?*

**1.4.2 RQ1b: The Influence of the Leader-Follower Relationship on Follower Job Satisfaction.**

Several researchers hint at or suggest a model linking the EI of leaders and followers. George (2000) challenges researchers by suggesting that leadership theory and research still need to fully evaluate how effective leaders influence their followers with emotions and moods. Daus, et al. (2012) go a step further and offer a theoretical model that takes organizational culture and EI research into a single model suggesting a relationship between leader and subordinate EI. These challenges and models lead to individual studies that demonstrate leaders with high EI produce greater performance (Wong & Law, 2002), positive work attitudes (Carmeli, 2003), and higher job satisfaction (Wong & Law, 2002). As leaders manage employee emotions, they generate these positive outcomes as they foster greater creativity, flexibility, and confidence in their followers to take action (Fredrickson, 2003; Zhou & George, 2003). As leaders become more adept at harnessing the emotions of their followers, they can generate greater collaboration (Barsade, 2002), coordination (Sy et al., 2005), and organizational citizenship behaviors (Mossholder et al., 1981; Wong & Law, 2002). While these statements attempt to explain how
leaders can alter their followers' job satisfaction directly, these ideas fall short of answering a related question of how leader and follower EI interact to produce job satisfaction?

The relationship between leader and follower can be complicated. The interactions between the pair host a gambit of emotions and affective reactions. With the control leaders have over time, resources, and interactions within an organization, followers are more sensitive to these emotions, reactions, moods, and feelings of their leaders and this sensitivity may result in greater emotional congruence between the dyad (Anderson et al., 2003; Sy et al., 2006). While studies show that subordinate EI partially mediates the relationship between leader EI and subordinate job satisfaction (Miao et al., 2016) and that the interactive effects of leader and follower EI plays a role in follower job satisfaction (Sy et al., 2006), little to no attention has been paid to the similarity in EI within the dyad and how this affects follower job satisfaction. Therefore, the second research question becomes: *To what extent does the congruence between a leader’s and a follower’s emotional intelligence result in a modification of a follower’s job satisfaction?*

1.5 Contributions

This study contributes to both the academic and practitioner communities. In regards to the management literature, this study builds on the existing literature and takes a deeper look at EI in order to find new insight into those abilities that affect work attitudes. Three divergent streams of EI literature currently exist and this research attempts to highlight the advantages of the ability-based model. These advantages, along with the integration of three emotional and affective theories, provides a holistic model of EI that can help explain both individual and leader-follower EI dynamics.
Countless researchers dedicate their studies to an investigation of the relationship between EI and job satisfaction. Further, it is noted that over 60 studies look specifically at self-report ability-based models of EI and their interaction with job satisfaction (Miao et al., 2017a). This study follows the lead of these studies to look at how emotional intelligence positively enhances job satisfaction but modifies the common traits of these studies to take a more in-depth look at the EI construct. This investigation includes a look at overall EI, as many previous studies have done, but it also examines individual dimensions of EI and the interaction of leaders and followers. Less than 20 studies include data breaking down the dimensions of self-report ability-based EI (Miao et al., 2017a). Far fewer actually investigate these dimensions and explore the theoretical underpinnings as to why these dimensions might be affecting individual job satisfaction. This study provides both a theoretical foundation and examination of the effects of each aspect of EI on job satisfaction.

To my knowledge, no studies have explored the impact of congruence between a leaders’ and followers’ EI on job satisfaction. In conducting this research, the hope is to create a jumping-off point for further exploration of the leader-follower relationship. In exploring both of these topics, this research adds to a body of literature that is currently limited. In summation, this research could present a holistic model of EI that provides more clarity on how individual dimensions of EI interact with job satisfaction, while also clarifying the leader-follower relationship in regards to EI.

This study also sets a foundation for a larger study that evaluates the dimensions of EI and their role in other positive work outcomes. Additionally, this study creates a starting point for further investigation of different aspects of how leader and follower EI interact. With the dynamic relationship between leader and follower, there is a future research stream ripe for
inquiry based on the results of this study. Today, the level of research on EI has reached a certain maturity, but there are many future studies that can help integrate and differentiate the dimensions of EI, help clear up the relationship between leader and follower, and explore EI beyond the realm of management.

For a more practical view, when companies understand how EI affects job satisfaction, what dimensions of EI are important, and how leader and follower EI interact to create work attitudes, they will be able to make better decisions about training and hiring. The who, what, and why of training can be difficult to pin down for many companies. With a better understanding of EI and its effects on work attitudes, companies can establish appropriate EI training to focus companies on productive interactions and positive work outcomes. Further, leadership hiring decisions set a tone for a company. Companies also incur substantial costs to dismiss, find, and hire a new leader (Goleman, 1998a). When we understand the relationship between EI and job satisfaction at the individual and dyadic leader-follower level and apply this knowledge to how a company hires leaders, the company can produce greater satisfaction for their employees, enhance work attitudes, and create positive outcomes for their employees. As a result, organizations can limit the costs suffered from dissatisfied employees and dysfunctional leader-follower relationships.

1.6 Definitions of Key Terms and Acronyms

Throughout this study, there is an introduction and then repeated use of certain key terms related to emotional intelligence and job satisfaction. For the reader’s convenience, a list of terms and definitions can be found in Table 1.2.

1.7 Summary
Table 1.2

Definitions of Key Terms and Acronyms

<table>
<thead>
<tr>
<th>Terms or Acronym</th>
<th>Definition (Reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence (EI)</td>
<td>Emotional intelligence is a collection of abilities related to perceiving, accessing, generating, understanding, regulating, and reflecting upon one’s emotions (Mayer and Salovey, 1997).</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Job satisfaction refers to an emotional affective response to one’s role in the workplace (Locke, 1976; Smith et al., 1969; Vroom, 1964).</td>
</tr>
<tr>
<td>Emotions</td>
<td>Emotions are evaluations of what is important to one’s self, including daily concerns, goals in life, or what inspires us to succeed, and cover a range of responses from instantaneous reactions to longer-lasting phenomenon known as moods (Oatley, 2004).</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Intelligence is the ability to reason, sort, handle information, and learn in order to adapt to the environment (Carroll, 1993; Spearman, 1927; Sternberg, 2000).</td>
</tr>
<tr>
<td>Self-emotion appraisal (SEA)</td>
<td>This dimension of EI describes the ability to understand they deep emotions and express these emotions naturally (Wong &amp; Law, 2002).</td>
</tr>
<tr>
<td>Others’ emotion appraisal (OEA)</td>
<td>This dimension of EI describes the ability of an individual to understand the emotions of people around them (Wong &amp; Law, 2002).</td>
</tr>
<tr>
<td>Use of emotions (UOE)</td>
<td>This dimension of EI describes the ability to regulate emotions and recover rapidly from psychological distress (Wong &amp; Law, 2002).</td>
</tr>
<tr>
<td>Regulation of emotion (ROE)</td>
<td>This dimension of EI describes the ability to use emotions by directing them towards constructive activities and enhancing personal performance (Wong &amp; Law, 2002).</td>
</tr>
<tr>
<td>Affective Events Theory (AET)</td>
<td>AET explains how emotions, both positive and negative, lead to work attitudes (Weiss &amp; Cropanzano, 1996).</td>
</tr>
<tr>
<td>Emotion Contagion Theory (ECT)</td>
<td>ECT explains the tendency to experience another person's emotions, including emotional appraisals, subjective feelings, expressions, patterned physiological processes, action tendencies, and instrumental behaviors (Hatfield, Cacioppo, and Rapson, 1992).</td>
</tr>
<tr>
<td>Multi-level model of emotion and leadership</td>
<td>This theory explains how leaders influence follower emotions and, ultimately, their job satisfaction through five levels of interaction, including within-person, between-person, interpersonal, group and teams, and organization-wide (Ashkanasy, 2003; Ashkanasy &amp; Humphrey, 2011a, 2011b; Ashkanasy &amp; Jordan, 2008).</td>
</tr>
</tbody>
</table>

14
Hypothesis | A hypothesis is a presupposition or speculation of what an expected outcome of an experiment might be.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMX</td>
<td>Leader-member exchange</td>
</tr>
<tr>
<td>WLEIS</td>
<td>Wong and Law Emotional Intelligence Scale</td>
</tr>
<tr>
<td>MSCEIT</td>
<td>Mayer-Salovey-Caruso Emotional Intelligence Test</td>
</tr>
<tr>
<td>SUEIT</td>
<td>Swinburne University Emotional Intelligence Test</td>
</tr>
<tr>
<td>EQ-i</td>
<td>Bar-On Emotional Intelligence Quotient Inventory</td>
</tr>
<tr>
<td>TEIQue</td>
<td>Trait Emotional Intelligence</td>
</tr>
<tr>
<td>SEIS</td>
<td>Schutte Emotional Intelligence Scale</td>
</tr>
<tr>
<td>EIA</td>
<td>Emotional Intelligence Appraisal</td>
</tr>
</tbody>
</table>

Note. Although the list provided in this table is not exhaustive, it does summarize key terms and acronyms from this study.

This study addresses the economic burden created by lower levels of job satisfaction in employees. Specifically, as job satisfaction decreases in employees, the likelihood of an employee to turnover, decrease organizational citizenship behavior, decrease commitment to the organization, and other negative outcomes increases. This study addresses these issues within U.S. based organizations. When the cost of the turnover of an employee can be equivalent to one full year of pay and the hidden costs include finding and training replacements, lower efficiency, lost customers, and more (Goleman, 1998a), keeping employees satisfied becomes highly important to an organization’s bottom line. This importance only escalates when an employee is a highly placed executive, as the expense can escalate drastically into the millions of dollars (Goleman, 1998a).

The variables in this study include individual perceptions of EI and job satisfaction, individual perceptions of the EI of one’s leader, and a congruence factor that measure the similarity of individual perceptions of EI and perceptions of one’s leader’s EI. Testing hypotheses highlighted in Figure 1.1 should allow for new insight into the role of EI in shaping job satisfaction. The first set of hypotheses relate to how overall EI and the individual dimensions of EI relate to job satisfaction. The second set of hypotheses relates to the effects of...
leader EI and the similarity of EI between a leader and a follower. The results of the study could provide a new set of directions for organizations to invest in the proper EI training and hire the appropriately emotionally intelligent employees and leaders to drive positive work attitudes.

**Figure 1.1**

*Research model: Hypotheses for testing the effects of emotional intelligence on job satisfaction*

This chapter provides an introduction to this study by framing the business problem, describing the key constructs, and outlining hypotheses. It also provides a list of the key terms
and outlines major contributions this study hopes to make. The remainder of the dissertation follows the following form: Chapter 2 examines the literature review of the major constructs and ideas of this dissertation, Chapter 3 outlines the methodology to test the hypotheses, Chapter 4 analyzes the results of the testing, including statistical outputs, and Chapter 5 discusses the findings of the study and relates them to both academic and practical uses.
CHAPTER 2
LITERATURE REVIEW

2.1 Emotional Intelligence

With the emergence of an affective focus in the realm of organizational behavior, researchers turn their focus beyond cognitive skills, traits, and abilities and towards those parts of the brain that deal with emotion, feelings, and mood. Emotional intelligence (EI) represents one of those constructs enjoying a resurgence in interest in this new era of organizational study. This section explains where EI comes from, defines it, and walks through the controversies surrounding the construct. It is important to understand the differentiation between the different aspects of the mind, including conation, cognition, and affect, where the roots of emotional and intelligence study come from. It is also important to understand the different models scholars use to theorize about EI. With this background in hand, researchers may more easily sort out the debates surrounding construct validity and which model makes sense to use moving forward in this era of affective study.

2.1.1 Origins of EI

Emotional intelligence is a loaded moniker. As the name implies, EI is born of both emotion and intelligence. Yet, EI stands out as distinct progeny from both. The roots of “emotional intelligence” can be found in the early twentieth century. References within the scientific literature begin in the 1920s and continued into the 1930s and 1940s. Descriptions of a division of intelligences that include social intelligences (Thorndike, 1920) paved the way for
attempts to measure social intelligence, described as the “ability to understand and manage people” (Thorndike, 1937, p.275). Wechsler (1943) continues to explore non-cognitive intelligences, asking whether “affective and conative abilities are admissible as factors in general intelligence” (p.103). Interpretations of popular literature in the 1950s loosely describe EI as “equated with delicacy and integrity of feeling” and “intelligence” (Van Ghent, 1953, p.133). Leuner (1966) takes a step forward, attempting to look at the practical role of EI in psychotherapy. The 1980s provide a renaissance for EI as researchers begin to more fully investigate multiple intelligences (Gardner, 1983; Sternberg, 1985) first laid out in the 1970s (Gardner, 1975). These multiple intelligences include two components, interpersonal and intrapersonal intelligence, that provide a foundation for dimensions of future EI models (Gardner, 1983). This multiple intelligence research leads to researchers explicitly utilizing the term “emotional intelligence” (Payne, 1985) and “emotional quotient” (Beasley, 1987) as new thoughts on emotions, intelligence, one’s ability to feel, and how to develop EI come to the forefront.

Going a bit deeper, the evolution of EI research emerges from both the cognitive psychologists’ exploration of cognition and affect, as well as emotion-cognition interaction. Mayer (2000) describes this emergence as the need to understand “how emotion changed thought, and vice versa” (p.411). With this in mind, it is essential to better understand emotions, cognition, and cognitions’ constituent; intelligence.

Hilgard (1980) relates the 200 years plus history of the conation-affect-cognition “trilogy of the mind”. While the focus here is on affect and cognition, conation plays a necessary role in the full trilogy. Conation deals with motivation, will, or otherwise, conscious will (Mayer et al., 1997). Hilgard (1980) argues that without treating all three parts of the mind, one loses a
complete and balanced view. Without the motivations of life such as thirst and the need for human interaction, one loses track of the basic biological needs that drive parts of our psychological impulses. Without emotions, one loses track of the interrelationships of daily life. Without cognition, one fails to learn and solve the problems associated with motivation and emotion. Taking these last two in concert, the importance of emotions and intelligence becomes evident.

2.1.2 Emotions

What are emotions? Emotions are evaluations of what is important to one’s self (Oatley, 2004). These important pieces of ourselves can include our daily concerns, our goals in life, or what inspires us to succeed in life. Emotions are both internal and external. An emotion may involve the quiet contemplation of the day’s happenings or the red-faced reaction of anger to a perceived slight. Emotions cover a wide variety of responses and also include the longer-lasting emotional phenomenon we know as moods (Oatley, 2004). Instead of instantaneous reaction to the environmental stimulus, emotion persists over hours, days, and even weeks. Instead of being happy at the moment, we describe a person as cheerful. Instead of upset by a single bad report, we describe the long-term sadness of the individual at having lost a loved one. Each of these facets of emotion forms a coordinated balance of phycological change, behavior modification, experience appraisal, physiological preparation, and non-cognitive processes (Izard, 1993; Parrott, 2002). The complexity of emotion as both silent and vocal, visible and imperceptible, brief and lasting, creates the underlying necessity of emotions within the trilogy of the mind.

2.1.3 Intelligence

Evident in the understanding of emotions is the interplay of cognition, and further intelligence, with emotions. Cognition is the process of both perceiving and then thinking about
one’s self and the world around them (Spearman, 1927). Intelligence takes cognition into the
realm of abilities, with intelligence as an ability to reason, sort, and handle information (Carroll,
1993; Spearman, 1927). Defining intelligence can be a difficult task as expert definitions of
intelligence vary (Sternberg, 2000) and intelligence covers the domains of language, reasoning,
memory, learning, and idea creation, while also including visual and auditory perceptions
(Carroll, 1993). Intelligence also occurs at different levels. Sternberg et al. (1981) found three
levels of intelligence in verbal, practical, and problem-solving. These levels could also be
thought of as the ability to understand verbal information, to recognize words or perceive how
objects fit together, and to reason abstractly (Mayer et al., 2008). Distilling these levels and
definitions down into an approachable conception leads to a view of intelligence as the “ability
to adapt to the environment and the ability to learn” (Sternberg, 2000, p.8).

Going back to the emergence of EI within the cognition and affect literature, the original
view of emotions revolves around the biasing and disrupting effects of emotional thought
(Mayer, 2000). As the link between emotions and intelligence solidifies beyond this foundational
literature, the result is a distinct construct that stands separate from other mental processes
(Mayer et al., 2008). The emphasis of emotion's negative influence on moods changes into a
focus on the functional uses of emotion and cognition. Therefore, the combination of emotions
and intelligence allows the processing of human interactions at a higher level than emotion or
intelligence alone (Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). The result is an
emotional intelligence construct that emphasizes problem-solving in regards to one’s own
emotions, the emotions of others, and the utilization of this information to enhance thinking.
2.1.4 Original Model of EI

The earliest conversation of EI utilizes abilities as the foundation for defining a model. Salovey & Mayer (1990) provide the earliest definition of EI as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions” (p.189). In this, EI is a narrowly defined set of theoretical constructs relating to the ability to recognize and control emotion. Researchers take issue with this narrow definition and the joining of emotions and intelligence into a singular construct. In particular, Mayer and Salovey (1997) feel the need to expand this definition into a new model that describes EI as a collection of abilities related to perceiving, accessing, generating, understanding, regulating, and reflecting upon one’s emotions. This ability-based model groups EI aspects into four dimensions (Figure 2.1). These four dimensions each have a set of abilities that grow from one another, starting with basic tasks and becoming increasingly more difficult (Mayer et al., 2016). For example, as one identifies their own emotions, one might then evaluate how to reduce the intensity of their emotional response, and ultimately engage those emotions in a productive manner. Each of the dimensions has its own progression of emotional intelligence (Table 2.1).

Figure 2.1

Ability-based model of emotional intelligence
Mayer and Salovey (1997) describe the first dimension as the ability to appraise and express emotion. Put another way, a person is aware of their own emotions and the emotions of others. For example, one infers another person’s emotions from their thoughts (Mayer & Geher, 1996) or physical expressions. In this awareness, a person can express their own emotions and empathizes with the emotions of others.

The second dimension of EI deals with the use of emotions to reason and make decisions (Mayer & Salovey, 1997). This dimension of EI allows a view of emotion that relates back to the original discussions of cognition and affect. Emotion provides a tool that directs one’s focus, eases choice-making, enhances one’s cognitive processes, and promotes flexibility (Mayer & Salovey, 1997). These abilities deal with the use of inner emotional states to solve problems (Cohen & Andrade, 2004; Leung et al., 2014). A person utilizing this second dimension of EI harnesses emotions to better understand their environment, those around them, and themselves. This understanding allows the flexibility to both recognize and exploit emotions for a strategic purpose.

The third dimension of the ability-based model of EI deals with knowledge of emotions. Meaning, a person knows the causes and consequences of emotions and that these emotions change over time (Mayer & Salovey, 1997). An understanding of the causes of emotions allows a person to anticipate those emotions before they surface and forecast the repercussions (Mayer et al., 2016). An understanding of the consequences of emotions allows a person to take action to limit or enhance the effects of emotions. Finally, an understanding of the mercurial nature of emotions allow a person to prepare for these changes and further employ emotions for one’s own purposes.

The final dimension of EI deals with regulation, maintenance, repair, and improvement of
### Table 2.1

*Updated Mixed Four-Branch Model of Emotional Intelligence*

<table>
<thead>
<tr>
<th>Dimensions of EI</th>
<th>Description</th>
</tr>
</thead>
</table>
| Managing Emotions         | • Effectively manage other’s emotions to achieve a desired outcome  
                           | • Effectively manage one’s own emotions to achieve a desired outcome  
                           | • Evaluate strategies to maintain, reduce or intensify an emotional response  
                           | • Monitor emotional reactions to determine their reasonableness  
                           | • Engage with emotions if they are helpful; disengage if not  
                           | • Stay open to pleasant / unpleasant feelings, and to the information they convey |
| Understanding Emotions    | • Recognize cultural differences in the evaluation of emotions  
                           | • Understand how a person might feel in the future or under certain conditions  
                           | • Recognize likely transitions among emotions such as from anger to satisfaction  
                           | • Understand complex and mixed emotions  
                           | • Differentiate between moods and emotions  
                           | • Appraise the situations that are likely to elicit emotions  
                           | • Determine the antecedents, meanings, and consequences of emotions  
                           | • Label emotions and recognize relations among them |
| Facilitating Thought Using Emotion | • Select problems based on how one’s ongoing emotional state might facilitate cognition  
                           | • Leverage mood swings to generate different cognitive perspectives  
                           | • Prioritize thinking by directing attention according to present feeling  
                           | • Generate emotions as a means to relate to experiences of another person  
                           | • Generate emotions as an aid to judgment and memory |
| Perceiving Emotion        | • Identify deceptive or dishonest emotional expressions  
                           | • Discriminate accurate vs inaccurate emotional expressions  
                           | • Understand how emotions are displayed depending on context and culture  
                           | • Express emotions accurately when desired  
                           | • Perceive emotional content in the environment, visual arts, and music  
                           | • Perceive emotions in other people through their vocal cues, facial expression, language, and behavior  
                           | • Identify emotions in one’s own physical states, feelings, and thoughts |

*Note.* This table provides the characteristics of emotional intelligence as suggested by an update of emotional intelligence by Mayer et al. (2016).
one’s own mood, along with the management of others’ emotions (Mayer & Salovey, 1997). Self-management of emotions attempts to keep a person’s mood from swinging wildly from the highs of happiness to the lows of sadness. These swings occur naturally in humans, but identifying and dampening these ups and downs provides emotional stability. In those times where emotions run high, self-management allows a person to improve their mood before any detrimental effects take place. Further, this regulation of one’s own mood bleeds over into the ability to manage others’ emotions. With control of one’s self, a person provides a stable example to then begin a process to help others regulate and direct their emotions toward a greater good. Taken together, these four dimensions of ability-based EI help a person to tap into the affective aspects of the mind, while simultaneously enhancing their cognition.

2.1.5 Three Sides of EI

Several debates began soon after Salovey & Mayer (1990) laid out the first model of EI. With that said, the debate over ability or trait appears to have taken a turn and the consensus is that the debate should end and each of the literatures should develop independently (Petrides, 2011). However, it is important to understand the debates that occurred.

Before a deeper dive, a quick discussion of abilities versus traits is in order. Traits, or personality traits, characterize how people behave across varied situations and times (McCrae & John, 1992). The keyword is “characterize”, as traits are features of a person’s character. Also key to traits is their enduring nature, with consistency over years instead of days or months. In contrast, the abilities of an individual refer to a general mental skill for problem-solving, reasoning, planning, complex idea understanding, learning from experience, and abstract thinking (Gottfredson, 1997). Abilities can be further defined by a description of an individual’s successful performance of tasks across variations of task difficulty (Carroll, 1993). Unlike traits,
an ability is malleable. One’s abilities can improve, decline, or otherwise change on a day-to-day basis. The underlying characteristics of EI more correctly fit under the ability moniker. As a person appraises, expresses, utilizes, and manages their emotions, that person is perceiving, processing, and taking action in line with definitions of intelligence or cognitive abilities (Carroll, 1993; Spearman, 1927). Beyond this, while a certain level of EI may be inborn, everyone can learn and cultivate emotional abilities (Goleman et al., 2002). A growing population of organizations believe this to be true with EI services and consulting representing a multimillion-dollar industry (Grewal & Salovey, 2005) and an estimation that upwards of 75% of Fortune 500 companies utilize EI products and services (Bradberry & Greaves, 2009). With a greater understanding of traits and abilities, a discussion of the three EI models and the debates surrounding them follows.

2.1.5.1 Mixed Model of EI

The first of these debates grow out of cynicism surrounding conceptions of EI. While Salovey & Mayer (1990) conceived of EI as ability-based, soon afterward Goleman (1995) popularized a competency-based mixed method model of EI into the scholarly and practical literature. Goleman (1995) consolidates abilities related to personality traits, motivational factors, and emotions into a mixed model that goes beyond the purely ability-based model.

The mixed model creates a matrix of personal competence and social competence from the perspective of awareness and management (Goleman et al., 2002) (Figure 2.2). Each of these four EI domains includes a set of capabilities. Personal competencies provide the first two domains of EI and determine how each person manages themselves. Self-awareness provides the first of these personal competencies and centers on reading one’s emotions, recognizing the impact of one’s emotions, accurately assessing one’s strengths and weaknesses, and having
confidence in one’s self and skills (Goleman et al., 2002). Similar to Mayer and Salovey (1997), the mixed model of EI focuses on one’s ability to appraise emotion. In reading personal emotions, a person understands where their emotions come from, what incites these emotions, and puts one in a better position to react to emotions. A better position also comes from recognizing how personal emotions affect the people around us. In recognizing, a person positions themselves to see the impact of their emotions and modify those emotions depending on the setting. As one assesses their strengths and weaknesses, that person may more thoughtfully contemplate the emotions that need work or that need to be reinforced. This contemplation and the self-improvement that results leads to a new confidence in one’s
emotional abilities, creating a tool to continue to improve one’s self-awareness. Without the ability to distinguish personal emotions, a person will fail to manage emotions properly and will find themselves less able to appreciate the emotions of others’ (Goleman et al., 2002). Therefore, self-awareness sets a foundation for overall EI and enhances one’s abilities in the other three domains.

The first of these other three domains is self-management. Self-management capabilities include emotional self-control, a transparency that displays honesty, integrity, and trustworthiness, flexibility in adapting to fluid situations and obstacles, a drive to achieve, an initiative to act and seize opportunities, and optimism about life (Goleman et al., 2002). Once again, we find a connection between this mixed model and the ability-based model in that there is a management of emotions component. A person needs to be able to control themselves by adjusting their moods and emotions as the situation requires and they need to be able to do this while exuding an upbeat confidence in themselves and the world around them. In doing so, they set themselves up for success with the mixed model’s social competencies.

Social competencies form the final two domains of EI that portray how one manages relationships. Social awareness utilizes empathy, awareness of group currents, decisions, and politics, and service of the personal needs around us (Goleman et al., 2002). With empathy as the preeminent ability on this list, social awareness allows a person to “feel the room” and act accordingly to calm fears, settle quarrels, and build enthusiasm. Here we find more similarities to the ability-based model, in that knowledge of emotions allows one to empathize and expression of emotion allows one to support the room through relationship management.

Relationship management focuses on inspiring, guiding, and motivating others, influencing and persuading, developing the abilities of others, catalyzing change, managing
conflict, building and maintaining relationships, and building teams through cooperation and collaboration (Goleman et al., 2002). All of this sound familiar once more. A person can utilize emotions to enhance processes through the assessment and expression of emotion.

### 2.1.5.2 Trait-Based EI

Soon after the mixed model, Bar-On (1997) and Petrides and Furnham (2001) introduce a trait focused conception of emotional intelligence. Barchard and Russell (2004) describe trait EI as “a cluster of personality characteristics or non-cognitive abilities related to life success”, while Bar-On (1997) defines this trait model of EI as “an array of noncognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p.14). These definitions highlight EI as an “umbrella term” for a range of constructs sharing a connection in their lack of connection with cognitive intelligence (Joseph & Newman, 2010, p.55). The trait EI model shares many similarities with the ability (Mayer & Salovey, 1997) and mixed models (Goleman, 1995) in that it includes personality traits such as assertiveness and empathy, social intelligence, personal intelligence, and abilities (Petrides & Furnham, 2001; Bar-On, 2001).

The primary dimensions of trait EI include intrapersonal, interpersonal, adaptability, stress management, and general mood, with each dimension encompassing a series of traits (Petrides & Furnham, 2001). Similar to the other models, trait EI also includes the facets of emotion awareness, emotion expression, managing others’ emotions, and self-regulating one’s own emotions under the intrapersonal and interpersonal dimensions (Petrides & Furnham, 2001). Unlike the other models, Petrides and Furnham (2001) include personal characteristics such as problem-solving and flexibility (e.g., adaptability), stress tolerance and impulse control (e.g., stress management), and happiness and optimism (e.g., general mood). These five “facilitators of
emotionally and socially intelligent behavior” provide additional support for one’s ability to manage the demands of both personal and social life (Bar-On, 2001, p. 87; Bar-On et al., 2003). These additional dimensions of the trait conception of EI take the model away from EI’s earliest conception and therefore increase the schism in the debate.

2.1.5.3 A Path Forward for EI

Despite the debate on the different models of emotional intelligence, the cynicism surrounding the three competing models seems potentially unnecessary. The debate continued because of the inability of the trait and mixed models to differentiate between traits and abilities, along with their inability to differentiate from personality. This is why Petrides and Furnham (2001) posit a distinct conceptual difference between trait-based and ability-based EI constructs and why researchers find support for these predictions (Brannick et al., 2009; Miao et al., 2017a; O’Connor and Little, 2003; Petrides & Furnham, 2000, 2001; Saklofske et al., 2003). Business researchers predominately choose to follow the ability-based model of EI as it has seen greater refinement, acceptance by researchers, and been a basis for most EI scales (Côté, Lopes, Salovey, & Miners, 2010; Spector & Johnson, 2006). The ability-based conception of EI also provides stronger construct validity, as discussed in the outline of the EI controversy below. There appears to be a place for the mixed or trait-based models of EI within the world of training and in academic research depending on the goals of the training or study. But it is necessary to make a distinction between these two alternative models and the ability-based model in order to help organize and develop the two streams of literature appropriately (Petrides, 2011).

2.1.6 EI Controversy

The secondary topics of debate in regards to EI include a controversy that surrounds the question of EI’s validity (Antonakis, 2004; Antonakis et al., 2009; Landy, 2005; Roberts et al.,
As just seen in the three sides of EI, the debate starts with an inability for complete agreement on conceptions of the construct. The debate also grows out of disagreements about the measure of EI (e.g., self-report vs. performance-based). These extensions of the debate stem from the inability of current research to distinguish EI from personality and cognitive intelligence, along with the inability to find unique predictions in empirical studies.

The debate starts with how researchers measure EI. Researchers utilize a wide array of EI scales based on both ability and trait-based measures. These measures include the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 2002), Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002), Swinburne University Emotional Intelligence Test (SUEIT; Palmer & Stough, 2001), Bar-On Emotional Intelligence Quotient Inventory (EQ-i; Bar-On, 1997), Trait Emotional Intelligence (TEIQue; Petrides & Furham, 2003), Schutte Emotional Intelligence Scale (SEIS; Schutte et al., 1998), the Emotional Intelligence Appraisal (EIA), among others. Each of these measures creates a variation on how best to tease out EI. These tactics for teasing out EI include the overarching ability versus trait-based argument, but also include variations such as who should provide the measurement (e.g., self-report, performance-based, 360° report) and whether all factors of the EI models should be contained within the scale. For the purposes of this paper, the conversation surrounding scale selection finds a better home in the methodology of this study. Therefore, a detailed examination of the theoretical framework and the validity of the EI construct follows.

Antonakis (2004) relates the hurdles the EI theoretical framework needs to be able to jump over (e.g., construct, criterion, discriminant, convergent, and incremental validity). According to one side of the debate, some of these hurdles are not met and that EI especially does not provide useful correlation controlling for cognitive abilities and personality (Antonakis,
As evidence of these claims, Schulte et al. (2004) find a multiple correlation of .81 between the MSCEIT measurement of ability-based EI and measurements of IQ, the Big Five personality traits, and gender. Summing up these results and the overall argument against EI as a separate construct, Antonakis et al. (2009) and Antonakis (2004) provide arguments and evidence that the EI construct cannot provide construct, convergent, and discriminant validity. These arguments find mixed support from a myriad of other sources (Davies et al., 1998; Matthews et al., 2002; MacCann et al., 2003; Zeidner et al., 2001; Zeidner et al., 2004).

2.1.6.1 EI Convergent Validity

In regards to convergent validity, an underlying difficulty exists in examining the convergent validity of EI. With a disparate collection of validated EI scales, claiming to measure a range of abilities and traits and measuring with a range of ability, self-report, cross-report, and performance-based items, researchers find a tall order relating different incarnations of EI. Matthews et al. (2002) and Conte & Dean (2006) raise questions about whether different EI measures actually measure the same construct and cite reports of MSCEIT and EQ-i correlations of .36 (Mayer et al., 2000) and .21 (Brackett & Mayer, 2003) as evidence. Van Rooy et al. (2005) also found a limited correlation between self-report and ability EI measures, leading the researcher to posit that each measure taps into different constructs. Despite these findings, several studies have found evidence of convergent validity (Bar-On, 1997; MacCann et al., 2003; O’Conner & Little, 2003; Mayer et al., 2002; Wong & Law, 2002). MacCann et al. (2003) find convergent and predictive validity through small to moderate correlation with emotion-related constructs. Further, O’Connor & Little (2003) found correlations between the EQ-i, a self-reported measure of the mixed model of EI, and MSCEIT, an ability measure of the ability-based model of EI. In the study, total scores for both measures correlate with one another (r = .34; P <
.01) and scales scores of the EQ-i significantly relate to the MSCEIT total score (O'Connor & Little, 2003). While consensus within the academic literature may never be found, researchers move forward with self-assurance in the convergent validity of the EI measures and knowing that each conception of EI serves its specific research purpose.

2.1.6.2 EI Discriminant Validity

The larger debate in regards to EI construct validity relates to discriminant validity. Researchers disagree as to whether EI relates to concepts that it is not supposed to. The testing of discriminant validity by Bracket and Meyer (2003) provides a succinct example of the issues. Brackett and Meyer (2003) test three EI measures for discriminant validity from both personality and cognitive abilities. In regards to the Big Five personality traits and MSCEIT, the most discrete among EI measures, agreeableness, and openness to experience contribute significantly to the model and no significant contribution is seen from cognitive abilities (e.g., verbal SAT). SREIT shows prediction with the Big Five’s extraversion, openness to experience, and agreeableness (R = .52), while EQ-i shows variance with all of the Big Five personality factors (R = .74) (Brackett & Meyer, 2003). These results highlight a common theme across studies of EI discriminant validity in that ability measures of EI tend to relate most with cognitive measures of ability and intelligence, while trait and mixed measures of EI heavily relate measure of personality.

2.1.6.3 Intelligence and EI

In regards to cognitive abilities specifically, Locke (2005) takes the stance that the classification of EI as an intelligence bastardizes the term as the monitoring one’s emotions does not require intelligence but, instead, that people deal with emotions by learning new skills and that one’s knowledge of emotions is not intelligence but rationality, focus, or integrity. An
examination of Gardner’s (1983) definition of personal or interpersonal intelligences and its focus on affective information provides evidence for much of the confusion seen in separating EI from traditional conceptualizations of intelligence.

A simple model helps to shed some light on the conceptualizations of EI and intelligence. The model utilizes job performance as a way of explaining the overlap between the two constructs. Campbell (1990) provides a model of job performance, a common organizational research outcome that delineates three major performance factors. These factors include declarative knowledge (i.e., knowledge of facts, principles and task understanding), procedural knowledge (i.e., cognitive skills, physical skills, self-management skills, interpersonal skills), and motivation (i.e., choice to perform, level of effort, persistence) (Campbell, 1990). Looking at these job performance factors in relation to Hilgard’s (1980) trilogy of the mind (e.g., cognition, affect, conation), the separation between EI and cognitive abilities becomes more apparent (Figure 2.3). Mental abilities share apparent overlap with cognition, declarative knowledge, and procedural knowledge. However, EI also relates to procedural knowledge with ties to both self-management and interpersonal skills. Emotional intelligence also relates distinctly to affect, conation, and the motivation component of job performance. This illustration highlights the idea that even jobs that require higher levels of cognitive intelligence (e.g., engineering, R&D) still require aspects of EI dealing with motivation and procedural skills (Law et al., 2008). At the same time, the two stand as separate intelligences covering different divisions of the mind.

As discussed, and illustrated above, EI potentially correlates with cognitive forms of intelligence, but investigations of the topic vary. Van Rooy et al. (2005), using a meta-analytical method, calculate an estimated true score correlation between ability models of EI and cognitive ability of .34. This result is in line with Mayer et al. (2008) findings that MSCEIT and MEIS
The relationship between EI, cognitive abilities, the trilogy of the mind, and job performance factors (adapted from Law et al., 2008).

Scales relate to verbal intelligence and verbal SAT ($r = .36$), with correlation to other cognitive intelligence lower ($r = .10$ to .20). MSCEIT also shows an average of $r = .38$ across seven studies looking at its relationship to verbal and crystallized intelligence measures (Roberts, Schulze, & MacCann, 2008). Finally, O’Connor & Little (2003) utilize a construct validity examination of MSCEIT to show a high correlation with indices of cognitive ability (ACT) and three of the MSCEIT scale scores ($r = .28$ to .51).
In contrast, Van der Zee et al. (2002) find little to no multiple correlation between academic intelligence (General Aptitude Test-Battery; GATB) and EI factors of empathy (.30), autonomy (NS), and emotional control (.24). Further, Roberts et al. (2001) look at self-report ability-based measures of EI and their correlation with intelligence (Armed Services Vocational Aptitude Battery; ASVAB) and find equivocal results. Wong & Law (2002) find minimal correlations between the dimensions of EI and estimates of IQ. In fact, results show that two of the four dimensions correlate negatively and significantly with Eysenck’s (1990) measure of IQ, which might indicate that higher levels of cognitive intelligence actually inhibit one’s ability to recognize emotions in others.

Overall, research evidence suggests that ability-based measures of EI include portions of cognitive abilities (Mayer et al. 2008), but EI is ultimately independent of intelligence (Davies et al., 1998; Miao et al., 2017a). As seen, consensus may be unreachable, but Mayer and Salovey’s (1993) original contention that the skills and abilities of EI exist outside of the domain of other types of intelligence appears to be satisfactorily investigated at this point.

2.1.6.4 Personality and EI

Disparate evidence argues both sides of EI correlating with personality. The originators of the first EI model predicted that EI would have a low, yet significant, relationship with the personality trait of Openness (Mayer & Salovey, 1993). Davies et al. (1998) also theorize that regulation of emotion relates to the stability of the emotional-neuroticism connection. Researchers support these predictions in general as they find that self-report measures of EI correlate and confound themselves with personality traits (Ciarrochi et al., 2000; Ciarrochi, et al., 2001; Joseph & Newman, 2010; MacCann et al., 2004). A meta-analytic study of the general factor of personality (GFP), as extracted from the Big Five personality dimensions, show a large
overlap between GFP and trait EI (r = .85) and moderate correlation with ability EI (r = .28) (van der Linden et al., 2016). Other studies show that while Openness does correlate to EI (r = .17 to .18), but larger effects are shown with Agreeableness (r = .21 to .28) (Mayer et al., 2008).

Further, Petrides and Furnham (2001) find a modest between trait EI and the Big Five personality constructs, with correlations for trait EI factors of -.29 (neuroticism), .30 (extraversion), .35 (conscientiousness), .13 (openness to experience), and -.01 (agreeableness).

Van der Zee et al. (2002) found similarly modest multiple correlations between the Big Five dimension of personality and the EI aspects of empathy (.53), autonomy (.77), and emotional control (.70). With these findings, Van der Zee et al. (2002) still go out of their way to state that “it seems not warranted to infer from the present data that emotional intelligence is nothing more than the Big Five in disguise” (p.120). This statement represents a larger body of evidence that EI can be distinguished from personality.

A series of studies provide this evidence that EI can be distinguished from personality constructs (Day & Carroll, 2004; MacCann et al., 2003; O’Connor & Little, 2003; Roberts et al., 2001; Van Rooy & Viswesvaran, 2004; Wong & Law, 2002). For example, O’Connor and Little (2003) examined ability-based EI in relation to personality dimensions and found that it correlated minimally, with the MSCEIT total score only correlating with the dimension of Anxiety (r = .240; P < .05). Day and Carroll (2004) find similar results of low or nonsignificant correlations between ability EI and personality scales. Only Openness to Experience significantly relates to all four MSCEIT scales with rs ranging between .13 and .23 (Day & Carroll, 2004).

Joseph and Newman (2010) continue to confirm these findings with Big Five correlations with EI and Neuroticism (r = -.17), Openness (r = .18), Extraversion and Conscientiousness (r = .12 to .15, and Agreeableness (r = .25). As with intelligence, the empirical results distinguishing EI
from personality vary in the types of scales utilized to examine EI (e.g., ability, trait, mixed) and the results found. Despite this variation, the results offer confidence that EI can move forward without fear of confounding. This statement is especially true if researchers take the time to select appropriate scales of EI for their research goals.

Ultimately, Salovey and Mayer’s (1990) original model of emotional intelligence has stood the test of time. Both intelligence and personality constructs appear to be independent of ability EI, with minimal or non-significant correlation (MacCann et al., 2003). These findings wrap up the discussion of the theoretical basis for, the three faces of, and the debates surrounding EI. Mayer & Salovey (1993) sum up this discussion nicely when they state that:

We did not use the term intelligence to create a controversy, but because we really are talking about a mental aptitude--one that assists in intellectual processing. We are not talking about reaching a criterion, as would be implied by a competence conception. Nor are we talking about an ability divorced from intellect, but rather enhanced processing of certain types of information: in short, emotional intelligence. (p. 439)

EI is not divorced from intelligence, personality, cognition, and emotions. Instead, EI represents a new conception of intellect and mental ability that utilizes emotion to develop the complex world around us.

2.2 Job Satisfaction

Job satisfaction represents one of the most studied constructs in organizational behavior. Starting with Hoppock’s (1935) foundational work Job Satisfaction and Management and the Worker (Roethlisberger & Dickson, 1939), interest in the topic increases rapidly as researchers begin to understand the importance of the construct and how it can be practically applied to organizations. To demonstrate how important job satisfaction becomes to job attitude research, a
search in PsycINFO for a group of some of the most popular job attitude constructs (e.g., job satisfaction, organizational commitment, job involvement, work satisfaction) shows the dominating spot that job satisfaction has held and currently holds in the literature (Figure 2.4). Starting in the 1930s, job satisfaction represents at least 70% of the research stream and elevates to over 90% as the popularity of work performance topics wanes throughout the 1940s and 1950s. Job satisfaction now holds a steady 75% to 80% involvement in job attitude research and has done so since the 1980s.
2.2.1 Definition and Origins of Job Satisfaction

Hoppock (1935) provides an early definition of job satisfaction as a combination of psychological, physiological, and environmental conditions that cause a person to feel satisfied with their job. Over the history of the job satisfaction construct, this early definition changes with the changes in job attitude perspectives. The core of the job satisfaction definition revolves around one’s judgment about their job, whether negative or positive (Weiss, 2002). This judgment may relate to a single expression of satisfaction with the job as a whole (Brayfield & Rothe, 1951) or it may relate to feelings about specific facets of one’s job (e.g., work tasks, pay, promotions, leader, coworkers) (Judge et al., 2017; Smith et al., 1969). It is important to distinguish the two because, while conceptually and empirically related, these two different perspectives on job satisfaction remain distinct from one another (Ironson et al., 1989). Ultimately, and within these two conceptions, job satisfaction refers to an emotional affective response to one’s role in the workplace (Locke, 1976; Smith et al., 1969; Vroom, 1964). As discussed below, this definition evolves to represent not just a single overarching feeling, but a collection of emotionally driven feelings about the job (Spector, 1985) that constantly fluctuate (Miner et al., 2005; Weiss & Cropanzano, 1996).

2.2.1.1 Job Satisfaction’s Early History

Before Hoppock’s monograms on job satisfaction in the 1930s and before he started contemplating intelligences, Thorndike (1917) contemplates how monotony in the workplace can limit the “satisfyingness” of a task. These thoughts resurface in the late 1920s and into the 1930s as researchers deal with the effects of the Great Depression, leading to a stream of research exploring affect, attitudes, and personality (Judge et al., 2017). During this time, Hoppock (1935) focuses on survey methods, satisfaction, and dissatisfaction in regard to the impacts of
satisfaction on society. Several other works take a closer look at job satisfaction as it is seen today, as they lay a basis for future questionnaires, statistical techniques, ideas about job attitudes, and job satisfaction specifically (Kolstad, 1938; Kornhauser & Sharpe, 1932; Super, 1939). As job satisfaction moves into the 1950s, two ideas influence the path forward. First, job satisfaction is conceptualized as a singular construct (Brayfield & Rothe, 1951; Kunin, 1955). Second, Herzberg et al. (1959) state that different factors cause positive and negative job attitudes. These two ideas and the other foundational works of job satisfaction lead to a more cohesive body of research within the Cognitive Era of the late 1960s and 1970s.

2.2.1.2 Job Satisfaction’s Cognitive Era

The Cognitive Era focuses on attitude objects and the judgments, whether positive or negative, that one has toward those attitude objects. Several subjects start to solidify the job satisfaction construct in this era, including how contextual and demographic factors play a role in job attitudes, the role of job satisfaction facets in overall job satisfaction, and the introduction of theories. Researchers begin to examine the direct and moderation effects of factors such as age (Blood, 1969; Glenn et al., 1977), race (O’Reilly & Roberts, 1973; Weaver, 1978), gender (Blood, 1969; Glenn et al., 1977; Sauser & York, 1978), organizational structure (Porter & Lawler, 1965), and organizational climate (Schneider & Snyder, 1975).

Researchers also start to examine the multiple facets of singular job attitude constructs. Smith et al. (1969) suggest that cognitive processes of comparison allow one to examine individual aspects of a job and compare those aspects to a personal frame of reference of what that job aspect should truly be. Further, Locke (1976) lays out a three-pronged approach to judging one’s job that looks at a similar comparison process, in addition to individuals assessing how jobs fulfill their needs or how jobs meet one’s desires, wants, and value needs. These multi-
faceted models utilize different examination methods. Where-as Mobley and Locke (1970) utilize a simple summation of facets to calculate an overall attitude score, Locke (1969) proposes a hierarchy of facet importance and the use of this hierarchy to create a multiplicative score of job satisfaction. Wanous and Lawler (1972) examine the different summation and multiplication models of job satisfaction. While Wanous and Lawler (1972) find no best way forward, the investigation of these models suggests that job satisfaction represents multiple feelings of satisfaction with one’s job that lead to overall job satisfaction (Spector, 1985).

Arguably, the most important result of the Cognitive Era’s research comes from the introduction of organized theories of job satisfaction. Researchers introduce the value-percept theory (Locke, 1969), expectancy theory (Mitchell, 1974), opponent process theory (Landy, 1978) and the Cornell model of job satisfaction (Smith et al., 1969). Each utilizes the “calculative perspective” to link the “quantifiable features of a job with more positive attitudes in mathematical representations” (Judge et al., 2017, p.360). Hackman and Lawler (1971) and Hackman and Oldham (1976) champion a secondary perspective on job satisfaction, the job characteristics model, that looks at the tasks that make up a job (e.g., intrinsic job satisfaction). These theories begin the concerted effort to bring order to the job satisfaction construct and lead to a new era of job satisfaction research focused on its behavioral components.

2.2.1.3 Job Satisfaction’s Behavioral Era

Instead of a focus on beliefs, this new era takes a fresh look by attempting to better understand the behavioral outcomes of the cognitive and affective components of job satisfaction. The change makes for a more practical view of job satisfaction. Research turns to real-world managerial problems such as the link between job satisfaction and turnover (Mobley, 1977). This practical view also leads to a discussion of performance. The long-standing
discussion of job satisfaction’s link to job performance begins in earnest with Iaffaldano and Muchinsky’s (1985) meta-analysis that shows a weak correlation, thereby ingraining the prevalent idea of job satisfactions inability to influence performance (Judge et al., 2017). The discussions of the behavioral outcomes allow managers to see the benefits of focusing on job satisfaction beyond it being the “right thing to do”. Job satisfaction research takes another step forward in the dispositional era as an examination of behaviors leads to a deeper examination of the disposition, or personality, of individuals.

2.2.1.4 Job Satisfaction’s Dispositional Era

As the 1980s end and the 1990s begin, researchers revive the old idea that individual dispositions affect job satisfaction. With new trait-based models of personality in hand, researchers usher in a new era of job attitudes research that explores job satisfaction stability (Staw & Ross, 1985), affective tendencies (Staw et al., 1986), commitment (Hom et al., 1992; Williams & Hazer, 1986), and core self-evaluations (Judge et al., 2000; Judge et al., 1997; Judge, et al., 1998). Core self-evaluation research provides a good example of the change in focus for job satisfaction research. Core self-evaluation is a stable personality trait within one’s subconsciousness that revolves around self-esteem, general self-efficacy, locus of control, and neuroticism (Judge et al., 1998). Judge et al. (1998) argue that core self-evaluations govern an individual’s disposition towards job satisfaction. The evaluation of a mix of individual traits and personality dimensions provides a new window into job satisfaction. Each of these eras of job satisfaction research builds to create the research seen today. While each of these perspectives still finds a role in job satisfaction research, a resurgence of affective views on job satisfaction allows for new insight.
2.2.2 Affect and Job Satisfaction

Job attitude has long included affect as part of its definition (Hersey, 1932). Through each of the eras of attitude research, affect and emotions play a part in the research of individual attitudes toward work (Cranny et al., 1992; Locke, 1969; Mowday et al., 1982; Williams & Alliger, 1994). Despite the inability for researchers to ignore affect, cognitive evaluation of job satisfaction dominates its measure. Organ and Near (1985) question the appropriateness of measuring affect solely through one’s cognitive response. This concern and the introduction of affective events theory (Weiss & Cropanzano, 1996) invite new concepts into job satisfaction research.

These new concepts have some researchers seeing satisfaction as a multi-dimensional construct made up of both cognitive and affective aspects (Brief, 1998; Judge & Ilies, 2004), while others see satisfaction as purely a judgment from affective states (Weiss, 2002; Weiss & Cropanzano, 1996). In both perspectives, researchers understand and emphasize the importance of within-person variability. Emotions, feelings, and moods fluctuate. In turn, job satisfaction, as measured through events and behaviors, fluctuates within a person (Miner et al., 2005; Weiss et al., 1999). The newly found emphasis on affect brings job satisfaction into an Affective Era of research. It is in this new Affective Era that emotion and attitude theory come together to allow for a novel investigation of one of organizational behavior’s most studied constructs.

2.3 Theoretical Options for EI and Job Satisfaction

The theoretical basis for job satisfaction models varies widely depending on the focus of the study. Many job satisfaction models start with explanations of human motivation. Maslow’s (1943) hierarchy of needs theory, the two-factor theory (Herzberg et al., 1959), and the job characteristics model (Hackman & Oldham, 1975) provide a link from job satisfaction to
financial compensation, healthcare, recognition, job insecurity, and intrinsic factors such as autonomy or task significance. These motivation models could allow a connection between EI and job satisfaction. For example, Maslow’s (1943) safety, belonging, and esteem, along with the motivator and hygiene factors of the two-factor theory, may be altered by mood and emotion-based attitudes. Further, one might also utilize theories of learning or personal development to connect emotions and job satisfaction. Social cognitive theory (Bandura, 1997) and emotional intelligence theory (Salovey & Mayer, 1990) connect learning through observation and self-reflection to one’s emotions and emotional influence. These perspectives might be useful on an individual basis.

However, the theoretical basis for investigation changes when the focus of the study moves from within-person to leader-follower interactions. One might utilize leader-member exchange theory which has shown that the interaction between supervisor and subordinate relate to subordinate satisfaction (Graen et al., 1982; Graen et al., 1973; Scandura & Graen, 1984). Focusing more on the affectional components of the exchange, one might look at the role of affect climate (Joseph de Rivera, 1992) and how leaders contribute to developing the mood of an organization and their followers (Parke & Seo, 2017). One could also use the affect theory of social exchange (Lawler, 2001) to help theorize how and when the emotions produced by a social exchange create stronger or weaker ties between a leader and follower. The same could be said for van Kleef’s (2008) emotions as social information theory which looks at the changes in emotional states due to an exchange between dyads.

While each of these theories delivers an avenue for investigating the EI-job satisfaction relationship and the effects of the leader-follower dynamic, the current study focuses on the affective events theory (AET; Weiss & Cropanzano, 1996), emotional contagion theory (ECT;
Hatfield et al., 1992), and the multilevel model of emotion and leadership (Ashkanasy, 2003; Ashkanasy & Humphrey, 2011a, 2011b). Weiss and Cropanzano’s (1996) AET provides a foundation to build the entire study on as it helps to explain how positive and negative affectivity explain job satisfaction. Building from this foundation, the study uses ECT to explain how emotions move between leaders and followers. The multilevel model of emotion and leadership unifies AET and ECT by helping one understand how leaders impact follower emotions and consequently their job satisfaction.

2.4 Affective Events Theory

Distilling down to its simplest explanation, AET explains how emotions, both positive and negative, lead to work attitudes (Weiss & Cropanzano, 1996). In order to fully appreciate the theory, it is necessary to start with a big picture view and come back to this simple understanding. The original goal of AET was to provide a theoretical position on affective reactions (Weiss & Cropanzano, 1996). The hope was to explain a structure of emotional reactions and the causes and consequences of these reactions. This goal of explanation came out of a need to fully clarify definitions of job satisfaction and why operationalizations of the construct do not include measurements of emotional reaction (Weiss & Cropanzano, 1996). Definitions that portray job satisfaction as “an affective (that is, emotional) reaction to a job” and at the same time include references to causes of these reactions that result “from the incumbent’s comparison of actual outcomes with those that are desired” create confusion (Cranny, Smith, & Stone, 1992, p.1). Measurements of job satisfaction focus on whether an individual has a positive or negative judgment of their job instead of affective or emotional reaction (Bacharach et al., 1991; Ironson et al., 1989; Pond & Geyer, 1991; Spector, 1985). Weiss & Cropanzano (1996) attempt to clarify the connection between affect and satisfaction by clearly distinguishing cause
and effect. This clarification results in a view of satisfaction as a judgment of one’s job that results from both emotional experiences at work and personal belief structures about one’s job. A clarification of job satisfaction as both affective and belief-based is consistent with how one forms attitudes (Breckler & Wiggins, 1989) but stands in contrast to other traditional theories of job satisfaction.

Theoretical positions on job satisfaction revolve around three general approaches (e.g., cognitive judgment, social influence, dispositional). As evidenced by measurement scales and the proliferation of judgment-based theory, the cognitive judgment approach dominates the job satisfaction conversation (Greenberg, 1982; Ilgen, 1971; Lawler, 1973; Locke, 1976; Mitchell, 1974; Porter, 1962). Each of the cognitive judgment approach theories follows a general structure where an individual perceives the environment, compares those perceptions to a personal set of standards, and this matching procedure leads to job satisfaction attitudes (Figure 2.5). The social influences approach complements the cognitive judgment approach by adding the social environment as a direct and indirect influence on work attitudes. As Figure 2.5 shows, social information has a direct influence on job satisfaction (Adler et al., 1985) and an indirect effect on perceptions and standards (Weiss, 1977; Weiss & Shaw, 1979). These two approaches do stand in contrast to the dispositional approach, which focuses on the idea that one’s job satisfaction relates to a general inclination to feel good or bad about life, irrespective of job characteristics (Judge, 1992; Straw & Ross, 1985; Weitz, 1952). In this third approach, feelings and moods enter into theories of job satisfaction. In digesting the long history and multiple approaches of job satisfaction theory, AET attempts to take a divergent view of job satisfaction that includes affective experiences as a counterbalance to judgment processes.
Contrasting AET with traditional models of job satisfaction highlights this departure. This contrast also stresses the benefits of utilizing the theory in relation to emotions. First, affective reactions take the place of judgment as the central focus of the model (Figure 2.6).

One’s emotions and moods, both positive and negative, represent a conduit through which work events affect work attitudes. With events as the primary cause of work attitudes and behaviors through affective mediation, the meaning of an event is important. Events simply mean something that occurs in a certain place during a certain timeframe and implies that a change in circumstance or experience occurs (Weiss & Cropanzano, 1996). These changes can generate emotional reaction or mood change, which is the principal focus of AET. As highlighted by the original goals of AET, the theory must help answer the question of what changes create significant affective reactions?

Cognitive-oriented emotion researchers advocate a two-stage process of appraisal that helps answer this question (Lazarus, 1991a, 1991b; Ortony et al., 1988; Roseman, 1984; Smith &
Ellsworth, 1987; Stein et al., 1993). In the first stage of this process, an individual evaluates the event for the positive or negative effects on personal well-being and sets the initial inclination for the intensity of the emotional reaction (Frijda, 1993; Lazarus, 1991a). In the second stage, an individual specifically focuses on the consequences, causes, and coping strategies (e.g., problem-focuses, emotion-focused) (Lazarus, 1991a; Smith & Ellsworth, 1985). Theorists suggest that this secondary appraisal leads to core emotions like rage, fear, and joy (Lazarus, 1991b; Smith & Ellsworth, 1987), or otherwise, significant affective reactions.

Theoretical discussions of mood change do not find the same coverage in the literature as emotions, but Morris (1989) lays out four sources of experienced mood change. In line with the previous discussion of emotion, moods may result from positive or negative events. These events may cause a change in mood through emotional reactions. These events may also alter one’s mood through the recollection of these emotional events. Finally, controlling one’s emotional
response to an event may result in an alteration of mood. In each of these four cases, individuals react to changes with affect.

The affective events theory further contrasts with traditional models of job satisfaction in that it modifies the relationship of the work environment by mediating the effects with work events, while simultaneously short-circuiting the effects of the workplace environment on work attitudes. By making the work environment a secondary influence on affective reactions and forcing it to work through work events, AET focuses more on the mercurial nature of work events than the stable features of the environment. A variety of these stable features, including weather, air pollution, and noise, can change individual affect and, in particular, mood states (Bell et al., 1978). But it is the events that the environment create that provide the primary focus of AET. The theory simultaneously recognizes the work environment by accepting the environments’ direct effects on attitudes.

In addition to the environment, AET recognizes the influence of individual dispositions on affective reactions. Despite evidence that affective dispositions directly relate to job satisfaction (Cropanzano et al., 1993; Czajka, 1990), Weiss & Cropanzano (1996) suggest that this interaction might be more complicated than it seems by arguing that affective traits act as hidden predispositions that “set the stage for individuals to have more or less intense bouts of emotion” (p.37). Basically, no matter how strong an individual’s negative affectivity may be, there must be a negative event take place in order for these underlying traits to modify that individual’s job satisfaction attitude.

Finally, AET adds time to the understanding of job satisfaction. As a note, this is in line with deemphasizing the influence of the stable work environment by emphasizing instead the idea that mood and emotion fluctuate over time (Frijda, 1993). These fluctuations in affective
reactions directly influence job satisfaction and behaviors at work as one’s emotions ebb and flow over time. An example from Weiss & Cropanzano (1996) provides a synopsis of these fluctuations and helps tie together each of the AET facets described above:

Imagine a worker who hears about the possibility of a large scale layoff in his organization. This event, being of relevance to his well being, is likely to elicit an emotional reaction. Because it has negative implications it will elicit a negative reaction and because it involves the anticipation of future harm that negative reaction is likely to be fear or anxiety. This layoff possibility, in turn, instigates a series of subevents, many caused by the coping mechanisms of the worker himself, each of which can have some emotional significance. For example, the worker may talk to his supervisor who tries to reassure him of his worth to the company and these reassurances produce a positive affective state. The worker may talk to other workers who relate tales of downsizing or outplacement, each with emotional implications. During the "episode" the worker will experience wide swings of affect in both positive and negative directions. He will also engage in coping processes which can divert resources away from job activities and consequently reduce job performance. (p.42)

As this example shows, AET proposes that organizational members’ emotional reactions to their work environment drive behavior and attitude. As positive and negative affective events occur over time, the affective states of individuals change and these changes lead to a modification of attitudes and behavioral responses (Butts et al., 2015; Dasborough, 2006). The challenge for these organizational members becomes how to control these emotional reactions, navigate emotional work events, and sustain a positive work attitude.

2.5 Emotional Intelligence and Job Satisfaction
With this review of AET in hand, it is now possible to delve deeper into the focus of this study. Even as early as the 1930s, Fisher and Hanna (1931) publish on the idea that the primary cause of worker dissatisfaction relates to chronic emotional instabilities and turbulence. This connection between emotional stability, or what can now be called EI, and job satisfaction continues to fascinate and draw the investigations of researchers. Modern individual studies of the relationship between EI and job satisfaction provide evidence of the relationship between the two constructs (Brunetto et al., 2012; Kafetsios & Zampetakis, 2008; Kirk et al., 2009; Ouyang et al., 2015; Sy et al., 2006; Wong & Law, 2002). Each of these studies employs an ability-based self-report measure of EI and finds that an individual’s EI positively and significantly relates to job satisfaction attitudes. Thinking back on the discussion of what abilities make a person emotionally intelligent and filtering this discussion through the lens of AET, a better picture of how emotionally intelligent individuals may find themselves better equipped to sustain positive workplace attitudes comes into view.

The workplace environment and, more importantly, the events that occur within this environment create an atmosphere ripe for negative feelings. With any job comes a myriad of stressors such as tight deadlines, heavy workloads, intimidating bosses, and plotting colleagues. Each forms an opportunity to succumb to the stress and react negatively. However, emotionally perceptive individuals appear to process the events of the workplace in a more satisfying light, playing off the hostile environment and threatening events of daily work life (Fox & Spector, 2000; Thoresen et al., 2003). EI allows one to better understand what causes tension and anxiety in themselves and in others. EI also allows one to be more resilient in the face of work events, bouncing back from negativity and regulating negative emotions (Sy et al., 2006). Therefore, before the strain of negative events overwhelms them, emotionally intelligent individuals create
a plan of attack to assess and overcome these events. The result is an ability to limit negative affective reactions, enhance positive feelings, and maintain high job satisfaction.

The literature explores the overall EI of an individual and its relationship to job satisfaction in many ways. Enough research now exists that several meta-analyses take a look at the state of the relationship (Miao et al., 2016, 2017a, 2017b). Miao et al. (2017a) find that all three types of EI (e.g., ability-based, trait-based, mixed) relate to job satisfaction. In 119 articles that meet an inclusion criterion, researchers investigate EI and job satisfaction across several streams of EI, in many types of workplaces, and in different locations across the world (Miao et al., 2017a). In a subset of these articles focusing on a self-report of EI abilities, the positive effect size of EI on job satisfaction ranges from as little as .03 to as high as .48. While this highlights the variability of the results, it also points to the importance of EI in regards to how satisfied employees consider themselves.

This importance goes beyond this simple two-construct relationship and helps explain a wide range of work outcomes. With job satisfactions' status as one of the most influential and popular constructs in organizational psychology, researchers explore many behavioral, attitudinal, and health-related outcomes (Judge & Kammeyer-Mueller, 2008; Schleicher et al., 2011). Researchers find job satisfaction to predict turnover intention (Shore & Martin, 1989; Tett & Meyer, 1993), actual turnover (Cotton & Tuttle, 1986; Tett & Meyer, 1993), withdrawal cognitions (Tett & Meyer, 1993), organizational citizenship behaviors (Fassina et al., 2008; Koys, 2001), organizational commitment (Meyer et al., 2002; Shore & Martin, 1989; Tett & Meyer, 1993), and job performance (Iaffaldano & Muchinsky, 1985; Petty et al., 1984), among others. In a better understanding of the EI-job satisfaction relationship, a door opens to a better understanding of other work outcomes.
2.5.1 Dimensions of EI and Job Satisfaction

While over 60 studies utilize a self-rated ability-based EI scale to evaluate the job satisfaction connection, far fewer studies examine the individual dimensions of EI laid out by Salovey and Mayer (1990). As few as 19 studies breakout these dimensions to help better understand how each of self-emotion appraisal, others’ emotion appraisal, use of emotion, and regulation of emotion interact with job satisfaction. Each of these dimensions represents a unique set of abilities associated with EI. Consequently, each dimension helps an individual better control their affective reactions in the workplace.

For example, EI allows the appraisal of one’s own emotions. As one recognizes the ebbs and flows of their emotions, they allow themselves to simultaneously understand the antecedents, meanings, and consequences of these emotions, and in doing so, better transition among emotions (e.g., from anger to satisfaction) (Mayer et al., 2016). High EI individuals can also better read the emotions of others. In understanding how to respond to others and how to act in different social settings and situations, individuals better understand how to react to work events (Byron, 2007). These controlled reactions relate to one’s ability to productively use emotions. One can alleviate the negative aspects of work events or enhance the aspects of positive work events through their reactions. As one leverages mood swings in a meeting to generate different ideas or generates emotions to aid in decision-making or facilitate thought, they prioritize thinking toward positivity (Mayer et al., 2016). Finally, in regulating emotions of oneself and others, individuals drive toward favorable outcomes and success. As one uses strategies to continue, reduce, or strengthen affective responses, a more reasonable, helpful, and pleasant attitude becomes possible (Mayer et al., 2016). Each of these skills significantly impacts the groups within organizations. High EI employees use their skills to generate positive interactions
and social relationships in the workplace, thereby boosting their personal morale and the morale of the group, and building job satisfaction for all (Goleman, 1995; Kafetsios & Zampetakis, 2008; Shimazu et al., 2004).

**2.6 Emotion Contagion Theory**

Despite a better understanding of the interactions between EI and job satisfaction within individuals, an organization demands that individuals work in concert with other colleagues and managers. These interactions create contact between individual emotions. Thinking of a common workplace event, an employee walks into the breakroom to find their manager pouring a cup of coffee. The two begin to talk casually. The employee suddenly realizes that something is off and begins to feel uncomfortable and fidgety. Worried that they might upset the manager, the employee attempts to relay a funny anecdote from the past weekend. Despite this attempt, the employee only feels their discomfort deepen and apologetically leaves the conversation to return to work. On the way back to their office, the employee wonders whether the manager was experiencing some inner turmoil as there was anxiety on their face and depressed tone in their voice. The employee also wonders if they “caught” and internalized these feelings themselves.

This narrative plays out daily in organizations around the world, but what is really going on? Emotion contagion theory (ECT) provides an explanation for these workplace interactions. Emotions form an adaptive action system, comprised of appraisals, psychological processes, action tendencies, subjective feelings, expressions, and behaviors (Fischer et al., 1990). With this, Hatfield et al. (1992) define emotional contagion as “the tendency to 'catch' (experience/express) another person's emotions (his or her emotional appraisals, subjective feelings, expressions, patterned physiological processes, action tendencies, and instrumental behaviors)” (p. 153). Therefore, emotional contagion plays an important role in the emotions of individuals.
Dyadic, team, and group social interactions include the same benefits and drawbacks of individual emotion as emotional contagion synchronizes attentional, emotional, and behavioral phenomena (Hatfield et al, 1992). The complication of this synchronization only increases as “primitive emotional contagion” plays in the background, with an automatic response to movement, facial expression, posture, and vocal tones driving social emotion (Hatfield et al, 1992). With this seen and unseen influence, emotional contagion plays a critical role in the dynamics of the workplace.

Individuals in that workplace successfully maneuver through this emotional social interplay as they coordinate emotionally and physically with one another (Hatfield et al., 1992). The question becomes, what characteristics make individuals apt to respond to emotional contagion? Hatfield et al. (1992) highlight a series of characteristics, with this study putting a special emphasis on those that relate to the leader-follower dyads and EI. In relation to dyads, one should be more susceptible to others’ feelings if they are deeply tied instead of oblivious to another’s emotions. This susceptibility should also increase as the interrelatedness of two individuals is the focus. The leader-follower relationship provides a situation ripe for enhanced emotional contagion. Further, those with the ability to read others' emotions or who are aware of their own emotions should be more vulnerable to contagion. Those who react and understand the power of those reactions can drive emotions. In these abilities, individual EI plays a role in how emotions spread in the workplace.

2.7 Multi-Level Model of Emotion and Leadership

The multi-level model of emotion and leadership provides a link between AET and ECT. The multi-level model unifies these theories into a single framework to explain how leaders influence follower emotions and, ultimately, their job satisfaction (Ashkanasy, 2003; Ashkanasy
& Humphrey, 2011a, 2011b; Ashkanasy & Jordan, 2008). This study focuses on the three lowest
levels of the five levels that make up the model (Figure 2.7). At level 1, the focus is on the
within-person aspects of emotion. AET provides an explanation of how the work environment
and events modify within-person affective reactions. These reactions lead to the modification of
mood, attitude, and behavior. These reactions go beyond front-line employees and have similar
within-person effects on leaders. Ashkanasy and Jordan (2008) note that leaders react to events
in the same ways that followers do despite the ideas of traditional leadership theories. Leaders
are not immune to affective events. In fact, leaders might find themselves more likely to
experience a range of emotionally laden events (e.g., organizational change events, economic,
legal, and political events, inter-organizational negation) (Ashton-James & Ashkanasy, 2008).

At level 2, the focus in on the dynamic between-persons aspects of emotion. ECT offers a
way to understand how leaders and followers interact and feed off of one another’s emotions.
The multi-level model combines the ideas of ECT with a focus on individual differences such as
trait affect, EI, and attitudinal variables (Ashkanasy & Humphrey, 2011a). These differences
determine the frequency, strength, and length of positive and negative emotions (Ashkanasy &
Humphrey, 2011b). This combined framework of the multi-level model and ECT highlights the
ability of emotionally stable and perceptive leaders to control and convey their emotions. In
doing so, leaders lift up their followers, enhance positive feelings, and positively affect
satisfaction.

Finally, at level 3, the focus turns to interpersonal exchanges of emotion. Specifically,
this level addresses the dyadic interactions between leaders and followers. As the LMX theory of
leadership (Graen & Uhl-Bien, 1995) or Mumby and Putnam’s (1992) idea of “bounded
emotionality” show, organizational life revolves around the balance of expression and control of
emotion in everyday work interactions. The multi-level model specifies that high EI leaders may use interpersonal exchanges and communication to enhance job satisfaction. As these leaders utilize their EI to balance emotion, they can perk up bored workers, sympathize with distressed workers, support frustrated workers, and join in with excited workers. Each of these acts helps to spread feelings of joy and enthusiasm for the workplace, fellow workers, and the job.
2.8 Leader-Follower Emotional Intelligence Congruence and its Impact on Job Satisfaction

If emotionally intelligent leaders proficiently display emotions and invoke emotions in others, these leaders may increase subordinate job satisfaction. Alternatively, if leaders lacking in EI proliferate negative emotions and create a culture of emotional mayhem, subordinate job satisfaction may decrease. These propositions relate to the ability of leaders to influence followers through EI. A handful of studies suggest how this process unfolds. For example, leaders who perceive and understand emotions engender empathy for followers, which in turn predicts relational and task-oriented leadership (Kellett et al., 2006). In this instance, EI allows a leader to show that they care about their follower, empathize with their thoughts and feelings, and, therefore, enhance job satisfaction. Further, Wong and Law (2002) suggest that leaders boost follower satisfaction as they provide them with psychological benefits (e.g., approval, respect, esteem, affection) and find that there is a positive link between leader EI and subordinate job satisfaction. In these two examples, followers depend on their leaders to bring positive emotions into the relationship.

Leaders exert this control of the interaction due to their control over time, resources, and day-to-day interactions (Sy et al., 2005). Specifically, Sy et al. (2005) find that a leaders’ group experiences more positive moods when leaders exhibit positive moods. Dasborough and Ashkanasy (2002) find if the connection between leader and follower is perceived as genuine, enhanced positive affect results. Positive affect built from EI can increase team member trust and group identity (Druskat & Wolff, 2001). This control, connection, and trust allows leaders to play a critical role in determining an organization’s culture. As the leader endorses these cultural values, a leader guides follower perception of the larger organization (e.g., missions, goals, actions) (Cherniss, 2001). Accordingly, by utilizing EI to create moods and co-create culture,
leaders tend to attract and retain followers that match their emotional values (Daus et al., 2012). With matching dyads in place, the congruence between a leader and follower’s EI may drive follower job satisfaction.

Sy et al. (2006) tangentially explore this topic when they test whether a “managers’ EI associates more positively with job satisfaction for employees with low EI than for employees with high EI” (p.463). While Sy et al. (2006) do not explicitly hypothesize about leader-follower EI congruence, the results of their study found that managers with low EI that match up with employees with low EI create a situation where employee job satisfaction is relatively low. Further, they also find that with high levels of manager-employee EI congruence, a relatively high employee job satisfaction exists.

Maio et al. (2016) revisit this topic and utilize a meta-analysis to examine subordinate job satisfaction in relation to a leader and follower’s EI levels. They find that leaders’ EI plays nearly as important a role in creating follower job satisfaction as follower EI with 48% relative importance of leaders’ EI versus 52% relative importance for subordinates’ EI. The meta-analysis also reveals that leader EI, in conjunction with subordinate EI, contributes statistically significant incremental validity in predicting subordinate job satisfaction (Miao et al., 2016). Specifically, Miao et al. (2016) find that subordinate EI accounts for 10.2% ($p < 0.001$), while the inclusion of leader EI explains an additional 5.4% of the variance in subordinate job satisfaction.

While few studies examine the relationship between leader EI, follower EI, and follower job satisfaction, these two studies make the point that congruence between a leader and follower’s EI could play an important role in creating work attitudes. Bringing together these
results, emotion and leadership theory, and the tenets of EI, this study builds on these studies to produce new insight into how employees perceive EI and job satisfaction.

2.9 Hypotheses Production

The primary purpose of this study revolves around better understanding emotional intelligence and its role in work attitudes. The hypotheses below utilize the literature review and theoretical foundation provided as a basis for highlighting the positive effects of EI on job satisfaction. The first hypothesis deals with the overall perceptions of EI and job satisfaction. The second set of hypotheses (Hypotheses 2, 3, 4, and 5) focus not on a single-factor score of EI but instead focus on each of the dimensions of EI as suggested by Salovey and Mayer (1990) and tested by Wong and Law (2002). The last set of hypotheses (Hypothesis 6, 7A, and 7B) step away from individual perceptions of the self and moves toward perceptions of the leader-follower relationship.

2.9.1 Overall EI and Job Satisfaction

As emphasized earlier, empirical studies of the EI-job satisfaction relationship find a significant and positive relationship between the two constructs (Brunetto et al., 2012; Kafetsios & Zampetakis, 2008; Kirk et al., 2009; Ouyang et al., 2015; Sy et al., 2006; Wong & Law, 2002). These specific studies, along with a substantial set of literature beyond, provide the data necessary to put together a meta-analysis on the relationship (Miao et al., 2016, 2017a, 2017b). While these meta-analyses cover the range of EI models (e.g., ability-based, trait-based, mixed), the overarching findings show a significant relationship where EI enhances one’s satisfaction at work. The abilities of EI allow one to process work events, understand the work atmosphere, regulate affective reactions, and create positivity in the workplace. This positivity allows individuals to spin the negative aspects of work-life into a more uplifting light (Fox & Spector,
2000; Thoresen et al., 2003). Sy et al., (2006) suggest that the cognitive side of EI helps one understand these negative aspects and face them head-on to recover from any negativity that might find its way in. With the ability to build and sustain positivity, individuals with high EI should find themselves with positive work attitudes and more satisfied with their jobs.

2.9.1.1 Hypothesis 1.

H1 relates to the overall measurements of individual perceptions of EI and their effects on job satisfaction. Workplaces are innately filled with emotional stimuli. A person’s work and their job often define them. Further, workers spend a large part of their lives in the workplace. Between interrelationships with colleagues, managers, vendors, and customers, along with the complication of today’s corporate environments, emotions can run high. Taking into consideration the importance, time, and complication of workplace life, the ability to understand, utilize, and manage emotions offers a way to fly above or deal with the rigors of workplace life. This understanding of EI and its relationship to workplace attitude leads to Hypothesis 1:

**H1: An employee’s overall emotional intelligence is positively related to job satisfaction.**

2.9.2 Dimensions ofEI and Job Satisfaction

While empirical research explores the link between overall EI and job satisfaction, researchers have produced a limited investigation into the individual dimensions of EI. This is especially true of investigations of ability-based self-report measures of EI. A handful of studies found a similarly positive and significant relationship between individual dimensions of EI and job satisfaction (Ouyang et al., 2015; Wong & Law, 2002). However, studies exist that show mixed results, with certain dimensions of EI showing non-significant relationships (Fu, 2014; Güleryüz et al., 2008; Kafetsios & Zampetakis, 2008; Trivellas et al., 2013) and other studies
showing significant relationships at the individual level but not at the overall level (Lee et al., 2011). In addition to mixed results, the setting for many of these EI studies occurs outside of the United States of America (e.g., China, Greece, Australia, Turkey). This all adds up to the simple conclusion that a consensus appears to be much further away in regards to the dimensions of EI versus overall EI.

With this said, a need exists to further empirically study the relationships between each of the four dimensions of EI (e.g., self-emotion appraisal, others’ emotion appraisal, use of emotion, regulation of emotion) and job satisfaction. Mayer et al. (2016), in a review and update of the emotional intelligence theory, suggest that each of the dimensions of EI provides individuals with the tools necessary to find satisfaction at work. Whether one regulates emotions to limit the effects of negative work events or helps colleagues control their feelings in a hectic office space, high EI individuals may drive positive work attitudes in those around them and within themselves through each of the abilities represented within overall EI.

2.9.2.1 Hypothesis 2

H2 relates to whether an individual with the ability to appraise their own emotions creates a greater perception of job satisfaction. When one exhibits this ability, they sense and acknowledge their feelings. Along with this acknowledgment of deep-seated and potentially explosive emotions, one can use this perspective to express emotions respectfully and naturally. Many employees can attest to the value of such an ability in the workplace. Day (2000) relates an example of this value by suggesting that leader effectiveness comes from interpersonal competence, including emotional awareness, self-confidence, self-regulation, and self-control. Self-appraisal not only allows oneself to enhance performance or effectiveness at work (Lyons & Schneider, 2005; Wong & Law, 2002), it also sets a foundation for all other dimensions of EI to
build on. In doing so, it also provides a foundation for positive work attitudes. This assertion leads to Hypothesis 2:

**H2: An employee’s ability to appraise and express their emotions (SEA) is positively related to job satisfaction.**

2.9.2.2 Hypothesis 3

Similar to how the self-appraisal dimension builds to understanding others’ emotions, H3 builds on H2. H3 suggests that, in addition to controlling personal emotions, it is also important for one’s work attitude to be able to read others' emotions. Hooijberg et al. (1997) present a framework based on cognitive, social, and behavioral complexities that emphasizes the need for workers to both socially differentiate and integrate. In differentiating, one discerns existing and potential social relationships by recognizing the different aspects and significances of each social situation over time. In integrating, one uses the ability to appraise others’ emotions to positively enhance social interactions. These positive interactions throughout the workplace set an optimistic tone, help with teamwork (Mayer & Salovey, 1997; Sjoberg, 2001), and make individuals feel more suited for the work environment (Goleman, 1998b). Consequently, these ideas lead to Hypothesis 3:

**H3: An employee’s ability to appraise others’ emotions (OEA) is positively related to job satisfaction.**

2.9.2.3 Hypothesis 4

H4 relates to how individuals deal with workplace distress by regulating emotions. A range of negative or positive events occur within the workplace, thereby modifying one’s stress, strain, or satisfaction. The ability of individuals to regulate their emotions enables more rapid recovery from this range of potentially psychologically distressing events (Wong & Law, 2002).
Further, individuals that can influence when, how, and which emotions they experience and express may be more successful at coping with the demands and pressures of work (Bar-On, 1997). Wild swings between supremely positive and extremely negative emotions during the course of one’s life can have a disconcerting effect. One’s work life is no exception. Without regulation, a roller coaster of emotional events may lead to feelings of both personal and organizational insecurity (Ashkanasy & Dorris, 2017). This line of thinking results in Hypothesis 4:

\[ H4: \text{An employee’s ability to regulate emotions (ROE) is positively related to job satisfaction.} \]

2.9.2.4 Hypothesis 5

H5 focuses on the use of emotions. Emotions can represent a driving force in the workplace and cover a full range of both negative and positive feelings (Basch & Fisher, 2000). Using these emotions can represent a valuable ability to overcome and focus these emotions beneficially. Specifically, the use of emotion means that individuals direct their emotions toward constructive activities. In turn, these constructive activities permit one to reach greater levels of performance, promote intellectual growth, and improve work attitudes (Wong & Law, 2002). These activities and their outcomes support Hypothesis 5:

\[ H5: \text{An employee’s ability to use emotions (UOE) is positively related to job satisfaction.} \]

2.9.3 Leader-Follower EI Congruence and Job Satisfaction

Much like the research regarding the dimensions of EI, the effects of EI within the leader-follower relationship and job satisfaction has also seen limited exploration. Miao et al. (2016) identified a total of 20 quantitative studies that met their standards for inclusion within a meta-
A large portion of these studies represents unpublished doctoral dissertations. A large portion of these studies also focuses on the effects of leader EI on follower job satisfaction. This meta-analysis shows that a leader’s EI positively relates to a subordinates’ job satisfaction (Miao et al., 2016). However, far fewer empirical studies attempt to examine the relationship between leaders’ EI, followers’ EI, and followers’ job satisfaction. Specifically, in regards to leaders’ EI, this study examines how followers perceive their leaders’ behaviors in order to avoid reliability issues related to managerial self-ratings (Atwater et al., 1995; Yammarino & Atwater, 1993) and the impracticality of EI assessments (Conte & Dean, 2006; Mayer et al., 2002).

The studies focusing on the more complicated interaction between leader and follower often focus on how manager EI affects the level of employee job satisfaction at different levels of employee EI (Sy et al., 2006) and the incremental importance of leaders’ EI in predicting subordinate job satisfaction in the presence of subordinate EI (Miao et al., 2016). Miao et al. (2016) find support for their hypothesis that leader EI does contribute to incremental validity and relative importance of predicting subordinate job satisfaction. Sy et al. (2006) also find support for their hypothesis, showing that a manager’s EI associates more positively with employee job satisfaction for employees with low EI versus those with high EI. Despite these studies, an understanding of the relationship between leader EI, follower EI, and job satisfaction still needs to be explored.

2.9.3.1 Hypothesis 6

H6 attempts to confirm the results of previous studies concerning leaders and followers. Studies find that leader and manager EI positively and significantly relates to follower job satisfaction (Miao et al., 2016; Sy et al., 2006). High EI leaders manage employee emotions in order to generate positive outcomes. These leaders help followers build creativity and flexibility
(Fredrickson, 2003; Zhou & George, 2003). As followers build these attributes, they find confidence and added ability to harness emotions in positive ways (e.g., collaboration, coordination, organizational citizenship behavior) (Barsade, 2002; Mossholder et al., 1981; Sy et al., 2005; Wong & Law, 2002). The result of finding new abilities through leadership leads to Hypothesis 6:

**H6: A leader’s overall emotional intelligence is positively related to job satisfaction.**

**2.9.3.2 Hypothesis 7A & 7B**

H7A and H7B add to this understanding of EI within the leader-follower dyad.

Researchers find that leader-follower congruence in work goals (Kristof-Brown et al., 2005; Vancouver & Schmitt, 1991), proactive personality (Zhang et al., 2012), and in perceptions of authentic leadership (Cerne et al., 2013) relate to follower job satisfaction. Accordingly, congruence between a leader and follower’s EI may also relate to follower job satisfaction. Leaders can be inspirational to their followers, they can transform followers’ attitudes beliefs, motives, and confidence, and, ultimately, followers want to identify with their leaders (Bass, 1985). Following this statement, logic argues that as followers attempt to identify with their leaders and as leaders attempt to modify attitudes and beliefs, followers might also align their emotional abilities with those of their leader. Whether that similarity denotes high or low levels of EI, congruence between the abilities of the dyad might result in an enhancement of the followers’ work attitude. This statement summarizes Hypotheses 7A:

**H7A: The congruence of leaders’ and followers’ overall emotional intelligence moderates the relationship between a followers’ overall emotional intelligence and a followers’ job satisfaction, such that the positive relationship is stronger for higher levels of congruence.**
Further, a similar relationship might exist between a leader’s emotional intelligence and their follower’s job satisfaction. Hypothesis 7B summarizes this proposition:

\textit{H7B: The congruence of leaders’ and followers’ overall emotional intelligence moderates the relationship between a leaders’ overall emotional intelligence and a followers’ job satisfaction, such that the positive relationship is stronger for higher levels of congruence.}
CHAPTER 3
METHOD, SAMPLE AND MEASURES

3.1 Introduction

This chapter describes the overall methodology and design of this study. This description includes: the purpose of the study, an overview of the population and sample, the design of the survey, a description of the data collection process, a review of the instruments of the survey, and data analysis procedures, including data cleaning, statistical assumptions, construct validity, and common method variance.

3.2 Purpose of the Study

The purpose of the present study was to empirically evaluate the relationship between emotional intelligence (EI) and job satisfaction, with a special emphasis on understanding the individual dimensions of EI and the moderating effects of EI congruence. The population of interest included employed U.S. workers that are 18 and older. Confirmation of the measurement model was followed by a specification and identification of structural regression models in order to test the structural paths (Kline, 2016). A series of confirmation tests were utilized in order to further probe the interactions within the structural model. Once the regression model was explored, the significance of conditional indirect effects was tested for higher-order constructs (Hayes, 2018).

3.3 Population and Sample
3.3.1 Population

The population for this survey was full-time and part-time U.S.-based employees over the age of 18. Despite its desirability, most sampling processes do not allow for all individuals within a target population to be included within a sample (Fowler, 2014). Accordingly, a sample frame for this study included MTurk® workers. A sample frame is a group of individuals who do have the opportunity to be included in the sample (Fowler, 2014). The opportunity to be included in this study comes from the desired population having an MTurk® worker account and access to the internet. This sample frame resulted in 427 employed U.S. respondents over the age of 18.

The study attempted to gather participants from a diverse background and in line with a representative sample of U.S.-based workers. Meta-analysis of emotional intelligence and work attitudes show that limited examination of U.S. workers has occurred in comparison to other parts of the world (Miao et al., 2016, 2017a, 2017b). This limitation drives this study to focus the study on U.S. workers and fill this gap. Also, by limiting the geographic extent of this study to the U.S., the study attempts to ensure that surveys were answered by respondents within the same national culture and with a set of similar societal principles and norms (Oh et al., 2014). In addition to limiting the study to U.S.-based workers, the study focuses on employed workers. Participants need to have a level of experience as an employee in order to answer items related to workplace interactions, abilities, and experiences (Iarossi, 2006). Despite these limitations of the sample, the study eliminated any restriction of age based on generation or based on managerial status.

3.3.2 Sample

The study sample was recruited with the assistance of MTurk®. MTurk® connects researchers with respondents through an online survey distribution platform. It has been used to
successfully examine employee emotional intelligence and job satisfaction (Brawley & Pury, 2016; Zacher et al., 2013). A range of research designs can be conducted with MTurk®, including the cross-sectional design utilized in this study (Buhrmester et al., 2011). MTurk® allows for a diverse sample to be achieved within a relatively short time period (Buhrmester et al., 2011). This diversity has been shown to go beyond that found in traditional data collection methods (e.g., college student samples), while providing equally valid and reliable data (Behrend et al., 2011; Berinsky et al., 2012; Buhrmester et al., 2011; Feitosa et al., 2015; Landers & Behrend, 2015). The diversity of MTurk® respondents, as compared to American college samples, relates to a larger range of educational backgrounds, greater representation of different professions, and a greater percentage of employed survey respondents (Behrend et al., 2011; Buhrmester et al., 2011). Despite evidence showing MTurk® samples to be slightly younger, of lower income, and more educated than the general U.S. populace, MTurk® provides a wide range of respondents from different generational cohorts, with various experience, and representing many professions and industries that this study attempts to examine (Paolacci et al., 2010; Woo et al., 2015). Based on the literature, MTurk® workers provide an appropriate sample frame for this study.

Three additional considerations for using an MTurk® sample include worker requirements, compensation, and worker quality. MTurk® requires potential survey respondents to meet certain qualifications before being offered a Human Intelligence Task (HITs) (Chambers & Nimon, 2018). In the case of this study, the requirements were set to limit the location of respondents to the United States and to ensure that all workers were full or part-time employees. Additionally, MTurk® requires that all workers be 18 years of age, which fits the parameters of this study. Workers within MTurk® receive minimal compensation for their completion of HITs,
ranging from 10 to 50 cents for short surveys (Goodman et al., 2013). Because there is compensation involved, requestors can design HITs to prevent multiple completions by the same participant (Chandler et al., 2014). The ability to limit “ballot box stuffing” through survey design and unique worker identification codes helps to enhance the quality of responses (Behrend et al., 2011). Additionally, worker identification codes allow MTurk® to track worker performance based on payment for satisfactory work and refusal of payment for a lack of quality work (Buhrmester et al., 2011; Mason & Suri, 2012). This monitoring keeps the quality of MTurk® workers in check by blocking those workers with too high of a rejection rate (Mason & Suri, 2012). Together each of these additional considerations provides the checks and balances necessary to qualify MTurk® workers as a valid sample frame for this study. Sample size will be addressed along with data collection below.

3.3.2.1 Sample Representativeness

To enhance generalizability of this study’s findings, the external validity of the sample was evaluated by comparing the demographics of the sample with the demographics of the population (Kline, 2009). The sample representativeness was assessed based on gender, age, race/ethnicity, company size, and industry. The Bureau of Labor Statistics (BLS) offered comparable demographic data for employees in the United States (Table 3.1). The BLS (2019a) provided information related to gender and age distributions of full-time and part-time employees in the United States. According to the BLS (2019a), 53.0% of employees are male, while 47.0% are female. The distribution of ages shows that 25 to 54-year-old employees make up 64.8% of the working population, followed by those employees 55 and older making up 23.9% and 18 to 24-year-olds making up 11.3% (BLS, 2019a).
Table 3.1

*Population demographics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>82,582</td>
<td>53.0</td>
</tr>
<tr>
<td>Female</td>
<td>73,166</td>
<td>47.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>17,533</td>
<td>11.3</td>
</tr>
<tr>
<td>25-54</td>
<td>100,976</td>
<td>64.8</td>
</tr>
<tr>
<td>55 or older</td>
<td>37,240</td>
<td>23.9</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>19,381</td>
<td>10.8</td>
</tr>
<tr>
<td>American Indian/Other Native American</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>10,179</td>
<td>5.7</td>
</tr>
<tr>
<td>Caucasian or White (other than Hispanic)</td>
<td>122,441</td>
<td>68.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>27,805</td>
<td>15.5</td>
</tr>
<tr>
<td>Other</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Company Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-499 employees</td>
<td>65,083</td>
<td>52.4</td>
</tr>
<tr>
<td>500 or more employees</td>
<td>59,074</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good-producing, excluding agriculture</td>
<td>20,661</td>
<td>12.8</td>
</tr>
<tr>
<td>Service-producing</td>
<td>129,142</td>
<td>80.2</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing, and hunting</td>
<td>2,310</td>
<td>1.4</td>
</tr>
<tr>
<td>Other</td>
<td>8,924</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Note.* Population Demographics are provided in thousands. n (gender, age) = 155,749. n (race) = 179,806. n (company size) = 124,157. n (industry) = 161,038.

The BLS (2019b) provided information on race distribution of employees in the United States. This race distribution consisted of 68.1% Caucasians or Whites, 15.5% Hispanics, 10.8%
African Americans or Blacks, and 5.7% Asian or Pacific Islander (BLS, 2019b). No data on American Indians or other Native Americans were reported (BLS, 2019b).

Finally, the BLS (2019c, 2019d) provide data related to the organizations that U.S. employees work for. The BLS (2019c) reported that 52.4% of U.S. workers are employed in companies with between 1 and 499 employees, with the remaining 47.6% employed in companies with more than 500 employees. These companies predominately represent the service-producing industry, with 80.2% of U.S. employees providing services (BLS, 2019d). Further, 12.8% of U.S. employees work in producing goods, 1.4% work in agriculture, forestry, fishing, and hunting, and the remaining 5.5% working in other industries (BLS, 2019d). The representativeness of the sample was evaluated based on Pearson’s chi-square tests by comparing the population percentages provided by the BLS with the sample in Chapter 4.

3.4 Survey Design

Qualtrics®, an online survey platform, was utilized to collect data with a cross-sectional survey design. Respondents accessed surveys via unique hyperlinks published as HITs on MTurk®. The survey design includes a few overall considerations. In order to avoid missing data, all items utilized a force response mechanism provided by Qualtrics® (Wolf et al., 2013). The non-response rate was also controlled by having The University of Dallas banner at the top of the survey screen in order to indicate the official sponsorship of the study by the university (Fan & Yan, 2010). Further, no back button was made available in order to avoid participants changing answers. The goal was to avoid common method bias of consistency motif by forcing respondents to go with their original selection (Podsakoff et al., 2012). In addition, participants were informed that there are no right or wrong answers to reduce evaluation apprehension and enhance data quality (Podsakoff et al., 2003). Data quality was also addressed by restricting
repeated survey completion from a single internet protocol (IP) address in the Qualtrics® platform (i.e., ballot box stuffing) (Goodman et al., 2013).

Further considerations were taken in regards to the use of MTurk® and the structure of the survey to enhance data quality. First, the MTurk® location requirement was limited to the United States and the employment status limitation was set to ensure respondents were employed. Despite these limitations, participants also answered four screening questions before taking the survey to confirm MTurk® worker requirements. The first screening question provided the participant a consent form to ensure that each respondent understood their rights, the purpose of the study, and assurances of privacy and anonymity. Participants were required to agree to the informed consent form in order to take the survey. This first screening question also confirmed the MTurk® requirement that survey respondents meet a minimum age requirement of 18. With the support of MTurk®, which does not condone the use of survey bots, each survey utilized a bot check as a second screening question to eliminate bots from participation in the survey (Rouse, 2015). The third screening question confirmed that the participant currently lived in the United States and the fourth screening question established the employment status of the participant. Respondents that did not pass screening questions or did not consent received an end of survey message that informed them that they did not meet the study criteria to take the survey and respondent was thanked for their time.

Upon completion of the screening questions, participants responded to items for use in a confirmatory factor analysis technique testing for common method variance, the dependent variable job satisfaction, personal perceptions of emotional intelligence, and perceptions of leader emotional intelligence (Table 3.2). An instructional manipulation check (IMC) was placed after collection of the dependent variable and again after the first independent variable in order to
confirm the engagement of the respondents (Oppenheimer, Meyvis, & Davidenko, 2009).

Additionally, attention check items were inserted within the two independent variable scales to enhance the data provided by the unsupervised sample (e.g., improve statistical power, reduce Type II error) (Goodman et al., 2013).

Table 3.2

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Screening questions</td>
</tr>
<tr>
<td>2</td>
<td>CFA items</td>
</tr>
<tr>
<td>3</td>
<td>Dependent variable: job satisfaction</td>
</tr>
<tr>
<td>4</td>
<td>IMC 1</td>
</tr>
<tr>
<td></td>
<td>Independent variable: personal emotional intelligence</td>
</tr>
<tr>
<td>5</td>
<td>IMC 2</td>
</tr>
<tr>
<td>6</td>
<td>Independent variable: leader emotional intelligence</td>
</tr>
<tr>
<td>7</td>
<td>Demographic items</td>
</tr>
</tbody>
</table>

*Note. IMC = instrumental manipulation check.*

Finally, questions related to the demographics of the respondent were asked. The demographic information collected consisted of gender, age, race/ethnicity, company size, industry, and tenure with the company. Various demographic variables have been frequently reported in relation to the EI and job satisfaction relationship (Kafetsios & Zampetakis, 2008; Law et al., 2008; Law et al., 2004; Miao et al., 2017b; Sy et al., 2006). The selectable answers for gender (i.e., male, female), age (i.e., 18-24, 25-54, and 55+), race/ethnicity (i.e., African American or Black, American Indian/Other Native American, Asian or Pacific Islander, Caucasian or White (other than Hispanic), Hispanic, and other), major industry sector (i.e., goods-producing excluding agriculture, services-providing excluding special industries, and
agriculture / forestry / fishing / hunting), and company size (1-499 employees and 500 or more employees) were based on the categories from the BLS (2019, abcd). The additional demographic question related to tenure with company (in years) was added based on literature on emotional intelligence and work attitudes (Law et al., 2008; Law et al., 2004; Sy et al., 2006). The survey did not utilize counterbalancing, although it has been shown as an acceptable method for controlling common method variance (CMV; Podsakoff et al., 2003). Instead of counterbalancing, the ordering of the demographic items followed a typical ascending order (e.g., age from youngest to oldest).

Each successfully completed survey ended with a message indicating successful completion and containing a unique code for the purposes of payment. If respondents completed the eight-part survey, they were paid between $0.21 and $0.26 for their response depending on which batch the respondent was captured in. This payment was in line with the limited time necessary to complete the survey (Goodman et al., 2013). The survey took less than five minutes to complete, which had the added benefit of reducing potential survey fatigue (Dillman, 2007).

In addition to the prior considerations, the basic ethical principals identified by the Belmont and Nuremburg Principles were observed. The ability for the researcher to follow these guidelines is evidenced by completion of the National Institutes of Health (NIH) course (see Appendix B – NIH Certificate) and confirmed by the received approval letter from the Institutional Review Board (see Appendix C – IRB Approval Letter).

3.5 Measures

Two measures were utilized to test the study’s theoretical model. Perceptions of emotional intelligence were measured using WLEIS by Wong and Law (2002). Perceptions of leader emotional intelligence were also measured with a modified version of WLEIS (Wong &
Law, 2002). Both measures consisted of four EI subscales: (a) self-emotion appraisal; (b) others’ emotion appraisal; (c) regulation of emotion; and (d) use of emotion. Finally, job satisfaction was measured with a shortened version of Brayfield and Rothe’s (1951) overall job satisfaction scale (Agho, Mueller, & Price, 1993; Aryee, Fields, & Luk, 1999) and a single item from an overall job satisfactions scale by Judge, Boudreau, and Bretz (1994). All scales were subjected to factor analysis and have been statistically validated. Sample items can be seen in Table 3.3: Sample question from surveys. However, the full scales as presented to respondents can be seen in Appendix A – Qualtrics Survey.

**Table 3.3**

*Sample questions from survey*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLEIS</td>
<td>• I have a good understanding of my emotions.</td>
</tr>
<tr>
<td></td>
<td>• I am sensitive to the feelings and emotions of others.</td>
</tr>
<tr>
<td></td>
<td>• I am a self-motivated person.</td>
</tr>
<tr>
<td></td>
<td>• I have good control of my own emotions.</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>• I feel fairly well satisfied with my present job.</td>
</tr>
<tr>
<td></td>
<td>• Most days I am enthusiastic about my work.</td>
</tr>
<tr>
<td></td>
<td>• I like my job better than the average worker does.</td>
</tr>
<tr>
<td></td>
<td>• What percentage of the time are you satisfied with your job on average?</td>
</tr>
</tbody>
</table>

*Note.* For full scale questions, see Appendix A.

**3.5.1 Emotional Intelligence**

A discussion of EI scales begins with the seminal work by Salovey and Mayer (1990). This work and a collaboration with fellow researchers led to the initial primary instrument and ultimately to an updated instrument to measure ability-based emotional intelligence, the MSCEIT/MEIS (Mayer et al., 2002; Mayer et al., 2003). Despite these foundational measures, and as described earlier, there has been significant debate as to the best way to measure
emotional intelligence. In regards to MSCEIT, there are a range of issues that lead researchers to choose a competing scale. For example, the test consists of 141 items and takes between 30 and 45 minutes to complete (Mayer et al., 2002). Similarly, the MEIS requires responses to over 400 items and takes 1 to 2 hours to complete (Conte & Dean, 2006). Other measures are simply not suitable for research in the workplace because of population specificity, unreported psychometric properties, measuring different conceptions of EI, and the inability to define all four dimensions of EI (Bar-On, 1997; Carson & Carson, 1998; Carson, Carson, & Phillips, 1997; Goleman, 1995; Salovey et al., 1995; Sosik & Megerian, 1999; Weisinger, 1998).

These issues and understanding the limitations of organizational survey research drove this study to utilize a self-report, ability-based measure. Self-report scales may be affected by a respondents’ biased self-perceptions, social desirability, and positive affectivity. Despite the idea that self-reported scales may not be as effective as ability tests of EI (Conte & Dean, 2006), there are several advantages. First, a self-report scale avoids potential assessment clues and methods to get correct answers by asking the respondent to make direct judgements (Law et al., 2008). Second, self-report items can be modified to evaluate others and eliminate potential incorrect perceptions of one’s self (Law et al., 2004). This flexibility is especially important to this particular study. Third, self-report measures of EI employed in empirical studies have shown to have acceptable reliability, convergent validity, discriminant validity, and criterion validity (Law et al., 2004; Wong & Law, 2002). Fourth, employees frequently receive feedback about their ability to handle emotions as daily social workplace interactions occur. This feedback potentially allows respondents to provide a more accurate evaluation of their EI (Law et al., 2008). Finally, a self-report measure provides a much more practical instrument for organizational researchers that must be conscious of the cost of time and money.
Therefore, this study employed the Wong and Law (2002) self-report, ability-based measure of EI. The WLEIS consists of 16 items that measure four dimensions of EI: self-emotions appraisal, others-emotion appraisal, use of emotion, and regulation of emotion. The scale anchors on a 7-point Likert-type scale, with 1 indicating *strongly disagree* and 7 indicating *strongly agree*. WLEIS asks respondents to indicate how much they agree with statements such as, “I really understand what I feel” or “I am a good observer of others’ emotions”. A series of student and field studies examine the relationships between these dimensions and potential confounding constructs (e.g., personality, cognitive ability) in order to provide evidence of validity (Law et al., 2004; Wong & Law, 2002; Wong, Law, & Wong, 2004). Wong and Law (2002) found an average factor loading of .80 and a range of coefficient alphas for the individual dimensions of EI of .89, .88, .76, and .85 for self-emotion appraisal, use of emotion, regulation of emotion, and others’ emotion appraisal, respectively.

In addition to this use of WLEIS to capture self-reports of one’s own emotional intelligence, the WLEIS was modified to change the object of the perception to focus on one’s leader. The modification of WLEIS to alter the object of the rating has shown equivalent coefficient alphas of .72 to .89, .77 to .89, and .76 to .90 for self, peer, and supervisory ratings of the four dimensions of EI, respectively (Law et al., 2004). The modification of the scale items has respondents agree with statements such as, “My leader really understand what they feel” or “My leader is a good observer of others’ emotions”. As seen in the previous sample items, the slight modification of the object represents the only adjustments made to the scale.

### 3.5.2 Job Satisfaction

With the long history of job satisfaction, accordingly, there is a long history of job satisfaction scales. Scales look at global job satisfaction (Ironson et al., 1989), general affective
reactions (Pond & Geyer, 1991), and job facets (Spector, 1985). This study utilized a six-item scale that provides a one-dimensional measure of overall job satisfaction (Agho et al., 1992), along with a single item allowing respondents to give a percentage of time they feel satisfied with their job. The Agho et al. (1992) scale modifies an established 18-item scale to six items for added efficiency. The six-item measure used a 5-point, Likert-type scale with 1 indicating strongly disagree and 5 indicating strongly agree. The overall job satisfaction scale asks respondents to agree with items such as, “I feel fairly well satisfied with my present job” and “I find real enjoyment with my work”. Coefficient alphas for the six-item scale ranged from .83 to .90 (Agho et al., 1993; Agho et al., 1992; Aryee et al., 1999; Judge et al., 1998). The single item, percentage response of job satisfaction came from the Judge et al. (1994) overall job satisfaction scale. This scale utilized the item in a similar way as this study does by standardizing the response and adding it to a group of items to create a composite measure of job satisfaction (Judge et al., 1994). The scale containing this item achieved coefficient alpha values ranging from .78 to .85 (Judge et al., 1994; Judge et al., 1999).

3.5.3 Emotional Intelligence Congruence

Researchers have minimally explored how the interaction of leaders and followers and their levels of EI influence job satisfaction. Further, to my knowledge, there has been no exploration of the congruence between leaders’ and followers’ congruence. With that said, there is no known scale that operationalizes EI congruence. Therefore, this study will calculate the EI congruence index variable with an absolute-difference model by taking the absolute value of the difference between overall scores of personal EI and leader EI (Sirgy, 1982; Sirgy et al., 1997). The predictive strength of this congruence calculation has shown no significant difference in the results compared to other models such as Euclidean-distance model (Maheshwari, 1974).
result of this calculation will be a magnitude of difference between a followers’ EI and a leaders’ EI.

3.6 Data Collection and Sample Size

In order to efficiently and effectively execute the data collection process, this study utilized a two-part online process. With the progression of the Internet, researchers in both academic and organization research now regularly turn to online data collection (Callegaro et al., 2014; Granello & Wheaton, 2004; Oppenheimer et al., 2011). In the first step of the process, an online survey through the Qualtrics® platform was utilized. This online platform allows for anonymous data collection and provides respondents a convenient avenue for participating in the study. Second, the study recruited respondents through the MTurk® online survey distribution service. MTurk® allows researchers to find respondents efficiently, providing large samples quickly (Chambers et al., 2016). While some researchers oppose the use of MTurk® in academic research (Crowston, 2012), others embrace the technology as an advantage because of its ability to enhance external validity through its access to a wide range of U.S. and internationally based respondents (Behrend et al., 2011; Buhrmester et al., 2011; Landers & Behrend, 2015).

Following the later view and taking advantage of the wide array of respondents, MTurk® allowed for the collection of an appropriately sized and diverse sample. The first consideration focused on the sample size necessary to complete structural equation modeling (SEM). Henson and Roberts (2006) suggest that the ratio between the number of respondents and the number of items within the study model meet a minimum ratio of 10:1. With 42 items, the minimum sample size would be 420. The second consideration focused on the sample size necessary to complete OLS regression analysis. Utilizing the G*Power software program (Faul et al., 2007), a minimum sample size of 270 was calculated (Table 3.4). With the size of this secondary sample
size calculation significantly smaller than the 420 respondents required for SEM, 427 responses were collected. This sample was large enough to meet the minimum sample sizes necessary for both SEM and OLS regression.

Table 3.4

G*Power analysis sample size

<table>
<thead>
<tr>
<th>Test Family</th>
<th>t tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical test</td>
<td>Linear multiple regression; Fixed model, single regression coefficient</td>
</tr>
<tr>
<td>Type of power analysis</td>
<td>A priori compute required sample size: given alpha, power &amp; effect size</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input parameters</th>
<th>Output parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tails</td>
<td>One</td>
</tr>
<tr>
<td>Effect size</td>
<td>.15</td>
</tr>
<tr>
<td>Alpha error probability</td>
<td>.05</td>
</tr>
<tr>
<td>Power</td>
<td>.80</td>
</tr>
<tr>
<td>Number of predictors</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-centrality parameter</td>
</tr>
<tr>
<td></td>
<td>Critical t</td>
</tr>
<tr>
<td></td>
<td>Df</td>
</tr>
<tr>
<td></td>
<td>Total sample size</td>
</tr>
<tr>
<td></td>
<td>Power</td>
</tr>
</tbody>
</table>

3.7 Data Analysis

The data analysis process involved a series of steps. The first of these steps involved cleaning the data. The second step consisted of analyzing the statistical assumptions, followed by an assessment of construct validity. The third step addressed common method variance due to the single wave nature of the study. The final step analyzed the data through both SEM and OLS regression to test hypotheses. Details of this process are found below.

3.7.1 Data Cleaning

The data was collected in and retrieved from Qualtrics® as a common separated values file for analysis within the software packages IBM® SPSS® Statistics 26.0.0.0 and IBM® SPSS® AMOS 26.0.0.0. The data analysis and storage occurred on a password protected computer.
The data cleaning process began by eliminating the respondents’ IP addresses to ensure anonymity of the survey participants. Further data cleaning included a series of response eliminations based on the response being incomplete, not passing the bot check, not passing the screening questions in order to meet the sample requirements, not agreeing to the informed consent, and not answering all questions. The next series of response removals relate to IMCs and attention checks. Responses that failed any of the IMCs or attention checks for the first time were initially retained, but closer attention was paid to these respondents to ensure that they were fully engaged (Oppenheimer et al., 2009). Future failures of an IMC or attention checks resulted in the removal since these signs of disengagement threaten external validity (Oppenheimer et al., 2009). Straight-lining was also considered a sign that respondents were not fully engaged (Cole et al., 2012). Straight-lining is when a respondent selects the same response for all items of the same scale and this straight-lining is easily detected because the survey included a reverse-coded item and the scale items were presented in a matrix format (Cole et al., 2012). Any straight-lined responses were removed and this removal occurred before the reverse coding process. This order of operation was taken because the reverse coding process can result in valid straight-lined responses (Cole et al., 2012). The final step of data cleaning was to take this reverse coding action to allow for the interpretation of the relationships between variables.

3.7.2 Statistical Assumptions

With data cleaning complete, statistical assumptions for the data were analyzed. Statistical data analysis and SEM was conducted with IBM® SPSS® AMOS 26.0.0.0 software packages. An assumption of multivariate normality was necessary since maximum likelihood was used as the estimation technique based on the covariance matrix (Kline, 2016). In the present study, multivariate normality was assessed through critical ratio analysis and the
computing of Mardia’s statistic (Kankainen et al., 2004; Kline, 2016). A significant Mardia’s statistic at \( p < .05 \) with a critical ratio greater than 5.0 indicates a departure from multivariate normality (Byrne, 2010; Kankainen et al., 2004). Along with normality testing, a test for multivariate outliers was performed via the squared Mahalanobis distance (\( D^2 \); Huck, 2012; Kline, 2016). Those \( D^2 \) values showing a distinct difference from other \( D^2 \) values represented potential outliers (Byrne, 2010). Kline (2016) also suggests to pay special attention to high \( D^2 \) values with low \( p \)-values (\( p < .001 \)), which represented another indicator of potential outliers.

The remedy in the face of a failure of multivariate normality was bootstrapping, with a comparison of estimates to the non-bootstrapped results (Kline, 2016). In this study, bootstrapping was set at a 5,000-case sampling procedure at the 95% confidence level (Kline, 2016). If non-bootstrapped results are not significantly different than bootstrapped estimates, the non-bootstrapped results are reported (Kline, 2016).

### 3.7.3 Construct Validity

Before testing the structural model, a measurement model analysis was conducted (Byrne, 2010; Kline, 2016; Schumacker & Lomax, 2016; Thompson, 2004). Two CFAs were performed on the larger model in order to validate both the dimensional and higher-order aspects of the model. The dimensional measurement model performed an analysis of the individual dimensions of EI and job satisfaction (Figure 3.1). The higher-order measurement model performed an analysis on the higher-order representation of personal EI and leader EI, as well as job satisfaction (Figure 3.2). As depicted in the figures, the multi-factor models constrained indicators of each factor to solely load on their respective factor and all factors were allowed to correlate (Byrne, 2010; Schumacker & Lomax, 2016; Thompson, 2004).
In order to validate the measurement model and before testing hypotheses with SEM, we performed a CFA to evaluate the goodness of fit of the model to the data (Kline, 2016; Schumacker & Lomax, 2016). As part of the measurement model evaluation, we freed all factors to correlate. A commonly used series of fit indices allows for the comparison and evaluation of Figure 3.2

*Initial higher-order EI measurement model (SEA = Self-Emotion Appraisal, OEA = Others’ Emotion Appraisal, ROE = Regulation of Emotion, UOE = Use of Emotion, PEI = Personal Emotional Intelligence, LEI = Leader Emotional Intelligence, JS = Job Satisfaction)*
the model fit across a series of six measurement models. These goodness of fit indices and their respective cutoff standards include the root mean squared error of approximation (RMSEA) ≤ .08, the standardized root mean square residuals (SRMRs) ≤ .08, the comparative fit index (CFI) ≥ .90, the smallest value of the Akaike information criterion (AIC), the Bayes information criterion, and the absolute correlation residuals (ACR) ≤ .10 (Byrne, 2010; Kline, 2016; Schumacker & Lomax, 2016). In addition to these indices, an evaluation of the difference
between the chi-square ($\chi^2$) values of models was performed with preference given to those models that lower $\chi^2$ (Kline, 2016). Additionally, in order to determine if the construct variable correlated most highly with its corresponding factor, the pattern and structure coefficients were assessed by examining the structure coefficients (Graham, Guthrie, & Thompson, 2003). The convergent validity of the construct variables required factor loadings above a .5 minimum threshold and hoped to meet a more stringent .7 threshold without going above .95 (Bagozzi & Yi, 1988; Kline, 2016). Further reliability and validity analysis occurred with an analysis of composite reliability (CR), the average variance extracted (AVE), and the square root of the AVE. CR ≥ .6 demonstrated reliability, while AVE ≥ .5 demonstrated convergent validity (Bagozzi & Yi, 1988). When correlations between factors were lower than the square root of the AVE for the individual factors, there was evidence of discriminant validity (Bagozzi & Yi, 1988). Each of these assessments ultimately provides confidence in the measurement model and individual construct validity and the results of this analysis can be seen in Chapter 4.

### 3.7.4 Common Method Variance

Since the data for this study was collected at a single point in time (e.g., cross-sectional data), an assessment of common method variance was performed to evaluate common method bias. CMV created the potential to bias this study due to measurement context and common rater effects. These effects potentially sourced primarily from artifactual covariation produced from measurements of predictor and criterion variables at the same point in time and through the same medium. (Podsakoff et al., 2003). Secondary sources of bias came from social desirability and leniency biases (Podsakoff et al., 2003). CMV has been shown to have substantial effects on the true versus observed correlations between constructs, especially in regards to item characteristic effects and item context effects (Podsakoff et al., 2003). Accordingly, CMV was tested for in
two ways, including both a Harmon’s single-factor test and a CFA marker technique (Williams et al., 2010).

A Harman’s single-factor test within CFA allowed a test of common method bias (Iverson & Maguire, 2000; Korsgaard & Roberson, 1995; Mossholder et al., 1998; Podsakoff et al., 2003). Going to a second step of CMV analysis with the CFA marker technique added rigor to the study in order to test for a wider range of CMV causes (Podsakoff et al., 2003). The CFA marker techniques has been shown to accurately identify the presence or absence of CMV up to 73% of the time, with this accuracy increasing to 84% with the use of an “ideal” marker (Richardson et al., 2009), as is the case in this study.

It is important to note that the choice of variable used to represent the “marker” plays an important role in the ability to find the true nature and prevalence of CMV in the data (Simmering et al., 2015). Richardson et al. (2009) refers to ideal markers, or markers with no expected theoretical relationship with substantive variables. Williams & McGonagle (2015) refer to a “measured cause variable” instead of using the marker terminology. This measured cause variable more accurately represents the ideal variable to use within the CFA marker technique because it directly measures method bias (Simmering et al., 2015; Williams & McGonagle, 2015). Examples of measured cause variables include social desirability (Barrick & Mount, 1996; Ganster et al., 1983; Podsakoff & Organ, 1986; Smith & Ellingson, 2002) and negative affectivity (Schaubroeck et al, 1992; Williams & Anderson, 1994; Williams et al., 1996). In order to follow the suggestions of the literature, this study utilized the three negatively worded items hostile, nervous, and afraid of the I-PANAS-SF (Thompson, 2007) as the measured cause variable. These items have been successfully used in several recent studies (Kim, Nimon, Song, & Zigarmi, 2015; Shuck, Nimon, & Zigarmi, 2017; Zigarmi, Nimon, & Conley, 2018). The
measured cause variable items were anchored on a 5-point Likert-type scale ranging from 1 (“never”) to 5 (“always”). The coefficient alpha value for the I-PANAS-SF was .76 (Thompson, 2007).

The CFA market techniques allowed for the “testing for the presence of an equality of method effects associated with the marker latent variable” (Williams et al., 2010, p. 494). This analysis results in model fit statistics, including a $\chi^2$ test statistic, degrees of freedom, and the comparative fit index (CFI), which should be $\geq .95$ (Williams et al., 2010). A comparison of models (e.g., Baseline Model vs. Model-C, Model-C vs. Model-U, and Model-C or Model-U vs. Model-R) are assessed based on statistically significant change in the chi-squared value ($\Delta \chi^2$) at $p \leq .05$ (Williams et al., 2010). Common method effects are found to be present if $\Delta \chi^2$ is statistically significant (Williams et al., 2010). These analyses were run on both the dimensional and higher-order models with results presented in Chapter 4.

3.7.5 Hypothesis Testing

While multiple regression may be a common method to test the direct effects of multiple independent variables on a single dependent variable, SEM analysis is a more effective method to test these relationships. SEM makes for a more sophisticated analysis technique, allowing for the simultaneous assessment of all relationships in the model and the interaction of variables (Kline, 2016). Therefore, Hypotheses 2, 3, 4, and 5 will be assessed within a single structural model of EI dimensions and job satisfaction.

Further, this study will use a bootstrapping approach through the PROCESS Macro for SPSS 26 as a means of testing the significance of moderation models (Hayes, 2018). Researchers have advocated this approach because it avoids normality assumptions in the sampling distribution through the use of bootstrapping confidence intervals (Hayes, 2018; Hayes et al.,
2017; Preacher et al., 2007). The PROCESS Macro allows for the implementation of these bootstrapping techniques and readily assesses different values of a moderator for the significance of the conditional effects. The abilities of this macro have allowed it to become ever more applied and popular in the literature (e.g. Goswami et al., 2016; Gu et al., 2016). Therefore, Hypotheses 1, 6, and 7 will be assessed through the testing of two moderation models with PROCESS model 1.

3.8 Summary

This chapter presented the design and methodology of this study. The chapter covered the purpose of the study, the population and sample, the survey design, data collection methods, measures, and data analysis, including data cleaning, statistical assumptions, construct validity, and common method variance. With the design and methodology understood, the next chapter explores the survey results and findings.
CHAPTER 4

RESULTS

4.1 Introduction

This chapter reports the result of this study. The sections outlining the results include information regarding data collection, sample representativeness, statistical assumptions, measurement models, structural equation modeling, regression analysis, descriptive statistics, and a discussion of the hypotheses. The chapter culminates with a summary.

4.2 Data Collection

The purpose of this study was to empirically assess the influence of EI on job satisfaction, including both a dimensional and higher-order analysis. The data were collected based on a single-wave, cross-sectional survey research method. Data were collected utilizing the online survey platform Qualtrics® and with the assistance of MTurk®. Data collection took place between February 24, 2020 and March 4, 2020. Demographics and work characteristic information were collected to identify those respondents that met the sample requirements.

The collected data were retrieved from Qualtrics® as a csv file. In order to process payment of respondents, a second csv file was retrieved from MTurk®. Both csv files provided the unique payment code necessary to validate the completion of the survey and payment. Upon completion of this process, the retrieved data from Qualtrics® went through further cleaning with IBM® SPSS® AMOS 26.0.0.0 in order to prepare for data analysis.
Data collection resulted in 697 surveys being accessed through Qualtrics®. IP addresses were removed as the first step of the data cleaning process in order to ensure anonymity. Those responses that did not pass the screening questions were removed in order to keep responses that met the sample requirements. These requirements are described in the survey design section. These requirements resulted in 80 response removals due to failing the bot check, one removal due to the respondent not living in the United States, and 20 removals for respondents that were not employed full or part time. All responses that passed the screening questions agreed to the informed consent. All questions in the survey required responses and no response should have been missing data at this point in the process unless the respondent failed to complete the survey. With this in mind, a total of 52 responses were removed due to incomplete data. Further screening was done by checking responses to IMCs and attention checks. Based on the assumption that these respondents were not fully engaged, responses that missed multiple IMCs or an attention check were removed (Oppenheimer et al., 2009). Straight-lining was also considered a sign of lack of engagement and, therefore, also utilized as a data removal criterion (Cole et al., 2012). At this point, 457 responses were marked for payment in MTurk®. The final step in the data cleaning process required a removal of responses that missed IMCs or attention checks and whose data showed signs of inattention or lack of engagement. These signs include quick survey completion times and severe straight-lining. The final sample size after the completion of data validation was 427.

The last step in the data cleaning process included the reverse coding of negatively worded items in order to allow for the interpretation of the relationship between variables. The job satisfaction scale was anchored on a 5-point Likert-type scale, with 1 indicating strongly
disagree and 5 indicating strongly agree. Item 1 was negatively worded and recoded so that all scale scores indicated an increase in job satisfaction as scores increased.

4.3 Sample Representativeness Results

In order to assess sample representativeness, Pearson’s chi-square tests were utilized to compare the demographic percentages of the collected sample to the percentages obtained from the BLS. Statistical significance was found at \( p \leq .05 \), while practical significance was determined at \( w \geq .10 \) (Cohen, 1988; Huck, 2012). Small effects are considered to be \( w = .10 \), with medium effects at \( w = .30 \), and large effects at \( w = .50 \) (Cohen, 1988; Huck, 2012). Table 4.1 compares the sample and the population as described by BLS data.

A notable difference between the BLS demographic profile and the final sample was found. The final sample consisted of more males (59.0%) than the BLS demographic profile (53.0%). This stands in contrast to previous reports that MTurk® workers are dominantly female (Buhrmester et al., 2011; Paolacci et al., 2010). The final sample included more 25-54-year-olds (81.0%) than the BLS profile (64.8%). This difference is likely due to the exclusion of non-working individuals from the sample. The race distribution indicated a difference between the BLS demographic profile (68.1% Caucasian/White, 15.5% Hispanic) and the sample, which consisted of more Caucasian/White (81.0%) and fewer Hispanics (2.8%). Finally, there were differences in the demographic profile of respondents’ companies. The sample indicated a smaller percentage of 500 or more employee companies (41.9%) compared to the BLS (47.6%). The dominant industry represented in the sample, service-producing, matched that of the BLS demographic profile, but at a smaller percentage (67.4% versus 80.2%).
Table 4.1

*Sample representativeness comparison for BLS against the sample*

<table>
<thead>
<tr>
<th>Variable</th>
<th>BLS/USCB</th>
<th>Sample</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$-value</th>
<th>w</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 or older</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Other Native American</td>
<td>n/a</td>
<td>0.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td></td>
<td>6.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian or White (other than Hispanic)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>81.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>n/a</td>
<td>0.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-499 employees</td>
<td></td>
<td>58.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 or more employees</td>
<td></td>
<td>41.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good-producing, excluding agriculture</td>
<td></td>
<td>12.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service-producing</td>
<td></td>
<td>67.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry, fishing, and hunting</td>
<td></td>
<td>2.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>17.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


4.4 Statistical Assumptions Results

The IBM® SPSS® AMOS 26.0.0.0 software package was used to conduct statistical data analysis and SEM for each of the two models. The cleaned data file from data collection was converted into an SPSS.sav format in order to facilitate its opening in AMOS. In AMOS,
maximum likelihood estimation technique based on a covariance matrix was used. The covariance data matrix for the raw data must be positive definite, meaning that the matrix is nonsingular, all eigenvalues are positive, and there are no out-of-bounds correlations or covariances (Kline, 2016). The technique also requires an analysis for outliers.

The squared Mahalanobis distance ($D^2$) was used to assess the existence of multivariate outliers (Huck, 2012; Kline, 2016). Potential outliers are potentially found when $D^2$ values are distinctly different from other $D^2$ values (Byrne, 2010). Also, special attention must be given to those high $D^2$ values that also have low $p$-values ($p < .001$), which provides additional evidence of a potential outlier (Kline, 2016). All $D^2$ values with $p < .001$ for both the dimensional and second-order model were examined. The $D^2$ value for observation 84 within the dimensional and second-order model appeared to be different from the other $D^2$ values. The observation exhibited a large drop in $D^2$ compared to the prior observation. After examining the raw data of observation 84 for large variations in reported scores and in consideration that the respondent appeared to fit within the target population, the data was determined not to represent an outlier and assumption testing was continued.

The maximum likelihood technique assumes multivariate normality (Kline, 2016). Mardia’s statistic provided a means of assessing multivariate normality (Kankainen et al., 2004). Finding a significant result of the Mardia statistic indicates a departure from normality (Kankainen et al., 2004). The Mardia statistic of 238.979 with a critical ratio of 72.811 ($p < .05$) for the dimensional model and 515.498 with a critical ratio of 99.143 ($p < .05$) for the second-order model showed that the assumptions of multivariate normality were not met. The critical ratio greater than 5.0 indicated nonnormality (Byrne, 2010). Knowing that the multivariate normality assumption had not been met, a 5,000-case bootstrapping procedure at the 95%
confidence level was performed (Kline, 2016). The results of this procedure indicated that bootstrapped estimates were not substantially different when compared to non-bootstrapped estimates. Based on this result, data were considered to be multivariate normal with no outliers and, with the exception of those confidence intervals reported for the direct effects in the structural model, non-bootstrapped estimates can be reported going forward (Kline, 2016).

4.5 Measurement Model Analyses

In order to validate the measurement model and before testing hypotheses with SEM, a CFA was performed to evaluate the goodness of fit of the model to the data (Kline, 2016; Schumacker & Lomax, 2016). As part of the measurement model evaluation, all factors were freed to correlate. A single CFA model was evaluated for the dimensional model, while multiple CFA models were evaluated on the higher-order model. The goodness of fit for each of these measurement models was determined by $\chi^2$, df, RMSEA, SRMRs, CFI, AIC, ACR, and factor loadings. In addition to these indices, an evaluation of the difference between the chi-square ($\chi^2$) values of models was performed with preference given to those models that lower $\chi^2$ (Kline, 2016). Finally, in order to assess whether the manifest variable correlated most highly with its corresponding factor, the structure coefficients were assessed (Graham et al., 2003). Additional statistics evaluated in this study include CR, AVE, and the square root of the AVE.

A total of six models were evaluated for CFA (Table 4.2). The first model (M1) was the theoretical five-factor CFA model with all items associated with the dimensional model. Model 1 showed a good fit for the data (RMSEA = .066, SRMR = .043, CFI = .950). In order to further assess the measurement model for Model 1, an evaluation of the factor loadings of all items was executed. Factor loadings of items greater than .5 highlighted convergent validity, with all but two factor loadings exceeding the more stringent .7 but less than .95 threshold (Bagozzi & Yi,
### Table 4.2

*Measurement model fit indices for the dimensional and higher-order data*

<table>
<thead>
<tr>
<th>Model (M)</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA (90% CI)</th>
<th>SRMR</th>
<th>CFI</th>
<th>AIC</th>
<th>BIC</th>
<th>ACR</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1: 5-factor dimensional</td>
<td>630.49</td>
<td>220</td>
<td>.066 (.060 -.072)</td>
<td>.043</td>
<td>.950</td>
<td>742.49</td>
<td>969.67</td>
<td>10</td>
</tr>
<tr>
<td>M2: Higher-order</td>
<td>1667.59</td>
<td>691</td>
<td>.058 (.054-.061)</td>
<td>.056</td>
<td>.939</td>
<td>1845.59</td>
<td>2206.64</td>
<td>60</td>
</tr>
<tr>
<td>M3: Higher-order, Minus 1 PEI Item</td>
<td>1553.08</td>
<td>654</td>
<td>.057 (.053-.060)</td>
<td>.053</td>
<td>.942</td>
<td>1727.08</td>
<td>2080.02</td>
<td>48</td>
</tr>
<tr>
<td>M4: Higher-order, Minus 2 PEI Items</td>
<td>1474.20</td>
<td>618</td>
<td>.057 (.053-.061)</td>
<td>.050</td>
<td>.943</td>
<td>1644.20</td>
<td>1989.03</td>
<td>34</td>
</tr>
<tr>
<td>M5: 4-factor (Harman's Test)</td>
<td>5680.50</td>
<td>230</td>
<td>.236 (0.231-.241)</td>
<td>.210</td>
<td>.340</td>
<td>5772.50</td>
<td>5959.11</td>
<td>84</td>
</tr>
<tr>
<td>M6: Higher-Order (Harman's Test)</td>
<td>9658.83</td>
<td>629</td>
<td>.184 (.180-.187)</td>
<td>.179</td>
<td>.395</td>
<td>9806.83</td>
<td>10107.03</td>
<td>179</td>
</tr>
</tbody>
</table>

*Note. df = degrees of freedom. RMSEA = root mean square error of approximation. SRMR = standardized root mean square residual. CFI = comparative fit index. AIC = Akaike information criterion. BIC = Bayes Information Criterion. ACR = absolute correlation residuals. PEI = Personal Emotional Intelligence*
1988; Hair et al., 2018; Kline, 2016). Additionally, as indicated by structure coefficients (Table 4.3) each manifest variable correlated most with its corresponding factor (Graham et al., 2003). As seen in Table 4.4, CR scores and AVE values each met their recommended thresholds of .6 and .5 respectively (Bagozzi & Yi, 1988). Finally, the square root of the AVE for individual factors were all greater than the correlations between factors and indicate discriminant validity (Bagozzi & Yi, 1988; see Table 4.4). With a satisfactory fit for Model 1, the analysis moved on to the second-order model that combined the four individual dimensions of EI into a higher-order factor for both personal and leader EI.

The second model (M2) utilized all items available under this second-order model for each of the three factors. Model 2 did not provide an optimal fit for the data (RMSEA = .058, SRMR = .056, CFI = .939, see Table 4.2). An analysis of residual correlation showed a significant amount of residual correlations greater than |0.10| (ACR = 60; Byrne, 2010; Kline, 2016; Schumacker & Lomax, 2016). Following the most conservative course, the single item providing the largest issue (ACR = 14) was eliminated to create Model 3 (M3). Model 3 also did not provide an optimal fit to the data (RMSEA = .058, SRMR = .056, CFI = .939), but fit the data significantly better than Model 2 ($\Delta \chi^2 = 114.511, p < .001$). With another item with extensive residual correlation left (ACR = 10), a second item was eliminated to create Model 4 (M4). Model 4 showed a good fit for the data (RMSEA = .057, SRMR = .050, CFI = .943), while also minimizing ACR (ACR = 34). Model 4 increased fit over Model 3 ($\Delta \chi^2 = 78.879, p < .001$).

In order to further assess the measurement model for Model 4 as was done on Model 1, an evaluation of the factor loadings of all items was executed. Once again, factor loadings highlighted convergent validity, with all but two factor loadings exceeding the more stringent .7 threshold (Bagozzi & Yi, 1988; Hair et al., 2018; Kline, 2016). Each manifest variable correlated
most with its corresponding factor (Table 4.5; Graham et al., 2003) and, as seen in Table 4.6, CR scores and all but one of the AVE values each met their recommended thresholds (Bagozzi & Yi, 1988). The personal EI factor AVE dipped slightly below the .5 threshold to .491. Finally, discriminant validity was found with the square root of AVE for individual factors all being greater than the correlations between factors (Bagozzi & Yi, 1988; see Table 4.6). With best fitting CFA models for both the dimensional and second-order measurement models in hand, the analysis moved forward into common method variance testing.
Table 4.3

Standardized path (P) and structure (S) coefficients for measurement model 1

<table>
<thead>
<tr>
<th>Construct Variables</th>
<th>JSAT</th>
<th>SEA</th>
<th>OEA</th>
<th>ROE</th>
<th>UOE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
</tr>
<tr>
<td>JSAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSAT1</td>
<td>.748</td>
<td>.748</td>
<td>.100</td>
<td>.156</td>
<td>.186</td>
</tr>
<tr>
<td>JSAT2</td>
<td>.880</td>
<td>.880</td>
<td>.118</td>
<td>.184</td>
<td>.219</td>
</tr>
<tr>
<td>JSAT3</td>
<td>.827</td>
<td>.827</td>
<td>.111</td>
<td>.173</td>
<td>.206</td>
</tr>
<tr>
<td>JSAT4</td>
<td>.867</td>
<td>.867</td>
<td>.116</td>
<td>.181</td>
<td>.216</td>
</tr>
<tr>
<td>JSAT5</td>
<td>.831</td>
<td>.831</td>
<td>.111</td>
<td>.174</td>
<td>.207</td>
</tr>
<tr>
<td>JSAT6</td>
<td>.869</td>
<td>.869</td>
<td>.116</td>
<td>.182</td>
<td>.217</td>
</tr>
<tr>
<td>JSAT7</td>
<td>.936</td>
<td>.936</td>
<td>.125</td>
<td>.195</td>
<td>.233</td>
</tr>
<tr>
<td>SEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEA1</td>
<td>.911</td>
<td>.911</td>
<td>.454</td>
<td>.541</td>
<td>.457</td>
</tr>
<tr>
<td>SEA2</td>
<td>.953</td>
<td>.953</td>
<td>.474</td>
<td>.566</td>
<td>.478</td>
</tr>
<tr>
<td>SEA3</td>
<td>.900</td>
<td>.900</td>
<td>.448</td>
<td>.534</td>
<td>.451</td>
</tr>
<tr>
<td>SEA4</td>
<td>.633</td>
<td>.633</td>
<td>.315</td>
<td>.376</td>
<td>.317</td>
</tr>
<tr>
<td>OEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEA1</td>
<td></td>
<td>.815</td>
<td>.815</td>
<td>.323</td>
<td>.193</td>
</tr>
<tr>
<td>OEA2</td>
<td></td>
<td>.901</td>
<td>.901</td>
<td>.357</td>
<td>.214</td>
</tr>
<tr>
<td>OEA3</td>
<td></td>
<td>.810</td>
<td>.810</td>
<td>.321</td>
<td>.192</td>
</tr>
<tr>
<td>OEA4</td>
<td></td>
<td>.926</td>
<td>.926</td>
<td>.367</td>
<td>.220</td>
</tr>
<tr>
<td>ROE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE1</td>
<td></td>
<td></td>
<td>.731</td>
<td>.731</td>
<td>.363</td>
</tr>
<tr>
<td>ROE2</td>
<td></td>
<td></td>
<td>.694</td>
<td>.694</td>
<td>.345</td>
</tr>
<tr>
<td>ROE3</td>
<td></td>
<td></td>
<td>.817</td>
<td>.817</td>
<td>.406</td>
</tr>
<tr>
<td>ROE4</td>
<td></td>
<td></td>
<td>.906</td>
<td>.906</td>
<td>.450</td>
</tr>
<tr>
<td>UOE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UOE1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.816</td>
</tr>
<tr>
<td>UOE2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.899</td>
</tr>
<tr>
<td>UOE3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.733</td>
</tr>
<tr>
<td>UOE4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.921</td>
</tr>
</tbody>
</table>

Note. IT = Intention to Turnover. PSHRD = Perceived Support for Participation in HRD Practices. EE = Emotional Engagement. BE = Behavioral Engagement. CE = Cognitive Engagement.
Table 4.4

*Implied correlations, average variance extracted (AVE), and composite reliability (CR) for measurement model 1*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SEA</td>
<td>.859</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. OEA</td>
<td>.498</td>
<td>.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ROE</td>
<td>.594</td>
<td>.396</td>
<td>.791</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. UOE</td>
<td>.501</td>
<td>.237</td>
<td>.497</td>
<td>.846</td>
<td></td>
</tr>
<tr>
<td>5. JSAT</td>
<td>.134</td>
<td>.209</td>
<td>.249</td>
<td>.215</td>
<td>.853</td>
</tr>
<tr>
<td>CR</td>
<td>.917</td>
<td>.922</td>
<td>.869</td>
<td>.909</td>
<td>.949</td>
</tr>
<tr>
<td>AVE</td>
<td>.737</td>
<td>.747</td>
<td>.626</td>
<td>.715</td>
<td>.727</td>
</tr>
</tbody>
</table>

*Note.* Square root of AVE along the diagonal. SEA = Self-Emotion Appraisal. ROE = Regulation of Emotion. UOE = Use of Emotions. OEA = Others' Emotion Appraisal. JSAT = Job Satisfaction.
Table 4.5

Standardized path (P) and structure (S) coefficients for measurement model 4

<table>
<thead>
<tr>
<th>Construct Variables</th>
<th>JSAT</th>
<th>PEI</th>
<th>LEI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>S</td>
<td>P</td>
</tr>
<tr>
<td>JSAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSAT1</td>
<td>.746</td>
<td>.746</td>
<td>.188</td>
</tr>
<tr>
<td>JSAT2</td>
<td>.882</td>
<td>.882</td>
<td>.222</td>
</tr>
<tr>
<td>JSAT3</td>
<td>.828</td>
<td>.828</td>
<td>.209</td>
</tr>
<tr>
<td>JSAT4</td>
<td>.866</td>
<td>.866</td>
<td>.218</td>
</tr>
<tr>
<td>JSAT5</td>
<td>.831</td>
<td>.831</td>
<td>.209</td>
</tr>
<tr>
<td>JSAT6</td>
<td>.868</td>
<td>.868</td>
<td>.219</td>
</tr>
<tr>
<td>JSAT7</td>
<td>.936</td>
<td>.936</td>
<td>.236</td>
</tr>
<tr>
<td>PEI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEA</td>
<td></td>
<td>.812</td>
<td>.812</td>
</tr>
<tr>
<td>ROE</td>
<td></td>
<td>.742</td>
<td>.742</td>
</tr>
<tr>
<td>UOE</td>
<td></td>
<td>.619</td>
<td>.619</td>
</tr>
<tr>
<td>OEA</td>
<td></td>
<td>.609</td>
<td>.609</td>
</tr>
<tr>
<td>LEI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSEA</td>
<td></td>
<td>.901</td>
<td>.901</td>
</tr>
<tr>
<td>LROE</td>
<td></td>
<td>.760</td>
<td>.760</td>
</tr>
<tr>
<td>LUOE</td>
<td></td>
<td>.826</td>
<td>.826</td>
</tr>
<tr>
<td>LOEA</td>
<td></td>
<td>.881</td>
<td>.881</td>
</tr>
</tbody>
</table>

Table 4.6

*Implied correlations, average variance extracted (AVE), and composite reliability (CR) for measurement model 4*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. JSAT</td>
<td>.853</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PEI</td>
<td>.403</td>
<td>.701</td>
<td></td>
</tr>
<tr>
<td>3. LEI</td>
<td>.361</td>
<td>.252</td>
<td>.844</td>
</tr>
<tr>
<td>CR</td>
<td>.949</td>
<td>.792</td>
<td>.908</td>
</tr>
<tr>
<td>AVE</td>
<td>.727</td>
<td>.491</td>
<td>.712</td>
</tr>
</tbody>
</table>

*Note.* Square root of AVE along the diagonal. IT = Intention to Turnover. JSAT = Job Satisfaction. PEI = Personal Emotional Intelligence. LEI = Leader Emotional Intelligence.

### 4.5.1 Common Method Variance Testing

Since the data for this study was collected at a single point in time (e.g., cross-sectional data), an assessment of common method variance was performed to evaluate common method bias. A Harman’s single-factor test and a CFA marker technique were utilized. The logic of a single-factor test is that method variance is responsible for covariance among measures (Podsakoff & Organ, 1986). A Harman’s single-factor test confirmed the logic underlying the single-factor procedure as the single factor measurement model for the 4-factor model (Model 5) did not fit the data well ($\Delta \chi^2 = 5050.01, p < .001$). A single factor measurement model for the higher-order model also did not fit the data well ($\Delta \chi^2 = 8184.63, p < .001$). The results of the Harman’s single-factor test can be seen in Table 4.2.

The CFA marker technique proposed by Williams et al. (2010) was utilized to further investigate potential issues with common method bias. As discussed in the methods section, we utilized a measured cause variable instead of a marker variable. The CFA marker analysis fully evaluated for CMV as outlined by Williams et al. (2010). The dimensional model was the first to
be examined. The first step was to examine the dimensional CFA model, which provided a complete set of correlations among all of the substantive study variables and the marker variable. The CFA model generated factor loading and measurement error variance estimates for the three marker variable indicators to use in succeeding models.

The second step was to examine the Baseline Model, which allowed for the substantive factors to be correlated. However, it is important to note that the measured cause variable is considered orthogonal, with its indicators having fixed factor loadings and error variances obtained from the CFA model. Specifically, these unstandardized factor loadings for M1, M2, and M3 were .37, .78, and .68 respectively. The unstandardized error estimates were .41, .35, and .25. The use of these fixed values in the Baseline and subsequent models enabled the establishment of meaning for the measured cause variables by preventing the meaning of the measured cause variable from being compromised.

In the third step, a Method-C model was formulated and examined by fixing the parameter estimates for the measured cause variables and adding factor loadings between the latent method factor to each of the substantive items. Each of these new factor loadings was set equivalent for the analysis.

The fourth step is to build a fourth model (Method-U) that replicates the previous model except that the estimates from the latent method factor the substantive items were not forced to be equivalent. This freeing of the estimates allowed for the testing of congeneric/noncongeneric perspectives. Since the Method-U model provided better fit statistics and model comparisons versus the Method-C model, the Method-U model was utilized for the final step.

The final step compared this selected model to a Method-R model in order to statistical test the level of bias due to the measured cause variable. The significant difference between these
two models ($p = .032$) provided potential evidence for CMV bias. The results of the dimensional CFA marker technique analyses can be seen in Table 4.7.

**Table 4.9**

*Model fit indices and model comparisons for higher-order CFA models with marker variable*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$ (df)</th>
<th>CFI</th>
<th>RMSEA (90% CI)</th>
<th>LR of $\Delta\chi^2$</th>
<th>Model comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA with marker variable</td>
<td>1731.9 (726)</td>
<td>0.935</td>
<td>.057 (.054, .061)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1835.5 (735)</td>
<td>0.929</td>
<td>.059 (.056, .063)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method-C</td>
<td>1799.9 (734)</td>
<td>0.931</td>
<td>.058 (.055, .062)</td>
<td>35.6, $df = 1$, $p &lt; .001$</td>
<td>vs. Baseline</td>
</tr>
<tr>
<td>Method-U</td>
<td>1675.3 (720)</td>
<td>0.938</td>
<td>.056 (.052, .059)</td>
<td>124.6, $df = 14$, $p &lt; .001$</td>
<td>vs. Method-C</td>
</tr>
<tr>
<td>Method-R</td>
<td>1679.8 (723)</td>
<td>0.938</td>
<td>.056 (.052, .059)</td>
<td>4.48, $df = 3$, $p = .214$</td>
<td>vs. Method-U</td>
</tr>
</tbody>
</table>

*Note. CFA = confirmatory factor analysis; CFI = comparative fit index; RMSEA = root mean square error of approximation; LR = likelihood ratio test; U = unconstrained; C = common; R = restricted.*

While evidence of CMV was found, further insight into the location and magnitude of the potential bias can be assessed by examining the significance of factor correlations between the Baseline and Method-U Models (Table 4.8). To recognize the magnitude of this potential common method bias, the average change in correlations estimates across all 10 correlations were computed (average $b = .079$). The range of these correlation value changes were between .011 and .168. Despite the significant model difference that uncovered the potential CMV bias, the average change highlights the minimal common method bias inherent in the data. To recognize where the bias may be located, the location of any changes in statistical significance
were identified. Analysis of the significance identified the relationships between the SEA and UOE dimensions with job satisfaction as the most likely locations for CMV, as they both showed factor correlations that became non-significant (Table 4.8). As an explanation of these findings, the link between job satisfaction and the measured cause variable, which both represent affective variables, creates the potential that the measured cause variable pulled out a portion of substantive variance for the job satisfaction factor. This loss of substantive variance can be the difference between finding a significant versus nonsignificant difference in models in the last step of CFA marker technique analysis. Additional analyses that decompose the reliability of the latent variables substantiate these findings (Williams et al., 2010), with the SEA, ROE, and UOE decomposed method component values of .30, .16, and .15, respectively, indicating the greatest affect due to method variance. Full reliability decomposition results, and additional sensitivity analysis (Williams et al., 2010), can be made available by request from the author.

Table 4.8

Factor correlations of the dimensional CFA marker technique analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Baseline Model Estimate</th>
<th>Method-U Model Estimate</th>
<th>Estimate Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA &lt;-&gt; OEA</td>
<td>.498*</td>
<td>.487*</td>
<td>.011</td>
</tr>
<tr>
<td>SEA &lt;-&gt; ROE</td>
<td>.594*</td>
<td>.510*</td>
<td>.084</td>
</tr>
<tr>
<td>SEA &lt;-&gt; UOE</td>
<td>.501*</td>
<td>.361*</td>
<td>.140</td>
</tr>
<tr>
<td>SEA &lt;-&gt; JSAT</td>
<td>.134*</td>
<td>.041</td>
<td>.093</td>
</tr>
<tr>
<td>OEA &lt;-&gt; ROE</td>
<td>.396*</td>
<td>.378*</td>
<td>.018</td>
</tr>
<tr>
<td>OEA &lt;-&gt; UOE</td>
<td>.237*</td>
<td>.198*</td>
<td>.039</td>
</tr>
<tr>
<td>OEA &lt;-&gt; JSAT</td>
<td>.209*</td>
<td>.185*</td>
<td>.023</td>
</tr>
<tr>
<td>ROE &lt;-&gt; UOE</td>
<td>.497*</td>
<td>.328*</td>
<td>.168</td>
</tr>
<tr>
<td>ROE &lt;-&gt; JSAT</td>
<td>.249*</td>
<td>.164*</td>
<td>.085</td>
</tr>
<tr>
<td>UOE &lt;-&gt; JSAT</td>
<td>.215*</td>
<td>.091</td>
<td>.124</td>
</tr>
<tr>
<td>Average</td>
<td>.353</td>
<td>.274</td>
<td>.079</td>
</tr>
</tbody>
</table>

*Note.  *p < .01
The higher-order CFA model was also examined with the CFA marker technique. Table 4.9 provides an overview of this analysis. The same process as outlined above was followed and resulted in nonsignificant difference between the final two models \((p = .214)\). This result showed that there was no evidence of common method bias. With limited evidence of common method bias in the dimensional data and no evidence of bias in the second-order model, the measurement models were utilized in further structural and regression analysis respectively.

**Table 4.9**

*Model fit indices and model comparisons for higher-order CFA models with marker variable*

<table>
<thead>
<tr>
<th>Model</th>
<th>(\chi^2) (df)</th>
<th>CFI</th>
<th>RMSEA (90% CI)</th>
<th>LR of (\Delta \chi^2)</th>
<th>Model comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFA with marker variable</td>
<td>1731.9 (726)</td>
<td>0.935</td>
<td>.057 (0.054, 0.061)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>1835.5 (735)</td>
<td>0.929</td>
<td>.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method-C</td>
<td>1799.9 (734)</td>
<td>0.931</td>
<td>.058 (0.055, 0.062)</td>
<td>35.6, df = 1, (p &lt; .001)</td>
<td>vs. Baseline</td>
</tr>
<tr>
<td>Method-U</td>
<td>1675.3 (720)</td>
<td>0.938</td>
<td>.056 (0.052, 0.059)</td>
<td>124.6, df = 14, (p &lt; .001)</td>
<td>vs. Method-C</td>
</tr>
<tr>
<td>Method-R</td>
<td>1679.8 (723)</td>
<td>0.938</td>
<td>.056 (0.052, 0.059)</td>
<td>4.48, df = 3, (p = .214)</td>
<td>vs. Method-U</td>
</tr>
</tbody>
</table>

*Note.* CFA = confirmatory factor analysis; CFI = comparative fit index; RMSEA = root mean square error of approximation; LR = likelihood ratio test; U = unconstrained; C = common; R = restricted.

**4.6 Descriptive Statistics**

Descriptive statistics provided herein are for the potential identification of meaningful patterns in the study. The descriptive statistics examined the minimum, maximum, statistical mean, standard deviation, skewness, and kurtosis statistics. Table 4.10 displayed the descriptive
Table 4.10

Descriptive statistics for the dimensional model (n = 427)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>S</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEA1</td>
<td>2</td>
<td>7</td>
<td>5.74</td>
<td>1.03</td>
<td>-1.34</td>
<td>2.52</td>
</tr>
<tr>
<td>SEA2</td>
<td>1</td>
<td>7</td>
<td>5.73</td>
<td>1.15</td>
<td>-1.56</td>
<td>3.28</td>
</tr>
<tr>
<td>SEA3</td>
<td>1</td>
<td>7</td>
<td>5.63</td>
<td>1.20</td>
<td>-1.27</td>
<td>1.75</td>
</tr>
<tr>
<td>SEA4</td>
<td>1</td>
<td>7</td>
<td>5.77</td>
<td>1.16</td>
<td>-1.22</td>
<td>1.50</td>
</tr>
<tr>
<td>OEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEA1</td>
<td>1</td>
<td>7</td>
<td>4.98</td>
<td>1.30</td>
<td>-.83</td>
<td>0.62</td>
</tr>
<tr>
<td>OEA2</td>
<td>1</td>
<td>7</td>
<td>5.32</td>
<td>1.33</td>
<td>-1.07</td>
<td>1.16</td>
</tr>
<tr>
<td>OEA3</td>
<td>1</td>
<td>7</td>
<td>5.45</td>
<td>1.28</td>
<td>-1.23</td>
<td>1.52</td>
</tr>
<tr>
<td>OEA4</td>
<td>1</td>
<td>7</td>
<td>5.33</td>
<td>1.22</td>
<td>-1.11</td>
<td>1.43</td>
</tr>
<tr>
<td>ROE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE1</td>
<td>1</td>
<td>7</td>
<td>5.67</td>
<td>1.15</td>
<td>-.98</td>
<td>1.01</td>
</tr>
<tr>
<td>ROE2</td>
<td>1</td>
<td>7</td>
<td>5.29</td>
<td>1.51</td>
<td>-.08</td>
<td>.63</td>
</tr>
<tr>
<td>ROE3</td>
<td>1</td>
<td>7</td>
<td>5.70</td>
<td>1.23</td>
<td>-.27</td>
<td>1.88</td>
</tr>
<tr>
<td>ROE4</td>
<td>2</td>
<td>7</td>
<td>5.81</td>
<td>1.15</td>
<td>-.15</td>
<td>1.23</td>
</tr>
<tr>
<td>UOE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UOE1</td>
<td>1</td>
<td>7</td>
<td>5.61</td>
<td>1.25</td>
<td>-1.35</td>
<td>2.13</td>
</tr>
<tr>
<td>UOE2</td>
<td>1</td>
<td>7</td>
<td>5.61</td>
<td>1.21</td>
<td>-1.24</td>
<td>2.01</td>
</tr>
<tr>
<td>UOE3</td>
<td>1</td>
<td>7</td>
<td>4.88</td>
<td>1.44</td>
<td>-.69</td>
<td>.12</td>
</tr>
<tr>
<td>UOE4</td>
<td>1</td>
<td>7</td>
<td>5.43</td>
<td>1.28</td>
<td>-1.21</td>
<td>1.88</td>
</tr>
<tr>
<td>JSAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSAT1</td>
<td>1</td>
<td>5</td>
<td>3.40</td>
<td>1.32</td>
<td>-.32</td>
<td>-1.20</td>
</tr>
<tr>
<td>JSAT2</td>
<td>1</td>
<td>5</td>
<td>3.63</td>
<td>1.17</td>
<td>-.84</td>
<td>-.19</td>
</tr>
<tr>
<td>JSAT3</td>
<td>1</td>
<td>5</td>
<td>3.89</td>
<td>1.07</td>
<td>-1.19</td>
<td>.89</td>
</tr>
<tr>
<td>JSAT4</td>
<td>1</td>
<td>5</td>
<td>3.43</td>
<td>1.25</td>
<td>-.48</td>
<td>-.85</td>
</tr>
<tr>
<td>JSAT5</td>
<td>1</td>
<td>5</td>
<td>3.42</td>
<td>1.20</td>
<td>-.45</td>
<td>-.67</td>
</tr>
<tr>
<td>JSAT6</td>
<td>1</td>
<td>5</td>
<td>3.53</td>
<td>1.22</td>
<td>-.65</td>
<td>-.49</td>
</tr>
<tr>
<td>JSAT7</td>
<td>0</td>
<td>100</td>
<td>67.52</td>
<td>25.09</td>
<td>-1.12</td>
<td>.37</td>
</tr>
</tbody>
</table>

statistics for the dimensional model. Table 4.11 displayed the descriptive statistics for the higher-order model. In both tables, the sample size equaled 427.

Table 4.11

Descriptive statistics for the higher-order model (n = 427)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>S</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEI</td>
<td>2.71</td>
<td>7</td>
<td>5.51</td>
<td>.84</td>
<td>-.59</td>
<td>.25</td>
</tr>
<tr>
<td>LEI</td>
<td>1</td>
<td>7</td>
<td>5.07</td>
<td>1.14</td>
<td>-.78</td>
<td>.44</td>
</tr>
<tr>
<td>JSAT</td>
<td>-2.22</td>
<td>1.22</td>
<td>.00*</td>
<td>.87</td>
<td>-.82</td>
<td>-.01</td>
</tr>
</tbody>
</table>


4.7 Structural Equation Modeling Results

In order to test the relationship between the dimensions of EI and one’s view of job satisfaction (Hypotheses 2 – 5), the dimensional measurement model was transformed into a structural model (Figure 4.1) and examined through structural equation modeling (SEM). The fit indices of the structural model indicated its viability for testing hypotheses (Table 4.12). It is important to note that the R-squared for the dimensional model was .094 (p < .01). While this result shows a potentially limited prediction of the variance in the dependent variable from the independent variables, these results compared with those of previous research on the EI and job satisfaction relationship, including Sy et al. (2006) (R² = .06, p < .001) and Miao et al. (2017a) (R² = .18, p < .001, inclusive of control variables)

As seen in Figure 4.2, three of the four hypotheses proposed within this study were supported by the results of the analyses. The direct effects from OEA (β = .166, SE = .065, LB = .037, UPB = .291, p < .05), ROE (β = .179, SE = .068, LB = .048, UPB = .309, p < .01), and
UOE ($\beta = .150$, $SE = .068$, LB = .017, UPB = .285, $p < .05$) factors to job satisfaction showed to be significant at the .05 level or better. However, the direct effect between SEA and job satisfaction was negative and not significant ($\beta = -.108$, $SE = .073$, LB = -2.52, UPB = .028, $p = .141$), which runs opposite to Hypothesis 2. As Table 4.4 shows, and in contrast to this result, the bivariate correlation is significant ($r_{SEA,JSAT} = .134$, $p < .01$) and has changed signs. Together, these results show signs of reciprocal suppression (Cohen et al., 2003; Kline, 2016; MacKinnon et al., 2007; Tabachnick & Fidell, 2007) and this suppression may alter the interpretation of the results.

**Figure 4.1**

*SPSS AMOS structural path diagram for dimensional model*
Table 4.12

*Fit indices for dimensional structural model*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA (90% CI)</th>
<th>SRMR</th>
<th>CFI</th>
<th>AIC</th>
<th>BIC</th>
<th>$R^2_m$</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1: 4-factor</td>
<td>1034.638</td>
<td>226</td>
<td>.092 (.086-.097)</td>
<td>.211</td>
<td>.902</td>
<td>1134.638</td>
<td>1337.477</td>
<td>.094**</td>
</tr>
</tbody>
</table>

*Note. df = degrees of freedom. RMSEA = root mean square error of approximation. SRMR = standardized root mean square residual. CFI = comparative fit index. AIC = Akaike information criterion. BIC = Bayes Information Criterion. **$p < .01$*

Figure 4.2

*Structural model diagram with direct effect correlations (*$p < .05$)*
4.8 OLS Regression with PROCESS Results

This study utilized a bootstrapping approach using the PROCESS Macro for SPSS 26 as a means of testing the significance of conditional indirect effects and direct effects (Hayes, 2018). Table 4.13 examines the moderating role of emotional intelligence congruence (EIC) in the relationship between personal emotional intelligence (PEI) and job satisfaction (Hypothesis 7A). Before creating the interactive term, all relevant variables were mean-centered to avoid multicollinearity with the product term (Hayes, 2018). All variance inflation factors were below 10, indicating that multicollinearity was not an issue in this analysis (Kline, 2016). In support of Hypothesis 7A, the interaction term had a significant coefficient for job satisfaction ($b = -.097, p < .05$). More simply, the relationship between PEI and job satisfaction was changed by the amount of EIC. Further, and in support of Hypothesis 1, PEI was positively and significantly correlated with job satisfaction ($b = .268, p < .01$).

Table 4.13

Summary of personal EI regression results

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
</tr>
<tr>
<td>PEI (1)</td>
<td>.268*</td>
</tr>
<tr>
<td>EIC (2)</td>
<td>-.212*</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Interactive Term (1) x (2)</td>
<td>-0.097**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.121</td>
</tr>
<tr>
<td>$F$</td>
<td>19.374*</td>
</tr>
</tbody>
</table>

Note. n = 427. Unstandardized regression coefficients reported. Figures in parentheses are standard errors. *p<.01. **p<.05.
Following conventional moderation analysis procedures, simple slopes at one standard deviation above and below the mean of the moderator were plotted and examined for a pattern of the interactive effect on job satisfaction. Figure 4.3 illustrates that the slope of the relationship between PEI and job satisfaction was changed significantly when EIC was either smaller (simple slope = -.8676, $t = 4.9743, p = .0000$) or larger (simple slope = .8676, $t = 3.1914, p = .0015$). In both cases, the relationship between the two was strong and significant.

**Figure 4.3**

*Personal EI interaction plot*

Table 4.14 examines the moderating role of EIC in the relationship between leader emotional intelligence (LEI) and job satisfaction (Hypothesis 7B). Once again, all relevant variables were mean-centered to avoid multicollinearity and all variance inflation factors were below 10. In support of Hypothesis 7B, the interaction term had a significant coefficient for job satisfaction ($b = -.075, p < .05$). Further, and in support of Hypothesis 6, LEI was positively and significantly correlated with job satisfaction ($b = .254, p < .01$)
Table 4.14

Summary of leader EI regression results

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEI (1)</td>
<td>.254*</td>
</tr>
<tr>
<td>EIC (2)</td>
<td>-.109</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Interactive Term (1) x (2)</td>
<td>-.075**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.120</td>
</tr>
<tr>
<td>$F$</td>
<td>19.213*</td>
</tr>
</tbody>
</table>

*Note.* $n = 427$. Unstandardized regression coefficients reported. Figures in parentheses are standard errors. *$p < .01$. **$p < .05$.

Figure 4.4

Leader EI interaction plot
Interaction plots were also examined for the interactive effect of EIC on the LEI and job satisfaction relationship. Figure 4.4 illustrates that the slope of the relationship between LEI and job satisfaction was changed significantly when EIC was either smaller (simple slope = -.8676, $t = 5.3381, p = .0000$) or larger (simple slope = .8676, $t = 3.9126, p = .0001$). In both cases, the relationship between the two was strong and significant. All interactions among the higher-order model are represented in Figure 4.5.

**Figure 4.5**

*Higher-order model with correlations (*p < .01, *p < .05)*

4.9 Hypotheses Summary

In this study, a total of eight hypotheses were proposed. Of those eight, seven were supported. Specifically, correlation coefficients within SEM analysis were found to be significant and positive for three of the four dimensional hypotheses. Further, correlations within
OLS Regression analyses were found to be significant and positive, including interactive effects. All hypotheses findings are summarized in Table 4.15.

**Table 4.15**

*Results of predicted hypotheses*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Identification</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Significant/Positive Correlation (OLS Regression)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Nonsignificant Correlation (SEM)</td>
<td>No</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Significant/Positive Correlation (SEM)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>Significant/Positive Correlation (SEM)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>Significant/Positive Correlation (SEM)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>Significant/Positive Correlation (OLS Regression)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 7A</td>
<td>Significant Interaction Coefficient (OLS Regression)</td>
<td>Yes</td>
</tr>
<tr>
<td>Hypothesis 7B</td>
<td>Significant Interaction Coefficient (OLS Regression)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The first hypothesis predicted that the unidimensional higher-order personal emotional intelligence construct would significantly and positively relate to job satisfaction. Support was indicated by a significant and positive correlation coefficient found with OLS Regression analysis ($b = .268, p < .01$). This indicated that the higher-order personal EI construct relates significantly to job satisfaction, opening the study up for extension by exploring the individual dimensions of EI.

The second, third, fourth and fifth hypotheses each predicted that the dimensions of EI would significantly and positively relate to job satisfaction. Support for three of the four hypotheses was indicated by significant and positive direct effect correlations found in SEM analysis (OEA, $\beta = .166, SE = .065, LB = .037, UPB = .291, p < .05$; ROE, $\beta = .179, SE = .068, LB = .048, UPB = .309, p < .01$; UOE, $\beta = .150, SE = .068, LB = .017, UPB = .285, p < .05$). These results fall in line with that found in Hypothesis 1. The second hypothesis related to SEA did not find support in this study ($\beta = -.108, SE = .073, LB = -2.52, UPB = .028, p = .119$).
However, these results came into question after examining bivariate correlation ($r_{SEA,JSAT} = .134$, $p < .01$) and the possibility of substantial suppression effects.

The sixth hypothesis predicted that the unidimensional higher-order leader emotional intelligence construct would significantly and positively relate to job satisfaction. Support was indicated by a significant and positive correlation coefficient found with OLS Regression analysis ($b = .254$, $p < .01$). This indicated that the higher-order leader EI construct relates significantly to job satisfaction.

The seventh and eighth hypotheses each made predictions related to the congruence between a leader and followers’ overall EI, otherwise known as emotional intelligence congruence (EIC). The seventh hypothesis predicted that EIC moderates the relationship between a followers’ overall EI and a followers’ job satisfaction. Support was indicated by a significant interaction coefficient found with OLS Regression analysis ($b = -.097$, $p < .05$). The eighth hypothesis predicted that EIC moderates the relationship between a leaders’ overall EI and a followers’ job satisfaction. Support was indicated by a significant interaction coefficient found with OLS Regression analysis ($b = -.075$, $p < .05$).

4.10 Additional Findings

A post-hoc analysis was run in order to compare the EI of different demographic groups (e.g., gender, age, race). Because there were potential normality issues within the data, a Mann-Whitney U test was run to determine if there were differences in EI scores between males and females. Distributions of the EI scores for males and females were similar, as assessed by visual inspection. EI score was not statistically significantly different between males ($Mdn = 5.71$) and females ($Mdn = 5.57$), $U = 22818$, $z = .613$, $p = .540$, using an exact sampling distribution for $U$ (Dinneen & Blakesley, 1973).
Further, analysis of age and race was done with Kruskal-Wallis tests, or one-way ANOVA with ranks, in order to compensate for non-normal data. The Kruskal-Wallis test run on different age groups was conducted to determine if there were differences in EI scores between groups that differed in their age level: 18-24 years old ($n = 14$), 25-54 years old ($n = 346$), and 55 and older ($n = 67$) age groups. Distributions of EI scores were similar for all groups, as assessed by visual inspection of a boxplot. Median EI scores were not statistically significantly different between the different age groups, $\chi^2(2) = 2.677$, $p = .262$.

While no significant difference was found between age groups, a significant difference was found between certain race groups. A Kruskal-Wallis test was conducted to determine if there were differences in EI scores between groups that differed based on their race: African American/Black ($n = 34$), Native American ($n = 2$), Asian/Pacific Islander ($n = 27$), Caucasian/White ($n = 348$), Hispanic ($n = 12$), and other ($n = 4$). Distributions of EI scores were similar for all groups, as assessed by visual inspection of a boxplot. Median EI scores were statistically significantly different between the different races, $\chi^2(5) = 14.920$, $p = .011$.

Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. Adjusted $p$-values are presented. This post hoc analysis revealed statistically significant differences in EI scores between the Caucasian/White ($Mdn = 5.50$) and African-American/Black ($Mdn = 7.10$) ($p = .037$) groups, but not between any other group combinations.

4.11 Summary

This chapter presented the results and analysis of this study by outlining the data collection process, the results of the sample representativeness and statistical assumptions analysis, and the refinement of measurement models. This was followed by a presentation of the
results of hypothesis testing through both SEM and OLS regression, along with the descriptive statistics. The chapter finished with a discussion of the hypotheses.
CHAPTER 5
DISCUSSION

5.1 Introduction

This chapter contains five sections. The first section discusses the results of Chapter 4 and the relationship of these results to the literature. The second section explores the implications of this study to both research and practice. The third section discusses the limitations of this study before discussion the potential for future research in the fourth section. Finally, a summary of this chapter is provided. Throughout this chapter, the goal is to discuss the findings of and provide insight into the research questions that underly this study. This study, through empirical analysis, confirms the role of EI and the dimensions of EI in developing an individual’s personal job satisfaction. Further, the study confirms the role congruence between a leader and follower’s EI plays in individual’s perceptions of job satisfaction.

5.2 Contributions

This study has provided several contributions to the academic and practitioner-scholar communities. With a range of disparate models of EI (Bar-On, 1997; Goleman, 1995; Petrides & Furnham, 2001; Salovey & Mayer, 1990), a review of the literature exposed a need to further highlight the appropriateness of the ability-based model of EI. Further, with the focus of many EI and job satisfaction studies centered on higher-order overall EI (Miao et al., 2017a), a need for a more in-depth look at the EI construct became evident. To this end, this study’s results have provided an empirical investigation of both the overall EI construct, the dimensions of the EI,
and the relationship of each to job satisfaction. By taking a deeper look at the ability-based
model of EI first laid out by Salovey and Mayer (1990) and operationalized by Wong and Law
(2002), this research laid out a theoretical foundation for the effects of each dimension of EI on
job satisfaction, while also examining the practical usability of the dimensional aspects of EI for
future research. Therefore, this research has presented a novel perspective on examining EI in
relation to job attitudes.

In addition to this examination of the dimensions of EI, this study investigated the leader-
follower dynamic in regards to EI and job satisfaction. The current EI literature has shown
limited study of the topic of leaders and followers in relation to job satisfaction (Miao et al.,
2016), with even fewer examining how a leader and follower’s EI might match up to enhance job
satisfaction (Sy et al., 2006). At the time of this writing, this study’s results have shown the first
known investigation of the impact of the congruence between a leaders’ and a follower’ EI on
job satisfaction. In doing so, this research takes a new step in clarifying the leader-follower
relationship in regards to EI.

5.3 Implications of Findings

5.3.1 Implications to Research

This study has two primary implications for research. First, the calls for a test of the
different facets of EI (Kafetsios et al., 2008; Law et al., 2004) were answered. This study utilized
the four dimensions of the EI construct as individual independent variables for structural
equation modeling and assessment of the relationship of each dimension to job satisfaction. The
findings provided empirical evidence that the structural relationship between three of the four EI
dimensions followed previous higher-order results (i.e., significant and positive). However, the
findings also show signs of substantial suppression among the four dimensions of EI. The direct
effects of the self-emotion appraisal dimension showed a significant, yet negative, effect on job satisfaction, while the bivariate correlation changed signs to become positive and remain significant. Together, these results highlight the suppression occurring amongst the dimensions (Kline, 2016; MacKinnon et al., 2007).

EI was originally hypothesized as a higher-order factor made up of a series of relationships between four lower-order factors (Mayer & Salovey, 1997). This second-order model was confirmed by Wong and Law (2002) and others. In regards to job satisfaction, there has also been confirmation of the use of a higher-order model, but there has been a limited exploration of the dimensions of EI. Many of these studies that do explore the dimensions have resulted in mixed findings (Fu, 2014; Güleyüz et al., 2008; Kafetsios & Zampetakis, 2008; Trivellas et al., 2013). As in this study, there was evidence of reciprocal suppression, or otherwise, a situation where independent variables correlate positively with the dependent variable and correlate negatively with each other (Tabachnick & Fidell, 2007, Cohen et al., 2003). These findings provide a potentially important implication of the examination of the EI dimensions. These suppression effects understate the importance of any single dimension of EI and its relationship with job satisfaction. Interpretation of EI dimensional interaction with dependent variables may be spurious. Therefore, this suppression and the role it plays in the results of future studies must be identified. Further, these findings highlighted the potential downfalls of a dimensional model of EI and confirmed the use of the theoretical higher-order model of EI.

Second, the calls for studies that identify moderators of the EI and work attitude relationship (Miao et al., 2016; Miao et al., 2017a; Sy et al., 2006) were answered. This study’s findings presented the potential importance of congruence between a leader and a follower’s EI.
With significant results that showed that the level of one’s personal EI and one’s perception of their leader’s EI play a role in enhancing one’s job satisfaction, this study’s model allowed for a deeper understanding of this contagion moderator and the leader-follower dyad by integrating emotion contagion theory (Hatfield et al., 1992) and the multi-level model of emotion and leadership (Ashkanasy, 2003; Ashkanasy & Humphrey, 2011a, 2011b; Ashkanasy & Jordan, 2008) together to examine the relationship between EI and job satisfaction.

5.3.2 Implications to Practice

This study also had implications for both business and managerial practice. A fundamental issue for any business is to successfully navigate both internal and external hurdles in order to create and nurture an organization’s competitive advantage (Porter, 1985). When organizations better understand how EI affects job satisfaction, organizations can reap the many positive behavioral, attitudinal, and health-related outcomes of job satisfaction (Judge & Kammeyer-Mueller, 2008; Schleicher et al., 2011). Further, when organizations better understand how one’s perception of their leader’s EI affects one’s job satisfaction, organizations can also help reduce negative outcomes such as turnover intention (Shore & Martin, 1989; Tett & Meyer, 1993), while simultaneously enhancing positive outcomes such as organizational citizenship behaviors (Fassina et al., 2008; Koys, 2001), organizational commitment (Meyer et al., 2002; Shore & Martin, 1989; Tett & Meyer, 1993), and job performance (Iaffaldano & Muchinsky, 1985; Petty et al., 1984).

In a knowledge of both personal and leader EI and the relationship they hold with job satisfaction, organizations can enhance their internal training programs to take advantage of these positive outcomes. Large Fortune 500 companies have already seen the potential benefits of EI training, with more than 75% utilizing some form of EI-related training product (Bradberry
& Greaves, 2009). These companies understood the potential benefits of productive interaction and the positive work outcomes that EI training can establish. The rewards for this integration of EI into corporate training can be both tangible, with benefits to the balance sheet and cash flows (Goleman, 1998a), and intangible, with benefits to employees and external stakeholders.

5.4 Limitations

5.4.1 Common Method and Social Desirability Bias

One limitation of this study was that personal EI and job satisfaction were measured by self-report. Self-report measures suffer from the potential for common method variance (CMV) and social desirability biases (Bagozzi & Yi, 1990; Williams & Brown, 1994). Previous research showed evidence to limit some of these concerns by demonstrating that WLEIS demonstrated both convergent and discriminant validity (Law et al., 2004; Wong & Law, 2002). Further, while this study found evidence of potential CMV, further insight into the location and magnitude of the potential bias was assessed. The average change in correlations highlighted the minimal common method bias inherent in the data. Additional analyses to explain the magnitude of CMV followed the recommendations of Williams et al. (2010) and further substantiated these findings.

Additionally, this study relied on followers’ perceptions of leaders’ behaviors. One could question the reliability of follower perceptions versus an EI assessment score or a leader’s perceptions of their own EI. As to the use of an EI assessment or test, existing tests require between 30 and 120 minutes to complete (Conte & Dean, 2006; Mayer et al., 2002) and limits their practical use. Additionally, previous research supported the use of follower perceptions in that these perceptions could be more reliable than a study including self-reported managerial data. Further, research has shown that managerial self-ratings include self-serving or egocentric bias (Atwater et al., 1995; Yammarino & Atwater, 1993).
5.4.2 Data Collection and Sample Representativeness

A second limitation of this study surrounds the method of data collection and the sample it produced. On-line data collection has been criticized for the ability of on-line respondents to engage in “faking” or extreme blatant responding (Landers et al., 2011). This faking behavior may be seen as a potentially greater risk for respondents who are compensated for their responses, as there is an incentive to complete surveys as quickly as possible. Despite these concerns, it is important to note that MTurk® participants have been shown to have many commonalities with and to give responses similar to traditional samples (Buhrmester et al., 2011; Paolacci et al., 2010; Rand, 2011).

There was also a risk that the sample obtained through this on-line data collection method was not perfectly representative of the desired population. In consideration of this risk, this study undertook the effort to produce a rigorous and generalizable study through the utilization of both a broad sample and by employing a deliberate survey design as discussed previously. The age and race demographics for the sample utilized in this study included a skew towards certain groups. Specifically, in regards to age, respondents 25 to 54 represented approximately 81% of the total sample. This percentage is higher than the typical in the U.S. working population (BLS, 2019a). In regards to race, the total sample was represented by 81% of respondents that identified as Caucasian/White. This percentage of Caucasian respondents also represented a greater proportion than the U.S. workforce (BLS, 2019b). An evaluation and comparison of the demographic characteristics of the study sample to the BLS demographic profile of U.S. based workers provided confidence as to the sample’s representativeness, showing that the practical difference between sample groups had a low to medium effect. As a final note on this subject, it must be noted that this study cannot be generalized beyond the United States.
5.4.3 Distinctiveness of Emotional Intelligence

Correlation does not inevitably suggest causation. Therefore, a third limitation of this study is the lack of certain control variables. There exist many variables that may influence one’s perception of job satisfaction. These variables range from demographic factors such as age, gender, or race, to personality factors (Judge et al., 2000), to workplace factors such as leadership behavior, loyalty to one’s supervisor, and trust (Law et al., 2004), to cognitive intelligence (Ganzach, 1998), and many more. Despite the potential for confounding variables, previous research highlights the incremental validity of self-reported ability-based EI as measured with WLEIS above and beyond demographic factors (Law et al., 2004), personality factors (Law et al., 2004; Miao et al., 2017a; Sy et al., 2006; Wong & Law, 2002), and cognitive abilities (Miao et al., 2017a), among other variables.

5.5 Future Research

This study created the opportunity to explore at least five additional research directions. First, this study can be replicated in other cultural or national settings. This recommendation allows for the generalizability of these findings beyond U.S.-based organizations. While the relationship between EI and job satisfaction has been explored in other settings (Kafetsios et al., 2008; Kirk et al., 2009; Wong & Law, 2002), the complexity of corporate (Schein, 2009) and national culture (Hofstede, 1980, 2001) around the world allows for a series of replications. Considering parts of the impetus for this study, especially the changes that have occurred and that are continuing to occur in today’s organizations, there is a need to understand if these changes vary from country to country or from culture to culture in regards to emotions. For example, future research questions might look at whether those cultures with high power distance see less successful cultivation of positive outcomes due to EI? Further, do companies
within certain national regulatory environments that encourage discussion between corporations and employees (e.g., highly unionized) need greater levels of emotional intelligence to achieve similar levels of satisfaction to those countries that utilize fewer worker-related regulations?

Second, a comparison study could be conducted to include leader’s perceptions of their own EI (Sy et al., 2006) or the testing of leader EI (Føllesdal & Hagtvet, 2013; Leban & Zulauf, 2004). Comparison of the results to the current study could inform researchers about the efficacy of utilizing follower perceptions of leader EI in place of the more complex methods necessary to capture dyadic leader-follower data or the time-consuming methods necessary to employ EI assessments. Researchers could also ask research questions related to the similarity of leaders’ self-report EI and follower-report EI. Past research found limited correlation between self-report and ability EI measures (Van Rooy et al., 2005), while several other studies have found evidence of convergent validity (Bar-On, 1997; MacCann et al., 2003; O’Conner & Little, 2003; Mayer et al., 2002; Wong & Law, 2002). Future research could help to clarify this debate, while also adding to the conversation by attempting to see which dimensions of EI might differ between different sources.

Third, this study could be extended to include the positive outcomes shown to originate from one’s satisfaction. A series of mediated and moderated models can explore the effects of this study’s existing variables on those variables shown to share a significant relationship with job satisfaction. These variables include turnover intention (Shore & Martin, 1989; Tett & Meyer, 1993), organizational citizenship behaviors (Fassina, Jones, & Uggerson, 2008; Koons, 2001), organizational commitment (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Shore & Martin, 1989; Tett & Meyer, 1993), and job performance (Jaffaldano & Muchinsky, 1985; Petty, McGee, & Cavender, 1984), among others. By investigating these mediated and moderated
interactions, researchers can investigate the boundary conditions of EI theories and potentially describe the limits of generalizability of said theories.

Fourth, the inclusion of moderators of the EI and job satisfaction relationship can extend the current research to identify circumstances in which EI leads to positive workplace outcomes. The most straightforward inclusion would be to test the importance of demographic variables such as age, gender, or tenure with an organization (Cabello et al., 2016; Sy et al., 2006). Further, there are important psychological factors that might play a role in enhancing one’s job satisfaction. Trust, or a lack thereof, in fellow employees, in one’s leader, and in one’s organization has the potential to unsettle relationships (Robinson, 1996). This breakdown in relationships may ultimately diminish job satisfaction. Further, the psychological safety built from a confidence that the environment will not be full of humiliation, rejection, or chastisement (Edmondson, 1999; Kahn, 1990) may also play a role in one’s job satisfaction. In an environment of acceptance, expression of emotions and the use of one’s EI abilities may play a larger role in one’s satisfaction in and at work.

Finally, a similar examination of moderators beyond the congruence between a leader and a follower (EIC) could help extend EI research. This extension might allow for a better understanding of the contexts in which a leader’s EI plays a role in follower work attitudes. An examination could include factors that impact the relationship between leader and follower, such as, leadership style (e.g., transformational, transactional) (Hur et al., 2011), national culture (e.g., power distance, collectivism) (Hauff et al., 2015), organizational culture (e.g., behavioral norms, shared values) (Lund, 2003), and organizational make-up (e.g., public vs. private, small vs. large) (Hodson, 1984).

5.6 Summary
Research on EI has seen a long history of evolution in order for the literature to find itself where it is today. Along the way, there has been controversy (Antonakis et al., 2009), new, practical, and popular ideas (Goleman, 1995), and a rush to reap the benefits of EI (Goleman, 1998a). Further, the study of job satisfaction has an even longer and more generous history of research (Judge et al., 2017). Together, the study of the relationship between EI and job satisfaction provides valuable insight into the achievement of individuals and their organizations. This study highlights this importance of EI and its relationship to job satisfaction. Despite the limitations of this study, there are several valuable implications. These implications set a foundation for future studies that can help to further delineate the role of EI in generating job satisfaction.
REFERENCES


https://doi.org/10.1177/1745691610393980


British Columbia: Canada.


https://doi.org/10.1037/0022-3514.75.4.989


https://doi.org/10.2307/2346934


https://doi.org/10.2307/1266041


https://doi.org/10.1016/j.chb.2009.10.015


https://doi.org/10.1016/j.paid.2014.11.017


144


148


https://doi.org/10.1080/13678868.2015.1026550


https://doi.org/10.1177/1754073916639667


https://doi.org/10.1177/1094428109332834


https://doi.org/10.1177/1059601116642364


162


https://doi.org/10.1037/0021-9010.87.2.211


https://doi.org/10.1177/1059601199243006


https://doi.org/10.1007/BF00929796


168

https://doi.org/10.1023/B:APJM.0000048717.31261.d0

https://doi.org/10.1017/iop.2015.21


APPENDIX A

QUALTRICS SURVEY

CONSENT TO PARTICIPATE IN A RESEARCH STUDY
University of Dallas
TITLE OF PROJECT: Work Environment Study

Below is a description of the research procedures and an explanation of your rights as a research participant. In accordance with the policies of the University of Dallas, you are asked to read this information carefully.

The purpose of this study is to measure your perceptions of your job and your organization. Your participation is completely voluntary, and if you begin participation and choose to not complete it, you are free to not continue without any adverse consequences.

If you agree to be in this study, are asked to do the following things:

- Confirm that you are at least 18 years of age.
- Confirm that you voluntarily agree to complete an online multiple-choice survey.
- Be willing to take approximately 3-5 minutes to answer all questions honestly as there are no right or wrong answers.
- Selecting the button that best corresponds to your response after reading each question or statement.
- Scroll down the page to answer all the questions if needed and select NEXT to continue after each page.
- Complete the survey in one sitting.

There are no known risks to this study, other than becoming a little tired of answering the questions. If this happens, you are free to take a break and return to the survey to finish it, or, you can discontinue participation without any problems. Potential benefits to this study are: contributing to the research on employee perceptions towards their job and their organization.

Because you will not be providing any clues to your identity, you can be assured that all your provided responses to the questions are anonymous. If you need to ask questions about this study, you can contact the principal researcher, Bradley Winton, or, if you have any questions about your rights as a participant, you may contact the Chair of the University of Dallas IRB, Dr. Gilbert Garza at (972) 721-5366 or garza@udallas.edu.

I have read and understood what has been explained to me. If I choose to participate in this study, I will click “Yes” in the box below and proceed to the survey. If I choose to not participate, I will click “No” in the box.

☐ Yes, I choose to participate in this study.
☐ No, I choose to not participate in this study.
What is the third word in this question: "How many stars are in the American flag?"

- 50
- 13
- STARS
Are you currently living in the United States?

- Yes
- No
What is your employment status?

- part-time
- full-time
- unemployed
- full-time student
- retired
- other
What best describes the industry sector that you work in?

- Goods-producing, excluding agriculture
- Service-providing
- Agriculture, forestry, fishing, and hunting
- Other
Please read each statement carefully and indicate how much you agree with each statement. Please be honest as there are no right or wrong answers. Often, the best approach is to select the first response that comes to your mind.

Thinking about yourself and how you normally feel, to what extent do you generally feel:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostile</td>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Nervous</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Afraid</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
The following statements are about your feelings about your organization. Please read each statement carefully and indicate how much you agree with each statement. Please be honest as there are no right or wrong answers. Often, the best approach is to select the first response that comes to your mind.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am often bored with my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel fairly well satisfied with my present job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my job for the time being.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most days I am enthusiastic about my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like my job better than the average worker does.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find real enjoyment in my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What percentage of the time are you satisfied with your job on average?

<table>
<thead>
<tr>
<th>Percentage of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>90</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>

177
We are interested in whether you actually take the time to read the directions. So, in order to demonstrate that you have read the instructions, please ignore the answer choices below and simply click on the NEXT button.

What is your favorite color?

- blue
- black
- yellow
- pink
- other
Please read each statement carefully and indicate how much you agree with each statement. Please be honest as there are no right or wrong answers. Often, the best approach is to select the first response that comes to your mind.

Thinking about yourself and how you normally feel, to what extent do you generally feel:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a good sense of why I have certain feelings most of the time.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>I have a good understanding of my emotions.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>I really understand what I feel.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>I always know whether or not I am happy.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>I always know my friends' emotions from their behavior.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>I am a good observer of others' emotions.</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
<td>⬜️</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>I am sensitive to the feelings and emotions of others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a good understanding of the emotion of people around me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always set goals for myself and then try my best to achieve them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always tell myself I am a competent person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a self-motivated person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would always encourage myself to try my best.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>I am able to control my temper and handle difficulties rationally.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am quite capable of controlling my own emotions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To show that you are paying attention to the statements, select Strongly Disagree for this item.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can always calm down quickly when I am very angry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have good control of my own emotions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please check the little blue circle at the bottom of the screen.
Do not click on the scale items that are labeled from 1 to 7.

This is just to screen out random checking.

Strongly Disagree 〇〇〇〇〇〇〇〇  Strongly Agree
As these statements deal with your leader, please remember that none of this information is tied to your identity and all answers are confidential and anonymous. Also, while you may not know exactly what your manager is thinking, respond your best based on how you see them behave.

Please read each statement carefully and indicate how much you agree with each statement. Please be honest as there are no right or wrong answers. Often, the best approach is to select the first response that comes to your mind.

Thinking about yourself and how you normally feel about your direct manager or leader, to what extent do you generally feel:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My leader has a good sense of why they have certain feelings most of the time.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My leader has a good understanding of their emotions.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My leader really understands what they feel.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My leader always knows whether or not they are happy.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My leader always knows their friends’ emotions from their behavior.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My leader is a good observer of others’ emotions.</td>
<td>〇〇〇〇〇〇〇</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>My leader is sensitive to the feelings and emotions of others.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader has a good understanding of the emotions of people around them.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader always sets goals for themselves and then tries their best to achieve them.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader always tells themselves they are a competent person.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader is a self-motivated person.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader would always encourage themselves to try their best.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td>My leader is able to control their temper and handle difficulties rationally.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My breakfast often includes motor oil.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader is quite capable of controlling their own emotions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader can always calm down quickly when they are very angry.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My leader has good control of their own emotions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Please answer the following general questions about yourself. Remember, none of this information is tied to your identity and all answers are confidential and anonymous.

What is your gender?
- Male
- Female

What is your age?
- 18 to 24 years
- 25 to 54 years
- 55 years and older

Which best describes your race/ethnicity?
- African American or Black
- American Indian/Other Native American
- Asian or Pacific Islander
- Caucasian or White (other than Hispanic)
- Hispanic
- Other
Please answer the following general questions about your work environment. Remember, none of this information is tied to your identity and all answers are confidential and anonymous.

How many years have you worked at your company? Please select 0, if you have worked less than a year at your company.

0  5  10  15  20  25  30  35

Years

What is the size of the company in terms of the number of employees?

☐ 1-499 employees

☐ 500 or more employees
Your response has been recorded. Thank you for your time and participation. Please copy and paste the following code into the MTurk HIT to receive payment R_LnjRgL6ApGpJx7

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Dissertation - E1 to Job Sat - BAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe your survey to Workers</td>
<td>This name is not displayed to Workers.</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td>Answer a 3-5 minute survey about you and your work environment</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Give us some general information about you, your job, and your organization.</td>
</tr>
<tr>
<td><strong>Keywords</strong></td>
<td>survey, organization, job, work environment</td>
</tr>
</tbody>
</table>
Setting up your survey

Reward per response  $0.26

This is how much a Worker will be paid for completing your survey. Consider how long it will take a Worker to complete your survey.

Number of respondents  50

How many unique Workers do you want to complete your survey?

Time allotted per Worker  1 Hours

Maximum time a Worker has to complete the survey. Be generous so that Workers are not rushed.

Survey expires in  7 Days

Maximum time your survey will be available to Workers on Mechanical Turk.

Auto-approve and pay Workers in  12 Days

This is the amount of time you have to reject a Worker’s assignment after they submit the assignment.

Worker requirements

Require that Workers be Masters to do your tasks (Who are Mechanical Turk Masters?)

- Yes
- No

Specify any additional qualifications Workers must meet to work on your tasks:

- HIT Approval Rate (%) for all Requesters’ HITs > greater than  95
- Location is United States (US)
- Employment Status - Unemployed False

Add another criterion (up to 2 more)

(Premium Qualifications incur additional fees, see Pricing Details to learn more)

Project contains adult content (See details)

- This project may contain potentially explicit or offensive content, for example, nudity.

Task Visibility (What is task visibility?)

- Public - All Workers can see and preview my tasks
- Private - All Workers can see my tasks, but only Workers that meet all Qualification requirements can preview my tasks
- Hidden - Only Workers that meet my Qualification requirements can see and preview my tasks
We are conducting an academic survey about your perceptions of your workplace. We need to understand your opinions and feelings about your organization. The quality of the data we receive is extremely important to us. To ensure quality, we have placed attention checks in the survey. Please read each question carefully. Participants who fail attention checks will not be paid.

Select the link below to complete the survey. After passing two pre-screening questions to ensure you fit the criteria set in the MTurk Worker requirements, you will be directed to the 2-6 minute survey. At the end of the survey, you will receive a code to paste into the box below to receive credit for taking our survey.

Make sure to leave this window open as you complete the survey. When you are finished, you will return to this page to paste the code into the box.

Survey link:
https://udallas.co1.qualtrics.com/jfe/form/SV_77GWTkKAdeEp4GeF

Provide the survey code here:

E.g. 123456
APPENDIX B

NIH CERTIFICATE

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Bradley Winton successfully completed the NIH Web-based training course "Protecting Human Research Participants."

Date of Completion: 09/13/2018

Certification Number: 2928475

National Institutes of Health
Office of Extramural Research
APPENDIX C

IRB APPROVAL

UNIVERSITY OF DALLAS
Institutional Review Board

IRB00007703          FWA 00016247          IORG0006409

February 19, 2020

Bradley Winton
Satish & Yasmin Gupta College of Business
University of Dallas
Irving, TX 75062

RE: IRB expedited approval of proposal # 2020007

Dear Bradley Winton:

Thank you for submitting your research proposal for prior approval by the Institutional Review Board (IRB). Your proposal was reviewed under the procedure for expedited review, as it poses minimal risk for participants. You indicate that steps will be taken to obtain informed consent from participants as well as the steps to be taken to protect participants’ identities. The reviewer(s) recommended approval of your request to complete the research described in your proposal under the conditions stated above and under the guidance of your advisor.

As you complete your research, please keep in mind that substantive changes to the research method or participant population will require IRB review, and that any participant injuries or complaints must be reported to the IRB at the time they occur. The IRB policies require that you provide an annual report of the progress of this research project, or a report upon completion, whichever occurs first.

On behalf of the members of the IRB, I wish you success in this project.

Sincerely,

[Signature]

Gilbert Garza, Ph.D.
Chair, IRB

1845 East Northgate Drive, Irving, TX 75062-4736