

**Leader emotional intelligence and subordinate job satisfaction: A
meta-analysis of main, mediator, and moderator effects**

Chao Miao ^a,

Ronald H. Humphrey ^b

Shanshan Qian ^c

^a Finance, Accounting and Management Department, Jay S. Sidhu School of Business & Leadership, Wilkes University, Wilkes-Barre, PA 18766, United States

^b Department of Leadership and Management, Lancaster University Management School, Lancaster, LA1 4YX, United Kingdom

^c Department of Management, College of Business and Economics, Towson University, Towson, MD 21252, United States

Miao, C., Humphrey, R. H., & Qian, S. (2016). Leader emotional intelligence and subordinate job satisfaction: A meta-analysis of main, mediator, and moderator effects. *Personality and Individual Differences*, 102, 13-24. <http://dx.doi.org/10.1016/j.paid.2016.06.056>

ABSTRACT

Based on a meta-analysis, leaders' emotional intelligence (EI) positively relates to subordinates' job satisfaction ($\hat{\rho} = .308$). All three EI streams (ability, self-report, mixed) exhibit significant incremental validity and relative importance (RW) in the presence of personality and cognitive ability in predicting subordinates' job satisfaction (ability EI: $\Delta R^2 = .002$, RW% = 3.5%; self-report EI: $\Delta R^2 = .021$, RW% = 25.3%; mixed EI: $\Delta R^2 = .085$, RW% = 49.9%). Leaders' EI demonstrates significant incremental validity and RW in the presence of subordinates' EI in predicting subordinates' job satisfaction (leaders' EI: $\Delta R^2 = .054$, RW% = 48.0%). Subordinates' EI positively relates to leaders' EI and mediates the relationship between leaders' EI and subordinates' job satisfaction. Moderator analyses indicate that (1) ability EI has a lower association with subordinates' job satisfaction than self-report EI and mixed EI; and (2) leaders' EI more positively relates to subordinates' job satisfaction in low in-group collectivistic or low humane oriented cultures.

Keywords: Emotional Intelligence; Leadership; Job Satisfaction; Cross-Cultural.

LEADER EMOTIONAL INTELLIGENCE AND SUBORDINATE JOB SATISFACTION: A META-ANALYSIS OF MAIN, MEDIATOR, AND MODERATOR EFFECTS

1. INTRODUCTION

The popularity along with controversy of the construct of emotional intelligence (EI) draws a substantial amount of attention from both researchers and practitioners, leading to the publication of a number of qualitative and quantitative review papers and books (e.g., Goleman, 1995; Goleman, Boyatzis, & McKee, 2002; Martins, Ramalho, & Morin, 2010; Mayer & Salovey, 1997; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). EI has been proven to be a major predictor of important outcomes, such as mental and physical health (Johnson, Batey, & Holdsworth, 2009; Martins et al., 2010; Schutte et al., 2007). Research has also demonstrated that trait EI has a genetic basis, which again substantiates the existence of EI as an important and independent trait (Vernon, Petrides, Bratko, & Schermer, 2008).

EI is a predictor of leader effectiveness (Ashkanasy & Daus, 2002; Boyatzis, Brizz, & Godwin, 2011; George, 2000; Siegling, Nielsen, & Petrides, 2014a; Siegling, Sfeir, & Smyth, 2014b; Walter, Cole, & Humphrey, 2011; Walter, Humphrey, & Cole, 2012). Walter et al. (2012) suggested that EI unleashes leadership potential. This view is supported by evidence that leaders score higher on EI than do followers (Siegling, et al., 2014a; Siegling, et al., 2014b). A summary of peer-reviewed published studies reported that leaders' EI was related to leadership emergence, the performance of effective leadership behaviors, and overall leadership effectiveness (Walter et al., 2011).

In this study we performed a meta-analysis on how leaders' EI relates to subordinates' job satisfaction. Individual studies have shown a relationship between EI and job satisfaction (e.g., Kafetsios & Zampetakis, 2008; Ouyang, Sang, Li, & Peng, 2015), yet to date there has not

been a meta-analysis of how leaders' EI influences subordinates' job satisfaction. We believe there are five major reasons why such a meta-analysis is needed. First, job attitudes are "one of the oldest, most popular, and most influential areas of inquiry in all of organizational psychology" (Judge & Kammeyer-Mueller, 2012, p. 342). A review found that "no construct in all of organizational research has been studied more than job satisfaction" (Schleicher, Hansen, & Fox, 2011, p. 147) across different types of job attitudes. Thus future EI research should study additional outcomes beyond job performance, such as job satisfaction – an important type of leader effectiveness (DeRue, Nahrgang, Wellman, & Humphrey, 2011). Job satisfaction is an important central construct in organizational psychology that influences behaviors of importance to organizations (Schleicher et al., 2011). For example, job satisfaction has been shown to influence job performance, organizational citizenship behavior, counterproductive work behavior, physical and psychological health outcomes, and withdrawal cognitions and behaviors (Schleicher et al., 2011). Therefore, understanding how leaders' EI influences subordinates' job satisfaction allows us to make inferences about how leaders' EI affects other important organizational outcomes. Accordingly, the first purpose of this meta-analysis is to assess the validity of leaders' EI in predicting subordinates' job satisfaction. To improve the methodological rigor of the current study, we also test the validity of leaders' EI in predicting subordinates' job satisfaction in the presence of both cognitive ability and the big five personality traits (i.e., the five factor model - FFM). Including these control variables is consistent with best practices as performed by other EI meta-analysis (Martins et al., 2010).

Second, Daus, Dasborough, Jordan, and Ashkanasy (2012) presented a theoretical model that merges organizational culture literature with emotional intelligence literature, which suggests a relationship between leaders' EI and subordinates' EI. As such, the second purpose of

our study is to meta-analytically assess this model (the link between leaders' EI and subordinates' EI in particular); in addition, we build on this model to explore whether subordinates' EI mediates the relationship between leaders' EI and subordinates' job satisfaction.

Third, although Walter et al. (2011) found strong support for the relationship between leader EI and leader effectiveness, there was enough variability across studies to suggest that moderators may exist. Similar calls for exploring moderators have been noted in some other studies as well. For instance, Farh, Seo, and Tesluk (2012) indicated that future EI research should follow a context-based approach because the validity of EI may depend on work contexts. So the third purpose of this study is to examine how the type of measurement used and contextual factors, in particular hierarchical level and firm type, influence the size of the leader EI – subordinate job satisfaction relationship.

Recent studies also indicated that EI research does not adequately incorporate national culture (Wong, Law, & Wong, 2004); therefore, the generalizability of existing findings discovered in Western countries to other countries/cultures remains unclear, and cross-cultural similarities and variations in EI require more exploration (Di Fabio, Saklofske, & Tremblay, 2016; Emmerling & Boyatzis, 2012; Ouyang et al., 2015; Walter et al., 2011). Thereby, the fourth purpose of this meta-analysis is to study how the relationship between leaders' EI and subordinates' job satisfaction is moderated by cultural dimensions.

Fifth, George (2000) lamented that “leadership theory and research have not adequately considered how leaders' moods and emotions influence their effectiveness as leaders” (p. 1028). To address this concern, the current study builds on multiple theories, such as affective events theory (AET) (Weiss & Cropanzano, 1996), emotional contagion theory (Hatfield, Cacioppo, & Rapson, 1992), and the multilevel model of emotion and leadership (Ashkanasy, 2003;

Ashkanasy & Humphrey, 2011a, 2011b), to explain how leaders' EI contributes to subordinates' job satisfaction. AET can help us understand how leaders can influence the events that occur throughout the day that sway subordinates' moods (and thus job satisfaction). Emotional contagion theory can help us understand how leaders' emotions spread to their followers (and vice-versa). Finally, the multilevel model ties together the research on AET and emotional contagion and creates a unifying framework for understanding how leaders influence their followers' emotions and thus their job satisfaction.

The present study unfolds as follows. First, we review relevant theories and literature and we develop hypotheses based on the theories. Second, we present the method and results sections to show how we assess (1) the relationship between leaders' EI and subordinates' job satisfaction; (2) how leaders' EI predicts subordinates' job satisfaction above and beyond cognitive ability and personality simultaneously; (3) how leaders' EI predicts subordinates' job satisfaction above and beyond subordinates' EI; and (4) how the relationship between leaders' EI and subordinates' job satisfaction is moderated. Third, we discuss the theoretical and practical implications and the future directions of the present study.

2. THEORY AND HYPOTHESES

2.1. Leader EI and Subordinate Job Satisfaction

Job satisfaction refers to “an evaluative state that expresses contentment with and positive feelings about one’s job” (Judge & Kammeyer-Mueller, 2012, p. 343). Job satisfaction has two relevant components, namely affective (feelings toward one’s job) and cognitive (cognitive evaluation of one’s job) components (Fisher, 2000; Judge & Kammeyer-Mueller, 2012; Weiss, Nicholas, & Daus, 1999). Job satisfaction has been a primary focus of

organizational researchers and practitioners for years, due to its influences on a variety of workplace outcomes (Schleicher et al., 2011).

Ashkanasy and Daus reviewed the EI literature and classified EI research into three major streams. We refer to these three streams as ability EI (stream 1), self-report EI (stream 2), and mixed EI (stream 3). Some examples of measures are the Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT V2.0) (Mayer, Salovey, Caruso, & Sitarenios, 2003) for ability EI, the Wong and Law Emotional Intelligence Scale (WLEIS) (Wong & Law, 2002) for self-report EI, and the Bar-On Emotional Quotient Inventory (EQ-i) (Bar-On, 2000, 2002) and the Emotional Competency Inventory (ECI) (Wolff, 2006) for mixed EI. The ECI was revised to become the Emotional and Social Competency Inventory (ESCI) (Boyatzis, Brizz, & Godwin, 2011).

Among the three streams of EI, ability EI instruments, such as the MSCEIT V2.0, were developed to satisfy the conventional criteria for intelligence scales by incorporating objective right and wrong answers (Mayer, Salovey, & Caruso, 2002). Although EI can be conceptualized as an ability, other scholars conceptualize it in trait terms (Petrides, 2009a, 2009b; Petrides & Furnham, 2003; Smith, Saklofska, & Yan, 2015). These scholars have developed measures such as the Assessing Emotions Scales (AES) (Schutte et al., 1998) and the Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009a, 2009b; Petrides & Furnham, 2003). The AES has been shown to predict a variety of important outcomes, such as mood repair following negative events (Schutte, Malouff, Simunek, Hollander, & McKenley, 2002). The TEIQue has also been supported in independent investigations (Mikolajczak, Luminet, Leroy, & Roy, 2007). The TEIQue provides an example of how scholars conceptualize the dimensions of EI. The TEIQue has four dimensions: emotionality, self-control, sociability, and well-being (Petrides,

2009a, 2009b). Petrides, Pita, and Kokkinaki (2007) analyzed the relationship of the TEIQue to other personality constructs. They “performed two joint factor analyses to determine the location of trait EI in Eysenckian and Big Five factor space. The results showed that trait EI is a compound personality construct located at the lower levels of the two taxonomies” (Petrides et al., 2007, page 273). Their results support the “conceptualization of trait EI as a lower-order construct that comprehensively encompasses the emotion-related facets of personality” Petrides et al., 2007, page 287). Moreover, they found that the TEIQue showed incremental predictability over the Big Five with regard to life satisfaction, rumination, rational coping, detached coping, and emotional coping. Later studies have confirmed that a short form of the TEIQue also has incremental predictability (Siegling, Vesely, Petrides, & Saklofske, 2015). A meta-analysis has established that the TEIQue is not redundant with other personality measures, and that it shows incremental predictability with regard to personality traits when predicting important outcomes, such as burnout and depression, alcohol abuse, academic achievement, and life and job satisfaction (Andrei, Siegling, Aloe, Baldaro, & Petrides, 2016). The stream 3 measures are similar to the stream 2 measures in that they use self- and peer reports; however, they include a larger number of dimensions. For example, the ESCI has 14 dimensions (Boyatzis et al., 2011). Stream 3 measures can also be conceptualized from the trait EI perspective.

Affective events theorists posit that each individual has an average affective mood level, and that some individuals have negative affective mood levels whereas others have positive affective mood levels; furthermore, this average affective mood level can be reduced or elevated by negative or positive events that one experiences at work (Cropanzano & Dasborough, 2015; Ilies, Aw, & Pluut, 2015; Weiss & Cropanzano, 1996; Weiss et al., 1999). Reacting to discrete “affective events” at work will impact affective responses, thereby resulting in an ebb and flow

in job satisfaction (Ashkanasy & Humphrey, 2011b; Humphrey, 2013a; Johnson, 2009; Walter & Bruch, 2009; Weiss & Cropanzano, 1996). Leaders generally have the capacity to reduce the effect of negative affective events on followers; in addition, leaders' actions (praise, criticism, expressions of joy or frustration, and demands for extra work) are often important affective events for their followers (Johnson, 2009). Leaders are higher on EI than followers (Siegling, et al., 2014a; Siegling, et al., 2014b), and emotionally intelligent leaders take the role of "emotional manager" to set up a positive "affective tone" (Pescosolido, 2002) both for their subordinates' benefit and to create positive affective events for them. Emotionally savvy leaders who are expressive can use emotional contagion to spread feelings of happiness and cheerfulness to enhance subordinates' positive state affect and satisfaction (Ilies, Curşeu, Dimotakis, & Spitzmuller, 2013). Emotional contagion occurs when emotions transmit from one person to another; further, individuals catch and share moods with each other and mimic each other's emotional expressions via body language and vocal tone (Hatfield, Cacioppo, & Rapson, 1992). Emotionally savvy leaders are able to harness and transmit their emotions via emotional contagion mechanisms to lift their followers' positive feeling and satisfaction levels. This line of reasoning is also backed up by the multilevel model of emotion and leadership (Ashkanasy, 2003; Ashkanasy & Humphrey, 2011a, 2011b). This model suggests that individual differences (e.g., EI) are among the key determinants of the frequency, intensity, and duration of positive and negative emotions that one may experience in organizations. Level Three of this model is concerned with dyadic interactions between leaders and followers. The model indicates that emotionally intelligent leaders may employ one-on-one interpersonal interactions with their subordinates in order to influence them. The interaction between leaders and subordinates

provides a natural platform where leaders can rely on their EI to enhance their subordinates' job satisfaction by spreading feelings of happiness and enthusiasm to them.

Research findings also showed that emotional contagion more often flows from leaders (and power-holders) to followers rather than vice-versa. This is because followers depend more on their leaders due to leaders' control over time, resources, and interactions (Sy, Côté, & Saavedra, 2005). Sy et al. (2005) found that group members experience more positive and less negative moods when leaders have positive moods. This effect also generalizes to the group level, so that leaders with positive moods enable groups to have a more positive and a less negative affective tone. It is noteworthy that emotional displays play a critical role in shaping subordinates' impressions of their leaders' sincerity (Dasborough & Ashkanasy, 2002) and of their leaders' charisma (Groves, 2005). Emotionally intelligent leaders are proficient at displaying emotions, invoking emotions in others, and conveying a message of authenticity to their subordinates, thus increasing subordinates' job satisfaction. Dasborough and Ashkanasy (2002) found that subordinates who perceive leaders as being genuine will have an enhanced positive affect; it is likely that this enhanced affect would translate into an increase in their job satisfaction. Groves (2005) also found that leaders need to be able to control their emotions in order to display the appropriate emotions to their followers.

High EI, in particular the ability to perceive and understand emotions, may also help leaders to recognize when they need to empathize with subordinates who are experiencing problems. For instance, Kellett and her colleagues found that the ability to perceive others' emotions predicted empathy, which in turn predicted both relations and task leadership (Kellett et al., 2006). Thus, emotionally savvy leaders can improve their followers' job satisfaction by displaying empathy and demonstrating that they care about their followers' well-being.

Likewise, Wong and Law (2002) argued that followers' satisfaction will be boosted if leaders treat followers with psychological benefits such as approval, respect, esteem, and affection. They argued that leaders high on EI would be more likely to provide these benefits, and their study found a positive link between leader EI and subordinate job satisfaction.

According to Petrides and Furnham (2003), all EI constructs overlap in their theoretical conceptualizations. For example, all include emotional awareness as a key EI facet. Because they overlap in their key concepts, it is likely that they all show at least some positive correlation with leaders' abilities to influence job satisfaction. However, Petrides and Furnham (2003) argued that the way EI is measured is an important factor in determining how well the measures can assess EI; most crucially, they argued that some dimensions of EI, like self-awareness, cannot be measured using ability measures. Thus it is important to test if the three streams of EI can all predict the effects of leaders' EI on followers' job satisfaction (for more on this, see Hypothesis 6). Hence, we provide the following hypotheses.

Hypothesis 1: Collectively, all three streams (ability, self-report, mixed) of leaders' EI as a set should significantly and positively relate to subordinates' job satisfaction.

Hypothesis 2: Individually, each stream of leaders' EI should significantly and positively relate to subordinates' job satisfaction.

O'Boyle et al. (2011) used the Ashkanasy and Daus (2005) three streams of EI research in their meta-analysis of EI and job performance. They concluded that "Because stream 3 measures overlap both in their measurement method and in the content of their questions, while stream 2 measures only overlap with regard to the use of self-reports, stream 3 measures should show higher relationships with personality factors than stream 2 measures.....stream 3 measures, unlike stream 2, include measures of personality factors not directly related to EI, so it is likely

that these measures will overlap more with similar personality measures” (p. 793). O’Boyle and his colleagues found that the associations between personality and ability EI and self-report EI span from weak to moderate, whereas the association between personality and mixed EI ranges from moderate to strong. It is noted in their meta-analytic review that there still exists much unique variance in EI not accounted for by personality and cognitive ability; as such, this unique variance may allow EI to predict job satisfaction above and beyond personality and cognitive ability. Recent empirical evidence did show that EI predicts job satisfaction above and beyond Big Five personality factors (Sy et al., 2006). Accordingly, we offer the following hypothesis.

Hypothesis 3: Each stream of leaders’ EI should contribute incremental validity and relative importance in the prediction of subordinates’ job satisfaction in the presence of the FFM and cognitive ability.

Leaders control their group members’ time, resources, and interactions; as such, subordinates are more likely to attend to and catch the moods and feelings of their leaders (who are higher in organizational hierarchy) than vice versa (Anderson, Keltner, & John, 2003; Sy et al., 2006). Since leaders strongly influence the organizational life of their subordinates and subordinates are more likely to empathize with leaders’ emotions than vice versa, we expect that leaders’ EI should contribute non-trivial incremental validity and show noticeable relative importance in predicting subordinates’ job satisfaction compared to subordinates’ EI. We suggest the following hypothesis.

Hypothesis 4: Leaders’ EI should contribute incremental validity and relative importance in predicting subordinates’ job satisfaction in the presence of subordinates’ EI.

2.2. Mediator for the Leader EI - Subordinate Job Satisfaction Relationship

To advance the prior literature related to the interplay between organizational culture and emotional intelligence (e.g., Cherniss, 2001; Mumby & Putnam, 1992), Daus et al. (2012) proposed a theoretical model that integrates emotional intelligence and organizational culture. Building on organizational culture literature (Schein, 1990; Schneider, 1987), Daus and her colleagues argued that leaders, implicitly and explicitly, hold certain assumptions to be true. Since leaders play a decisive role in shaping an organization's culture (Cherniss, 2001), the expression of basic assumptions espoused by leaders is held in high esteem by the followers, and the values endorsed by leaders guide an organization's missions, goals, and actions. Drawing on the attraction-selection-attrition theoretical framework (Schneider, 1987), emotionally intelligent leaders are likely to create an organizational culture that values emotional intelligence and that attracts and retains emotionally intelligent followers (Daus et al., 2012). Moreover, emotionally intelligent leaders may increase their team members' sense of trust and group identity, which in turn can build group emotional intelligence (Druskat & Wolff, 2001). Further, emotionally intelligent leaders should promote training and developmental opportunities that cultivate their followers' emotional intelligence and skills (Daus et al., 2012). This may enable their followers to behave in emotionally intelligent ways when interacting with other organizational members, and may facilitate their using proper strategies to cope with stresses and negative feelings, thereby enhancing followers' job satisfaction. Thus we proposed the following hypothesis.

Hypothesis 5: Subordinates' EI should significantly and positively relate to leaders' EI and partially mediate the positive relationship between leaders' EI and subordinates' job satisfaction.

2.3. Moderators for the Leader EI - Subordinate Job Satisfaction Relationship

2.3.1. EI streams.

Meta-analytic evidence demonstrated that cognitive ability weakly predicts job satisfaction (Gonzalez-Mulé, Carter, & Mount, 2014), whereas personality is a good predictor of job satisfaction (Judge, Heller, & Mount, 2002). Mixed EI has the strongest association with personality, self-report EI the second strongest, and ability EI the weakest association with personality (O'Boyle et al., 2011). Furthermore, ability EI has a moderate association with cognitive intelligence, whereas self-report and mixed EI have small associations with cognitive intelligence (O'Boyle et al., 2011). These findings suggest that ability EI measures may predict job satisfaction similar to the way in which cognitive intelligence measures predict, and thus may have relatively small associations with job satisfaction compared to the other two EI streams. Analogously, mixed EI may predict job satisfaction similar to the way in which personality measures predict, and therefore may have a stronger correlation with job satisfaction relative to the other two EI streams. In addition, trait researchers have reasoned that ability tests cannot measure intrapersonal experiences, such as awareness of one's emotions, and thus should have lower predictive ability (e.g., Petrides & Furnham, 2003). Hence, mixed EI should demonstrate the strongest association with job satisfaction, self-report EI the second strongest, and ability EI the weakest association with job satisfaction. We derive the following hypothesis.

Hypothesis 6: Leaders' mixed EI will show the strongest relationship with subordinates' job satisfaction, leaders' self-report EI the second strongest, and leaders' ability EI the weakest relationship with subordinates' job satisfaction.

2.3.2. National culture.

National culture can significantly influence the context in which job roles are executed; as such, it is important to investigate the cross-cultural validity of EI (Di Fabio, Saklofske, & Tremblay, 2016; Emmerling & Boyatzis, 2012; Ouyang et al., 2015). The present study

specifically focuses on the cultural dimensions of institutional collectivism, in-group collectivism, humane orientation, and power distance, because they are relevant to understanding the influence of social context on the relation between leaders' EI and employees' job attitude. We couched our hypotheses regarding the moderating roles of national culture in trait activation theory. This theory suggested that traits will be more predictive of trait-relevant outcomes when a context contains trait-relevant cues because these cues will trigger the expression of one's psychological traits and prompt one to act in ways consistent with the cues (Farh et al., 2012; Tett & Burnett, 2003; Tett & Guterman, 2000). We argued that national cultures may contain trait-relevant cues that can activate one's psychological traits because national cultures shape social norms and specify the types of values that are rewarded (Oh et al., 2014).

Institutional collectivism refers to "the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action" (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. 30). High institutional collectivistic cultures emphasize group interest, group loyalty, and interdependence (House et al., 2004). In-group collectivism is defined as "the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families" (House et al., 2004, p. 30). High collectivistic cultures prioritize relatedness, and strong distinctions are made between in-groups and out-groups (House et al., 2004).

Emotionally intelligent leaders are able to build group social identities (Druskat & Wolff, 2001) among their employees and help them move toward productive emotional states that enhance their morale and job satisfaction (Ashkanasy & Humphrey, 2011a). We expect that leaders' EI will be more strongly related to subordinates' job satisfaction in high institutional collectivistic or high in-group collectivistic cultures. Leaders in high institutional collectivistic or

high in-group collectivistic cultures are expected to employ their EI (i.e., the activation of the expression of trait EI) to build collective identities in order to foster group loyalty, cohesion, interdependence, and relatedness, thereby enhancing their subordinates' job satisfaction. In these cultures, the expression of EI to accomplish all aforementioned group-related goals, interests, and needs are rewarded and recognized. On the other hand, leaders in low institutional collectivistic or in-group collectivistic cultures are less likely to express EI because it is less necessary for them to utilize EI to foster the bonds and harmonious relationships with and among their followers, because group goals, interests, and needs are less valued, resulting in a weaker leader EI – subordinate job satisfaction relationship. We proposed the following hypotheses.

Hypothesis 7: Leaders' EI is more strongly and positively related to subordinates' job satisfaction in high institutional collectivistic culture than in low institutional collectivistic cultures.

Hypothesis 8: Leaders' EI is more strongly and positively related to subordinates' job satisfaction in high in-group collectivistic cultures than in low in-group collectivistic cultures.

Humane orientation refers to the extent to which being altruistic, fair, friendly, generous, caring, and kind to others is encouraged by an organization or society (House et al., 2004). This culture sets the norm that one needs to be responsible for promoting the well-being and interest of others (House et al., 2004). As such, in high humane oriented cultures, leaders' EI may have less impact on subordinates' job satisfaction because using EI to maintain the well-being of others (e.g., subordinates' job satisfaction) is normative and is something one is supposed to do. The opposite may hold in low humane oriented cultures. In a culture where it is not normative to promote the well-being of others, the expression of leaders' EI will be activated and leaders' EI will have a stronger impact on subordinates' job satisfaction because subordinates may interpret

leaders' effective leading behaviors (as a result of EI) as more voluntary, altruistic, and benevolent instead of obligatory. We derived the following hypothesis.

Hypothesis 9: Leaders' EI is more strongly and positively related to subordinates' job satisfaction in low humane oriented culture than in high humane oriented culture.

Power distance is the degree to which individuals are willing to accept hierarchical order (House et al., 2004). Individuals in high power distance cultures are willing to be obedient to their leaders and accept their policies without question; as such, subordinates will be less sensitive to how they are treated by their leaders (Kirkman, Chen, Farh, Chen, & Lowe, 2009; Yang, Mossholder, & Peng, 2007). Hence, leaders' EI will have a smaller impact on followers' job satisfaction in high power distance culture because regardless of whether leaders employ EI to influence their followers or not, subordinates are generally less sensitive to leaders' actions towards them due to their obedience to the power hierarchy; consequently, subordinates may not strongly feel the benefits from leaders' use of EI. On the other hand, in low power distance culture, the expression of leaders' EI will be activated because subordinates in low power distance culture are more sensitive to social exchange with their leaders and are more concerned with how they are treated by their leaders (Choi, 2013; Kirkman et al., 2009). Thus when leaders employ their EI to facilitate social exchanges and interpersonal relationships with their subordinates it plays an important role in influencing their subordinates' job satisfaction. We advance the following hypothesis.

Hypothesis 10: Leaders' EI is more strongly and positively related to subordinates' job satisfaction in low power distance cultures than in high power distance cultures.

2.3.3. Leader hierarchical level.

We expect that leaders' EI will have a stronger impact on subordinates' job satisfaction when leaders' hierarchical level is low (e.g., front line managers) compared to high (e.g., CEOs and executives) because leaders at a low hierarchical level will have more opportunities to interact with their direct followers, and therefore more opportunities to use their EI to influence their subordinates. In addition, due to frequent interaction and close social and/or physical distance between leaders and subordinates, subordinates may feel more strongly and directly that they benefit from leaders' EI, thus leading to a much higher leader EI – subordinate job satisfaction relation. When leaders' hierarchical level is high, the effect of leaders' EI on subordinates' job satisfaction will be weaker, due to limited opportunities for interpersonal interactions and social exchange between leaders and subordinates. We offer the following hypothesis.

Hypothesis 11: Leaders' EI is more strongly and positively related to subordinates' job satisfaction when leaders' hierarchical level is low than when it is high.

2.3.4. Firm type.

Leaders working in the public sector will have less managerial discretion than those who work in the private sector; further, leaders in the public sector are more concerned about compliance with rules and regulations, as well as with the processes and procedures that are used to achieve outcomes (Hooijberg & Choi, 2001). Accordingly, leaders' power and influence are constrained in public firms, and the organizational characteristics of a public firm substitute the need for leadership (Hooijberg & Choi, 2001; Kerr & Jermier, 1978). A subordinate also tends to discount the role of a leader who has constrained managerial discretion (Osborn & Hunt, 1975). Hence, we expect that leaders' EI will have a smaller influence on subordinates' job satisfaction in public firms than in private firms because even if leaders are able to utilize EI to foster

interpersonal interaction with their subordinates to enhance their job satisfaction, the interactions and exchanges between leaders and followers are constrained by rules and policies enacted by the firm; as such, this limits the influence of leaders' EI on subordinates' job satisfaction.

Thereby, we offer the following prediction.

Hypothesis 12: Leaders' EI is less positively related to subordinates' job satisfaction in public firms than in private firms.

The conceptual model tested in this study is shown in Figure 1.

(Figure 1 about here)

3. METHOD

3.1. Literature Search

We used several search approaches to maximize the likelihood of locating all relevant studies. First, we searched electronic databases, such as *ABI/INFORM*, *EBSCO Host* (e.g., *Academic Search Complete* and *Business Source Complete*), *Google*, *Google Scholar*, *JSTOR*, *ProQuest Dissertations and Theses*, *PsycNET* (e.g., *PsycInfo* and *PsycArticles*), and *Social Science Citation Index*. Second, we searched the journals in management and psychology, such as *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Management Studies*, *Journal of Organizational Behavior*, *Journal of Personality and Social Psychology*, *Journal of Vocational Behavior*, *Leadership Quarterly*, *Organizational Behavior and Human Decision Processes*, *Organization Science*, *Personality and Individual Differences*, *Personnel Psychology*, and *Psychological Science*. Third, we searched management and psychology conference papers, such as *Academy of Management*, *Southern Management Association*, and *Society for Industrial and Organizational*

Psychology. Fourth, we contacted EI scholars to ask for unpublished manuscripts, correlation matrices, and raw data.

3.2. Inclusion Criteria

We used a set of criteria to filter the articles we identified in our search process. A study was considered eligible for being included in our meta-analysis if it satisfied the following criteria. First, primary studies must be empirical and quantitative. All qualitative studies were removed. Second, primary studies have to report a correlation coefficient between leaders' EI and subordinates' job satisfaction. When such effect size information is missing, primary studies have to report sufficient statistics to allow the conversion into effect sizes. We applied Lipsey and Wilson's (2001) and Peterson and Brown's (2005) methods to complete effect size conversions. Third, primary studies must use real employee samples. The studies based on non-employee samples (e.g., student samples) were removed from our analysis. Fourth, we excluded the studies that employed proxy measures of EI (e.g., self-monitoring scales). After applying these criteria to winnow the articles, we finally had 20 samples and a sample size of 4665. A list of the references for the studies included in the meta-analysis has been specified in the reference section.

3.3. Coding Procedures

We coded the EI stream of each study according to the EI categorization developed by Ashkanasy and Daus (2005). National culture was coded based on House et al. (2004). Leader hierarchical level was coded as either supervisory level (e.g., front-line managers) or mid- or upper-level (e.g., CEOs and executives) (Wang, Oh, Courtright, & Colbert, 2011). Firm type was coded as private firm if studies were performed in for-profit organizations (e.g., *Fortune* 500 companies) or as public firm if studies were performed in not-for-profit organizations (e.g.,

government agencies) (Wang et al., 2011). In line with prior meta-analytic reviews (e.g., Crook et al., 2011; Zhao, Seibert, & Lumpkin, 2010), we combined facet-level effect sizes and created a single effect size when a study provided multiple facet-level effect sizes of a construct.

Two coders independently coded each sample. The initial coding agreement was 97%. Coding disagreement was handled through discussion. When the two coders could not reach agreement, a third coder was used to resolve any coding disagreements. All coding disagreement was resolved and a 100% consensus was reached.

3.4. Meta-Analytic Procedures

We conducted psychometric meta-analysis developed by Hunter and Schmidt (2004). Measurement error systematically and downwardly biases effect sizes (Hunter & Schmidt, 2004). We corrected for measurement errors in both independent and dependent variables for each individual effect size. Since some primary studies did not report reliability coefficients, we had to impute missing reliabilities for both independent and dependent variables based on the mean of reliabilities of the studies that provided reliability information (Hunter & Schmidt, 2004). We calculated corrected sample-size-weighted mean correlation ($\hat{\rho}$) as the estimate of population mean correlation. We computed corrected 95% confidence intervals to assess whether effect sizes are statistically significant. The effect sizes are deemed as statistically significant when corrected 95% confidence intervals do not contain zero. We tested moderator effects by using the z-test developed by Hunter and Schmidt (1990). This test examines the statistical significance of between-group effect size difference. We calculated both $\text{Var}_{\text{art}}\%$ and 80% credibility intervals to evaluate the existence of moderators. $\text{Var}_{\text{art}}\%$ refers to the percent of the variance in $\hat{\rho}$ accounted for by statistical artifacts. Hunter and Schmidt (2004) recommended that moderators may exist if less than 75% of the variance in the meta-analytic effect sizes is explained by statistical artifacts.

We also computed a corrected 80% credibility interval to determine the existence of moderators in that a wide 80% credibility interval suggests the potential existence of moderators (Whitener, 1990).

We built meta-analytically derived corrected correlation matrices and conducted both hierarchical multiple regression and relative weight analyses (Johnson, 2000; Tonidandel & LeBreton, 2011) to assess the incremental validity and relative importance of leaders' EI in predicting subordinates' job satisfaction in the presence of cognitive ability and the FFM. Although hierarchical multiple regression analysis can examine incremental validity and beta weights obtained from this analysis can be compared in terms of rank-order, it does not allow the determination of the relative importance of each predictor to the total variance explained (Johnson & LeBreton, 2004; O'Boyle et al., 2011). The relative importance of each predictor can be determined based on beta weights or zero-order correlations only when predictors are uncorrelated (O'Boyle et al., 2011). The indices, such as beta weights or zero-order correlations, may produce misleading information regarding the relative importance of each predictor when predictors are correlated (Johnson & LeBreton, 2004). We thereby conducted relative weight analyses to handle this methodological limitation. Relative weight analyses yield more precise estimates of the relative importance of each predictor in predicting a criterion variable in a multivariate model with correlated predictors (Johnson, 2000). For instance, a weight of .8 for a predictor is twice as important as another predictor having a weight of .4 in a model with these two predictors correlated. Since sample sizes differed across the cells in the meta-analytically derived correlation matrices, we calculated harmonic mean sample size (Viswesvaran & Ones, 1995), which is shown to produce more conservative estimates as less weight is assigned to large samples (Colquitt, Scott, & LePine, 2007). We performed meta-analytic structural equation

modeling (MASEM) to assess the mediating role of subordinates' EI in the positive relationship between leaders' EI and subordinates' job satisfaction.

4. RESULTS

4.1. Main and Moderator Effects

Table 1 displays the results for the main and moderator effects of the relation between leaders' EI and subordinates' job satisfaction. We found that overall leaders' EI was significantly and positively associated with subordinates' job satisfaction ($k = 20$, $N = 4665$, $\hat{\rho} = .308$) in that the corrected 95% confidence interval ranged from .251 to .365 and did not contain zero. Hence, Hypothesis 1 is supported. Similarly, we found that none of the corrected 95% confidence intervals for ability EI ($\hat{\rho} = .112$), self-report EI ($\hat{\rho} = .289$), and mixed EI ($\hat{\rho} = .434$) distributions included zero, denoting that each stream of leaders' EI was positively related to subordinates' job satisfaction. Accordingly, Hypothesis 2 is supported. It was noted that only 10% of the variance in $\hat{\rho}$ (see $\text{Var}_{\text{art}}\%$ column in Table 1) was explained by statistical artifacts for the overall leader EI – subordinate job satisfaction relation. This met Hunter and Schmidt's (2004) 75% rule, suggesting the potential existence of moderators. As such, our search for moderators was justified.

(Table 1 about here)

We performed a series of z-tests to assess moderator effects. With respect to the EI stream, our results demonstrated that ability EI is significantly smaller than self-report EI and mixed EI ($\Delta\hat{\rho}$ [ability EI versus self-report EI] = .177; $\Delta\hat{\rho}$ [ability EI versus mixed EI] = .322), whereas the difference between self-report EI and mixed EI is not statistically significant ($\Delta\hat{\rho} = .145$). Hypothesis 6 is partially supported. As for national culture, although we found that leader EI – subordinate job satisfaction effect size is larger in high institutional collectivistic

cultures than in low counterparts ($\Delta\hat{\rho} = .013$), this difference is insignificant. Hypothesis 7 is rejected. It was noted that leader EI – subordinate job satisfaction effect size in low in-group collectivistic cultures is significantly larger than that in high in-group collectivistic cultures ($\Delta\hat{\rho} = .200$), which is opposite to what we hypothesized. As such, Hypothesis 8 is rejected.

Hypothesis 9 is supported because the leader EI – subordinate job satisfaction effect size is larger in low humane oriented cultures than in high counterparts ($\Delta\hat{\rho} = .200$). Hypothesis 10 is rejected because the leader EI – subordinate job satisfaction effect size in low power distance cultures is not significantly different from that in high power distance cultures ($\Delta\hat{\rho} = .013$). It was noted that the leader EI – subordinate job satisfaction effect size does not significantly differ across leader hierarchical levels (supervisory-level versus mid- or upper-level; $\Delta\hat{\rho} = .082$) and across firm types (private versus public; $\Delta\hat{\rho} = .015$). Hence, Hypotheses 11 and 12 were rejected.

4.2. Mediator Effect

We ran MASEM to test the hypothesis regarding mediation. A mediation effect would exist if the test displays a significant indirect path. We compared a set of alternative models to determine our choice of final model. We compared a partial mediation model to a model without mediation effect ($\Delta\chi^2 = 188.024, p < .001, CFI = .692, TLI = .076, RMSEA = .274, SRMR = .116$) and then to a full mediation model ($\Delta\chi^2 = 153.911, p < .001, CFI = .748, TLI = .245, RMSEA = .248, SRMR = .091$). χ^2 difference test and model fit indices show that the partial mediation model demonstrated best model fit ($\chi^2 = 0.000, CFI = 1.000, SRMR = .000$) compared to the other two alternative models. As such, we chose the partial mediation model and performed Sobel test, Aroian test, and Goodman test to determine the statistical significance of indirect effect. We found that the indirect effect from leaders' EI to subordinates' job satisfaction through subordinates' EI is statistically significant (the statistical significance test of indirect

effect from leaders' EI to subordinates' job satisfaction via subordinates' EI: Sobel Test = 9.757, $p < .001$; Aroian Test = 9.745, $p < .001$; Goodman Test = 9.770, $p < .001$). Hypothesis 5 is thus supported.

(Figure 2 about here)

4.3. Results of Incremental Validity and Relative Weight Analyses

We performed both incremental validity and relative weight analyses to assess whether leaders' EI improves the prediction of subordinates' job satisfaction above and beyond what has already been accounted for by the FFM and cognitive ability. We constructed a meta-analytically derived correlation matrix based on the meta-analytic estimates from the current study as well as from prior meta-analytic reviews (see Table 2).

(Table 2 about here)

4.3.1. Results of incremental validity analysis.

The results of incremental validity analyses are shown in Table 3. Model 1 indicated that the FFM and cognitive ability jointly explained 15.2% ($p < .001$) of the variance in job satisfaction. The other three models displayed the incremental validity of each stream of EI above and beyond the FFM and cognitive ability. Model 2 suggested that ability EI yielded an additional 0.2% ($p < .001$) of the variance above and beyond the FFM and cognitive ability in predicting subordinates' job satisfaction. Model 3 and Model 4 demonstrated that self-report EI and mixed EI contributed an additional 2.1% ($p < .001$) and an additional 8.5% ($p < .001$) of the variance above and beyond the FFM and cognitive ability in predicting subordinates' job satisfaction. In conclusion, all three streams of EI contributed statistically significant incremental validity above and beyond the FFM and cognitive ability in predicting subordinates' job satisfaction.

(Table 3 about here)

Table 4 displayed the incremental validity of leaders' EI relative to subordinates' EI in predicting subordinates' job satisfaction. Subordinates' EI alone accounted for 10.2% ($p < .001$) of the variance in subordinates' job satisfaction. Leaders' EI contributed an additional 5.4% ($p < .001$) of the variance in subordinates' job satisfaction above and beyond subordinates' EI.

(Table 4 about here)

4.3.2. *Results of relative weight analysis.*

We performed relative weight analysis to evaluate the relative importance of each predictor in predicting subordinates' job satisfaction because the predictors are correlated in our regression models. Based on the work of Cohen (1988), O'Boyle et al. (2011) set the R^2 values of .01, .09, and .25 as small, medium, and large relative importance. They further noted that Cohen's (1988) criteria is a conservative one in that it is used for bivariate relations rather than multivariate models, meaning that a medium effect at the bivariate level can be small or even insignificant in a multivariate model.

The relative importance of all three streams of EI is shown in Table 3 (see RW and RW% indices). Model 2 indicated that ability EI contributed 3.5% of the explained variance (i.e., R^2 contribution of .01) in subordinates' job satisfaction, which just met the criteria of a small relative importance. Model 3 suggested that self-report EI yielded 25.3% of the explained variance (i.e., R^2 contribution of .04) in subordinates' job satisfaction, showing a small relative importance. Model 4 demonstrated that mixed EI contributed 49.9% of the explained variance (i.e., R^2 contribution of .12) in subordinates' job satisfaction, indicating a medium relative importance. The relative importance of mixed EI as 49.9% is quite noticeable because the FFM

and cognitive ability (six predictors in combination) contributed 50.1% of the explained variance in subordinates' job satisfaction, which is nearly identical to that of mixed EI.

The relative importance of leaders' EI relative to subordinates' EI in predicting subordinates' job satisfaction is shown in Table 4. Leaders' EI contributed 48.0% of the explained variance (i.e., R^2 contribution of .07) in subordinates' job satisfaction, showing a small, yet close to medium, relative importance. It is noted that leaders' EI demonstrated nearly the same relative importance as subordinates' EI in predicting subordinates' job satisfaction.

In a nutshell, we found that all three streams of leaders' EI demonstrated statistically significant incremental validity and from small to medium relative importance in predicting subordinates' job satisfaction in the presence of the FFM and cognitive ability. Hypothesis 3 is supported. We also found that leaders' EI contributed statistically significant incremental validity and small, yet close to medium, relative importance in predicting subordinates' job satisfaction in the presence of subordinates' EI. Hypothesis 4 is thus supported.

5. DISCUSSION

Leadership is an emotion-laden process and emotional intelligence leads to effective leadership (George, 2000). We presented a meta-analysis for the relationship between leaders' EI and subordinates' job satisfaction and found a positive relationship ($k = 20$, $N = 4665$, and $\hat{\rho} = .308$) between these two constructs, meaning that emotionally intelligent leaders will produce satisfied followers, thus yielding support for the link between EI and leader effectiveness. Leaders' mixed EI is most predictive of subordinates' job satisfaction ($\hat{\rho} = .434$), leaders' self-report EI the next best predictor ($\hat{\rho} = .289$), and leaders' ability EI has the lowest association with subordinates' job satisfaction ($\hat{\rho} = .112$).

To address the common criticisms concerning the incremental validity of EI above and beyond the FFM and cognitive ability, we included them as study covariates to improve the methodological rigor of our study (Walter et al., 2011). Our results demonstrated that all three streams of EI contributed statistically significant incremental validity above and beyond the FFM and cognitive ability in predicting subordinates' job satisfaction. In addition, all three streams of EI contributed from small to medium relative importance in predicting subordinates' job satisfaction (3.5% relative importance for ability EI, 25.3% relative importance for self-report EI, and 49.9% relative importance for mixed EI). It is worthwhile to note that mixed EI alone impressively accounts for 49.9% relative importance in predicting subordinates' job satisfaction, whereas the FFM and cognitive ability in combination (i.e., six predictors in total) only show 50.1% relative importance in predicting subordinates' job satisfaction.

Our results indicate that leaders' EI is nearly as important as subordinates' EI in predicting subordinates' job satisfaction (48.0% relative importance of leaders' EI versus 52.0% relative importance of subordinates' EI), suggesting that leaders' EI plays a noteworthy role in determining subordinates' workplace satisfaction. Our test for a mediator revealed that part of leaders' EI effects result from the influence of subordinates' EI. Finally, our tests for moderators also bore fruit. Leaders' EI is more strongly related to subordinates' job satisfaction in low in-group collectivistic and low humane oriented cultures. We discussed the implications, future directions, and limitations in the following sections.

5.1. Theoretical Implications

Our results yield support for the multilevel model of emotion and leadership (Ashkanasy & Humphrey, 2011a, 2011b) and emotional contagion theory (Hatfield et al., 1992). Consistent with these theories, emotionally intelligent leaders take on the role of "mood managers" to

influence their subordinates' emotions and to let them experience more positive feelings and less negative feelings via effective interpersonal interactions (e.g., high quality leader-member-exchange [Wong & Law, 2002]) and emotional contagion mechanisms, thus leading to higher subordinates' job satisfaction. We also compared the relative importance of leaders' EI and subordinates' EI in predicting subordinates' job satisfaction. Our meta-analytic results sustain the trait approach to leadership (DeRue et al., 2011; Hoffman, Woehr, Maldagen-Youngjohn, & Lyons, 2011). This is because leaders' EI, as an individual difference trait, influences leader effectiveness (as measured by subordinates' job satisfaction in the present study).

Our results also support the classification of EI measures into three streams (Ashkanasy & Daus, 2005). The three EI streams have differential associations with the FFM and cognitive ability (O'Boyle et al., 2011). These results are in line with our expectations because ability EI has the highest relation with cognitive ability and thereby should demonstrate the lowest relation with job satisfaction because cognitive ability weakly predicts job satisfaction (Gonzalez-Mulé et al., 2014). On the other hand, mixed EI acts in many ways like trait measures, which are good predictors of job satisfaction (Judge et al., 2002), and mixed EI scales also measure competencies and developed skills, so it is not surprising that the results show that mixed EI scales have the highest associations with job satisfaction.

Our results yield support for the theoretical model proposed by Daus et al. (2012). Our results reveal that emotionally intelligent leaders will have more emotionally intelligent, thus more satisfied, subordinates because emotionally savvy leaders are likely to foster an emotionally intelligent organizational culture where training and developing emotional intelligence is promoted. The emotionally intelligent culture will result in employees who are better able to deal with negative feelings and who are able to facilitate effective interpersonal

interactions. As a result, emotionally intelligent followers are likely to be attracted, recruited, and retained as a result of the attraction-selection-attrition process (Daus et al., 2012; Schneider, 1987).

In a comprehensive meta-analysis related to leader traits and leader effectiveness, DeRue et al. (2011) pointed out that the relationship between leader traits and leader effectiveness may be context-based because some aspects of a context may activate the expression of a given trait. Consistent with the propositions raised by prior studies (Walter et al., 2011), we found that some cultural contexts may activate the expression of leaders' EI because there are cultural variations in terms of the predictive validity of leaders' EI. In high humane oriented cultures, social norms obligate leaders to display care about their followers (House et al., 2004), so leaders may display this care regardless of their levels of EI. In addition, in these cultures followers may not regard these displays as especially noteworthy since the displays are normative. Both of these tendencies would reduce the size of the leader EI-subordinate job satisfaction relationship. Our results are consistent with the expectations that there would be a smaller leader EI – subordinate job satisfaction relationship in high humane oriented cultures than in low humane oriented cultures.

The finding that leaders' EI contributes less to subordinates' job satisfaction in high in-group collectivistic culture is contrary to our expectations. Perhaps this is because emotions are not openly displayed in high in-group collectivistic countries and it becomes a norm for people to suppress and control their own emotions, thus making it difficult for one to observe and recognize the emotion of others (Gunkel, Schlägel, & Engle, 2014). We fail to find support for the differential validity of leaders' EI across institutional collectivism and power distance

cultural dimensions, suggesting that the validity of leaders' EI may be generalizable across these two cultural dimensions in predicting subordinates' job satisfaction.

5.2. Limitations and Future Directions

First, there were a small number of samples in a few moderator subgroups; as such, our results may be susceptible to second-order sampling error (Hunter & Schmidt, 2004). In addition, moderator analysis in meta-analysis is a low power test (Steel & Kammeyer-Mueller, 2002). Hence, an insufficient number of samples may further influence the power of our moderator analysis. This may partly explain why some moderators are statistically insignificant. We encourage readers to interpret our results of moderator analyses with caution.

Second, even if we analyzed a set of moderators, $\text{Var}_{\text{art}}\%$ values across all subgroups are still less than 75%, meaning that our meta-analytic estimates are still not very stable and are likely to be influenced by other unobserved moderators. Future research should explore more moderators beyond what we found.

Third, the multilevel model of emotion proposes five levels of emotion research. Yet, the research at high levels (e.g., team-level and organization-level) turns out to be incredibly sparse, to the extent that it is nearly non-existent, which prevented us from meta-analyzing leaders' EI influence on satisfaction at high levels. Thus, we call for more research to analyze how the effect of leaders' EI operates at high level mechanisms. In terms of organizational-wide research, one fruitful avenue might be to introduce the concept of EI to the field of entrepreneurship (Cardon, Foo, Shepherd, & Wiklund, 2012; Humphrey, 2013b). Entrepreneurs determine the organizational culture for their organizations, and it is possible that entrepreneurs high on EI might be more successful in motivating their employees.

5.3. Practical Implications

Job satisfaction is a factor influencing many important workplace outcomes, such as job performance, turnover, and profits (Schleicher et al., 2011). The present study quantitatively synthesized a series of research findings and found a positive link between leaders' EI and subordinates' job satisfaction. Our findings also demonstrate that scores on all three streams of EI tests predict subordinates' job satisfaction above and beyond traditional cognitive ability and personality tests. As such, organizations should consider including EI in leadership education, training, and development (Walter et al., 2011) in order to generate satisfied employees. Longitudinal studies have shown that managers can improve their EI through training programs (Clarke, 2010). We also encourage managers to administer an EI test when they make personnel decisions.

6. REFERENCES

References marked with an asterisk (*) were included in the meta-analysis.

Anderson, C., Keltner, D., & John, O. P. (2003). Emotional convergence in close relationships.

Journal of Personality and Social Psychology, 84, 1054–1068.

Andrei, F., Siegling, A. B., Aloe, A. M., Baldaro, B., & Petrides, K. V. (2016). The incremental validity of the Trait Emotional Intelligence Questionnaire (TEIQue): A systematic review and meta-analysis. *Journal of Personality Assessment, 98*(3), 261-276.

Ashkanasy, N. M. (2003). Emotions in organizations: A multilevel perspective. In F. Dansereau & F. J. Yammarino (Eds), *Research in multi-level issues: Multi-level issues in organizational behavior and strategy* (pp. 9-54). Oxford, UK: Elsevier Science.

Ashkanasy, N. M., & Daus, C. S. (2002). Emotion in the workplace: The new challenge for managers. *Academy of Management Executive, 16*, 76–86.

- Ashkanasy, N. M., & Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior*, 26, 441–452.
- Ashkanasy, N. M., & Humphrey, R. H. (2011a). A multi-level view of leadership and emotions: Leading with emotional labor. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *Sage handbook of leadership* (pp. 363–377). London, UK: Sage Publications.
- Ashkanasy, N. M., & Humphrey, R. H. (2011b). Current emotion research in organizational behavior. *Emotion Review*, 3, 214-224.
- Bar-On, R. (2000). Emotions and social intelligence: Insights from the emotional quotient inventory. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp.363–388). San Francisco: Jossey-Bass.
- Bar-On, R. (2002). *Bar-On EQ-i technical manual*. Toronto: Multi-Health Systems.
- *Benson, J. D. (2009). *The relationship between emotional intelligence and managers' use of specific directive and supportive behaviors* (Unpublished doctoral dissertation), University of Phoenix.
- Boyatzis, R., Brizz, T., & Godwin, L. (2011). The effect of religious leaders' emotional and social competencies on improving parish vibrancy. *Journal of Leadership & Organizational Studies*, 18, 192-206.
- Cherniss, C. (2001). Emotional intelligence and organizational effectiveness. In C. Cherniss & D. Goleman (Eds.), *The emotionally intelligent workplace* (pp. 3–12). San Francisco: Jossey-Bass.

- Choi, D. (2013). *Differentiated leader-member exchange and group effectiveness: A dual perspective* (Unpublished doctoral dissertation), University of Iowa.
- Clarke, N. (2010). The impact of a training programme designed to target the emotional intelligence abilities of project managers. *International Journal of Project Management*, 28, 461-468.
- *Coetzee, M., & Pauw, D. (2013). Staff perception of leader emotional competency as a predictor of satisfaction with retention factors. *Journal of Psychology in Africa*, 23, 177-185.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92, 909-927.
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96, 443-456.
- Cropanzano, R., & Dasborough, M. T. (2015). Dynamic models of well-being: Implications of affective events theory for expanding current views on personality and climate. *European Journal of Work and Organizational Psychology*, 24, 844-847.
- Dasborough, M. T., & Ashkanasy, N. M. (2002). Emotion and attribution of intentionality in leader-member relationships. *Leadership Quarterly*, 13, 615-634.
- Daus, C. S., Dasborough, M. T., Jordan, P. J., & Ashkanasy, N. M. (2012). We are all mad in wonderland: An organizational culture framework for emotions and emotional

- intelligence research. In N. M. Ashkanasy, C. E. J. Hartel, & W. J. Zerbe (Eds.), *Experiencing and managing emotions in the workplace* (pp. 375-399). Bingley, United Kingdom: Emerald Group Publishing.
- DeRue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology, 64*, 7-52.
- Di Fabio, A., Saklofske, D. H., & Tremblay, P. F. (2016). Psychometric properties of the Italian trait emotional intelligence questionnaire (I-TEIQue). *Personality and Individual Differences 96*, 198–201.
- Druskat, V. U., & Wolff, S. B. (2001). Building the emotional intelligence of groups. *Harvard Business Review, 79*, 80-90.
- Emmerling, R. J., & Boyatzis, R. E. (2012). Emotional and social intelligence competencies: Cross cultural implications. *Cross Cultural Management: An International Journal, 19*, 4-18.
- Farh, C. I., Seo, M. G., & Tesluk, P. E. (2012). Emotional intelligence, teamwork effectiveness, and job performance: The moderating role of job context. *Journal of Applied Psychology, 97*, 890-900.
- Fisher, C. D. (2000). Mood and emotions while working: Missing pieces of job satisfaction? *Journal of Organizational Behavior, 21*, 185-202.
- *Fortner, A. N. (2013). *The role of a leader's emotional intelligence and how it relates to employees' motivation and job satisfaction* (Unpublished doctoral dissertation), Capella University.

- George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*, 1027–1055.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Cambridge, MA: Harvard Business School Press.
- Gonzalez-Mulé, E., Carter, K., & Mount, M. K. (2014). *Is ignorance really bliss? A meta-analysis of the relationship between general mental ability and attitudes*. Working Paper.
- Groves, K. S. (2005). Linking leader skills, follower attitudes, and contextual variables via an integrated model of charismatic leadership. *Journal of Management, 31*, 255-277.
- Gunkel, M., Schlägel, C., & Engle, R. L. (2014). Culture's influence on emotional intelligence: An empirical study of nine countries. *Journal of International Management, 20*, 256-274.
- Hatfield, E., Cacioppo, J., & Rapson, R. L. (1992). Emotional contagion. In M. S. Clark (Ed.), *Review of personality and social psychology: Emotion and social behavior* (pp. 151–177). Newbury Park, CA: Sage Publications.
- *Heindel, K. (2009). *The relationship between the emotional intelligence of leaders and critical employee engagement factors*. (Unpublished doctoral dissertation), Alliant International University.
- *Hoar, P. A. (2011). *Nurse manager emotional intelligence, staff nurse satisfaction, and staff nurse retention* (Unpublished doctoral dissertation), Teachers College, Columbia University.
- Hoffman, B. J., Woehr, D. J., Maldagen-Youngjohn, R., & Lyons, B. D. (2011). Great man or great myth? A quantitative review of the relationship between individual differences and

- leader effectiveness. *Journal of Occupational and Organizational Psychology*, 84, 347-381.
- Hooijberg, R., & Choi, J. (2001). The impact of organizational characteristics on leadership effectiveness models an examination of leadership in a private and a public sector organization. *Administration & Society*, 33, 403-431.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks: Sage Publications.
- Humphrey, R. H. (2013a). *Effective Leadership: Theory, cases, and applications*. Los Angeles, CA: Sage.
- Humphrey, R. H. (2013b). The benefits of emotional intelligence and empathy to entrepreneurship. *Entrepreneurship Research Journal*, 3, 287-294.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Beverly Hills, CA: Sage.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- Ilies, R., Aw, S. S., & Pluut, H. (2015). Intraindividual models of employee well-being: What have we learned and where do we go from here? *European Journal of Work and Organizational Psychology*, 24, 827-838.
- Ilies, R., Curşeu, P. L., Dimotakis, N., & Spitzmuller, M. (2013). Leaders' emotional expressiveness and their behavioural and relational authenticity: Effects on followers. *European Journal of Work and Organizational Psychology*, 22, 4-14.
- Johnson, J. W. (2000). A heuristic method for estimating the relative weight of predictor variables in multiple regression. *Multivariate Behavioral Research*, 35, 1-19.

- Johnson, J. W., & LeBreton, J. M. (2004). History and use of relative importance indices in organizational research. *Organizational Research Methods, 7*, 238–257.
- Johnson, S. J., Batey, M., & Holdsworth, L. (2009). Personality and health: The mediating role of trait emotional intelligence and work locus of control. *Personality and Individual Differences, 47*, 470–475.
- Johnson, S. K. (2009). Do you feel what I feel? Mood contagion and leadership outcomes. *Leadership Quarterly, 20*, 814-827.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology, 87*, 530-541.
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology, 92*, 107-127.
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology, 63*, 341-367.
- Kafetsios, K., & Zampetakis, L. A. (2008). Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. *Personality and Individual Differences, 44*, 712-722.
- *Kappagoda, U. W. M. R. S. (2011). *The relationship between principals' emotional intelligence and teachers' job satisfaction: A case of national schools in Sri Lanka*. Working Paper.
- Kellett, J. B., Humphrey, R. H., & Sleeth, R. G. (2006). Empathy and the emergence of task and relations leaders. *Leadership Quarterly, 17*, 146-162.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance, 22*, 375-403.

- Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, *52*, 744–764.
- *Lam, C. S., & O’Higgins, E. R. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organization Development Journal*, *33*, 149-174.
- *Lee, C.-H. (2014). The effects of flight attendant team leader’s emotional intelligence on team effectiveness and organizational effectiveness. *Journal of the Aviation Management Society of Korea*, *12*, 97-117.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Sage Publications: Thousand Oaks, CA, 2001.
- *Liu, X. Y., & Liu, J. (2013). Effects of team leader emotional intelligence and team emotional climate on team member job satisfaction: A cross-level. *Nankai Business Review International*, *4*, 180-198.
- MacCann, C. (2010). Further examination of emotional intelligence as a standard intelligence: A latent variable analysis of fluid intelligence, crystallized intelligence, and emotional intelligence. *Personality and Individual Differences*, *49*, 490-496.
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *49*, 554-564.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–25). New York: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. (2002). *Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT): User’s manual*. Toronto, ON: Multi-Health Systems.

Mayer, J. D., Salovey, P., Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*, 97–105.

Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue; Petrides & Furnham, 2003). *Journal of Personality Assessment, 88*, 338–353.

Mount, M. K., Barrick, M. R., Scullen, S. M., & Rounds, J. (2005). Higher-order dimensions of the big five personality traits and the big six vocational interest types. *Personnel Psychology, 58*, 447-478.

Mumby, D. K., & Putnam, L. L. (1992). The politics of emotion: A feminist reading of bounded rationality. *Academy of Management Review, 17*, 465-486.

*Munro, J. C. (2011). *Nurse manager emotional intelligence as a predictor to registered nurse job satisfaction and RN perceptions of the practice environment and the relationship to patient, nursing and hospital outcomes* (Unpublished doctoral dissertation), University of South Florida.

*Ngirande, H., & Timothy, H. T. (2014). The relationship between leader emotional intelligence and employee job satisfaction. *Mediterranean Journal of Social Sciences, 5*, 35-40.

O’Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior, 32*, 788-818.

Oh, I. S., Guay, R. P., Kim, K., Harold, C. M., Lee, J. H., Heo, C. G., & Shin, K. H. (2014). Fit happens globally: A meta-analytic comparison of the relationships of person–

- environment fit dimensions with work attitudes and performance across East Asia, Europe, and North America. *Personnel Psychology*, 67, 99-152.
- Osborn, R. N., & Hunt, J. G. (1975). An adaptive-reactive theory of leadership: The role of macro variables in leadership research. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 27-44). Columbus, OH: Kent University Press.
- Ouyang, Z., Sang, J., Li, P., & Peng, J. (2015). Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: A study from China. *Personality and Individual Differences*, 76, 147–152.
- Pescosolido, A. T. (2002). Emergent leaders as managers of group emotion. *Leadership Quarterly*, 13, 583-599.
- Peterson, R. A., & Brown, S. P. (2005). On the use of beta coefficients in meta-analysis. *Journal of Applied Psychology*, 90, 175-181.
- Petrides, K. V. (2009a). Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue). In C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.), *Assessing emotional intelligence: Theory, research, and applications*. (pp. 85-101). New York, NY: Springer Science.
- Petrides, K. V. (2009b). *Technical manual for the Trait Emotional Intelligence Questionnaire (TEIQue)*. London, England: London Psychometric Laboratory.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioral validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17, 39–57.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98(2), 273-289.

- *San, L. C. (2010). *Enhancing team and individual outcomes: The interrelated influences of managers' emotional intelligence and leadership style* (Unpublished doctoral dissertation), University of South Australia.
- Schein, E. H. (1990). Organizational culture. *American Psychologist*, *45*, 109–119.
- Schleicher, D. J., Hansen, S. D., & Fox, K. E. (2011). Job attitudes and work values. In S. Zedeck (Ed), *APA handbook of industrial and organizational psychology, Vol 3: Maintaining, expanding, and contracting the organization. APA Handbooks in Psychology* (pp. 137-189). Washington, DC, US: American Psychological Association.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, *40*, 437-453.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, *25*, 167–177.
- Schutte, N., Malouff, J. M., Simunek, M., Hollander, S., & McKenley, J. (2002). Characteristic emotional intelligence and emotional well-being. *Cognition and Emotion*, *16*, 769–785.
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *42*, 921-933.
- Siegling, A. B., Sfeir, M., & Smyth, H. J., (2014a). Measured and self-estimated trait emotional intelligence in a UK sample of managers. *Personality and Individual Differences* *65*, 59–64.
- Siegling, A. B., Nielsen, C., Petrides, K. V. (2014b). Trait emotional intelligence and leadership in a European multinational company. *Personality and Individual Differences*, *65*, 65–68.

- Siegling, A. B., Vesely, A. K., Petrides, K. V., & Saklofske, D. H. (2015). Incremental Validity of the Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF). *Journal of personality assessment, 97*(5), 525-535.
- Smith, M. M., Saklofske, D. H., Yan, G. (2015). Perfectionism, trait emotional intelligence, and psychological outcomes. *Personality and Individual Differences, 85*, 155–158.
- Steel, P. D., & Kammeyer-Mueller, J. D. (2002). Comparing meta-analytic moderator estimation techniques under realistic conditions. *Journal of Applied Psychology, 87*, 96 - 111.
- *Stoneback, D. T. (2011). *The relationship between manager emotional intelligence and job satisfaction: A quantitative study of call center employees* (Unpublished doctoral dissertation), Capella University.
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology, 90*, 295-305.
- *Sy, T., Tram, S., & O'Hara, L. A. (2006). Relation of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior, 68*, 461-473.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88*, 500–517.
- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality, 34*, 397–423.
- Tonidandel, S., & LeBreton, J. M. (2011). Relative importance analysis: A useful supplement to regression analysis. *Journal of Business and Psychology, 26*, 1-9.

- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65, 71-95.
- Vernon, P.A., Petrides, K.V., Bratko, D., & Schermer, J. A. (2008). A behavioral genetic study of trait emotional intelligence. *Emotion*, 8, 635-642.
- *Villard, J. A. (2004). *Determining the relationship between job satisfaction of county extension unit employees and the level of emotional intelligence of extension county chairs* (Unpublished doctoral dissertation), The Ohio State University.
- Viswesvaran, C., & Ones, D. S. (1995). Theory testing: Combining psychometric meta-analysis and structural equations modeling. *Personnel Psychology*, 48, 865–885.
- Walter, F., & Bruch, H. (2009). An affective events model of charismatic leadership behavior: A review, theoretical integration, and research agenda. *Journal of Management*, 35, 1428–1452.
- Walter, F., Cole, M. S., & Humphrey, R. H. (2011). Emotional intelligence: Sine qua non of leadership or folderol? *The Academy of Management Perspectives*, 25, 45-59.
- Walter, F., Humphrey, R. H., & Cole, M. S. (2012). Unleashing leadership potential: Toward an evidence-based management of emotional intelligence. *Organizational Dynamics*, 41, 212-219.
- Wang, G., Oh, I. S., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, 36, 223-270.
- * Webb, K. S. (2011). *Emotional intelligence and business success*. Working Paper.

- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 1–74). Greenwich, CT: JAI Press.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review, 12*, 173-194.
- Weiss, H. M., Nicholas, J. P., & Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behavior and Human Decision Processes, 78*, 1–24.
- Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in meta-analysis. *Journal of Applied Psychology, 75*, 315–321.
- *Whiteoak, J. W., & Manning, R. L. (2012). Emotional intelligence and its implications on individual and group performance: A study investigating employee perceptions in the United Arab Emirates. *The International Journal of Human Resource Management, 23*, 1660-1687.
- Wolff, S. B. (2006). *Emotional Competence Inventory (ECI), Technical Manual*. Hay Group, McClelland Center for Research and Innovation, Boston, MA.
- *Wong, C.-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *Leadership Quarterly, 13*, 243–274.
- Wong, C. S., Law, K. S., & Wong, P. M. (2004). Development and validation of a forced choice emotional intelligence measure for Chinese respondents in Hong Kong. *Asia Pacific Journal of Management, 21*, 535-559.

* Wong, C. S., Wong, P. M., & Peng, K. Z. (2010). Effect of middle-level leader and teacher emotional intelligence on school teachers' job satisfaction: The case of Hong Kong.

Educational Management Administration & Leadership, 38, 59-70.

Yang, J., Mossholder, K.W., & Peng, T. K. (2007). Procedural justice climate and group power distance orientation: A case of cross-level effects. *Journal of Applied Psychology*, 92, 681-692.

Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36, 381-404.

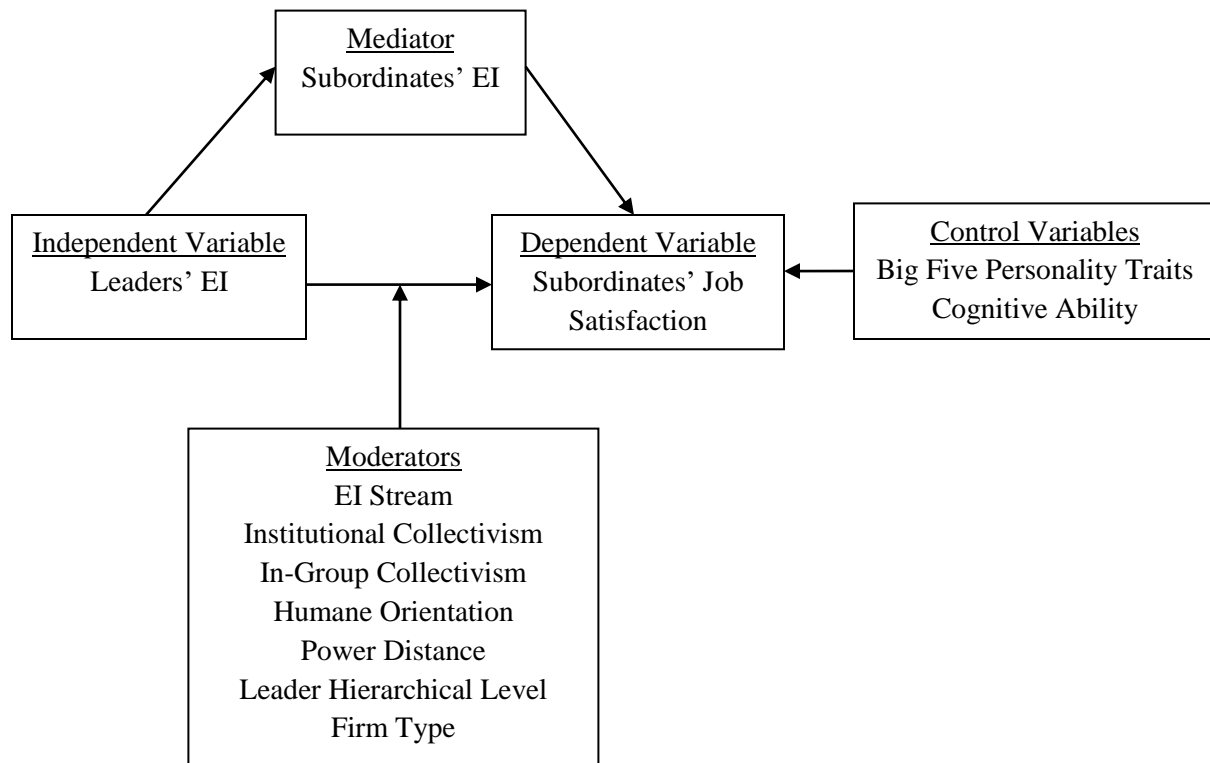


Fig. 1. A conceptual model of how leaders' EI influences subordinates' job satisfaction.

Table 1

Psychometric meta-analysis results.

	<i>k</i>	<i>N</i>	\bar{r}_o	SD_r	$\hat{\rho}$	SD_ρ	Var _{art} %	Corrected 95% CI	Corrected 80% CR	Significant Difference
Leader EI – Subordinate JS	20	4,665	.246	.197	.308	.224	10	.251 to .365	.022 to .600	
EI Stream										
a. Ability EI	5	732	.100	.095	.112	.057	74	.085 to .140	.039 to .186	b,c
b. Self-report EI	8	2,434	.235	.116	.289	.129	21	.254 to .324	.125 to .454	a
c. Mixed EI	6	1,407	.316	.275	.434	.301	6	.359 to .509	.049 to .819	a
National Culture										
Institutional Collectivism										
a. Low	14	2,672	.221	.213	.279	.241	11	.234 to .325	-.029 to .588	—
b. High	4	1,664	.234	.146	.292	.177	10	.259 to .326	.066 to .518	—
In-Group Collectivism										
a. Low	6	1,260	.350	.145	.421	.146	20	.392 to .450	.234 to .607	b
b. High	12	3,076	.175	.183	.221	.219	11	.180 to .263	-.059 to .502	a
Humane Orientation										
a. Low	6	1,260	.350	.145	.421	.146	20	.392 to .450	.234 to .607	b
b. High	12	3,076	.175	.183	.221	.219	11	.180 to .263	-.059 to .502	a
Power Distance										
a. Low	14	2,672	.221	.213	.279	.241	11	.234 to .325	-.029 to .588	—
b. High	4	1,664	.234	.146	.292	.177	10	.259 to .326	.066 to .518	—
Leader Hierarchical Level										
a. Mid- or upper-level	5	1,232	.230	.156	.325	.137	25	.287 to .363	.151 to .500	—
b. Supervisory-level	12	2,934	.201	.173	.243	.196	13	.193 to .294	-.007 to .494	—
Firm Type										
a. Private	5	1,082	.201	.127	.320	.107	45	.285 to .354	.183 to .456	—
b. Public	11	2,340	.257	.207	.305	.228	10	.247 to .363	.013 to .597	—
Leader EI – Subordinate EI	4	1,043	.234	.160	.272	.210	11	.219 to .326	.003 to .541	

Note. *k* = number of independent samples; *N* = sample size; \bar{r}_o = uncorrected sample-size-weighted mean correlation; SD_r = sample-size-weighted standard deviation of observed mean correlations; $\hat{\rho}$ = corrected sample-size-weighted mean correlation; SD_ρ = sample-size-weighted standard deviation of corrected mean correlations; Var_{art}% = percent of variance in $\hat{\rho}$ explained by statistical artifacts; Corrected 95% CI = corrected 95% confidence interval; Corrected 80% CR = corrected 80% credibility interval; Significant Difference = letters in this column correspond to the letters in rows and suggest that effect sizes are significantly different from one another at .05 level. The sign “—” indicates that between-group difference is not statistically significant; EI = emotional intelligence; JS = job satisfaction.

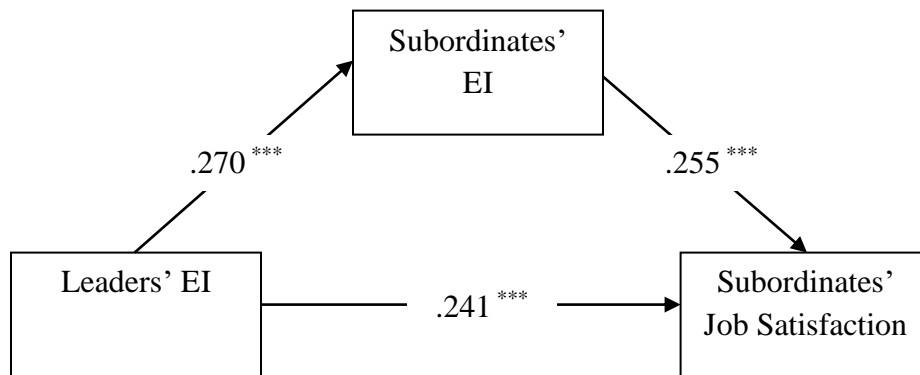


Fig. 2. Path model of the mediating role of subordinates' EI in the relationship between leaders' EI and subordinates' job satisfaction. N (harmonic mean sample size) = 2485. EI = emotional intelligence. The statistical significance test of indirect effect from leaders' EI to subordinates' job satisfaction via subordinates' EI: Sobel Test = 9.757***, Aroian Test = 9.745***, Goodman Test = 9.770***
*** $p < .001$

Table 2

Meta-analytically derived corrected intercorrelation matrix

	1	2	3	4	5	6	7
1. Job Satisfaction	—						
2. Cognitive Ability	.05 ^a	—					
3. Neuroticism	-.29 ^b	-.09 ^c	—				
4. Extraversion	.25 ^b	.02 ^c	-.24 ^d	—			
5. Openness	.02 ^b	.22 ^c	-.19 ^d	.45 ^d	—		
6. Agreeableness	.17 ^b	.00 ^c	-.42 ^d	.26 ^d	.17 ^d	—	
7. Conscientiousness	.26 ^b	-.04 ^c	-.52 ^d	.17 ^d	.09 ^d	.39 ^d	—
8. Ability EI	.11 ^f	.32 ^e	-.16 ^e	.11 ^e	.18 ^e	.26 ^e	.11 ^e
9. Self-report EI	.29 ^f	.08 ^e	-.40 ^e	.32 ^e	.30 ^e	.26 ^e	.38 ^e
10. Mixed EI	.43 ^f	.06 ^e	-.54 ^e	.49 ^e	.39 ^e	.38 ^e	.38 ^e

^aGonzalez-Mulé et al. (2014). ^bJudge et al. (2002). ^cJudge et al. (2007). ^dMount et al. (2005). ^eO'Boyle et al. (2011). ^fThe present study.

Table 3

Hierarchical multiple regression and relative weight analyses for three streams of leaders' EI in predicting subordinates' job satisfaction

	Model 1			Model 2			Model 3			Model 4		
	β	RW	RW%	β	RW	RW%	β	RW	RW%	β	RW	RW%
Cognitive Ability	.069***	.003	2.0	.052***	.002	1.5	.063***	.003	1.6	.073***	.003	1.3
Neuroticism	-.180***	.046	30.3	-.179***	.045	29.4	-.145***	.038	21.6	-.040**	.030	12.7
Extraversion	.251***	.051	33.5	.251***	.050	32.7	.225***	.044	25.3	.136***	.035	14.6
Openness	-.155***	.007	4.8	-.159***	.008	5.0	-.183***	.010	5.7	-.224***	.016	6.7
Agreeableness	.001	.009	5.9	-.012	.008	5.2	-.002	.008	4.4	-.035**	.007	3.1
Conscientiousness	.140***	.036	23.4	.139***	.035	22.8	.101***	.028	16.1	.101***	.028	11.7
Ability EI				.053***	.005	3.5						
Self-report EI							.172***	.044	25.3			
Mixed EI										.400***	.118	49.9
R^2	.152***			.154***			.173***			.237***		
ΔR^2				.002***			.021***			.085***		
N_{harmonic}	6681			4780			5578			5773		

Note. N_{harmonic} = harmonic mean sample size; β = standardized regression weights; RW = relative weight; RW% = percent of relative weight (computed by dividing individual relative weight by the sum of individual relative weight and multiplying by 100); R^2 = multiple correlations; ΔR^2 = incremental change in R^2 ; EI = emotional intelligence; JS = job satisfaction.

** $p < .01$

*** $p < .001$

Table 4

Hierarchical multiple regression and relative weight analyses for subordinates' and leaders' EI

	Subordinate Job Satisfaction			
	Step 1	Step 2		
	β	β	RW	RW%
Subordinate EI	.320***	.255***	.081	52.0
Leader EI		.241***	.075	48.0
R^2	.102***	.156***		
ΔR^2		.054***		

Note. N (harmonic mean sample size) = 2485; β = standardized regression weights; RW = relative weight; RW% = percent of relative weight (computed by dividing individual relative weight by the sum of individual relative weight and multiplying by 100); R^2 = multiple correlations; ΔR^2 = incremental change in R^2 ; EI = emotional intelligence.

*** $p < .001$