HOW EMOTIONAL INTELLIGENCE AFFECTS LMX RELATIONSHIPS

A Thesis
by
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Abstract

HOW EMOTIONAL INTELLIGENCE AFFECTS LMX RELATIONSHIPS.

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This study explored the utility of emotional intelligence (EI) as a predictor of leader-member exchange (LMX). To date, there has been very little research exploring the relationship between these constructs. It was hypothesized that EI in both supervisors and employees would have positive relationships with employee-rated LMX quality. A study was conducted with 24 working students at a Southeastern University and their supervisors at work. The Wong and Law Emotional Intelligence Scale and LMX-7 were administered to participants along with a measure of the Big Five. Pearson correlation and multiple regression analyses did not demonstrate support for the hypothesized relationships. There was weak to no support that employee EI predicted employee-rated LMX ($r = .16$) within a larger sample obtained in the study but was not statistically significant within the 24 dyads examined. The results of this study suggest that if a relationship does exist between EI and LMX, it is likely to be small. Some support was also offered for supervisor-employee similarity of EI being a predictor of employee-rated LMX scores.

Keywords: leader-member exchange, LMX, emotional intelligence, leadership

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Foreword

This thesis is written in accordance with the style of the *Publication Manual of the American Psychological Association (6th Edition)* as required by the Department of Psychology at Appalachian State University.

How Emotional Intelligence Affects LMX Relationship

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How Emotional Intelligence Affects LMX Relationships

Leader-member exchange (LMX) is a theory of leadership that was originally proposed as an alternative to theories which described leaders as having an average style which is used consistently among their subordinates (Dansereau, Graen, & Haga, 1975). The idea of LMX describes leaders as having a differentiating leadership style for each of their employees based on the relationship that the manager and employee develop within the workplace. LMX is thus described as a relationship-oriented approach to leadership (Graen & Uhl-Bien, 1995). The leader will naturally develop higher quality relationships with certain employees and develop lower quality relationships with others. This leads to an "in-group" and an "out-group," where the in-group receives special benefits that can range from favorable treatment to tangible rewards. Not only does the in-group benefit from this exchange relationship, but there are also advantages that the employee may provide to the leader when a high quality LMX relationship is present (Dansereau et al., 1975).

The literature has since moved beyond the "in-group" and "out-group" perspective. Rather than an emphasis on how leaders discriminate among their employees, LMX intends to provide a framework for how leaders can work effectively with each of their employees. Things such as the leader-subordinate personality interaction and the leaders willingness to build relationships with all employees can influence the quality of the LMX relationship (Graen & Uhl-Bien, 1995). Managers can thus develop high quality relationships with their employees in which they utilize the positive aspects of their exchange relationship to better

the organization, or they may develop low quality relationships which are more typical of a leader-subordinate relationship focused strictly on task performance.

High quality LMX relationships have been linked to a variety of positive organizational outcomes. In a meta-analytic review, Gerstner and Day (1997) were able to demonstrate that job performance, satisfaction with supervision, overall satisfaction, commitment, role clarity, and member competence were all significant correlates of LMX. Results from other studies offered support for a relationship between LMX and organizational citizenship behaviors (OCBs), perceived organizational support (Wayne, Shore, & Liden, 1997), turnover intent (Kim, Lee, & Carlson, 2010), job satisfaction, organizational feedback, supervisor feedback, role conflict (Harris, Harris, & Eplion, 2007), trust, respect, and obligation (Graen & Uhl-Bien, 1995).

Although empirical evidence has generally found high LMX quality to be associated with positive organizational outcomes, some studies have demonstrated that high LMX quality may result in negative outcomes. For example, although turnover intent is generally regarded as having a negative linear relationship with LMX, Harris, Kacmar, and Witt (2005) have demonstrated evidence of a curvilinear relationship. In this study, both low and high quality LMX relationships led to higher turnover, while an average quality relationship demonstrated lower turnover. In another study, stress was shown to have a curvilinear relationship with LMX, in which both high and low quality LMX relationships led to higher stress (Harris & Kacmar, 2006). Both of these studies suggest that there may be certain circumstances in which high LMX quality may have negative outcomes.

Antecedents of LMX

While the literature has provided a great deal of evidence related to outcomes of LMX quality, there has been far less research aimed at identifying antecedents of high LMX quality (Harris, Harris, & Eplion, 2007). To illustrate this effect, Dulebohn, Bommer, Liden, Brouer, and Ferris (2011) conducted a meta-analysis of LMX outcomes and antecedents. Their final sample consisted of 247 studies that had been conducted up until 2010. Among 21 antecedents for which they found evidence, the number of studies in their sample that reported these antecedents was relatively small, ranging from 4 to 20 ($M = 9.67$) depending on the specific antecedent being analyzed; however, of the 16 outcomes that were found, the number of studies that reported them was much larger, ranging from 5 to 108 ($M = 32.00$). What this suggests is that the literature has paid significantly more attention to outcomes of LMX than it has to its antecedents.

A central question of the theory of LMX involves identifying what characteristics precede these high quality relationships. Results have been mixed regarding this question. One study found that leader and member expectations of each other, liking, and perceived similarity were all able to predict LMX quality early in the relationship (Liden, Wayne, & Stilwell, 1993). Subordinates role clarity and affect towards their leader has also been supported as a predictor of LMX quality (Sears & Hackett, 2011). In another study, follower extraversion and leader-perceived follower similarity were found to be correlated with LMX quality, but follower locus of control and follower growth need strength were not found to be related to LMX quality (Phillips & Bedeian, 1994). Contradicting previous results, a more recent study found support for a link between LMX and locus of control, as well as LMX and need for power, but not for LMX and self esteem (Harris et al., 2007).

A variety of studies have provided support for the Big Five personality traits as antecedents of LMX. These five traits include extraversion, conscientiousness, openness, agreeableness, and neuroticism (McCrae & John, 1992). These factors are considered to Bernerth, Armenakis, Feild, Giles, and Walker (2007) found that employee conscientiousness, extraversion, neuroticism, and openness to experience were all significant predictors of employee rated LMX quality. In the same study, supervisor conscientiousness and agreeableness were predictive of employee perceptions of LMX quality, but the other three Big Five traits did not demonstrate a relationship. A separate study found that leader-follower similarity on a measure of the Big Five personality factors successfully predicted ratings of LMX (Oren, Tziner, Sharoni, Amor, & Alon, 2012).

Considering the vast number of differences in antecedents that have been found on a study-to-study basis, perhaps the clearest picture the literature has painted is the previously mentioned meta-analysis by Dulebohn et al. (2011). In this study, significant antecedents of LMX quality were separated into characteristics of the subordinate, characteristics of the leader, and interpersonal relationship variables. The follower characteristics that have been found throughout the LMX literature included competence, agreeableness, conscientiousness, extraversion, locus of control, positive affectivity, and negative affectivity. Antecedents involving leader characteristics consisted of extraversion, agreeableness, supervisor's expectations of followers, transformational leadership, and contingent reward behavior. Lastly, the meta-analysis examined interpersonal relationship variables and found support for perceived similarity, affect, ingratiation, self-promotion influence tactics, and leader trust.

One of the more interesting findings of the meta-analysis conducted by Dulebohn et al. (2011) is the evidence that leader characteristics explained the most variance in LMX

quality over follower characteristics and interpersonal relationship variables. What this suggests is that while we may be able to explain variance in LMX quality by examining factors relating to the subordinate or specific interactions, it could be possible to explain more variance by looking at antecedents related to the leader. Rather than look at traits in subordinates, from which we may be able to identify how one relationship at a time will develop, it may be more efficient to identify a singular trait in a leader that would allow us to predict whether or not they will form high quality relationships with their employees that in turn lead to many outcomes that will benefit the organization.

Emotional Intelligence

Emotional intelligence (EI) is an idea that was first published in 1990 as a complement to the idea of multiple forms of intelligence (Salovey & Mayer, 1990). The authors developed the original theory and definitions partly in response to an increased interest in the 1980s regarding the interaction of emotion and cognition (Mayer, Salovey, & Caruso, 2004). EI was originally defined as "the subset of social intelligence that involves 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" (Salovey & Mayer, 1990, p. 189). EI has since been conceptualized as a four-branch model that includes abilities involving: (a) perception of emotions - the ability to accurately perceive how you and others around you are feeling; (b) using emotions to guide thought - the ability to use your feelings to guide and enhance cognitive thinking; (c) understanding emotions - the ability to label emotions and the understanding of how to reason with them; and (d) managing emotions - the ability to manage emotions within oneself (Mayer et al., 2004).

Since its introduction, there has been a fair amount of controversy surrounding the construct of EI. There are three main criticisms currently surrounding EI: the variety of differing conceptualizations being used within the literature, poor construct validity involving some popular measures of EI, and the predictive power of EI for significant organizational outcomes (Cherniss, 2010). Other critics argue that EI measures do not provide incremental validity over the Big Five personality factors and general mental ability (Conte, 2005).

Ashkanasy and Daus (2005) have attempted to address the first two of the main criticisms by categorizing different conceptualizations of EI and their associated measures into three streams. Stream 1 involves ability-based models derived from the four-branch model proposed by Mayer and Salovey (1997) and is considered to be the truest form of EI. The only measure of EI that is placed within Stream 1 is the Mayer Salovey Caruso Emotional Intelligence Test (Mayer, Salovey, Caruso, & Sitarenios, 2003), which is more similar to traditional ability-based intelligence tests. Stream 2 models are also derived from the Mayer-Salovey ability-based four-branch model; however, measures in this stream are either self- or peer-reported. Finally, Stream 3 models include self-report surveys and encompass components of personality that fall outside of the Mayer-Salovey definition. It is argued that Stream 3 models and their associated measures should be avoided because they are not based on the dominant Mayer-Salovey definition, include aspects of personality separate from EI, and thus should not be considered measures of EI (Ashkanasy & Daus, 2005).

The utility of the various streams were discussed by O'Boyle, Humphrey, Pollack, Hawver, and Story (2011) in a meta-analysis comparing EI, the Big Five, cognitive ability,

and job performance. They found that although the three streams of EI predicted job performance at roughly the same level, the manner in which they did so differed dramatically. O'Boyle et al. (2011) also found that all three streams demonstrated correlations with the Big Five. Even though Stream 1 measures had the smallest relationships with the Big Five; it was also the only stream that correlated with cognitive ability. Stream 2 and Stream 3 measures both had relatively stronger relationships to the Big Five than Stream 1 measures, but Stream 2 showed smaller relationships to the Big Five than Stream 3 in general. The most interesting finding was that all three streams showed incremental validity over the Big Five and cognitive ability; however, the incremental validity provided by Stream 1 was minimal (0.4%), whereas Stream 2 (5.2%) and Stream 3 (6.8%) demonstrated a much larger amount of incremental validity.

To summarize the findings in O'Boyle et al. (2011), Stream 1 measures demonstrate the smallest correlation with the Big Five, show a relationship with cognitive ability, and have little incremental validity over the Big Five and cognitive ability for predicting job performance. Stream 2 and Stream 3 measures contribute significant incremental validity for predicting job performance, show no correlation with cognitive ability, but have larger relationships with the Big Five. Stream 2 measures seem to reduce some of the personality baggage that Stream 3 measures demonstrate without sacrificing much predictive ability. It was also determined that Stream 2 measures were more similar to the ability-based Stream 1 measures than the personality-based Stream 3 measures.

While Ashkanasy and Daus (2005) advise against using Stream 3 measures, they have a more favorable stance toward Stream 1 and Stream 2 models. Both authors have called for researchers to recognize EI as defined by Mayer and Salovey (1997), and argue that models

must use this conceptualization and framework in order to be considered EI. This is consistent with Cherniss (2010), who suggests that most of the literature has accepted the four-branch model and definition of EI proposed by Mayer, Salovey, and Caruso (2000). To remain consistent with the definition most embraced within the literature, this study adopts the definition and model previously outlined by Mayer et al. (2000).

EI, as conceptualized by the four-branch model, has been shown to relate to many different organizational and life outcomes. Studies have demonstrated a relationship between EI and ethical behavior (Deshpande & Joseph, 2009), drug and alcohol use, positive and negative relations with friends, care of physical appearance (Brackett, Mayer, & Warner, 2004), and life satisfaction (Gannon & Ranzijn, 2005). As far as work outcomes, EI has been linked to performance, organizational citizenship behaviors (Carmeli & Josman, 2006); job burnout, job satisfaction (Weng et al., 2011), and conflict resolution (Schlaerth, Ensari, & Christian, 2013).

EI has also been shown to be related to a variety of leadership abilities. Multiple studies have provided evidence that EI is positively and directly related to transformational leadership (Cavazotte, Moreno, & Hickmann, 2012; Wang & Huang, 2009).   In another study, Hur, van den Berg, and Wilderom (2011) found that transformational leadership acted as a mediator between EI and outcomes of leader effectiveness and service climate. This research found that all four subscales of EI demonstrated relationships with transformational leadership. In two separate studies, Côté, Lopes, Salovey, and Miners (2010) were able to demonstrate that EI predicted leader emergence in small groups. More specifically, the subscale of understanding emotions showed significant correlations in both studies, while the subscales of perceiving emotions and using emotions each demonstrated significant

correlations in only one of the two studies. Leader effectiveness has also been demonstrated

as an outcome of EI, with the two subscales of perceiving emotions and understanding

emotions showing significant correlations (Rosete & Ciarrochi, 2005).

Sy, Tram, and O'Hara (2006) were able to demonstrate how EI in leaders can have a

positive effect on their employees. Their study found a positive relationship between EI as

measured in the employee, employee job satisfaction, and employee job performance.

Although the relationship between EI and job performance is one that has been demonstrated

through past research, this specific rendition had an interesting twist. They also measured EI

of the supervisors, and the supervisor EI level moderated the relationship between employee

EI and the outcomes. As the supervisor displayed higher EI levels, employees with low EI

showed an increase in job performance and job satisfaction that was not present in employees

with supervisors of lower EI. This study clearly suggests that the EI of a leader can

positively affect the relationships and performance of their employees.

Emotional Intelligence and LMX

There is some conceptual alignment between the constructs of EI and LMX, and one

can observe overlap within the nomological network of these two concepts. Relations with

job satisfaction, organizational citizenship behaviors, and job performance have been

referenced in the literature of both constructs. These shared outcomes may suggest that there

is relationship that has not yet been fully explored.

Indeed, the LMX literature is moving closer to the idea of EI in leaders being a

significant predictor. One study examined supervisor perceptions of employee EI (Chen,

Lam, & Zhong, 2012). The authors found that supervisors who perceived their employees to

have higher EI also had higher quality LMX relationships with them. Another study

examined the similarity between leader and subordinate EI as a predictor of LMX and found

significant results (Sears & Holmvall, 2010). Supervisors with low EI were able to develop

high LMX quality relationships with employees who had low EI as well.

At a theoretical level, it seems intuitive that higher EI may lead to an increased ability

to form quality relationships with others. By having an increased perception and

understanding of emotions in others, as well as using these emotions to guide thought, one

should be able to use this emotional control to alter interactions with others in a way that is

most effective to the current disposition of the other person. Some research has confirmed

this idea. Lopes, Salovey, and Straus (2003) provide some evidence that EI may contribute

to the quality of relationships in general. In an analysis involving EI, personality, and several

measures of social quality, they found that the managing emotions branch of EI contributed

to positive relations with others and social support from parents. Also, all four branches of

EI correlated negatively with a scale measuring negative interactions with close friends.

These results may suggest that the four branches of EI contribute to the ability to prevent

negative interactions, thus allowing a relationship to grow and develop without setbacks. In

a two study analysis, Lopes et al. (2004) were able to replicate the previous finding that the

managing emotions subscale of EI correlated with relationship quality with friends. Even

more revealing , though, was their finding that managing emotions was related to perceived

success in impression management. Taken together, these two studies suggest that while all

four branches of EI may help in preventing relationships from going bad; the managing

emotion subscale may contribute to overall relationship quality.

The literature summarized in the previous section regarding EI and leadership

supports the notion of EI as a whole influencing effective leadership. The EI subscales of

perceiving emotions, understanding emotions, and using emotions are the subscales that have demonstrated a direct relationship with leadership ability. It would appear that supervisors are more likely to achieve successful management outcomes if they have stronger abilities involving knowledge of emotions, perceiving the emotions of their employees, and using this information properly in everyday interactions. When examining a single supervisor, these three branches of EI may be what contribute to successful leadership, while the managing emotions subscale appears to contribute to quality relationship formation with employees. Considering that LMX is a measure which combines aspects of leadership with aspects of relationship formation and management, it would be logical that all four branches of EI contribute to increased LMX quality.

> Hypothesis 1: Supervisor EI will be positively related to his/her employee's rating of
>
> LMX quality.
>
> Because LMX looks at the dyadic relationship between an employee and supervisor,

it would make sense that the effects of EI within a relationship context would apply to the employee perspective of the relationship as well. Because all four branches of EI are related to the number of negative interactions, and the managing emotions subscale improves relationship quality (Lopes et al., 2003), employees higher on EI should also have formed higher level LMX relationships with their supervisors.

> Hypothesis 2: Employee EI will be positively related to employee-rated LMX quality.
>
> Hypothesis 2a: For employees, the managing emotions subscale of EI will have the
>
> strongest relationship with employee-rated LMX quality.

Based on the finding by Dulebohn et al. (2011) that leader factors explain the most variance in LMX quality, and also due to the fact that the leader has the most influence and power in

the relationship, it is expected that leader EI will explain more variance in LMX quality than employee EI.

     Hypothesis 3: Supervisor EI will explain more variance in employee-rated LMX quality than employee EI.

Personality and EI

     A major critique of measures of EI is that they do not show discriminant validity from measures of personality and thus do not show incremental validity over the Big Five personality factors for a variety of outcomes (Conte, 2005). However, Daus and Ashkanasy (2005) argue that the reasoning for these findings are due to measures of EI being used which do not utilize a true conceptualization of EI and that incorporate aspects of personality. These "false" measures of EI are being lumped together with ability-based measures that seem to assess EI in a more pure form. They believe that measures that are created under an ability-model of EI should demonstrate discriminant validity from personality. This idea has previously been supported by Brackett and Mayer (2003), who found that a Stream 1 measure was able to demonstrate discriminant validity from personality while two Stream 3 measures showed relationships with personality.

     Although a majority of recent research on EI and personality has focused on the Big Five, some research is examining other aspects of personality. Brackett and Mayer (2003) also looked at personality measures of psychological well-being and subjective well-being, and found that EI as measured as an ability showed discriminant validity from the Big Five and both measures of well-being. Another study found a moderate correlation between EI measured as an ability and empathy (Iliescu, Ilie, Ispas, & Ion, 2012).

With respect to personality, this study aims to replicate and extend previous research. As discussed earlier, with the exception of agreeableness, all of the Big Five factors as measured in employees were related to LMX quality with their supervisor (Bernerth et al., 2007). It is expected that this result will be replicated in the present study; however, it is also expected that EI will better predict LMX quality relative to the Big Five.

Wong and Law (2002) developed a self-report measure of emotional intelligence that is based on the four branch model proposed by Mayer and Salovey (1997). This scale would be considered a Stream 2 measure because it is a self-report measure based on the four branch model. In the development of the Wong Law Emotional Intelligence Scale (WLEIS), Wong and Law (2002) conducted a factor analysis which showed a distinct four-factor structure. Slight support was also found for discriminant validity from the Big Five personality traits, with one of the four factors loading on conscientiousness and another factor loading on neuroticism. In the same study, it was found that the WLEIS showed incremental validity over the Big Five for the outcome of life satisfaction. In a follow up study, Law, Wong, and Song (2004) performed a factor analysis comparing the WLEIS with the Big Five. They again found moderate correlations with neuroticism and conscientiousness, but concluded that EI was distinct from these traits.

Hypothesis 4: EI as measured by the WLEIS will demonstrate discriminant validity with the Big Five personality traits.

Although EI has not demonstrated incremental validity over personality and cognitive ability on outcomes such as job performance and job satisfaction, this may be due to the outcomes being measured. Job performance may contain elements that relate more to personality and cognitive ability than to EI. Even though EI demonstrates a relationship to

the outcome of job performance, it is not too surprising that cognitive ability and personality remain better predictors; however, EI should demonstrate incremental validity for outcomes that are more closely related to the processes captured by EI. As previously discussed, the facets of EI have been shown to be related to leadership ability and various aspects of relationship formation. Considering LMX is a measure which incorporates aspects of both leadership and relationship management, it is proposed that EI will show incremental validity over the Big Five for the outcome of LMX.

> Hypothesis 5: EI will provide incremental validity over the Big Five personality traits when predicting employee-rated LMX quality.

Method

Participants

The sample for the present study included college students who are currently working and their direct supervisors. A total of 309 students participated in the study. Incomplete surveys were omitted from the data set, resulting in 288 completed surveys of which 177 were by females and 111 were by males. Their mean age was 20.73 years ($SD = 2.70$), and their mean total years of experience was 4.04 ($SD = 3.08$). Approximately 91% of the student sample was Caucasian with smaller representation from African American, Asian/Pacific Islander, and Hispanic/Latin American races. Of these completed surveys, only 214 of respondents were employed and provided an LMX score for their supervisor.

Among those 214 student respondents, 67 provided email addresses for their supervisors. After being contacted, 25 supervisors agreed to participate and completed the survey, resulting in a 37% response rate. Of these supervisor surveys, 13 were by females and 12 were by males. Their mean age was 32.16 years ($SD = 11.21$), and their mean total years of experience was 12.90 ($SD = 9.29$). Of the supervisor sample, 92% were Caucasian,

with 4% representation from Asian American and African American races. One of the

supervisor results was unable to be matched to an employee, resulting in 24 employee-

supervisor dyads.

To determine the desired sample size, the computer program G*Power was used. A

recent meta-analysis on the LMX literature was analyzed to determine an average effect size.

Dulebohn, Bommer, Liden, Brouer, & Ferris (2011) reported that the average magnitude of

all examined relationships for the 247 studies they reviewed was $\rho = .33$. Using that effect

size as a general reference point, with an α error probability of .05 and a 1-β error probability

of .80, the results of the power analysis suggested that a sample size of 52 would be

necessary to find the desired effect. The present sample size, thus, is small, and potential

issues arising from this will be examined in the discussion section. A power analysis

indicated that a power of .12 was achieved in this study.

Measures

Demographic Survey. Demographic information was obtained from both

supervisors and employees. Specific items for the different versions can be found in

Appendices A and B. The demographic survey for the employees assessed their age, gender,

race, major, GPA, class rank, job title, and number of hours worked per week. The

demographic survey for the supervisors asked for their age, gender, race, level of education,

total years of work experience, and years of experience at their current job.

LMX. The LMX-7 scale was used to obtain measures of LMX quality for employees

and supervisors. The employee and supervisor version of the LMX-7 can be found in

Appendices C and D. The LMX-7 is a seven question measure with items such as "How well

does your leader understand your job problems and needs?" and "How would you

characterize your working relationship with your leader?" (Graen & Uhl-Bien, 1995). Each

item on the LMX-7 is measured on a 1 to 5 scale (1 = Rarely; 5 = Very Often) resulting in a

range of scores from 7 to 35. Gerstner and Day (1997) reported in their meta-analysis that

LMX-7 had higher average alphas and tended to obtain higher correlations with outcomes

than other measures of LMX. For the sample in the present study, Cronbach's alpha for

LMX-7 items was .89. Although generally regarded as the soundest measure of LMX in the

literature, there have been issues of leader-member convergence of scores addressed (Zhou &

Schriesheim, 2009). To address this, dyadic relationship scores were assessed separately to

reflect the two different perspectives of the relationship.

   Emotional Intelligence. The Wong and Law Emotional Intelligence Scale (WLEIS)

was used to measure EI (Wong & Law, 2002). This measure can be found in Appendix E.

The WLEIS is a 16-item scale designed to measure the four branches of EI as originally

proposed by Mayer and Salovey (1997). Although the factors in the WLEIS are meant to

assess the four proposed by Mayer and Salovey, there is a slight difference. In the WLEIS,

the subscale of perceiving emotions is assessed by the two factors of self-emotion appraisal

and others' emotion appraisal. The items assessing self-emotion appraisal are also associated

with the Mayer and Salovey counterpart of knowledge of emotions.

   Each item is scored on a 7-point Likert scale (1 = Totally Disagree; 7 = Totally

Agree; Law et al., 2004). Each branch of the WLEIS is assessed via four items. In the full

sample of participants in this study, the scales of use of emotion, regulation of emotion, self-

emotions appraisal, and others-emotions appraisal demonstrated Cronbach's alpha

coefficients of .70, .81, .77, and .78 respectively. EI was assessed by summing the scores

across the 16 items. Cronbach's alpha for the entire 16-item scale was .87. Sample items

from the WLEIS include "I am quite capable of controlling my own emotions" and "I am a self-motivating person".

       Personality. The International Personality Item Pool (IPIP) was used to obtain an assessment of personality (Goldberg et al., 2006). The specific items were accessed from the IPIP web site at http://ipip.ori.org/. All of the items used in this study can be found in Appendix F. The IPIP was used to assess the Big Five personality factors. In the observed sample, Cronbach's alphas for openness, conscientiousness, extraversion, agreeableness, and neuroticism were .77, .81, .86, .77, and .86 respectively. Each item was assessed on a 5-point Likert scale (1 = Very Inaccurate; 5 = Very Accurate). The scores for the five factors were determined by summing the scores for all of the respective items.

Procedure

       This study aimed at analyzing LMX relationships that had already naturally developed in an organizational context. Students who were working at the time of the study were recruited through a research participation system hosted in the psychology department at a large Southeastern university. Also, various professors within the departments of management and psychology offered course credit in exchange for participation in the study.

       For this study, employees were asked to identify their direct supervisor at work with whom they had worked the longest. They then completed an online survey containing the LMX-7, demographic items, the IPIP, and the WLEIS. To obtain information from the leader's perspective, the employee was asked to approach the supervisor at work whom they selected. If the supervisor agreed to participate in the study, he/she was emailed a link to an online survey containing the demographic items, the IPIP, the task performance measure for the employee, and the WLEIS.

Participation in this research was completely voluntary and students were compensated for their participation with extra course credit. This research project strictly adhered to the ethical standards of Appalachian State University and fully considered the possible demands on the participants. This project has been approved, as required, by the Institutional Review Board of Appalachian State University (February 12, 2014; IRB Reference # 0930239). See Appendix G for IRB approval and Appendix H for consent forms.

Results

Correlations between all of the main variables within the study are located within Table 1. To test Hypothesis 1, a Pearson correlation was calculated. Correlations for the study's primary variables are reported in Table 2. There was no significant relationship, r (22) = -.12, p = .282, between supervisor total scores on the WLEIS and the employee ratings of LMX. Thus Hypothesis 1 was not supported.

While non-significant, a negative trend was surprising given that a positive relationship was expected. Thus, several post-hoc analyses were conducted to further examine the relationship between EI and LMX quality. First, if the scores of the supervisor version of the LMX-7 are used, there emerges a significant linear relationship, r (22) = .44, p = .016, between supervisor scores on the WLEIS and supervisor scores on the LMX-7.

Additionally, when analyzing the data for Hypothesis 1, leverage statistics showed that there was one data point of supervisor EI which was not consistent with the rest of the data in the sample. This outlier was then removed and correlations were re-run with this new sample. The new correlations are reported in Table 3. With this new sample, the

relationship between supervisor EI and supervisor ratings of LMX becomes non-significant, r $(21) = .23$, $p = .149$.

Hypothesis 2 was also tested with a Pearson correlation. These results are displayed in Table 2. Leverage statistics did not indicate any outliers for employee EI within the full dyadic sample. No relationship was observed, $r (22) = .16$, $p = .232$, between the total score of employee EI and employee ratings of LMX quality. There was also no significant relationship, $r (22) = .10$, $p = .328$, with employee EI and supervisor ratings of LMX quality. However, if the entire sample of working students (including those whose supervisors did not provide results) is analyzed, there is a significant relationship, $r (211) = .16$, $p = .011$, between employee scores on the WLEIS, $M = 91.08$, $SD = 16.46$, and employee-reported LMX-7, $M = 27.78$, $SD = 5.23$. Thus, Hypothesis 2 is partially supported.

To test Hypothesis 2a, the four factors of employee EI were examined with Pearson correlations to determine if any of them predicted employee-rated LMX (see Table 4 for results). In the sample of 24 employees who had a dyadic supervisor response, none of the individual scales correlated with LMX quality. There was a no significant relationship, r $(22) = .29$, $p = .087$, between the Regulation of Emotion scale and employee-rated LMX. There was a non-significant correlation, $r (22) = .20$, $p = .177$, between the Others-Emotions Appraisal scale and employee scores of LMX. The Use of Emotion subscale and employee LMX demonstrated no relationship, $r (22) = .02$, $p = .457$. Lastly, there was a non-significant correlation, $r (22) = -.03$, $p = .443$, between the Self-Emotions Appraisal scale and employee ratings of LMX. While the WLEIS equivalent of the managing emotions subscale (Regulation of Emotion) demonstrated the largest correlation with employee LMX scores, the relationship was non-significant. Thus, Hypothesis 2a was not supported.

To further examine the WLEIS subscales, Pearson correlations between EI subscales and LMX scores were also conducted in the full sample of working students. There was a significant positive relationship, r (211) = .12, p = .047, between the Regulation of Emotion scale and employee-rated LMX. There was a significant positive correlation, r (211) = .14, p = .022, between the Others-Emotions Appraisal scale and employee scores of LMX. The Use of Emotion subscale and employee LMX demonstrated a positive significant relationship, r (211) = .17, p = .007. Lastly, there was no significant correlation, r (211) = -.06, p = .193, between the Self-Emotions Appraisal scale and employee ratings of LMX.

To test Hypothesis 3, a Fisher r-to-z transformation was used. Employee ratings of EI were compared to supervisor ratings of EI when predicting LMX ratings as provided by the employee. The sample of employee-supervisor dyads with the outlier removed was used for this analysis. It was demonstrated that there was no statistical difference between supervisor EI and employee EI when predicting employee ratings of LMX, t (22) = .46, p = .651. The same analysis was conducted to determine if there was any statistical difference between employee EI and supervisor EI when predicting supervisor ratings of LMX. There was no statistical different between supervisor EI and employee EI when predicting supervisor ratings of LMX, t (22) = -.49, p = .631. Thus, Hypothesis 3 is not supported.

To test Hypothesis 4, a sample of all participants in the study was used. This sample included working students, non-working students, and the supervisors who participated. Pearson correlations were used to determine if there was a relationship between total scores of EI and the Big Five personality factors. These correlations are reported in Table 1. The WLEIS was not statistically different from the Big Five on all of the factors except Openness. There was no relationship, r (311) = -.08, p = .138, between the WLEIS and

openness. However, EI demonstrated a small linear relationship, r (311) = -.13, p = .024,

with neuroticism.   No significant relationship, r (311) = .01, p = .804, was found between EI

and agreeableness. There was also no relationship, r (311) = .01, p = .885, found with EI and

extraversion. Finally, no significant relationship, r (311) = .07, p = .219, was determined to

exist with EI and conscientiousness. Therefore, Hypothesis 4 was partially supported.

To test Hypothesis 5, the sample of 213 working students was used. Because there

was not a significant relationship between employee EI and employee-rated LMX in the

sample of 24 dyads, and because there are issues of power in that small of a sample, the full

sample of working students was used.

To test whether employee EI would provide incremental validity over the Big Five in

the sample, it was first necessary to determine which of the Big Five factors correlated with

LMX. Pearson correlations were used for this analysis. These results are presented in Table

6. There was no significant relationship, r (211) = -.04, p = .546, between LMX scores and

neuroticism scores. Also, no significant relationship emerged, r (211) = .06, p = .366,

between LMX and extraversion. There existed a non-significant relationship, r (211) = .01, p

= .836, between LMX and openness. There was a significant relationship observed, r (211) =

.14, p = .047, with LMX scores and conscientiousness. There was also a non-significant

relationship, r (211) = .13, p = .067, between LMX and agreeableness scores. The only of

the Big Five personality factors which demonstrated a relationship with employee-rated

LMX was conscientiousness.

Next, the Big Five and EI were examined in a regression analysis. A model with only

EI was compared to a model with EI and the Big Five. When considered by itself, EI

significantly predicted, F (1, 212) = 5.39, p = .021, R = .16, employee-rated LMX quality.

Specifically, an employee's EI had a significant positive relationship, $b = .05$, $t(210) = 2.32$, $p = .021$, with LMX quality. When considered together, EI and the Big Five, did not significantly predict, $F(6, 212) = 1.94$, $p = .077$, employee-rated LMX. Therefore the best fitting model was the one with only EI. In the regression equation with EI and the Big Five, only EI significantly contributed to the prediction of LMX.

Next, a model with only EI was compared to a model with EI and conscientiousness. When considered together, EI and conscientiousness significantly predicted, $F(3, 212) = 4.29$, $p = .015$, $R = .20$, LMX quality. Specifically, when considered with conscientiousness, EI significantly contributed, $b = .05$, $t(209) = 2.13$, $p = .035$, to the prediction of employee-rated LMX. However, when considered with EI, conscientiousness did not significantly contribute, $b = .11$, $t(209) = 1.77$, $p = .079$, to the prediction of LMX. The model of EI and conscientiousness did not provide a significant F change over the model of only EI for the outcome of employee-rated LMX quality. Thus, Hypothesis 5 is not supported.

In addition to the hypothesis testing, some exploratory analyses were also conducted. Based on previous literature (Sears & Holmvall, 2010), an EI similarity score was computed by taking the difference between the employee and supervisor scores on the WLEIS. The dyadic sample with the outlier removed was used for this analysis. Because the similarity score for EI was computed by taking the difference between employee and supervisor scores on the WLEIS, higher numbers on this score would indicate a bigger difference between employee and supervisor EI. Although the strict difference score did not have a relationship with any variables, the absolute value of this difference score had a very interesting correlation. There was a marginally-significant relationship, $r(21) = .34$, $p = .054$, with the employee-indicated LMX score and the absolute value of the difference scores between

employee and supervisor EI, $M = 12.04$, $SD = 4.90$. When examining the relationship with

supervisor-rated LMX scores, $M = 29.13$, $SD = 3.17$, and the absolute value of the employee

and supervisor EI difference scores, there is a positive, although non-significant relationship,

$r(21) = .30$, $p = .086$. An average of employee and supervisor LMX scores was then

calculated and examined with the EI similarity variable. Average scores of LMX, $M = 29.07$,

$SD = 3.59$, and the absolute value of EI difference scores demonstrated a significant

correlation, $r(21) = .37$, $p = .044$. These results are discussed below.

Discussion

This study examined employee-supervisor relationships, and the relative influence of

EI and the Big Five personality factors. Student participants were asked to complete online

surveys assessing their scores on EI and the Big Five. Participants who were currently

working were asked to recruit their supervisor to fill out an online survey in order to examine

the LMX relationships.

Most of the proposed hypotheses were not supported. The exceptions to this were

Hypothesis 2 and Hypothesis 4, which were partially supported. It was surprising that

supervisor EI did not demonstrate any observable correlation with LMX as proposed in

Hypothesis 1. However, this result was also found in another study which has directly

examined LMX and EI (Sears & Holmvall, 2010), who also found a near zero correlation

between supervisor EI and employee-rated LMX.

However, with only 24 dyads to examine in the main sample, the analysis suffered

from a lack of power. As reported earlier, the achieved power from this study was only .12.

There may have been a selection bias in the sample where supervisors who agreed to

participate were ones who have a positive relationship with their employee. On a scale which ranges from 7 to 35, only one employee-rated score of LMX was smaller than 24 in the sample of supervisors who participated. There was also a slight difference in variance scores between employee-rated LMX in the sample of employees whose supervisor participated (σ^2 = 24.00, N = 24) and the sample of all working employees (σ^2 = 27.33, N = 213). Thus, there is some evidence of range restriction within the dyadic sample obtained in this study.

Hypothesis 2 was partially supported, with the full sample of working students demonstrating a small, positive relationship between employee EI and employee-rated LMX. Although the relationship between employee EI and employee-rated LMX was non-significant in the sample of 24 dyads, the size of the correlation was exactly the same as the one observed in the full sample (r = .16). While this may provide some evidence that the sample of students in the dyadic sample is representative of the full sample, other evidence suggests that this may not be so. When examining how the different subscales contributed to the correlation of LMX, it was evident that the relationships changed completely between the two samples. In the dyadic sample, none of the individual subscales demonstrated a statistically significant correlation with LMX quality, with one of them even showing a negative correlation. However, in the full sample of working students, all subscales demonstrated a positive correlation with LMX quality, and only the Self-Emotions Appraisal subscale did not reach statistical significance. This further supports the idea that the sample of employees with a supervisor response was different from the population they were intended to represent.

The analysis for Hypothesis 3 showed that employee EI and supervisor EI were not statistically different in their predictive utility for employee-rated LMX. This result aligns

with others indicating that neither employee EI nor supervisor EI demonstrated a significant

correlation with LMX quality. Considering the previously mentioned possibility that the

dyadic sample may not be representative of the population, one could imagine that this

relationship might seem different when observed in a larger sample where more variance

could be observed.

Hypothesis 4, which stated that the WLEIS would demonstrate discriminant validity

with the Big Five personality factors, was partially supported. EI demonstrated no

relationship with all of the Big Five except for neuroticism, which had a small negative

correlation with the WLEIS. This is a promising result for self-report measures of EI which

are often criticized for correlating with measures of the Big Five. While the WLEIS did not

have perfect discriminant validity from the Big Five, these results suggest that measures of

EI are heading in the right direction.

Hypothesis 5 was not supported in the analyses conducted. A regression model with

the Big Five and EI did not significantly predict employee-rated LMX quality, suggesting

that EI did not provide incremental validity over the Big Five when predicting LMX. A

model with EI and conscientiousness was close to reaching statistical significance, but failed

to provide a significant F change over the model with only EI. When looking closer, we can

see that the reason EI does not provide incremental validity over the Big Five is because once

EI is considered, none of the five personality factors significantly contribute to the prediction

of employee LMX. When the Big Five are considered by themselves, only conscientiousness

correlated with LMX. In a relative weight analysis, EI contributed 46% of the relative

importance towards predicting utility. Only conscientiousness and agreeableness contributed

a notable amount of relative importance, demonstrating 23% and 21% respectively. What

this suggests is that although employee EI may not demonstrate incremental validity for the outcome of employee-rated LMX when considered with the Big Five, EI did demonstrate predictive utility and could be used instead of the Big Five.

Sears and Homvall (2010) found that employee-supervisor similarity on EI was a significant predictor for LMX scores. Supervisor-subordinate relationships in which both were high on EI and relationships in which both were low on EI both resulted in high LMX scores. In this study, EI similarity demonstrated a significant relationship with LMX quality, but in a different way than Sears and Holmvall (2010) found. Employee-supervisor relationships with a high degree of EI similarity resulted in lower LMX scores than relationships defined by a low degree of EI similarity. What is interesting is that this correlation was observed with both employee and supervisor ratings of LMX quality. When an average between supervisor and employee ratings of LMX quality was used for analyses, the difference score of EI demonstrated a significant relationship with LMX quality. It is clear that EI similarity seems to be the variable that bridges the gap between employee and supervisor ratings within the obtained sample. This relationship demonstrates the need to further explore these two variables in future research.

Contributions

This study offers a few contributions regarding research in the areas of EI and LMX. While there is a growing body of literature regarding the organizational implications of EI, there have been very few studies which have looked at how EI and LMX interact. In one of the first published studies looking at these variables, Sears and Holmvall (2010) found that EI similarity positively correlated with LMX scores. This study found a negative correlation with EI similarity and LMX scores, such that dyads which were more similar on EI had

lower LMX ratings. This is contradictory with the previous findings and suggests a need for future research to look further into this relationship.

Another contribution of this research is what it demonstrates about the validation of the WLEIS. This study found an adequate amount of discriminant validity between the WLEIS and the IPIP Big Five scales. This is promising for the research field on EI where self-report measures have been criticized for their relation to the Big Five.

Limitations

There are a number of limitations in the present study that must be considered. The first of which is the study's small sample size. With regard to examining EI in dyadic relationships, acquiring only 24 dyads clearly limits the statistical power in the analyses. A power analysis indicated that 52 dyads were desirable in order to find the targeted effects. Even the effects that were discovered with the statistical analyses may be artifacts of the small sample size that was observed. Future studies should focus on observing the interaction of EI and LMX within a larger sample than what was obtained in this study.

A second limitation of this study is the representativeness of the acquired sample. A sample of employed university students may not be representative of the typical working adult. Thus, the generalizations that can be made from the present study may be limited.

Furthermore, as previously mentioned, it is possible that only employees with a positive relationship with their supervisor were willing to ask their supervisor to participate. This may have led to a selection bias where supervisors that participated are those with a better quality LMX relationship, making them non-representative of the average supervisor. It would have been optimal to go into an organization and measure the LMX relationships that a supervisor forms with multiple employees.

An additional limitation of the study involves the self-report nature of the measures used in this study. Previous research has found that self-report measures of EI are different from ability tests, and it is possible that the results of this study may have been different if an ability test of EI were used. There is also the issue of whether one can accurately report their ability of EI. It would be interesting to see how the use of an ability measure of EI would change the results.

Conclusion

Employee-supervisor dyads were examined to determine how EI influences LMX relationships. Results indicated that supervisor EI did not have a significant influence on LMX quality. Employee LMX had a small correlation with employee-rated LMX. Employee EI was shown to be a better predictor of employee ratings of LMX than employee ratings on the Big Five. The WLEIS demonstrated no significant correlation with four of the Big Five personality factors. Although non-significant, there was a small-moderate correlation between employee-supervisor EI similarity and both employee and supervisor ratings of LMX quality.

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Table 1

Main Variable Correlations and Descriptive Statistics

Variable	1	2	3[†]	4[†]	5	6	7	8	9	10
1. Age	--									
2. Gender	- .14*	--								
3. Years of work experience [†]	.87**	-.13	--							
4. LMX [†]	.02	.15*	.06	--						
5. Emotional Intelligence	.02	.02	-.01	.12	--					
6. Neuroticism	-.10	.20**	-.08	-.02	-.13*	--				
7. Agreeableness	.13*	.06	.12	.06	.01	-.46**	--			
8. Extraversion	-.03	.10	-.03	.11	.08	-.41**	.21**	--		
9. Conscientiousness	.06	.12*	.11	.09	.07	-.37**	.40**	.22**	--	
10. Openness	.06	.04	.04	.03	-.08	-.05	.18**	.20**	.01	--
M	21.57	1.61	5.04	27.68	90.89	23.87	37.83	35.18	38.05	34.96
SD	4.93	.49	4.87	5.63	20.28	6.89	5.10	6.74	5.81	6.38

Note: Gender was coded male =1, female =2
$n = 312$, unless otherwise denoted
[†] $n = 239$ for correlations involving this variable
* $p < .05$ (two-tailed)
** $p < .01$ (two-tailed

Table 2

Dyadic EI-LMX Correlations

Variable	1	2	3	4
1. Employee LMX	--			
2. Supervisor LMX	.41*	--		
3. Employee EI	.16	.10	--	
4. Supervisor EI	-.12	.44*	-.10	--
M	29.21	28.03	90.04	91.75
SD	4.90	3.42	9.43	10.94

n = 45, unless otherwise denoted
* *p* < .05 (one-tailed)

Table 3

Dyadic EI-LMX Correlations – Outlier Removed

Variable	1	2	3	4
1. Employee LMX	--			
2. Supervisor LMX	.57*	--		
3. Employee EI	.18	.06	--	
4. Supervisor EI	.02	.23	-.21	--
M	29.21	29.13	90.04	93.26
SD	4.90	3.17	9.43	8.24

$n = 45$, unless otherwise denoted

* $p < .05$ (one-tailed)

Table 4

Correlations Between LMX And Employee EI Subscales – Dyadic Sample

Variable	1	2	3	4	5	6
1. Employee LMX	--					
2. Supervisor LMX	.41*	--				
3. OEA Subscale - Emp	.20	.05	--			
4. SEA Subscale - Emp	-.03	-.01	-.01	--		
5. ROE Subscale - Emp	.29	.10	.33	.46*	--	
6. UOE Subscale - Emp	.02	.16	-.01	.66**	.44*	--
M	29.21	28.03	23.91	21.83	20.92	24.00
SD	4.90	3.42	2.94	4.34	3.39	2.67

$n = 24$
* $p < .05$ (one-tailed)
** $p < .01$ (one-tailed)

Table 5

Correlations Between LMX And EI Subscales – Working Students

Variable	1	2	3	4	5
1. LMX	--				
2. OEA Subscale	.14*	--			
3. SEA Subscale	.06	.43**	--		
4. ROE Subscale	.12	.73**	.30**	--	
5. UOE Subscale	.17	.03	.33**	-.11	--
M	29.21	23.44	21.83	21.61	23.58
SD	4.90	4.60	4.34	10.84	2.94

$n = 213$
* $p < .05$ (one-tailed)
** $p < .01$ (one-tailed)

Table 6

Correlations Between LMX And Big Five – Working Students

Variable	1	2	3	4	5	6
1. LMX	--					
2. Neuroticism	-.04	--				
3. Agreeableness	.13	-.40**	--			
4. Extraversion	.06	-.35**	.27**	--		
5. Conscientiousness	.14*	-.30**	.37**	.24**	--	
6. Openness	.01	.06	.23**	.18**	-.06	--
M	29.21	24.06	37.19	35.45	37.84	34.11
SD	4.90	6.95	5.21	6.84	5.81	6.73

 n = 213
 * *p* < .05 (one-tailed)
 ** *p* < .01 (one-tailed)

Appendix A – Employee Demographic Survey

What class are you completing this for?

_____

Name of professor teaching class:

_____

First and Last Name:

_____

Your email address:

_____

Major:

_____

GPA:

_____

Class Rank:
Freshman   Sophomore   Junior   Senior   Graduate
Age:

_____

Gender:
Male   Female
Race:
African American   Asian/Pacific Islander   Hispanic/Latin American
Arab   Native American   Caucasian/White   Other
Name of current employer:

_____

Job title:

_____

Estimate your average number of hours of paid employment per week:

_____

How long, in months, have you been working in your current position?

_____

Years of total work experience:

_____

Name of supervisor:

_____

Phone number of supervisor (if email is not available):

_____

How long (in months) have you worked with this supervisor?

_____

Appendix B – Supervisor Demographic Survey

First and last name of employee mentioned in survey email:
_____

Please provide the following information about yourself:
Age:

_____

Gender:
Male   Female
Race:
African American   Asian/Pacific Islander   Hispanic/Latin American
Arab   Native American   Caucasian/White   Other
Educational attainment:
High School Diploma   Associates Degree   Bachelors Degree
Masters Degree   Ph.D   Juris Doctor   Other
Name of current employer:
_____

Industry your current employer operates in:
_____

Job title:

_____

Years of experience at current job:

_____

Years of total work experience:

_____

How long have you been working with the employee mentioned
earlier?_____

Phone number for contact in the event of follow-up questions:

_____

Appendix C - LMX-7 Scale (Employee Version)

Instructions: For the following section, please answer the following questions regarding your working relationship with your immediate supervisor at work. This will be the supervisor at work who has the most power and authority over you. If more than one supervisor at your job fit this description, please select the supervisor with whom you interact the most or spend the most time.

Key: Rarely   Occasionally   Sometimes   Fairly Often   Very Often   N/A

1. Do you know where you stand with your leader . . do you usually know how satisfied your leader is with what you do? (Does your member usually know)

2. How well does your leader understand your job problems and needs? (How well do you understand)

3. How well does your leader recognize your potential? (How well do you recognize)

4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work? (What are the changes that you would)

5. Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would "bail you out," at his/her expense? (What are the chances that you would)

6. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so? (Your member would)

7. How would you characterize your working relationship with your leader? (Your member)

Appendix D – LMX-7 Scale (Supervisor Version)

Instructions: For the following section, please answer the following questions regarding your working relationship with your employee at work. This will be the previously mentioned employee whom is also participating in the study.

Key: Rarely   Occasionally   Sometimes   Fairly Often   Very Often   N/A

1. Does your employee know where they stand with you as a leader. . . does your employee usually know how satisfied you are with what they do?

2. How well do you understand your employee's job problems and needs?

3. How well do you recognize your employee's potential?

4. Regardless of how much formal authority you have built into your position, what are the chances that you would use your power to help your employee solve problems in their work?

5. Again, regardless of how much formal authority you have, what are the chances you would "bail your employee out," at your expense?

6. Would your employee have enough confidence in you that he/she would defend and justify your decision if you were not present to do so?

7. How would you characterize your working relationship with your employee?

Appendix E – Wong and Law Emotional Intelligence Scale

Instructions: Please evaluate the following phrases as they apply to you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence.

Key: Totally   Disagree   Somewhat   Neither Agree   Agree   Totally   N/A
           Disagree   Agree   Nor Disagree   Agree

Self-Emotions Appraisal (SEA)

1. I have a good sense of why I have certain feelings most of the time.
2. I have good understanding of my own emotions.
3. I really understand what I feel.
4. I always know whether or not I am happy.

Others-Emotions Appraisal (OEA)

5. I always know my friends' emotions from their behavior.
6. I am a good observer of others' emotions.
7. I am sensitive to the feelings and emotions of others.
8. I have good understanding of the emotions of people around me.

Use of Emotion (UOE)

9. I always set goals for myself and then try my best to achieve them.
10. I always tell myself I am a competent person.
11. I am a self-motivating person.
12. I would always encourage myself to try my best.

Regulation of Emotion (ROE)

13. I am able to control my temper so that I can handle difficulties rationally.
14. I am quite capable of controlling my own emotions.
15. I can always calm down quickly when I am very angry.
16. I have good control of my own emotions.

Appendix F – International Personality Inventory Pool Scales

Instructions: Below is a series of phrases describing people's behaviors, feelings, or thoughts. Please use the rating scale below each phrase to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence.

Key: Very   Moderately   Neither Innacurate   Moderately   Very   N/A
          Inaccurate   Inaccurate   Nor Accurate   Accurate   Accurate

NEUROTICISM

+ keyed   Often feel blue.
          Dislike myself.
          Am often down in the dumps.
          Have frequent mood swings.
          Panic easily.

– keyed   Rarely get irritated.
          Seldom feel blue.
          Feel comfortable with myself.
          Am not easily bothered by things.
          Am very pleased with myself.

EXTRAVERSION

+ keyed   Feel comfortable around people.
          Make friends easily.
          Am skilled in handling social situations.
          Am the life of the party.
          Know how to captivate people.

– keyed   Have little to say.
          Keep in the background.
          Would describe my experiences as somewhat dull.
          Don't like to draw attention to myself.
          Don't talk a lot.

OPENNESS TO EXPERIENCE

+ keyed   Believe in the importance of art.
          Have a vivid imagination.
          Tend to vote for liberal political candidates.
          Carry the conversation to a higher level.
          Enjoy hearing new ideas.

− keyed   Am not interested in abstract ideas.
          Do not like art.
          Avoid philosophical discussions.
          Do not enjoy going to art museums.
          Tend to vote for conservative political candidates.

AGREEABLENESS

+ keyed   Have a good word for everyone.
          Believe that others have good intentions.
          Respect others.
          Accept people as they are.
          Make people feel at ease.

− keyed   Have a sharp tongue.
          Cut others to pieces.
          Suspect hidden motives in others.
          Get back at others.
          Insult people.

CONSCIENTIOUSNESS

+ keyed   Am always prepared.
          Pay attention to details.
          Get chores done right away.
          Carry out my plans.
          Make plans and stick to them.

− keyed   Waste my time.
          Find it difficult to get down to work.
          Do just enough work to get by.
          Don't see things through.
          Shirk my duties.

Appendix G – IRB Approval

From: Dr. Stan Aeschleman, Institutional Review Board Chairperson
Date: 2/12/2014
RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)
Study #: 14-0175

Study Title: Leader Emotional Intelligence As A Predictor Of LMX Quality
Submission Type: Initial
Expedited Category: (7) Research on Group Characteristics or Behavior, or Surveys, Interviews, etc.
Approval Date: 2/12/2014
Expiration Date of Approval: 2/11/2015

The Institutional Review Board (IRB) approved this study for the period indicated above. The IRB found that the research procedures meet the expedited category cited above. IRB approval is limited to the activities described in the IRB approved materials, and extends to the performance of the described activities in the sites identified in the IRB application. In accordance with this approval, IRB findings and approval conditions for the conduct of this research are listed below.

Approval Conditions:

Appalachian State University Policies: All individuals engaged in research with human participants are responsible for compliance with the University policies and procedures, and IRB determinations.

Principal Investigator Responsibilities: The PI should review the IRB's list of PI responsibilities. The Principal Investigator (PI), or Faculty Advisor if the PI is a student, is ultimately responsible for ensuring the protection of research participants; conducting sound ethical research that complies with federal regulations, University policy and procedures; and maintaining study records.

Modifications and Addendums: IRB approval must be sought and obtained for any proposed modification or addendum (e.g., a change in procedure, personnel, study location, study instruments) to the IRB approved protocol, and informed consent form before changes may be implemented, unless changes are necessary to eliminate apparent immediate hazards to participants. Changes to eliminate apparent immediate hazards must be reported promptly to the IRB.

<u>Approval Expiration and Continuing Review</u>: The PI is responsible for requesting continuing review in a timely manner and receiving continuing approval for the duration of the research with human participants. Lapses in approval should be avoided to protect the welfare of enrolled participants. If approval expires, all research activities with human participants must cease.

<u>Prompt Reporting of Events</u>: Unanticipated Problems involving risks to participants or others; serious or continuing noncompliance with IRB requirements and determinations; and suspension or termination of IRB approval by an external entity, must be promptly reported to the IRB.

<u>Closing a study</u>: When research procedures with human subjects are completed, please complete the Request for Closure of IRB review form and send it to irb@appstate.edu.

Websites:

1. PI responsibilities:
http://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/PI%20Responsibilities.pdf

2. IRB forms: http://researchprotections.appstate.edu/human-subjects/irb-forms

CC:
Jacqueline Bergman, Management
Shawn Bergman, Psychology

Appendix H – Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

Ian Head   Jacqui Bergman
Principal Investigator   Faculty Advisor
330-814-3496   828-262-4958
headim@appstate.edu   bergmanjz@appstate.edu

I.   Purpose of this Research/Project

The purpose of this study is to examine various factors as they relate to supervisor-subordinate relationship quality.

II.   Procedures

Participation in this study will involve completing an online survey. The survey should take no longer than 30 minutes to complete. This survey will ask you a series of questions about yourself and your working relationship with your supervisor. You will be asked to complete the survey immediately following this screen. You will then be asked to provide contact information for your immediate supervisor at work, who will be asked to fill out an online survey.

III.   Risks

It is possible that you may feel some slight psychological discomfort when reflecting upon your answers to some of the questions posed. However, the risks posed by participation in this study are minimal and equivalent to those encountered in your everyday life.

IV.   Benefits

The results of the study may be of benefit to the scientific community, as the results may assist the research of industrial-organizational psychologists who regularly assess leadership relations in the workplace.

V.   Extent of Anonymity and Confidentiality

All of the information you provide during this study will be held in the strictest confidence. Although you will be asked to provide your name, none of your individual answers will be released or made available to anyone other than the researcher directly involved in the study. Answers you provide WILL NOT be shared with your supervisor who may also take part in this study. Furthermore, you will not receive any information that he/she provides. Your online survey is managed on a secured online account, and only the researcher involved in the study will have access to your responses. However, the security of information sent through the Internet cannot be guaranteed and could be intercepted by a third party. No

individuals will be identified in any report issued as a result of the study; the data will be analyzed and released in group form only, and for research purposes only. Once all data has been collected for this research, all identifying information for survey results will be removed from the data and survey results will be completely anonymous.

VI.   Compensation

As compensation for participating, you will receive 1 ELC or course credit. There is no penalty for choosing not to participate, or for choosing to withdraw at any time. Other research and non-research options for obtaining course credit are available. Please see your class instructor for more information. Credit will not be administered in circumstances in which the entire survey has been left unanswered.

VII.   Freedom to Withdraw

Participation in this study is completely voluntary. You are free to refuse to participate in this study or withdraw at any time. There is no penalty of any kind for either nonparticipation or withdrawal.

VIII.   Approval of research

This research project has been approved on 02/12/2014 by the Institutional Review Board (IRB) at Appalachian State University. This approval will expire on 02/11/2015 unless the IRB renews the approval of this research.

IX.   Participant's Responsibilities

I voluntarily agree to participate in this study. I have the following responsibilities: To complete the survey as completely and honestly as possible.

Vita

Ian Head was born in Akron, OH in 1989. He graduated in June 2012 from The University of Akron in Ohio with a B.A. in Psychology. In August 2012, he began graduate education at Appalachian State University to pursue an M.A. in Industrial-Organizational Psychology and Human Resource Management. Following graduation in May 2014, Ian started a career in the field of Human Resources.