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**Abstract**

Servant leadership is an effective leadership style that focuses on ethics and morality. Emotional intelligence (EI) is also associated with effective leadership and ethical behavior; thus, there has been a surge in studies that assessed the link between EI and servant leadership. Nevertheless, the empirical landscape of this relationship is mixed and fragmented. We undertook a meta-analysis to clarify this literature and found that (1) emotional intelligence (EI) has a significant positive relationship with servant leadership ( $\hat{\rho} = .57$ ); (2) the relationship between EI and servant leadership is stronger in studies having a lower percentage of well-educated subjects, in low power distance cultures, and in high institutional collectivism cultures; and (3) We were unable to find sufficient evidence to support moderating effects of the relationship between EI and servant leadership for gender (male-dominated and female-dominated studies), age (between young and old subjects), for self-report versus follower-report of servant leadership, and across different scales of servant leadership.

**Keywords:** emotional intelligence; servant leadership; ethics; meta-analysis

## Emotional Intelligence and Servant Leadership: A Meta-Analytic Review

### Introduction

Servant leadership was coined nearly five decades ago and was conceptualized as a people-centered leadership style that prioritizes attending to the needs of followers and stakeholders ahead of one's own needs (Greenleaf, 1970, 1977). Servant leaders act as stewards of the organization while also prioritizing their followers' welfare, thus balancing the needs of the organization with their followers' needs. Greenleaf's 1977 book was called, *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness*. He maintained that both business leaders and non-profit leaders should be servants to their followers. In addition, they should concentrate on growing their followers' skills and competencies and on helping them live better lives. He described (1977, p. 21) servant leaders as meeting the following test:

The best test and the most difficult to administer is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, ... more likely themselves to become servants?

The servant leadership style focuses on authenticity and interpersonal acceptance (Banks et al., 2018; Barbuto, Gottfredson, & Searle, 2014; Liden et al., 2015; van Dierendonck, 2011). This other-oriented form of leadership style emphasizes personal integrity and serving (more than leading) (Whetstone, 2002), and this focus on ethics is presumed to lead to various positive outcomes. Servant leaders focus on ethics and morality and influence their followers' ethical conduct by role modeling ethical behavior (Deshpande & Joseph, 2009; Fu, 2014; Reed, Vidaver-Cohen, & Colwell, 2011).

According to one early definition, **emotional intelligence (EI)** consists of perceiving emotions, using emotions to facilitate thought, understanding emotions, and managing emotions

(Mayer, Salovey, Caruso, & Sitarenios, 2003). Therefore, it is not surprising that there is a surge in literature that builds the bridge between emotional intelligence and servant leadership. This is because EI is generally associated with effective leadership (e.g., Boyatzis, Good, & Massa, 2012; Siegling, Nielsen, & Petrides, 2014) and some components of EI have theoretical connections with servant leadership (Barbuto et al., 2014).

It also makes sense to consider the connections between EI and ethics and practical wisdom. As Sison and Ferrero (2015, p. S87) observe, practical wisdom “produces an alignment among right thinking or perception, right desire and right action; it creates harmony among reason, sensibility or emotions and behavior.” Because EI involves the ability to reason effectively while using emotion knowledge to aid decision-making, EI and practical wisdom should be closely related. Mindfulness enhances moral reasoning, and EI is a good predictor of mindfulness (Miao, Humphrey, & Qian, 2018c). Practical wisdom also involves the ability to manage emotions. As Ferrero and co-authors (Ferrero, Rocchi, Pellegrini, & Reichert, 2020) maintain, practical wisdom and virtue require the ability to curb one’s passions and temptations. This is analogous to EI’s ability to manage emotions, such as anger and frustration, and to practice delay of gratification (Goleman, 1995).

Although Gandolfi and Stone (2016, p. 221) argue for the value of servant leadership in times of crisis, they note that, “a major criticism of servant leadership is that it is believed to be soft, intangible, and ill-reflected on the bottom line of an organization.” One way to demonstrate the validity of both EI and servant leadership is to examine their construct validity with regard to each other. Because they have some elements in common, they should be empirically related. Hence, the first purpose of this meta-analysis is to estimate the overall relationship between EI and servant leadership. The effect sizes for this relationship reported across studies appear to be

mixed. For example, Portillo (2015) reported a correlation of .80 whereas Barbuto et al. (2014) found that the range of effect size between EI and each dimension of servant leadership (as measured from the followers' perspective) was from .07 to .28. **Meta-analysis is the best way to estimate the true relationship between EI and servant leadership. If we find a small correlation, such as .07, then we will know there is a trivial relationship between the two variables. On the other hand, should there be a sizable relationship between EI and servant leadership, decision-makers may benefit from our study by understanding that training employees on EI and recruiting individuals high on EI may help create the conditions that foster servant leadership.**

In his review, van Dierendonck (2011) called for future research to investigate cross-cultural differences in servant leadership, and there have also been calls to examine the cross-cultural influences on EI (Emmerling & Boyatzis, 2012). Thus, the second objective of this meta-analysis is to explore the impact of national cultural differences on the relationship between EI and servant leadership.

Our third purpose in doing this study is to examine potential differences in servant leadership scales. Owing to the substantial progresses made by scholars in developing servant leadership theory, there has been a growing number of servant leadership scales (Liden et al., 2015). These scales nevertheless differ in tapping the construct of servant leadership as evidenced by the different numbers and labels of construct dimensions (van Dierendonck, 2011).

Our fourth purpose is to examine other moderators of the EI – servant leadership relationship. We will examine the factors that may moderate the relationship between EI and servant leadership (e.g., gender, age, education level, national culture, rating methods of servant leadership, and servant leadership scales).

## Theory and Hypotheses

### Emotional Intelligence

Ashkanasy and Daus (2005) clarified the literature on EI and classified EI research into three streams known as ability EI, self-report EI, and mixed EI. Ability EI measures are based on the theoretical assumption that EI is a type of intelligence and can be measured the way that cognitive intelligence is measured with objective right or wrong answers (Mayer, Roberts, & Barsade, 2008). Ability EI is conceptualized as having four branches: perceiving emotions, using emotions to facilitate thought, understanding emotions, and managing emotions (Mayer et al., 2003). The most popular ability EI is the MSCEIT (Mayer et al., 2003).

Ashkanasy and Daus (2005) pointed out that self-report EI measures that were developed based on the four-branch theoretical model constitute the second type of EI. An example of a self-report measure in this category is the Assessing Emotions Scale (Schutte et al., 1998). The third stream of EI, known as mixed EI, is also based on self-report ratings; yet, this stream of EI includes a conglomerate of competencies, behaviors, and/or skills that go beyond the coverage of the four-branch model. An example includes the Emotional and Social Competency Inventory (Boyatzis, Brizz, & Godwin, 2011).

Although some researchers theorize that EI is a type of cognitive ability, other researchers argued that EI may be conceptualized as a type of personality trait and should be measured the way other traits are measured via self-reports (Petrides, Pita, & Kokkinaki, 2007; Petrides et al., 2016). Petrides and his colleagues stated that trait EI is “a constellation of behavioral dispositions and self-perceptions concerning one’s ability to recognize, process, and utilize emotion-laden information” (Petrides, Frederickson, & Furnham, 2004, p. 278).

Research findings have demonstrated that EI influences outcomes, such as leadership effectiveness, job performance, team performance, OCB, counterproductive work behavior, antisocial behavior, ethical behavior, academic performance, health, job satisfaction, organizational commitment, and turnover intention (e.g., Ashkanasy & Humphrey, 2011; Fu, 2014; Joseph & Newman, 2010; Martins, Ramalho, & Morin, 2010; Miao, Humphrey, & Qian, 2016, 2017a, 2017b, 2018b; O'Boyle et al., 2011; Petrides et al., 2004, 2016; Siegling et al., 2014; Spraggon & Bodolica, 2015). A wealth of studies have demonstrated the valid factor structure of EI and the incremental validity of EI above and beyond cognitive ability, Big Five personality traits, general self-efficacy, self-rated job performance, and affectivity (e.g., Andrei et al., 2016; Miao et al., 2017a, 2017b, 2018b; O'Boyle et al., 2011; Petrides, Pérez-González, & Furnham, 2007; van der Linden et al., 2017).

### **Servant Leadership**

Barbuto and Wheeler (2006) were among the first scholars to develop measures of servant leadership. As described by Searle and Barbuto (2011), “Servant leadership is among the most positive forms of leadership, it emphasizes service over self-interest, foci on the developmental needs of others, ethical moral behavior, and an altruistic ideology.” A current review article was jointly co-authored by Liden and by van Dierendonck, developers of two of the more popular servant leadership scales (Liden, Wayne, Zhao, & Henderson, 2008; van Dierendonck & Nuijten, 2011). This review, by Eva et al. (2019, p. 114), defines servant leadership this way:

Servant leadership is an (1) other-oriented approach to leadership (2) manifested through one-on-one prioritizing of follower individual needs and interests, (3) and outward reorienting of their concern for self towards

concern for others within the organization and the larger community.

Parris and Peachy (2013) examined the research themes commonly explored in the servant leadership research, and they concluded that there was strong evidence in favor of the following themes: the cross-cultural applicability of servant leadership, the hypothesized attributes of servant leaders, the effectiveness of servant leaders at the team level, and the effectiveness of servant leaders in increasing followers' well-being.

Another qualitative review examined four decades worth of literature (van Dierendonck, 2011). This review concluded that servant leadership leads to high quality leader-follower relationships (characterized by affect, respect, contribution, and loyalty) and positive psychological climate (characterized by trust and fairness), which result in positive job attitudes (e.g., job satisfaction, organizational commitment, empowerment, and engagement), improved performance (e.g., organizational citizenship behavior [OCB] and team effectiveness), and positive firm-level outcomes (e.g., sustainability and corporate social responsibility). Likewise, Newman, Schwarz, Cooper, and Sendjaya (2017) found that servant leadership was positively related to high quality leader member exchanges, which in turn predicted employee OCB. Hence, it is not surprising that the practice of servant leadership was prevalent in 50% of the top 10 companies in "100 Best Companies to Work For" (Carter & Baghurst, 2014).

Another review found that servant leadership is a good predictor of attitudinal, behavioral, and perceptual outcomes, and the review also concluded that servant leadership shows a sufficient degree of conceptual and empirical uniqueness relative to transformational leadership (Hoch et al., 2018).

## **The Relationship between EI and Servant Leadership**

EI may influence servant leadership in multiple ways. Servant leaders focus on the needs of others. Because people high on EI are good at reading others' emotions and feelings, EI should help servant leaders better understand others' needs. Research has shown that emotionally intelligent individuals may use their EI to understand others' feelings, empathize with others, and act in ways that satisfy the expectations of others (Gardner et al., 2009; Humphrey, 2008; Johnson & Spector, 2007). This ability to read and understand others' emotions should help emotionally intelligent servant leaders focus on the developmental needs of others and take an other-oriented approach to leadership. Emotionally intelligent leaders are good communicators, and they are able to communicate their feelings and thoughts to their subordinates about the task processes and objectives to ensure successful goal attainment (George, 2000; Miao et al., 2018b).

Emotionally intelligent leaders are likely to care about the long-term maintenance of the organization (Hur, van den Berg, & Wilderom, 2011), and this matches servant leaders' concern for the organization and the larger community. Like servant leaders (Searle & Barbuto, 2011), employees high on EI are more likely to perform virtuous organizational citizenship behaviors and to refrain from performing counterproductive work behaviors (Miao et al., 2017b). Moreover, leaders high on EI also have employees who are more likely to perform organizational citizenship behaviors, thus meeting Greenleaf's (1977) test that servant leaders mentor others so that they are more likely themselves to become servants. **Moreover, ethical leaders also role model moral courage (Humphrey & Adams, 2017), a characteristic that should apply to servant leaders.**

In sum, it appears that EI should be positively associated with servant leadership. We offer the following hypothesis:

*Hypothesis 1: EI positively relates to servant leadership.*

## Demographic Moderators

**Gender.** The research findings with regard to gender and EI are mixed and need further study. In a theory paper, Duff argued that females are more likely to display service behaviors and to be socialized towards the norms of communal support, and that females can better enact servant leadership styles (Duff, 2013). Schutte et al. (1998) found that women scored higher than men on their measure of EI. Together, these two studies suggest that gender might be an important moderator of the EI—servant leadership relationship. Related findings in other areas also suggest gender differences. An early meta-analytic study found that females tend to use a more democratic or participative style and a less directive style than do males (Eagly & Johnson, 1990). In contrast, in a direct test of gender differences in emotional and social competencies, Taylor and Hood (2011) found no gender differences, thus suggesting an equality between men and women. Moreover, the meta-analysis by Joseph and Newman (2010) found that although women scored higher than men on ability based EI measures, that there were no differences between men and women on self-report EI or mixed EI competencies measures.

A number of studies that expected to find stronger EI effects for women have found no differences between men and women. For example, Miao et al. (2017c) posited that the association between EI and job satisfaction would be stronger for women, yet their meta-analysis yielded no significant gender differences. In another meta-analysis, Miao et al. (2018a) also expected to find that the EI—authentic leadership relationship would be stronger for women, yet again they found no differences. This meta-analysis is particularly relevant in that authentic leadership and servant leadership share a number of similarities, including an emphasis on ethics and social responsibility. In a third meta-analysis, Miao et al. (2018c) found that there was no moderation effects by gender in the EI—trait mindfulness relation.

In a related area, Ng, Lam, and Feldman (2016) tested the gender stereotype that suggested that women are more likely to perform OCB. After meta-analyzing 395 samples, they concluded that there were no gender differences in performing OCB. Likewise, Van Emmerik and her colleagues tested the gender stereotype that women are more likely to use a consideration style leadership and less likely to use a task-oriented leadership style (Van Emmerik, Euwema, & Wendt, 2008). They used a large world-wide sample (42 countries; 64,038 subordinates evaluated the leadership behaviors of 13,595 leaders). They summarized their results by stating that, “In this large worldwide sample, gender differences in managerial behavior appear to be rather limited”, and male and female managers “do not differ much in leadership behaviors” (Van Emmerik et al., 2008, p. 310).

Together, these more recent studies suggest a gender equality between men and women, and a refutation of gender stereotypes that portray women as kind and caring (and less task-oriented) and men as tough and task-oriented (and less considerate). In order to avoid hypothesizing a null hypothesis, we propose the following hypothesis to test the existing controversy in the field (although this could just as easily be phrased as a research question given our doubts about whether there will be a gender effect):

*Hypothesis 2: EI and servant leadership relationships are stronger in female-dominated studies.*

**Age.** EI may develop over time throughout one’s life as a result of training, learning, and maturation (El Badawy & Magdy, 2015; Extremera, Fernández-Berrocal, & Salovey, 2006). In addition, older individuals may exhibit more effective leadership behaviors than do young individuals because older leaders may be the survivors of selection processes and they may be more skilled and experienced (Eagly, Johannesen-Schmidt, & van Engen, 2003). Miao et al.

(2018c) found that there was a significant moderation effect by age, such that the EI—trait mindfulness relationship was stronger for older people. In addition, Wechtler, Koveshnikov, and Dejoux (2015) explored the relationships among expatriates' age, their EI, and their cross-cultural adjustment. They found that “age is a facilitator of regulation and utilization of emotions on general living adjustment and of regulation of emotions on interactional adjustment” (Wechtler et al., 2015, p. 409). In contrast, however, Miao et al. (2017c) found no age moderation effect in the EI—job satisfaction relationships. It may well be that whether age moderates EI effects depends upon the particular outcome variable under investigation. Because it is not clear whether age is a significant moderator of the EI – servant leadership relationship, it is important to test the assumption that it is. Hence, we propose the following hypothesis:

*Hypothesis 3: EI and servant leadership relationships become stronger with age.*

**Educational level.** One purpose of education is to equip individuals with the necessary knowledge and skills to be successful in their careers; university education helps one handle complex information, be innovative, and gain wider and more general knowledge and skills (Bae, Qian, Miao, & Fiet, 2014; Døving & Gooderham, 2008), all of which may be necessary for exhibiting effective leadership behaviors and enhancing leadership effectiveness. Hence, EI may be less useful or necessary for well-educated subjects to display servant leadership because they may use other types of knowledge and skills they learned from their higher education to exhibit servant leadership behaviors. In contrast, less educated individuals may depend more heavily on their EI to show servant leadership behaviors because they may not have as many resources (e.g., knowledge and skills) as well-educated individuals which they can use to exhibit servant leadership behaviors, thus increasing the impact of EI on servant leadership for less educated individuals. Personality theory also suggests that when the cognitive side of personality is less

well-developed that people can compensate by drawing upon their affective skills (Cervone, 2004; Mischel & Shoda, 1995). This further implies that in lower education settings leaders may compensate by further drawing upon their EI skills. We provide the following hypothesis.

*Hypothesis 4: EI and servant leadership relationships vary inversely with education.*

### **Cross-Cultural Moderators**

Although certain ethical principles such as integrity may be endorsed across cultures, the degree to which they are endorsed could still vary considerably by national culture (Martin, Resick, Keating, & Dickson, 2009). Although van Dierendonck et al. (2017) verified the cross-cultural equivalence of the Servant Leadership Survey (SLS) in European countries, the mean levels of servant leadership, as well as its relationships to other variables, still needs to be explored cross-culturally. In their recent review, Eva, Robin, Sendjaya, van Dierendonck, and Liden (2019) found that research on servant leadership has been done in 39 countries, and interest in servant leadership is growing around the world. In terms of future research directions, they called for research on whether servant leadership is as effective in countries with high power distance/masculinity scores. They also asked for researchers to examine whether servant leadership's influence over helping behaviors differs in countries with individualistic versus collectivist values.

Support for this comes from research on social responsibility and cross-cultural differences. Waldman and his colleagues used the GLOBE classification of cultural differences to examine cross-cultural differences in top managers' support for social responsibility (Waldman, Sully de Luque, Washburn, House, et al., 2006). The GLOBE study examined cross-cultural differences specifically with regard to preferences for leadership styles (Javidan, Dorfman, Sully de Luque, & House, 2006), so it is particularly relevant to our study. Waldman

and his colleagues found that two dimensions from the GLOBE study, institutional collectivism and power distance, influenced the degree to which top managers expressed support for social responsibility values. Servant leaders should care strongly about social responsibility, and Searle and Barbuto (2011) argued that servant leaders should facilitate organizational virtuousness. Waldman et al.'s study results suggest that institutional collectivism and power distance should also influence the relationship between EI and servant leadership. Our study will focus on these two cross-cultural dimensions.

Research suggests that EI may play an important role with regard to a variety of cross-cultural issues, such as expatriate adjustment (Koveshnikov, Wechtler, & Dejoux, 2014). The research by Miao et al. (2018b) found that culture was a significant moderator of the effects of leaders' EI on subordinate task performance and OCB. The research by Waldman et al. (2006) suggests that two cultural dimensions may be particularly important to servant leadership: institutional collectivism and power distance. These two dimensions, taken from the GLOBE study, varied the ratings top managers gave on social responsibility values. Servant leaders almost by definition should be strongly committed to social responsibility, so based on Waldman et al.'s finding we focused on power distance and institutional collectivism when investigating cultural moderators of the relationship between EI and servant leadership.

**Power distance.** As defined by the GLOBE study, power distance is “The degree to which members of a collective expect (and should expect) power to be distributed equally. A high-power distance score reflects unequal power distribution in a society” (Javidan et al., 2006, p. 70). Waldman et al. (2006, p. 826) stated that in high power distance countries, people believe that leaders “should be obeyed without question and afforded special privileges.” As a result, Waldman and his colleagues hypothesized that power distance should be negatively related to

top leaders' expressed support for social responsibility. They found support for their hypotheses for all three of their measures of social responsibility.

Based on the Waldman et al. (2006) findings, we believe that EI may be more effective in low power distance societies, thus there should be a moderation effect of the EI – servant relationship, such that this relationship is stronger in low power distance societies. A low power distance culture may provide a context that is conducive to the display of emotion and servant leadership because such cultures allow free communication and exchange of thoughts between leaders and followers. In high power distance cultures where obedience is encouraged, followers may not easily perceive a leader as a servant leader or leaders may not find it necessary to use their EI to display servant leadership. Cultural norms may somewhat attenuate the natural urge for high EI leaders to perform servant leadership when they are in high power distance cultures, and thus weaken the relationship. In these cultures, high EI leaders may be motivated to use their emotional skills to pursue other forms of leadership or goals other than serving others. Miao et al. (2018b) found that EI has positive effects across all cultures, although they did find meaningfully important differences between cultures in the size of the relationships. Thus, our argument here should not be construed as arguing that EI will not be related to servant leadership in high power distance cultures. Based on these reasons, we suggest the following hypothesis.

*Hypothesis 5: EI and servant leadership relationships are stronger in low power distance cultures.*

**Institutional Collectivism.** According to Javidan et al. (2006, p. 69), institutional collectivism is the “degree to which organizational and societal institutional practices encourage and reward (and should encourage and reward) collective distribution of resources and collective action.” As stated by Waldman et al. (2006, p. 826), “This dimension involves the belief that the

self should be interdependent with others and should have duties and obligations to the greater collective that outweigh personal concerns.” This dimension thus has obvious connections to servant leadership, with its emphasis on serving others and on stewardship. Waldman and his colleagues hypothesized that there would be a positive relationship between institutional collectivism and leaders’ expressed support for stakeholder relations and community/state welfare corporate social responsibilities values. Consistent with their hypothesis, institutional collectivism was positively related to support for corporate social responsibility. Based on the Waldman et al. (2006) findings, we believe that the effects of EI on servant leadership will be stronger in high institutional collectivism cultures. We thereby offer the following hypothesis.

*Hypothesis 6: EI and servant leadership relationships are stronger in high institutional collectivism cultures.*

### **Methodological Moderators**

**Rating methods of servant leadership.** Both self-reports and follower-reports of leadership behaviors were used in prior studies; nevertheless, these different rating methods of leadership behaviors may capture different aspects of leadership behaviors. Self-reports of leadership behaviors capture leaders’ ideology or desired leadership whereas follower-reports of leadership behaviors capture leaders’ actual leadership behaviors (Barbuto et al., 2014). Barbuto et al. (2014) suggested that EI may be more strongly associated with leaders’ ideology than with leaders’ actual leadership behaviors. In addition, utilizing self-reported leadership behaviors may subject results to social desirability bias and self-enhancement (Podsakoff, MacKenzie, & Podsakoff, 2012), thus leading to artificial inflation in effect sizes. We thereby provide the following hypothesis.

*Hypothesis 7: EI and servant leadership relationships are stronger when servant leadership is measured via self-reports instead of follower-reports.*

**Servant leadership scales.** Scale-based moderation exists in leadership research (e.g., Banks et al., 2014) because different measures of the same leadership construct may vary in construct domain sampling and/or in conceptualizing the construct dimensionality. Servant leadership is one of the leadership constructs where consensus has not yet been reached in terms of the operationalization of it (van Dierendonck, 2011). For example, as summarized in van Dierendonck's (2011) qualitative review, the Servant Leadership Questionnaire (SLQ) developed by Barbuto and Wheeler consists of five measurement dimensions whereas the Servant Leadership Scale (SLS) developed by Liden and colleagues consists of seven measurement dimensions. The only overlap across the labels of all measurement dimensions between SLQ and SLS is emotional healing. Further, these two measures also differ from other measures of servant leadership in terms of measurement dimensions. Due to these reasons, we offer the following exploratory research question.

*Research Question 1: Do EI and servant leadership relationships differ across measures of servant leadership (SLQ versus SLS versus others)?*

## **Method**

### **Literature Search and Inclusion Criteria**

We followed the approaches developed by Colquitt, Scott, and LePine (2007) to search for relevant articles and to set our inclusion criteria. The computerized search was performed on a series of databases to locate relevant articles, such as ABI/INFORM, EBSCO Host, ProQuest Dissertations and Theses, PsycNET, ScienceDirect, and Social Sciences Citation Index. We used a set of keywords (and several variations in them) in searching for relevant studies, including

emotional intelligence, emotional competency, servant leadership, and servant leader(s). We also searched pertinent leadership, management, and psychology journals to ensure the comprehensiveness of computerized search on electronic databases. We searched relevant journals, including *Academy of Management Journal*, *Administrative Science Quarterly*, *Business Ethics: A European Review*, *Journal of Applied Psychology*, *Journal of Business Ethics*, *Journal of Leadership & Organizational Studies*, *Journal of Management*, *Journal of Management Studies*, *Journal of Occupational and Organizational Psychology*, *Journal of Organizational Behavior*, *Journal of Personality and Social Psychology*, *Journal of Vocational Behavior*, *Leadership & Organization Development Journal*, *Leadership Quarterly*, *Organizational Behavior and Human Decision Processes*, *Organization Science*, *Personality and Social Psychology Bulletin*, and *Personnel Psychology*. We searched Google and Google Scholar as well as relevant leadership, management, and psychology conferences (i.e., *Academy of Management*, *International Leadership Association*, *Society for Industrial and Organizational Psychology*, and *Southern Management Association*) in order to capture unpublished papers.

We specified two inclusion criteria to winnow the articles identified in the initial search: (1) the eligible studies had to be empirical and quantitative; and (2) the eligible studies had to report a correlation coefficient between EI and servant leadership, or report enough statistics that allow the conversion into effect sizes through Lipsey and Wilson's (2001) and/or Peterson and Brown's (2005) approaches. Eighteen studies were determined to be eligible for being included in the meta-analysis ( $k = 18$ ,  $N = 2,409$ ). The references for the studies included in the meta-analyses are marked with \* in the section of references.

### **Coding Procedures**

We coded the correlation coefficient for EI – servant leadership relationship in each eligible study. Ashkanasy and Daus's (2005) classification method was employed to code the EI scales as ability EI, self-report EI, or mixed EI, in order to be consistent with prior research (e.g., Miao et al., 2017a; O'Boyle et al., 2011). We coded the percent of male respondents in each study and conducted a median split on these values to assign these studies into male-dominated and female-dominated subgroups. We employed the benchmark of 40 years old to assign studies into young group and middle- or old-age group. The percent of subjects who held bachelor's degree or above was coded for each study. That value was used as an indicator of the average education level of subjects in each study. A median split was performed to allocate studies into high versus low education level. The GLOBE cultural classification (House et al., 2004) was utilized to code the national cultural dimensions of each included study and median splits were performed on the cultural scores (Saeed, Yousafzai, & Engelen, 2014). Among different GLOBE cultural dimensions, we coded and focused on institutional collectivism and power distance because Waldman et al. (2006) found that institutional collectivism and power distance affected the extent to which managers show support for social responsibility. Since servant leadership is rooted in social responsibility and ethics, institutional collectivism and power distance should be relevant to the context of our research. The rating method of servant leadership for each study was coded as self-report versus follower-report. Finally, the servant leadership scales were coded into three types: SLQ developed by Barbuto and Wheeler (2006), SLS developed by Liden et al. (2008), and other scales. There are three studies using the SLS scale developed by Liden et al., among which two of them used SL-28 and one of them used SL-7. We combined the studies using SL-7 and SL-28 and included them in the distribution of SLS (Servant Leadership Scale developed by Liden et al.). We have two rationales why this combination is acceptable. First,

Liden et al. (2015) found high convergence between SL-28 and SL-7 and the correlations between them range from .78 to .97 across three independent studies. Secondly, we performed sensitivity analyses and compared the results with and without the inclusion of the study using SL-7. We found that the result of moderator analyses remains the same before and after the removal of the study using SL-7. The coding table for the included studies is shown in Table 1.

*Insert Table 1 about Here*

### **Meta-Analytic Methods**

Schmidt and Hunter's (2015) methods were used to meta-analyze the data. Measurement errors in both independent and dependent variables were corrected and  $\bar{\rho}$  (corrected sample-size-weighted mean correlation) was calculated and reported. Corrected 95% confidence intervals were computed to assess the statistical significance of effect sizes. Effect sizes were statistically significant at .05 level as long as 95% confidence intervals did not include zero. We computed  $\text{Var}_{\text{art}}\%$  statistics, corrected 80% credibility intervals, and  $Q$  statistic to check the potential existence of moderators. If less than 75% of the variance in the meta-analytic effect sizes ( $\text{Var}_{\text{art}}\% < 75\%$ ) was explained by statistical artifacts, we then considered moderators may operate in a meta-analytic distribution. Wide corrected 80% credibility intervals were indicative of potential presence of moderators. A statistically significant  $Q$  statistic also signals the potential existence of moderators. We conducted Hunter and Schmidt's subgroup analyses to examine the moderator effects. We also performed fail-safe  $N$  calculations and found that the effect of publication bias on our meta-analytic results are negligible or non-existent (Rosenthal, 1979).

## **Results**

### **Main Effects**

Table 2 exhibited the meta-analytic findings for main and moderator effects. Each meta-analytic distribution in Table 2 was denoted with a hypothesis number for the clarity of reporting. We found that EI had a significant positive relationship with servant leadership ( $\bar{\rho} = .57$ ) because the 95% confidence interval of this effect size ranged from .48 to .66 which excluded zero. Therefore, hypothesis 1 was supported. It was also noted that self-report EI ( $\bar{\rho} = .60$ ) and mixed EI ( $\bar{\rho} = .56$ ) had significant positive relationships with servant leadership. Finally, the  $\text{Var}_{\text{art}}\%$  statistic was only 17% which was far smaller than 75%. In accordance with Schmidt and Hunter's 75% rule, searching for moderators is recommended. The search for moderators is warranted by the significant  $Q$  statistic ( $Q = 184.20, p < .001$ ).

### **Moderator Effects**

We performed subgroup analyses to examine moderator effect. The result of each moderator testing was shown in the last column in Table 2. As for the first moderator – gender, the relationship between EI and servant leadership did not significantly differ between male-dominated and female-dominated studies ( $\Delta \bar{\rho} = .08$ ). Hypothesis 2 was thus not supported. This lack of support was consistent with our expectations based on the recent empirical evidence that found gender equalities with regard to EI. We repeated the same procedure to examine all other moderators. We found that the relationship between EI and servant leadership was stronger in studies having smaller percentages of well-educated subjects (Hypothesis 4), in low power distance cultures (Hypothesis 5), and in high institutional collectivism cultures (Hypothesis 6). Nevertheless, the relationship between EI and servant leadership did not significantly differ between young and old subjects (Hypothesis 3), between self-reports and follower-reports of servant leadership (Hypothesis 7), and across different servant leadership scales (SLQ versus SLS versus others) (Research Question 1). In sum, hypotheses 3 and 7 were not supported,

whereas hypotheses 4, 5, and 6 were supported. With regard to research question 1, there were no statistically significant differences in effect sizes according to the type of servant leadership scale used, thus there was insufficient evidence to reject the null hypothesis.

*Insert Table 2 about Here*

## **Discussion**

### **Theoretical Implications**

Our results help us understand the range of findings reported in prior studies about the relationship between EI and servant leadership. Because the range was quite large, researchers could not tell from a single study whether the relationship was weak, moderate, or strong and practically significant. This meta-analysis revealed that EI has a substantial positive association with servant leadership ( $\bar{\rho} = .57$ ). The size of this correlation indicates that EI has practical significance, and that organizations can increase their selection of servant leaders by hiring people who score high on EI, and by training people in EI competencies and skills. As explained below, our study also helps us understand why the range is as large as it is by examining moderators of the EI-servant leadership relationship.

Prior research suggested that it may be critical to assess the link between EI and leadership ethics (Walter, Cole, & Humphrey, 2011; Walter, Humphrey, & Cole, 2012). Our finding is supportive of the bright sides of EI (e.g., Deshpande & Joseph, 2009; Fu, 2014) because EI has a strong and positive link with servant leadership, meaning that emotionally intelligent individuals are other-oriented, humble, caring, ethical, and authentic leaders who put others' interests ahead of their own interests. The strong and positive relationship between EI and servant leadership remains the same across both self-reports and follower-reports of servant leadership. This gives credence to the conclusion that EI affects not only leaders' ideology or

desired leadership behaviors from their own perspectives but also leaders' actual leadership behaviors in the eyes of stakeholders.

In addition to the main finding, our study also revealed some important moderators. **These moderators help us understand why some studies found large EI—servant leadership relationships whereas others found weaker relationships.** The relationship between EI and servant leadership is stronger in low power distance cultures and in high institutional collectivism cultures. These findings are supportive of the research by Waldman et al. (2006) which found that these two cultural dimensions are important moderators of leaders' support for social responsibility values. These results are also in agreement with a prior meta-analysis on EI and leadership (i.e., Miao et al., 2018b) which found that leaders are more likely to use their EI in collectivistic cultures where being other-oriented and looking after others are valued and encouraged. Although the relationships between EI and servant leadership are stronger in low power distance cultures and in high institutional collectivism cultures, the effect sizes for this relationship are still large and positive in high power distance cultures and in low institutional collectivism cultures, suggesting that EI may be universally important across all cultures. These cross-cultural findings answered the calls from prior research which encouraged more cross-cultural examination on servant leadership (Eva et al., 2019; Parris & Peachey, 2013; van Dierendonck, 2011).

Education level was also a moderator such that the EI – servant leadership relationship was stronger for less educated individuals. This might be because they do not have as many alternative resources (e.g., knowledge and skills) as well-educated individuals have. Consequently, it is possible that leaders with less education may have to depend more on their EI skills in order to display effective leadership behaviors.

We did not find any moderator effects by gender and age, i.e., we had insufficient evidence to reject the null hypothesis. This implies that individuals, regardless of gender and age, may equally benefit from EI to show servant leadership behaviors. These findings coincided with prior findings on EI (Miao et al., 2017c) and with the review by Parris and Peachey (2013) on servant leadership and demographic differences.

The relationship between EI and servant leadership does not vary between self-reports and follower-reports of servant leadership. This finding also implies that social desirability bias and self-enhancement as a result of self-reports may not pose a threat to our research findings.

The relationship between EI and servant leadership does not vary across different servant leadership scales. Our findings are consistent with van Dierendonck (2011) who argued that different models and measures of servant leadership may employ different vocabularies for similar concepts and that there exist significant overlaps among them. This finding signals the need for future research to systematically examine all major servant leadership scales and to explore the measurement items and dimensionalities that may optimally tap the construct of servant leadership. Such a research endeavor may help researchers reach consensus on the operationalization of servant leadership, prevent the proliferation of servant leadership scales having different vocabularies yet tapping similar or identical construct domain, settle the debate about the uniqueness of servant leadership, and facilitate the formation of cumulative knowledge on servant leadership.

### **Limitations and Future Directions**

In spite of our efforts to identify moderators and to subgroup meta-analytic distributions,  $Var_{art}\%$  values still remain small and  $Q$  statistics are still statistically significant across a series of meta-analytic distributions in our study, meaning that there are further unidentified moderators.

Future studies may use our research findings as a guide to search for more moderators. For example, prior studies have demonstrated the moderator role of emotional labor demand on EI and its relationship with outcomes (e.g., Joseph & Newman, 2010; Miao et al., 2017a). Future research may examine how emotional labor demand conditions the relationship between EI and servant leadership.

Second, the number of samples which were included in our meta-analysis is not large; moreover, the samples in our meta-analytic distributions are skewed towards the mixed EI models. This limitation is particularly pertinent to our moderator analyses because the number of samples across subgroups is not large so the results of moderator analyses are likely to be influenced by second-order sampling error. To mitigate the impact of this limitation, we followed the best practices to perform meta-analytic moderator analyses. For instance, we performed subgroup analyses to test moderators because this meta-analytic moderator testing method has higher statistical power than other meta-analytic moderator testing methods (Wang, Oh, Courtright, & Colbert, 2011). In sum, we encourage readers to exercise caution in interpreting the results of our moderator analyses. Further, the results of moderator analyses provide a roadmap to identify the areas which await more explorations. For instance, the present empirical landscape for the relationship between EI and servant leadership is dominated by the studies using mixed EI. This phenomenon sends a clear signal to call for more studies to use ability EI and self-report EI so that researchers may investigate whether the relationship between EI and servant leadership will exhibit different patterns across different streams of EI.

### **Conclusions and Practical Implications**

This study has critical practical implications for managers. Our study identified a strong positive relationship between EI and servant leadership. Although this relationship is stronger for

less educated subjects, in low power distance cultures, and in high institutional collectivism cultures, this relationship is consistently positive across different types of EI, different servant leadership measures, gender, age, education, cultures, and different rating sources of servant leadership (self-reports versus follower-reports).

Holt and Marques (2012) reasoned that we could increase the number of ethical corporate leaders by training students and employees in empathy and by recruiting empathic people. Empathy is a crucial part of EI, and consistent with Holt and Marques we advocate for training in empathy and EI, and for recruiting leaders high in empathy and EI. Our study found a strong relationship between EI and servant leadership, and this suggests a low-cost, yet effective, way to find servant leaders, which is to hire emotionally intelligent individuals and/or to train existing employees on EI.

This meta-analysis found that EI is an important predictor of servant leadership with an average corrected correlation of .57. Thus, recruiting and training leaders in EI and emotional competencies may be one way to increase ethical servant leadership in organizations.

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Table 1. Coding Table for the Studies Included in the Meta-Analysis

| <b>Authors</b>                 | <b>Year</b> | <b>N</b> | <b>Male%</b> | <b>Age</b>        | <b>Education</b> | <b>EI Type</b> | <b>SL Measure</b> |
|--------------------------------|-------------|----------|--------------|-------------------|------------------|----------------|-------------------|
| Barbuto, Gottfredson, & Searle | 2014        | 75       | Low          | Middle or Old Age | High             | Mixed EI       | SLQ               |
| Carrington                     | 2015        | 81       | High         | -                 | -                | Mixed EI       | Others            |
| Dalavai                        | 2018        | 71       | Low          | -                 | -                | Mixed EI       | SLS               |
| du Plessis, Wakelin, & Nel     | 2015        | 154      | Low          | Young             | Low              | Mixed EI       | SLQ               |
| Gregory                        | 2016        | 100      | Low          | -                 | -                | Mixed EI       | SLQ               |
| Johnson                        | 2008        | 53       | High         | -                 | -                | Mixed EI       | Others            |
| Lee                            | 2019        | 445      | High         | Middle or Old Age | High             | Self-Report EI | Others            |
| Mahdieh & Khanifar             | 2015        | 248      | High         | -                 | Low              | Mixed EI       | Others            |
| McCannon                       | 2015        | 103      | Low          | -                 | High             | Mixed EI       | SLQ               |
| McDonnell                      | 2011        | 72       | High         | -                 | -                | Ability EI     | Others            |
| Mulder                         | 2015        | 30       | Low          | -                 | Low              | Mixed EI       | Others            |
| Pollock                        | 2017        | 141      | High         | -                 | -                | Self-Report EI | SLS               |
| Portillo                       | 2015        | 12       | High         | -                 | -                | Mixed EI       | Others            |
| Roark                          | 2013        | 42       | Low          | -                 | High             | Mixed EI       | SLS               |
| van Staden                     | 2007        | 154      | Low          | Young             | Low              | Mixed EI       | SLQ               |
| Vidic                          | 2007        | 535      | -            | Young             | -                | Mixed EI       | Others            |
| Waddell                        | 2009        | 44       | High         | Middle or Old Age | High             | Mixed EI       | Others            |
| Werner                         | 2013        | 49       | -            | -                 | -                | Self-Report EI | Others            |

*Note:* N = sample size; Male% = the percent of male subjects; Education = the percent of subjects holding bachelor's degree or above; SL = servant leadership; SLQ = servant leadership questionnaire developed by Barbuto and Wheeler; SLS = servant leadership scale developed by Liden and colleagues.

Table 2. Meta-Analytic Results of the Relationship between EI and Servant Leadership

|                                      | <i>k</i> | <i>N</i> | $\bar{r}$ | <i>SD<sub>r</sub></i> | $\hat{\rho}$ | <i>SD<sub>ρ</sub></i> | CI LL | CI UL | CV LL | CV UL | Var <sub>art</sub> % | <i>Q</i>  | fail-safe <i>N</i> | Moderator |
|--------------------------------------|----------|----------|-----------|-----------------------|--------------|-----------------------|-------|-------|-------|-------|----------------------|-----------|--------------------|-----------|
| H1: EI - Servant Leadership          | 18       | 2,409    | .48       | .19                   | .57          | .18                   | .48   | .66   | .34   | .80   | 17%                  | 184.20*** | 2859               |           |
| EI Type                              |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. Ability EI                        | 1        | 72       | .63       | -                     | .70          | -                     | -     | -     | -     | -     | -                    | -         | -                  | -         |
| b. Self-Report EI                    | 3        | 635      | .48       | .14                   | .60          | .12                   | .45   | .74   | .44   | .75   | 22%                  | 29.22***  | 143                |           |
| c. Mixed EI                          | 14       | 1,702    | .47       | .20                   | .56          | .19                   | .45   | .66   | .31   | .80   | 16%                  | 152.51*** | 1464               |           |
| H2: Gender                           |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. Male-dominated                    | 8        | 1,096    | .54       | .19                   | .64          | .19                   | .51   | .78   | .40   | .88   | 13%                  | 75.07***  | 746                | -         |
| b. Female-dominated                  | 8        | 729      | .50       | .19                   | .56          | .16                   | .44   | .69   | .36   | .77   | 23%                  | 73.83***  | 412                | -         |
| H3: Age                              |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. Young                             | 3        | 843      | .44       | .19                   | .53          | .17                   | .33   | .73   | .31   | .75   | 10%                  | 86.28***  | 212                | -         |
| b. Middle- or old-age                | 3        | 564      | .40       | .06                   | .49          | .00                   | .42   | .56   | .49   | .49   | 100%                 | 2.46      | 59                 | -         |
| H4: Education Level                  |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. High                              | 5        | 709      | .38       | .06                   | .47          | .00                   | .41   | .54   | .47   | .47   | 100%                 | 3.48      | 106                | b         |
| b. Low                               | 4        | 586      | .67       | .16                   | .72          | .18                   | .54   | .90   | .49   | .95   | 7%                   | 44.43***  | 351                | a         |
| H5: Power Distance                   |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. High                              | 14       | 1,823    | .42       | .15                   | .51          | .13                   | .43   | .59   | .34   | .68   | 31%                  | 69.84***  | 1199               | b         |
| b. Low                               | 3        | 338      | .62       | .20                   | .64          | .19                   | .42   | .87   | .40   | .89   | 9%                   | 42.33***  | 128                | a         |
| H6: Institutional Collectivism       |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. High                              | 3        | 338      | .62       | .20                   | .64          | .19                   | .42   | .87   | .40   | .89   | 9%                   | 42.33***  | 128                | b         |
| b. Low                               | 14       | 1,823    | .42       | .15                   | .51          | .13                   | .43   | .59   | .34   | .68   | 31%                  | 69.84***  | 1199               | a         |
| H7: Servant Leadership Rating Method |          |          |           |                       |              |                       |       |       |       |       |                      |           |                    |           |
| a. Self-Report                       | 11       | 1,761    | .45       | .17                   | .56          | .16                   | .46   | .66   | .36   | .77   | 19%                  | 100.99*** | 1092               | -         |
| b. Follower-Report                   | 8        | 723      | .51       | .23                   | .56          | .22                   | .40   | .72   | .28   | .84   | 13%                  | 83.24***  | 469                | -         |

|                                | $k$ | $N$   | $\bar{r}$ | $SD_r$ | $\hat{\rho}$ | $SD_{\rho}$ | CI LL | CI UL | CV LL | CV UL | Var <sub>art</sub> % | $Q$      | fail-safe $N$ | Moderator |
|--------------------------------|-----|-------|-----------|--------|--------------|-------------|-------|-------|-------|-------|----------------------|----------|---------------|-----------|
| RQ1: Servant Leadership Scales |     |       |           |        |              |             |       |       |       |       |                      |          |               |           |
| a. SLQ                         | 5   | 586   | .53       | .20    | .60          | .17         | .44   | .75   | .38   | .81   | 16%                  | 65.71*** | 271           | -         |
| b. SLS                         | 3   | 254   | .60       | .17    | .67          | .17         | .46   | .87   | .45   | .88   | 18%                  | 16.52*** | 76            | -         |
| c. Others                      | 10  | 1,569 | .44       | .17    | .54          | .17         | .42   | .65   | .32   | .76   | 17%                  | 83.91*** | 783           | -         |

*Note.*  $k$  = number of independent samples;  $N$  = sample size;  $\bar{r}$  = 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;  $SD_{\rho}$  = sample-size-weighted standard deviation of corrected mean correlations; CI LL and CI UL = lower and upper bounds of corrected 95% confidence interval; CV LL and CV UL = lower and upper bounds of corrected 80% credibility interval; Var<sub>art</sub>% = percent of variance in  $\hat{\rho}$  explained by statistical artifacts;  $Q$  = a statistic that assesses the heterogeneity in effect sizes across studies; Moderator = Moderator Effect (Letters in the column of Moderator match with the letters in rows. They demonstrate if effect sizes significantly differ from one another at .05 level. The sign “-” indicates the statistically non-significant moderator effect); EI = emotional intelligence; SLQ = Servant Leadership Questionnaire developed by Barbuto and Wheeler; SLS = Servant Leadership Scale developed by Liden et al.; Others = other servant leadership scales. H1 through H7 in the table refers to hypothesis 1 through hypothesis 7. RQ1 refers to research question 1.

\*\*\*  $p < .001$