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Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis

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This study compares three emerging forms of positive leadership that emphasize ethical and moral behavior (i.e., authentic leadership, ethical leadership, and servant leadership) with transformational leadership in their associations with a wide range of organizationally relevant measures. While scholars have noted conceptual overlap between transformational leadership and these newer leadership forms, there has been inadequate investigation of the empirical relationships with transformational leadership and the ability (or lack thereof) of these leadership forms to explain incremental variance beyond transformational leadership. In response, we conducted a series of meta-analyses to provide a comprehensive assessment of these emerging leadership forms' relationships with variables evaluated in the extant literature. Second, we tested the relative performance of each of these leadership forms in explaining incremental variance, beyond transformational leadership, in nine outcomes. We also provide relative weights analyses to further evaluate the relative contributions of the emerging leadership forms versus transformational leadership coupled with their low amounts of incremental variance suggest that their utility is low unless they are being used to explore very specific

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outcomes. Servant leadership, however, showed more promise as a stand-alone leadership approach that is capable of helping leadership researchers and practitioners better explain a wide range of outcomes. Guidance regarding future research and the utility of these three ethical/moral values-based leadership forms is provided.

Keywords: meta-analysis; transformational leadership; authentic leadership; ethical leadership; servant leadership; construct redundancy

In recent years, a series of very public corporate scandals (e.g., Enron, Fannie Mae, Lehmann Brothers, Tyco, WorldCom) have been associated with increased interest in positive leadership emphasizing ethical and moral leader behavior. These emerging ethical/moral values–based leadership forms include ethical, authentic, and servant leadership (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014). The focus upon moral and ethical behavior resulted from a widely held view that crises of leadership, attributed to unethical behavior among senior leaders in organizations (Woods & West, 2010), were responsible for these scandals. The rising popularity of these three leadership forms is reflected in the increase in public as well as scholarly references. A Google Scholar search for "ethical leadership" yielded 2,090 results for 1980 to 2003 versus 16,200 results for the period 2003 to 2016; for "authentic leadership," there were 926 versus 13,200 results; and for "servant leadership," there were 2,630 versus 16,800 results, respectively.¹

While there has been a meteoric rise in interest when it comes to these three leadership forms, the field has provided little direction regarding whether these emerging approaches actually perform as their supporters claim. In other words, while there is certainly a lot of attention being focused upon these ethical/moral values–based leadership forms, it remains to be seen whether they are actually explaining anything "new" at all. This is reflective of scholars' general concern regarding potential construct redundancy, which occurs when new theories of leadership with new behavioral constructs are promoted without evaluating their distinctiveness and usefulness compared to existing leadership approaches (DeRue, Nahrgang, Wellman, & Humphrey, 2011).

These three ethical/moral values–based leadership forms represent additions to positive leadership, with transformational leadership being the dominant theory since the 1980s. Positive leadership forms focus on leader behaviors and interpersonal dynamics that increase followers' confidence and result in positive outcomes, beyond task compliance, such as motivating followers to go beyond expectations, positive self-development, and prosocial behaviors (cf. Hannah, Sumanth, Lester, & Cavarretta, 2014). Primary studies and meta-analyses on transformational leadership have consistently demonstrated that transformational leadership has high overall validity and is significantly related to a variety of employee and organizational criteria, such as commitment, trust, satisfaction, and performance (e.g., Judge & Piccolo, 2004).

Theorists have provided potential justification for the ethical/moral values-based leadership forms by arguing that transformational leadership may be viewed as incomplete as a result of an absence of a strong, explicit moral dimension. Specifically, leaders, while being "transformational," may be unethical, abusive of followers, and act in ways that are selfserving and contrary to espoused values and organizational interests (Bass & Steidlmeier, 1999; Conger & Kanungo, 1988). This has been exemplified by corporate failures occurring under leaders widely viewed as transformational, such as Ken Lay (Tourish, 2013) and Al Dunlap (Fastenburg, 2010). In response, scholars introduced a distinction between authentic and pseudo transformational leadership, to account for the presence or absence of ethical and positive moral character in transformational leaders (Bass & Steidlmeier, 1999; Price, 2003), and advanced ethically oriented leadership forms, including authentic, ethical, and servant leadership (Northouse, 2010).

Consistent with the DeRue et al. (2011) call for integration across leadership forms, the current study seeks not only to understand the three ethical/moral values–based leadership forms but also to assess these leadership forms in the context of transformational leadership.² With the promotion of these ethically oriented leadership approaches, there has been an accompanying concern as to whether they are conceptually distinct from transformational leadership (e.g., Avolio & Gardner, 2005). Adding further concern to the issues of distinctness, extant research has provided some empirical evidence of significant associations between transformational leadership and ethical (cf. Ng & Feldman, 2015), authentic (cf. Riggio, Zhu, Reina, & Maroosis, 2010), and servant leadership (cf. van Dierendonck, Stam, Boersma, de Windt, & Alkema, 2014).

Some attention has been given in primary studies to examining the predictive validity of these emerging forms of leadership above transformational leadership on a few correlates (Brown, Treviño, & Harrison, 2005; Liden, Wayne, Zhao, & Henderson, 2008). To date, however, their incremental validity in relation to transformational leadership in explaining key outcomes is unknown. This is not to say, however, that no one has started the evaluation process. More specifically, two meta-analyses have been recently conducted on ethical leadership (Bedi, Alpaslan, & Green, in press; Ng & Feldman, 2015), but none have been conducted on authentic or servant leadership. Ng and Feldman (2015) did a narrow analysis of the predictive validity of ethical leadership, in the presence of transformational leadership, on task performance and organizational citizenship behaviors (OCBs) and found some support.

Consequently, questions exist whether these "new additions" make unique contributions to explaining key measures beyond those provided by transformational leadership (cf. Haynes & Lench, 2003). Therefore, this study's objective is to evaluate the incremental validity of the three ethical/moral forms of leadership to determine whether they add to the prediction of criteria above those explained by transformational leadership alone. Testing the incremental validity of leadership forms and evaluate potential construct redundancy. Furthermore, the study represents a response to calls to evaluate incremental validity on related constructs, which has been a neglected focus "in most areas of applied psychology" (Hunsley & Meyer, 2003: 446).

To effectively accomplish the above goals, we present three distinct yet related sets of analyses. First, we conduct a separate broad-based, comprehensive meta-analysis for each of the three emerging leadership forms to determine their associations with organizationally relevant variables. Consequently, this study is the first to provide comprehensive meta-analyses on authentic and servant leadership. For ethical leadership, we expand upon the prior meta-analyses by including a larger number of independent studies and correlates. Together, we are able to meta-analyze 20, 15, and 11 correlates for ethical, authentic, and servant leadership, respectively.

Once these three comprehensive meta-analyses of the emerging leadership forms are presented, we select nine correlates shared across the analyses and investigate the relative weights (cf. Tonidandel & LeBreton, 2011) of the relationships between the new leadership forms and the correlates versus transformational leadership and the correlates. The relative weights approach takes a different quantitative and philosophical perspective than the incremental validity tests, which will also be conducted. Rather than putting the burden of proof on the new leadership forms to explain incremental variance, the relative weights analyses partition the variance explained to determine the relative variance explained by each of the new forms versus that explained by transformational leadership.

Next, we use hierarchical regression results to test the incremental validity provided by each of the three emerging leadership forms as compared to transformational leadership. The transformational leadership associations are based on a fourth meta-analysis we conduct on transformational leadership that includes the nine shared correlates from the ethical/moral values–based leadership forms' analyses.

The above analyses allow the current research to accomplish four major objectives. First, we provide comprehensive summaries of the ethical/moral values–based leadership forms and their relationships with an array of relevant measures. Second, we present the largest meta-analysis of transformational leadership done to date. Third, we present the relative variance in organizationally relevant outcomes explained by the different leadership forms. Fourth, we assess whether these emerging forms of leadership are redundant and to what degree they explain incremental variance beyond that already explained by transformational leadership.

Theoretical Background and Expectations

Transformational Leadership

Beginning in the late 1970s, leadership research experienced a paradigm shift away from traditional or classical leadership approaches to what has been labeled positive forms of leadership (cf. Avolio & Gardner, 2005). Burns (1978) introduced transformational leadership to describe the ideal situation between political leaders and their followers. Burns specified transformational leadership as an ongoing process, whereby "leaders and followers raise one another to higher levels of morality and motivation beyond self-interest to serve collective interests" (20). He contrasted transformational and transactional leadership (which is based upon contingent reinforcement and is focused on short-term goals, self-interest, and the exchange relationship). This positive leadership theory highlighted leaders' ability to influence positive follower outcomes through identifying and addressing followers' needs and transforming them by inspiring trust, instilling pride, communicating vision, and motivating followers to perform at higher levels (cf. Turner, Barling, & Zacharatos, 2002).³

Bass (1985) developed and expanded Burn's (1978) political concept of transformational leadership and applied it to organizational contexts. Bass defined the process of transformational leadership in terms of a leader's ability "to achieve follower performance beyond ordinary limits" (xiii). In contrast to Burns, Bass's initial conceptualization and application of transformational leadership to organizations did not specify an ethical or moral dimension but highlighted the importance of such later (cf. Bass & Riggio, 2006). According to Bass, transformational leaders transform their followers to perform beyond expectations by engaging in "the four Is" of behavior: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

During the past three decades, a majority of organizational leadership research has been based on transformational leadership (cf. Judge & Piccolo, 2004). Numerous empirical studies have supported a relationship between transformational leadership and leader effectiveness in terms of follower attitudinal outcomes; organizational climate; OCBs; individual, group, and organizational performance; job satisfaction; supervisor satisfaction; engagement; and reduced turnover (e.g., Bass, Avolio, Jung, & Berson, 2003; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Judge & Piccolo, 2004; Wang, Oh, Courtright, & Colbert, 2011).

The delineation of authentic and pseudo transformational leadership by Bass and Steidlmeier (1999) was based on a recognition that leaders could potentially engage in "inauthentic" transformational leadership (cf. Conger & Kanungo, 1988). Bass and Steidlmeier stated: "Each component of either transaction or transformational leadership has an ethical dimension. It is the behavior of leaders—including their moral character, values and programs—that is authentic to less authentic rather than authentic or inauthentic" (184). Authenticity refers to being true and acting consistently with one's own self and values and being transparent regarding those values. Authentic leaders are aware of their beliefs and values, and they are genuine, reliable, moral, other focused, and devoted to developing followers and creating a positive and engaging organizational context (Ilies, Morgeson, & Nahrgang, 2005).

Authentic Leadership

Luthans and Avolio (2003) proposed authentic leadership as a specific leadership form. It was further developed by Gardner, Avolio, Luthans, May, and Walumbwa (2005) and Avolio and Luthans (2006) following major corporate scandals. Authentic leaders are described as high on moral character and those who are "deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspectives, knowledge, and strengths" (Avolio, Gardner, Walumbwa, Luthans, & May, 2004: 802). Authentic leadership is viewed as a root concept or precursor to all other forms of positive leadership including transformational, ethical, and servant leadership (Avolio & Gardner, 2005). Thus, the degree of authenticity represents an underlying determinant or wellspring defining positive leadership. For example, with respect to transformational leadership, it answers the question: Is the leader's leadership genuine and beneficial to followers and organizations, or is it abusive and unethical?

Although a number of definitions of authentic leadership have been proposed, Avolio and Gardner (2005) identified the following dimensions of authentic leadership: positive moral perspective, self-awareness, balanced processing, relational transparency, positive psychological capital, and authentic behavior. In addition, authentic leadership has a strong developmental focus in terms of both moral development of the leader and development of authenticity in followers (Avolio & Gardner, 2005). The positive moral perspective dimension highlights that authentic leadership requires a leader's actions to be based on internalized positive virtues and high moral character. Regarding self-awareness, authentic leaders are cognizant of their strengths, knowledge, beliefs, and values and act on these openly and candidly (Avolio et al., 2004). Balanced processing reflects an inclination to objectively consider and weigh multiple perspectives and listen to others when processing information and before making decisions. Relational transparency describes the open and transparent manner with which authentic leaders share information about themselves to followers, including

their personal values, weaknesses, and limitations (Ilies et al., 2005). Also, authentic leaders possess positive psychological capital in that they are confident, optimistic, hopeful, and resilient (Luthans & Avolio, 2009). Furthermore, authentic leaders display "actions that are guided by the leaders' true self as reflected by core values, beliefs, thoughts and feelings, as opposed to environmental contingencies or pressures from others" (Gardner et al., 2005: 347).

In comparing authentic and transformational leadership, Avolio et al. (2004) described authentic leadership as adding ethical leadership qualities to positive leadership forms. Thus, leaders may be authentic but not transformational and simply display ethical characteristics of authentic leadership. As a result, genuine transformational leaders must be authentic (Avolio & Gardner, 2005). Although the ethical aspects of authentic leadership are additions to components of transformational leadership identified by Bass (1985, 1998), in light of the positive capital attributes, there appears to be significant conceptual overlap between authentic and transformational leadership.

Ethical Leadership

Brown et al. defined ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making" (2005: 120). They identified how ethical leadership differs from other positive leadership forms. First, ethical leadership focuses on the ethical dimension of leadership rather than including ethics as an ancillary dimension (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Second, Brown et al. (2005) described ethical leadership as including trait (i.e., the moral person) and behavior (i.e., the moral manager) dimensions. They argued that ethical leadership can be reflected by leader traits, such as integrity, social responsibility, fairness, and the willingness to think through the consequences of one's actions. However, ethical leadership is also reflected by specific behaviors, whereby the leader promotes workplace ethicality.

Ethical leaders seek to do the right thing and conduct their lives and leadership roles in an ethical manner (Brown & Treviño, 2006). Ethical leadership draws on social learning theory (Bandura, 1986) and posits that ethical leaders influence followers to engage in ethical behaviors through behavioral modeling and transactional leadership behaviors (e.g., rewarding, communicating, and punishing). The recent focus on ethical leadership has been based on the belief that ethics represent a critical component in effective leadership and leaders are responsible for promoting ethical climates and behavior (Brown & Treviño, 2006). In comparing ethical leadership and transformational leadership, the empirical findings generally suggest a strong relationship (cf. Brown & Treviño, 2006; Mayer, Aquino, Greenbaum, & Kuenzi, 2012) with the exception of a study by Brown et al. (2005) that reported a relatively weak association between ethical leadership and idealized influence (r = .20, p < .01).

Servant Leadership

Robert Greenleaf (1970, 1977) developed the philosophy of servant leadership that focuses on putting the needs of followers and stakeholders first. Greenleaf stated: "The servant-leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to aspire to lead" (1970: 13). Keith (2008) described servant

leadership as ethical, practical, and meaningful. On the basis of Greenleaf's writings, Spears (2010) identified 10 characteristics of servant leaders, including listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of others, and building community. Servant leadership posits that by first facilitating the development and well-being of followers, long-term organizational goals will be achieved.

According to Bass, servant leadership has numerous parallels with transformational leadership, including "needing vision, influence, credibility, trust and service but it goes beyond transformational leadership in selecting the needs of others as its highest priority" (2000: 33). Furthermore, Bass stated that the two leadership forms are most similar with respect to the transformational leadership facets of inspirational motivation and individualized consideration. Stone, Russell, and Patterson (2003) noted that the major difference between transformational leadership and servant leadership is the leader's primary focus. Servant leaders' principal focus is on their followers; transformational leaders primarily focus on organizational objectives and inspiring follower commitment toward those objectives. Overall, it appears that there are certainly conceptual similarities and differences between servant and transformational leadership, but whether the conceptual overlap is associated with significant empirical overlap is explored in the current research.

Expectations for the Emerging Leadership Forms

Not surprisingly, the research focus to date of the emerging leadership forms has been on their individual consequences, not on their incremental contributions when compared to transformational leadership. Therefore, we examine a number of organizationally relevant measures in our comparison of authentic leadership, ethical leadership, and servant leadership with transformational leadership by using meta-analytic techniques. Specifically, the extant research allowed us to include the *behavioral outcomes* of job performance, OCBs, and deviance; *attitudinal outcomes* of employee engagement, job satisfaction, affective commitment, and organizational commitment; and *relational perception* measures of trust and leader-member exchange (LMX). While not proposing formal hypotheses for the variance explained by each new leadership form with each outcome, we present expectations as follows.

Behavioral outcomes. A central emphasis of transformational leadership is fostering follower identification with organizational goals and influencing followers to engage in in-role performance that exceeds expectations (Bass, 1985). Empirical investigation of transformational leadership has provided strong support for positive associations between transformational leadership and individual performance. For example, in their meta-analyses, Wang et al. (2011) and Fuller, Patterson, Hester, and Stringer (1996) found overall effect sizes (ps) between transformational leadership and job performance of .25 and .45, respectively.

In contrast to transformational leadership, authentic, ethical, and servant leadership do not have as strong an emphasis on affecting follower in-role performance. Rather, the focus of these emerging leadership forms, as a group, appears to be directed more to ethical behavioral role modeling by leaders, social learning, moral development of followers, and promotion of socially and normatively appropriate, as well as extrarole, behavior (Avolio & Luthans, 2006; Brown et al., 2005; Gardner et al., 2005; Hu & Liden, 2013). Consequently, we do not expect significant incremental variance in explaining job performance from these emerging forms.

With respect to OCBs, the meta-analysis of Wang et al. (2011) reported an association between transformational leadership and this outcome ($\rho = .30$). Nevertheless, we expect the emerging leadership forms will contribute significant incremental variance in explaining both employee OCBs and reducing employee deviance above transformational leadership as a result of their focus on the promotion of extrarole and normatively appropriate behaviors.

Attitudinal outcomes. Attitudinal outcomes include employee engagement, job satisfaction, affective commitment, and organizational commitment. Employee engagement has been defined as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption to one's work" (Schaufeli, Salanova, González-Romá, & Bakker, 2002: 74). A general assumption is that transformational leaders are motivational, charismatic, engaged, and visionary and influence followers to experience identification with organizational goals. Transformational leaders also have been described as leading followers to view their work as more important and self-congruent (Shamir, House, & Arthur, 1993). Bono and Judge (2003) noted that transformational leaders influence followers through value internalization and work engagement. In addition, Judge and Piccolo's (2004) meta-analysis demonstrated that follower engagement ($\rho = .53$) and follower job satisfaction ($\rho = .58$) were strongly associated with transformational leadership.

Researchers have found engagement and job satisfaction to be positively associated with authentic leadership (Neider & Schriesheim, 2011; Wong, Laschinger, & Cummings, 2010), ethical leadership (Den Hartog & Belschak, 2012; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009), and servant leadership (Chan & Mak, 2014; E. M. Hunter, Neubert, Perry, Witt, Penney, & Weinberger, 2013). This may occur through authentic leadership's personal identification with followers, ethical leadership's emphasis on fair treatment of followers, and servant leadership's focus on serving followers, thus promoting identification with the leader that could contribute to employee work engagement and engender positive attitudes, such as job satisfaction. In spite of these associations, because of the centrality of these outcomes to transformational leadership, we do not expect the new forms of leadership to add significant incremental validity above transformational leadership for engagement and job satisfaction for both the theoretical and empirical reasons provided above.

Although the literature does not directly support a significant incremental effect upon the previous discussed attitudinal measures, a different picture emerges for employee commitment. Organizational commitment has been defined as "the relative strength of an individual's identification with and involvement in a particular organization" (Mowday & Steers, 1979: 226), and affective commitment refers to employees' emotional bonds to their organizations (Meyer & Allen, 1984). Researchers have found associations between transformational leadership and both organizational commitment ($\rho = .43$; DeGroot, Kiker, & Cross, 2000) and affective commitment (r = .33; Liao & Chuang, 2007). In spite of the positive associations with transformational leadership, we expect that the three emerging leadership forms will contribute incremental variance in explaining affective commitment and organizational commitment. This expectation is based on empirical research supporting direct effects of these three leadership forms on follower work attitudes, including organizational commitment (cf. Leroy, Palanski, & Simons, 2012; Liden et al., 2008; Ng & Feldman, 2015),

and the expectation that leaders who engage in these ethical forms of leadership will significantly affect followers' emotional attachments and connections to the organization. This is consistent with authentic leadership's emphasis on the positive moral perspective and follower development; ethical leadership's emphasis upon the moral manager; individualized consideration, fairness, and leader honesty; and servant leadership's emphasis on the leader's serving followers.

Relational perceptions. The relational perceptions that allowed for analysis include trust in supervisor and LMX. Dirks and Ferrin's (2002) meta-analysis demonstrated that transformational leadership is strongly associated with trust ($\rho = .72$). Similarly, the meta-analysis of Dulebohn, Bommer, Liden, Brouer, and Ferris (2012) found transformational leadership to be strongly associated with LMX ($\rho = .73$). Even though scholars have described the emerging leadership forms as resulting in followers' perceiving themselves to be in social exchange relationships, which represents a central premise for LMX and trust (Avolio & Gardner, 2005; Barbuto & Wheeler, 2006; Brown & Treviño, 2006), transformational leadership's strong association with both trust and LMX make it empirically unlikely that the new leadership forms will explain much incremental variance. Thus, while the emerging forms of leadership are described as creating social exchanges between leaders and followers, transformational leadership creates the same social exchange.

Data and Method

Literature Search and Criteria for Inclusion

We conducted a systematic computer-based search of the literature associated with the leadership forms included in this research (i.e., authentic leadership, ethical leadership, servant leadership, and transformational leadership) by using several methods, including searches of the *ABI-Inform*, *Dissertation Abstracts*, *PsycINFO*, *ISI Web of Knowledge*, and *Google Scholar* databases for dissertations and articles that included the leadership behaviors of interest. To be as inclusive as possible, we conducted a broad search using each of the forms as keywords. For authentic leadership, we included search terms such as *authentic leadership*, *authentic leader, authenticity*, and *authentic behavior*; for ethical leadership, we included *ethical leadership*, *ethical leader, ethical integrity, ethical identity, ethical manager, moral manager, ethical climate*, and *ethical context*. For servant leadership, we included *servant leadership*, servant leader, servant organization, and servant behavior. For transformational leadership, we used terms such as *transformational leadership*, *charismatic leadership*, and *charisma*. Additionally, we conducted a manual search for "in press" articles in leading management journals and contacted authors who are active in the area. Data collection included studies up to November 2015.

Inclusion Criteria

We used several decision rules regarding which studies would be included in the analyses. First, studies had to be empirical and use working employees as the sample. Thus, we omitted the few lab studies that used nonworking student samples and did not include work-related

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Leadership Form	Average Year of Publication	Total Studies	Total Samples	Non-U.S. Samples	Unpublished Studies	Unpublished Samples	Same-Source Same- Time Samples
Authentic leadership	2011	41	45	19 (42%)	17 (41%)	20 (44%)	29 (64%)
Ethical leadership	2011	96	124	58 (47%)	18 (19%)	31 (25%)	43 (35%)
Servant leadership	2011	41	49	20 (49%)	7 (17%)	11 (22%)	28 (65%)
Transformational leadership	2006	155	179	80 (45%)	37 (24%)	37 (24%)	88 (49%)

 Table 1

 Study Characteristics for the Four Leadership Forms

outcomes (two each for authentic and ethical leadership and five for transformational leadership). Second, studies needed to report sample sizes along with correlations or statistical results adequate to compute a correlation coefficient or effect size between the leadership form and one or more correlates of interest. Third, we excluded studies that examined leadership relationships only at the group level of analysis. In addition, studies had to be written in English to be included in our analysis. Finally, we included only those studies that contributed one or more relationships to the analyses. This last criteria is important as it is possible that a study met the four criteria described but did not contain one or more of the effects of interest. This could happen if the study in question used a novel measure that other researchers have not used, which made it unsuitable for inclusion in a meta-analysis.

Coding and Sample Characteristics

Each study was reviewed and independently coded by two authors for the sample characteristics and the source of the variables (i.e., leader or follower reported). The average intercoder percentage of agreement across the study variables was 95%. In situations where there were discrepancies among the raters, discussion between the two raters was used to reach a consensus, following the approach used by Podsakoff, Bommer, Podsakoff, and MacKenzie (2006). The sample size of each study was recorded as the number of observations used to compute the correlation coefficients included in the study. Table 1 presents the study characteristics for the four leadership forms. Please see the online appendix in the supplemental material for a reference list of all studies included in the four meta-analyses.

Meta-Analytic Procedures

J. E. Hunter and Schmidt's (1990) random effects meta-analytic procedures were used via the Mark XIII meta-analysis program and were cross-checked using the Hunter and Schmidt formulae. The weighted mean correlations and their variances were corrected for measurement and sampling error, and we did not attempt to correct for range restriction. Also, for those studies in which there were multiple indicators of a focal construct, we used the average of the correlations. For example, in studies reporting the four dimensions of authentic leadership but not an overall measure, we averaged the correlations across the four dimensions.

Results

To accomplish our research goals, we used a four-stage process. First, we performed exhaustive meta-analyses of authentic leadership, ethical leadership, and servant leadership. To do this, we examined the extant empirical research that included any of these leadership forms. Consequently, this first step included meta-analyses of relationships unique to specific leadership forms, and some of these relationships, as unique, were not included in the incremental variance analysis. Similar to other researchers (e.g., Cole, Walter, Bedeian, & O'Boyle, 2012; LePine, Erez, & Johnson, 2002), we decided a priori that we would include a correlate in the meta-analysis for each leadership form if the correlate was included in four or more samples.

In the second step, we conducted a fourth series of meta-analyses related to transformational leadership. Surprisingly, while there have been numerous meta-analyses on transformational leadership, some of the primary correlates that have been examined by the new leadership forms have not been included in a previous transformational leadership metaanalysis. As a result, we conducted what we believe to be the largest analysis of transformational leadership research to date.

The third set of analyses included relative weights analyses to understand the relative associations that each leadership form had with the correlates. To do this, we conducted a series of regressions using structural equation modeling to determine the variance jointly explained by transformational leadership and one of the new leadership forms. Thus, a model including transformational leadership as well as one of the new forms was estimated using the same criterion measure (e.g., the variance explained in job satisfaction by transformational and authentic leadership). This model used the harmonic mean (Viswesvaran & Ones, 1995) for the sample size. The relative weights analyses are useful to better understand the relative relationships of the new leadership form and transformational leadership across a series of relevant criterion measures.

The fourth step was to conduct a series of hierarchical regressions using structural equation modeling to determine the variance explained in the criterion by transformational leadership and then to assess the incremental variance explained by each of the other positive leadership forms (i.e., authentic leadership, ethical leadership, and servant leadership). To perform these analyses, we analyzed a series of models where a series of relationships were estimated. First, the variance explained in the criterion measure by transformational leadership was estimated (e.g., the variance explained in job satisfaction by transformational leadership). Next, a model including transformational leadership as well as one of the new forms was estimated using the same criterion measure (e.g., the variance explained in job satisfaction by transformational and authentic leadership). This second model used the harmonic mean for the sample size. The incremental variance was then assessed by the change in variance explained between these two, sequential, steps.

Meta-Analytic Results

Before addressing the three groups of outcomes as they related to our expectations from the extant literature, the overall meta-analytic results presented in Tables 2, 3, and 4 will be summarized. After the general discussions of these results, the results of incremental variance tests will be presented and discussed.

							80%	CV	95%	CI	
Variable	k	N	R	ρ	SD p	Q	Lower	Upper	Lower	Upper	N _{FS}
Behavioral measures											
Job performance	8	2,101	.11	.12	.09	23.30**	.00	.24	.04	.20	95
Overall OCB	8	1,256	.29	.33	.19	51.21***	.09	.57	.19	.47	281
Employee deviance	4	1,175	22	25	.08	10.10*	34	15	35	14	103
Employee voice	4	1,019	.28	.30	.12	18.99***	.15	.45	.17	.43	126
Attitudinal measures											
Engagement	6	1,182	.43	.47	.18	50.56***	.24	.69	.30	.62	319
Job satisfaction	9	2,129	.44	.48	.09	32.40***	.36	.60	.42	.55	492
Organizational commitment	5	797	.43	.48	.12	18.33**	.33	.64	.36	.61	274
Affective commitment	5	1,182	.48	.53	.17	48.08***	.31	.74	.37	.68	312
Empowerment	4	1,117	.47	.52	.09	16.40***	.41	.64	.42	.62	244
Psychological capital	7	2,236	.48	.53	.07	25.40***	.44	.62	.46	.60	437
Moral identity	4	578	.40	.45	.17	24.42***	.23	.67	.29	.63	202
Relational perceptions											
Trust in manager	6	929	.64	.69	.18	81.14***	.46	.92	.54	.84	567
Leader-member exchange	4	1,468	.62	.67	.17	66.51***	.45	.89	.47	.85	361
Correlates											
Transactional leadership	4	770	.37	.40	.45	246.84***	17	.98	.03	.86	175
Transformational leadership	10	2,397	.67	.75	.26	494.78***	.42	.99	.58	.92	1,134

 Table 2

 Meta-Analysis Results for Authentic Leadership

Note: CV = credibility interval; CI = confidence interval; OCB = organizational citizenship behavior. *p < .05.

***p* < .01.

***p < .001.

A few general patterns for *authentic leadership* emerge from Table 2. First, in every case, a combination of the Q test and an examination of the credibility intervals suggest that significant heterogeneity, or variation between the studies, exists in the relationships. Second, even though 17 relationships met the threshold of 4 samples or higher, in no case were more than 10 effect sizes available for analysis. Given that there were 45 samples total for authentic leadership, this suggested that there was very little consensus in what has been studied along with authentic leadership. The average number of samples per relationship was under 6 (i.e., 5.9), and the average sample size was 1,356. Overall, the combination of a relatively large number of dissertations or theses (44% of the samples), high heterogeneity, and the low number of samples per relationship suggests the authentic leadership results should be interpreted with caution.

A summary of Table 3, and the results associated with *ethical leadership*, suggests a larger extant literature than what existed for authentic leadership. An analysis of the 124 samples found that 20 relationships had the required 4 or more effect sizes. Of the relationships examined, the average number of effect sizes (k) was 15.2 and the average sample size (N) was 3,632. Both of these were between two and three times the comparable values for authentic leadership.

							80%	CV	95%	CI	
Variable	k	N	R	ρ	SDρ	Q	Lower	Upper	Lower	Upper	N_{FS}
Behavioral measures											
Job performance	22	4,904	.22	.25	.06	35.47*	.18	.33	.21	.29	575
Overall OCB	22	5,049	.25	.29	.08	50.90***	.19	.40	.25	.34	672
OCB–I	28	5,396	.24	.28	.10	75.42***	.15	.41	.23	.33	817
OCB–O	16	4,362	.30	.36	.15	100.21***	.17	.56	.28	.44	620
Employee deviance	26	10,889	39	45	.21	435.53***	72	18	53	38	1,273
Turnover intentions	7	2,942	34	37	.11	44.90***	51	24	46	29	276
Dedication (extra effort)	7	2,201	.30	.33	.15	69.66***	.13	.52	.21	.45	236
Attitudinal measures											
Engagement	6	1,335	.35	.39	.10	19.90***	.26	.51	.29	.48	244
Job satisfaction	17	4,578	.45	.50	.11	95.88***	.36	.65	.44	.56	972
Satisfaction with supervisor	10	2,228	.48	.54	.14	74.11***	.36	.71	.44	.63	623
Organizational commitment	14	3,835	.39	.44	.13	89.80***	.27	.60	.36	.51	663
Affective commitment	24	4,873	.42	.48	.15	170.24***	.29	.67	.41	.55	1,289
Continuance commitment	6	858	.05	.08	.13	15.08*	09	.24	07	.20	39
Normative commitment	5	768	.47	.52	.02	0.57	.52	.52	.50	.53	299
Distributive justice	6	799	.50	.59	.15	28.52***	.43	.76	.45	.73	437
Ethical climate	19	3,535	.43	.49	.20	186.27***	.24	.74	.39	.58	1,053
Relational perceptions											
Trust in manager	18	4,105	.58	.66	.27	527.79***	.32	1.00	.54	.79	1,576
Leader-member exchange	18	4,052	.65	.71	.20	352.87***	.45	.96	.63	.81	1,786
Correlates											
Transactional leadership	13	2,232	.61	.69	.19	180.13***	.44	.93	.57	.79	1,208
Transformational leadership	20	3,717	.63	.70	.17	302.30***	.48	.93	.62	.79	1,964

 Table 3

 Meta-Analysis Results for Ethical Leadership

Note: CV = credibility interval; CI = confidence interval; OCB = organizational citizenship behavior; OCB-I = OCB directed toward the individual; OCB-O = OCB directed toward the organization.

p* < .01. *p* < .001.

In terms of general comments, a high degree of heterogeneity existed in the ethical leadership results, with 19 of 20 cases (95%) suggesting significant residual variance among the effects. Compared to the authentic leadership literature, the ethical leadership literature has focused on more detailed aspects of common constructs (e.g., subdimensions of commitment, satisfaction, and citizenship). Overall, the larger number of samples and the higher average sample sizes provide more confidence in the findings associated with ethical leadership than for authentic leadership's extant literature.

The summary of *servant leadership* is presented in Table 4. An overall analysis of the 49 samples finds relatively few relationships that have been looked at consistently. In fact, we were able to identify only 11 relationships with four or more effect sizes. Of these 11 relationships, 9 showed significant heterogeneity. The low number of samples (i.e., average of 6.4) coupled with the relatively low associated average sample sizes (1,637) further

^{*}*p* < .05.

							80%	CV	95%	CI	
Variable	k	N	R	ρ	SDρ	Q	Lower	Upper	Lower	Upper	N _{FS}
Behavioral measures											
Job performance	8	2,077	.20	.23	.08	19.12**	.12	.34	.15	.31	189
Overall OCB	6	2,404	.33	.40	.12	35.04***	.25	.55	.28	.51	262
OCB–I	5	1,674	.33	.35	.17	59.76***	.13	.57	.19	.51	182
OCB-O	4	765	.37	.44	.03	4.61	.41	.48	.36	.51	193
Attitudinal measures											
Engagement	4	959	.47	.52	.00	1.99	.52	.52	.47	.58	241
Job satisfaction	11	2,671	.60	.66	.11	67.00***	.52	.80	.59	.73	957
Organizational commitment	11	2,424	.49	.55	.35	379.33***	.09	.99	.33	.76	706
Affective commitment	5	1,436	.35	.41	.27	124.38***	.07	.75	.18	.65	225
Relational perceptions											
Trust in manager	7	1,886	.63	.71	.12	70.07***	.55	.86	.58	.82	426
Leader-member exchange	4	938	.59	.65	.16	47.80***	.45	.85	.48	.83	342
Correlate											
Transformational leadership	5	774	.47	.52	.08	11.97*	.41	.63	.45	.60	304

 Table 4

 Meta-Analysis Results for Servant Leadership

Note: CV = credibility interval; CI = confidence interval; OCB = organizational citizenship behavior; OCB-I = OCB directed toward the individual; OCB-O = OCB directed toward the organization.

**p* < .05.

***p* < .01.

****p* < .001.

suggests that the extant empirical research associated with servant leadership is somewhat sparse and the research that has been conducted has not had a consistent focus. Overall, the findings associated with servant leadership can be interpreted with a little more confidence than authentic leadership but significantly less confidence than the results associated with ethical leadership.

Nine different criterion variables (in our criterion categories of behavioral, attitudinal, and relational perception measures) were included across at least two of the three emerging leadership forms. Table 5 presents a comparison of the measures included in prior transformational meta-analyses as well as those nine measures we compare with the three leadership forms. Consequently, of the 11 variables presented in Table 5, deviance, engagement, affective commitment, and extra effort are all unique to the current meta-analyses.

A comparison of the scope of the current *transformational leadership* analysis to the scope of previous meta-analyses is also worth mentioning. For example, Judge and Piccolo (2004) included six leadership criteria measures and averaged 23 samples and a sample size of about 4,690. Furthermore, in the summary of meta-analyses in this area, Wang et al. (2011) showed results across 25 different meta-analytically derived relationships including transformational leadership, suggesting that most meta-analyses have included relatively few outcomes, that the average number of studies has been approximately 20, and that the average sample size has been 4,500. Our current analysis averages 70% more samples and more than twice as large of sample sizes as the typical meta-analysis examining transformational leadership.

						95%	CI
Outcome Measure	N	k	r	ρ	SD	Lower	Uppe
Job performance							
Current study	18,129	74	.25	.27	.15	.24	.31
DeGroot, Kiker, & Cross, 2000	715	4	.19	.21	.11	.03	.38
Wang, Oh, Courtright, & Colbert, 2011	16,809	62	.22	.25	.11	.21	.28
Fuller, Patterson, Hester, & Stringer, 1996	4,611	27	.39	.45	.18	.37	.52
Overall OCB							
Current study	18,617	63	.44	.52	.35	.43	.61
Wang et al., 2011	7,970	28	.26	.30	.09	.26	.34
Deviance							
Current study	2,300	10	21	23	.13	32	15
Engagement							
Current study	5,300	14	.44	.48	.27	.35	.63
Job satisfaction							
Current study	20,344	55	.37	.42	.20	.37	.47
DeGroot et al., 2000	3,832	14	.70	.77	.19	.36	1.17
Dumdum, Lowe, & Avolio, 2002	2,175	6	.27	.30	NA	NA	NA
Judge & Piccolo, 2004	5,279	18	NA	.58	NA	NA	NA
Organizational commitment							
Current study	12,583	43	.39	.43	.20	.37	.50
DeGroot et al., 2000	2,040	3	.39	.43	.10	.24	.63
Affective commitment							
Current study	11,835	30	.36	.42	.16	.36	.48
Trust in manager							
Current study	7,048	23	.56	.65	.17	.56	.72
Dirks & Ferrin, 2002	5,657	13	.72	.79	NA	NA	NA
Leader-member exchange							
Current study	4,591	20	.64	.71	.18	.63	.80
Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012	5,451	20	.66	.73	.19	.64	.81
Satisfaction with supervisor							
Current study	16,536	44	.68	.80	.20	.71	.89
Dumdum et al., 2002	2,457	9	.49	.57	NA	NA	NA
Judge & Piccolo, 2004	4,349	23	NA	.71	NA	NA	NA
Fuller et al., 1996	2,680	12	.71	.80	NA	.72	.88
Leader effectiveness							
Current study	20,251	53	.69	.79	.16	.72	.85
DeGroot et al., 2000	5,577	23	.68	.74	.15	.29	.99
Dumdum et al., 2002	7,262	18	.43	.50	NA	NA	NA
Judge & Piccolo, 2004	5,415	27	NA	.64	NA	NA	NA
Lowe, Kroeck, & Sivasubramaniam, 1996	6,485	47	.62	.71	NA	.69	.74
Fuller et al., 1996	1,524	10	.68	.78	NA	.67	.90
Extra effort							
Current study	5,983	22	.71	.85	.17	.73	.98

 Table 5

 Current and Prior Meta-Analyses Results for Transformational Leadership Outcomes

Note: CI = confidence interval; OCB = organizational citizenship behavior.

		v							1		
							80%	CV	95%	CI	
Variable	k	N	R	ρ	SDρ	Q	Lower	Upper	Lower	Upper	N_{FS}
Behavioral measures											
Job performance	74	18,129	.25	.27	.15	464.10***	.08	.47	.24	.31	2,096
Overall OCB	36	10,768	.23	.28	.22	481.35***	.00	.56	.20	.35	1,036
Deviance	10	2,300	21	23	.13	42.09***	39	07	32	15	246
Attitudinal measures											
Engagement	14	5,300	.44	.48	.27	436.82***	14	.82	.35	.63	773
Job satisfaction	55	20,344	.37	.42	.20	897.43***	.16	.67	.37	.47	2,517
Organizational commitment	43	12,583	.39	.43	.20	605.34***	.18	.68	.37	.50	2,048
Affective commitment	30	11,835	.36	.42	.16	361.17***	.21	.62	.36	.48	1,369
Relational perceptions											
Trust in manager	23	7,048	.56	.65	.17	371.98***	.43	.87	.56	.72	1,964
Leader-member exchange	20	4,591	.64	.71	.18	358.61***	.48	.94	.63	.80	2,041

 Table 6

 Meta-Analysis Results for Transformational Leadership

Note: CV = credibility interval; CI = confidence interval; OCB = organizational citizenship behavior.

*****p* < .001.

The analysis of the 179 transformational leadership samples indicated that compared to any of the three ethical/values-based leadership forms, the size of the extant research is substantial. For the results, the average number of samples was nearly 34 (i.e., 33.9) and the associated average sample size was 10,313. Considering that we used only the nine variables examined by the new forms of leadership as a guide for the variables included in the transformational leadership analysis, the size of this meta-analyses is even more impressive. For the full results associated with transformational leadership meta-analysis, please see Table 6.

Much like the emerging forms of positive leadership, the transformational leadership results suggested significant heterogeneity in the extant literature. Every relationship tested had significant variation when examined with either the Q results or the size of the credibility interval.

Relative Weights Analysis Results

We conducted a series of relative weights analyses based upon the regression models explained above. These analyses were conducted using the guidelines set forth by Tonidandel and LeBreton (2011). The results of these analyses are shown in Table 7.

In Table 7, the regression results are not being interpreted "incrementally" (unlike the incremental analyses to follow) but, rather, these results put each leadership form on an equal footing and then assessed their relative contribution. Although there are certainly some notable patterns across Table 7. Despite some exceptions (e.g., transformational leadership played a dominant role when it came to explaining job performance but was less

^{*}*p* < .05. ***p* < .01.

	Transfor	mational	Leadership			
Criterion Variable	AL	TL	EL	TL	SL	TL
Behavioral measures						
Job performance	16.93	83.07	43.52	56.48	38.08	61.92
Overall OCB	63.70	36.30	52.98	47.02	74.42	25.58
Employee deviance	57.20	42.80	84.52	15.48		
Attitudinal measures						
Employee engagement	48.16	51.84	33.42	66.58	56.05	43.95
Job satisfaction	61.31	38.69	64.18	35.82	79.21	20.79
Organizational commitment	69.39	30.61	51.95	48.05	67.77	32.23
Affective commitment	68.52	31.48	61.05	38.95	48.17	51.83
Relational perceptions						
Trust in supervisor	55.19	44.81	51.30	48.70	56.66	43.34
Leader-member exchange	50.00	50.00	50.00	50.00	43.34	56.66

 Table 7

 Relative Weights Analysis of Authentic, Ethical, and Servant Leadership Versus

 Transformational Leadership

Note: AL = authentic leadership; TL = transformational leadership; EL = ethical leadership; SL = servant leadership; OCB = organizational citizenship behavior.

related to OCB, overall organizational commitment, and trust than the new forms), the newer leadership forms documented somewhat stronger associations with the criterion variables than transformational leadership. More specifically, servant leadership averaged a relative weight of 58%, ethical leadership almost 55%, and authentic leadership over 54%. So, in all cases, the new forms of leadership had higher average relative weights than did transformational leadership.

Incremental Variance Results

Now that the results associated with the individual leadership approaches have been presented, the incremental variance can be directly assessed. As explained earlier, this was done by creating a series of small models that included the relationships between transformational leadership, a criterion variable, and one of the new leadership forms. This allowed us to examine the incremental variance (if any) explained by the new form of leadership beyond that explained by transformational leadership across a series of criterion measures. Consistent with the recommendation of Viswesvaran and Ones (1995), the harmonic mean of the different correlation populations was used for the sample size in each of these analyses.

The nine different criterion variables, which were included across at least two of the three emerging leadership forms, were the behavioral outcomes of job performance, OCBs, and deviance; the attitudinal outcomes of employee engagement, general job satisfaction, overall organizational commitment, and affective commitment; and the relational perceptions of trust and LMX.

The remaining step required us to utilize correlations between the three ethical/moral values-based leadership forms and transformational leadership. Results of these analyses are presented in Table 8 and the results represent a bit of a double-edged sword when it comes to their ability to answer the central question of whether the new forms of leadership explain

	R^2 of TI Only.	R ² of TL	N for Model		% of Total 22 Over TI	R ² of TL	N for Model		% of Total	R ² of TL	N for Model		% of Total
Criterion Variable	(a) ^a	Model (b)	(p) ^b	(a-b)	by AL	Model (c)	(c) ^b	(c –a)	by EL	Model (d)	(d) ^b	(d –a)	by SL
Behavioral measures													
Job performance	.07	60.	3,163	.02	22	.08	5,681	.01	13	.08	1,641	.01	13
Overall OCB	.08	.11	2,297	.03	27	.10	5,358	.02	20	.17	1,666	60.	53
Employee deviance	.05	.07	1,762	.02	29	.22	3,770	.17	77				
Attitudinal measures													
Employee engagement	.23	.26	2,066	.03	12	.24	2,486	.01	4	.33	1,189	.10	30
Job satisfaction	.18	.24	3,204	.06	25	.26	5,590	.08	31	.44	1,749	.26	59
Organizational commitment	t18	.24	1,713	.06	25	.22	4,924	.04	18	.33	1,682	.15	45
Affective commitment	.18	.28	2,226	.10	36	.24	2,857	.06	25	.23	1,447	.05	22
Relational perceptions													
Trust in supervisor	.42	.52	1,834	.10	19	.50	4,583	.08	16	.61	1,527	.19	31
Leader-member exchange	.50	.55	2,279	.05	6	.59	4,089	60.	15	.61	1,164	11.	18

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^aSample sizes are the same as the N column in Table 6. ^bValues are harmonic means.

variance beyond transformational leadership. As a result of the large sample sizes in Table 8, all of the incremental variance results are statistically significant.

An examination of the results associated with the behavioral measures suggests that consistent with expectations, all three of the ethical/moral values–based leadership forms explained very little incremental variance in job performance. More specifically, in no case did the three emerging forms explain more than 2% incremental variance, above transformational leadership, in employee job performance.

Our expectations for OCBs and deviance were that the ethical/moral values-based leadership forms would provide additional variance. However, the results were mixed. When it came to OCBs, transformational leadership explained relatively little variance on its own (8%) that made incremental contributions easier to achieve. The results showed that servant leadership explained an additional 9% of variance in OCB but that neither of the other leadership forms were particularly consequential. For deviance, ethical leadership contributed an additional 17% of variance and represented 77% of the total variance explained by transformational leadership along with ethical leadership. In sum, servant leadership's incremental contribution to OCB and ethical leadership's contribution to explaining employee deviance were both substantial, but the other relationships did not support the expected role of the emerging leadership forms.

When it came to the attitudinal measures, our literature review suggested that overall and affective commitment would be more central to the new forms of leadership than engagement and job satisfaction. The results, however, did not find much of a difference for the attitudes assessed but did show some significant differences in terms of the leadership forms. More specifically, servant leadership explained important incremental variance in employee engagement and job satisfaction. Servant leadership also explained 15% of incremental variance beyond transformational leadership when it came to organizational commitment. Ethical leadership was relatively important in providing incremental variance in job satisfaction but less so in the other attitudinal measures. In a similar manner, authentic leadership explained 10% of incremental variance in affective commitment but was considerably less important when it came to explaining incremental variance in overall commitment, job satisfaction, or employee engagement. As a result, the expectations suggesting that the new forms of leadership would be more highly associated with the forms of commitment than engagement and job satisfaction were not supported as they were about equally useful in explaining each set of employee outcomes.

The last category of variables examined was that of relational perceptions. On the basis of the large amount of variance that transformational leadership shares with trust (Dirks & Ferrin, 2002) and LMX (Dulebohn et al., 2012), we expected the new forms of positive leadership to not explain incremental variance in either trust or LMX. The results for these two measures, however, explained more incremental variance than was expected. More specifically, all three leadership forms (authentic, ethical, and servant) explained significant incremental variance in trust in supervisor, and two of the forms (ethical and servant leadership) added relatively high levels of incremental variance explaining variance in LMX.

Another way to assess the marginal contribution of the emerging leadership forms is to calculate how much variance, on average, each form explained across the outcomes, as presented in Table 8. This analysis confirms that the three forms are certainly not equal in their ability to explain additional variance. Specifically, authentic leadership averaged about 5.2%,

ethical leadership 6.2%, and servant leadership 12%. Clearly, servant leadership was much better able to explain incremental variance in the outcomes than either authentic or ethical leadership.

Discussion

The present research had multiple objectives. First, we sought to report the findings of broad-based meta-analyses for three forms of positive leadership. Second, we wanted to present a large-scale analysis of transformational leadership across a collection of important employee measures. Third, we set out to present the relative relationships comparing transformational leadership to the new leadership forms across a collection of organizationally relevant measures. Fourth, and most importantly, using the results of these meta-analyses, we set out to test the incremental variance explained across multiple organizationally relevant measures by each of these newer leadership forms above that explained by transformational leadership. This focus on the relative importance of authentic, ethical, and servant leadership as predictors of follower behaviors, attitudes, and relational perceptions, beyond transformational leadership, provides a step toward integrating the research literature on these positive leadership theories as well as investigating possible construct redundancy.

Scholars have pointed out that the organizational sciences are plagued by construct proliferation and, consequently, construct redundancy (Le, Schmidt, Harter, & Lauver, 2010; Morrow, 1983; Schwab, 1980). In describing this, Le et al. wrote that

new constructs similar to existing ones are frequently proposed (the "old wine in new bottles" phenomenon). Many such constructs may lack discriminant validity relative to other constructs; that is, they may be redundant with existing constructs and thus be examples of construct proliferation. (112)

These authors further point out two criteria required for construct distinctiveness: conceptual as well as empirical nonredundancy. Conceptual nonredundancy "asks if sound theoretical justification is available to view two constructs as logically different conceptualizations" (Singh, 1991: 256). Empirical nonredundancy is based on the constructs' not being highly correlated and not having the same pattern of relationships with other variables.

Although scholars have described the new leadership forms as being conceptually distinct from transformational leadership, the correlations between transformational leadership and the emerging forms of leadership suggest high associations, providing some evidence of empirical redundancy. Specifically the corrected correlation coefficient between transformational leadership and authentic leadership (.75) was high, as was the correlation between transformational neadership and ethical leadership (.70). The correlation between transformational and servant leadership, however, was substantively lower and would generally be classified as moderate (.52), pointing toward empirical distinctness. It should be pointed out that the high correlations between both authentic and ethical leadership with transformational leadership could lead to significant collinearity and suppression problems if these measures are used in addition to transformational leadership in a primary study.

Regarding empirical redundancy, in terms of the constructs' having the same pattern of relationships with other variables, the broad-based meta-analyses contributed an interesting

picture of the leadership forms. At a general level, the relationships across the nine common measures were about the same for authentic leadership ($\rho = .45$) as they were for transformational leadership ($\rho = .43$). This finding was mimicked in the relative weight analyses contained in Table 7 as well. A closer examination of Table 8, however, shows that authentic leadership played a particularly important incremental role in the prediction of affective commitment and trust. For the other seven measures, authentic leadership played a varying role, contributing between 2% and 6% to the total variance explained in those measures. Consequently, the analysis evinced construct redundancy, based on the correlation between transformational leadership and authentic leadership ($\rho = .75$) as well as the overall similar pattern of relationships with the majority of variables. Because of the redundancy, the results suggest that authentic leadership scales should not be used to augment transformational leadership in a consistent fashion. If, however, the research goal is to explain a particular outcome (i.e., in this case, likely affective commitment or trust), from a practical perspective, the inclusion of authentic leadership may be warranted. The use of both sets of measures, however, would likely cause significant problems with discriminant validity due to the high correlation between the authentic and transformational leadership scales.

The overall empirical results associated with ethical leadership provide a relatively similar story as that associated with authentic leadership. Much like authentic leadership, ethical leadership had average relationships across the nine measures that were approximately equal to those of transformational leadership ($\rho = .46$ for ethical leadership vs. $\rho = .43$ for transformational leadership with similar results presented in Table 7 from the relative weights analyses). Also similar to authentic leadership, the analysis did not support construct nonredundancy, based on the correlation between transformational leadership and ethical leadership ($\rho = .70$) as well as an overall similar pattern of relationships with the other variables. It was primarily when deviance and job satisfaction were being explained that ethical leadership played an important incremental role. Thus, the results do not support using ethical leadership as a measure to augment transformational leadership unless some relatively specific measures, such as deviance or job satisfaction, are the research focus.

With respect to servant leadership, it is important to remember that the extant research is not as comprehensive or as extensive as it is for ethical leadership. Overall, servant leadership had a somewhat higher average correlation with the outcomes ($\rho = .51$) than transformational leadership ($\rho = .43$) as well as higher relative weights as noted in Table 7. Because of the lower correlation ($\rho = .52$) with transformational leadership coupled with somewhat higher average correlations with the outcomes, servant leadership added incremental variance to more of the measures than the other two ethical/moral values–based leadership forms. On average, it added about 12% to the variance explained in the measures beyond that explained by transformational leadership alone. This was almost twice as high as that associated with ethical leadership and more than twice the amount contributed by authentic leadership. Thus, when researchers want to explain OCBs, engagement, job satisfaction, overall commitment, trust, or LMX, including servant leadership should provide a practical strategy.

Although servant leadership is the only emerging form that seems to support construct nonredundancy, the overall results are suggestive of specific gaps in transformational leadership and improvements in variance explained, which these forms of positive leadership fill. Thus, while each new leadership form has significant limitations, our analyses also pointed to some limitations in transformational leadership.

Moral Dimension for Transformational Leadership

As noted, although Burns (1978) viewed morality as an integral aspect of transformational leadership, Bass's (1985) initial position was that transformational leadership could vary in terms of morality. Specifically, Burns viewed transformational leadership as occurring when leaders engage with followers to raise one another to a higher level of motivation and morality. Burns stated that "the result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents" (4). In contrast, Bass's (1985) initial concept of transformational leadership posited transformational leaders as potentially virtuous or nonvirtuous (Bass & Steidlmeier, 1999). While Bass "originally argued that transformational leaders could wear the black hats of villains or the white hats of heroes depending on their values," he later stated that "only those who wear white hats are seen as truly transformational. Those in black hats are now seen as pseudo-transformational" (Bass & Steidlmeier, 1999).

Bass (1985) operationalized transformational leadership through his development of the Multifactor Leadership Questionnaire (MLQ), which has represented the primary instrument for measuring transformational leadership. The first version of the MLQ included three dimensions of transformational leadership, including charisma, individual consideration, and intellectual stimulation. In subsequent versions of the MLQ, the charisma factor was divided into two factors resulting in the four factors of idealized influence, inspirational motivation, individual consideration, and intellectual stimulation (Bass & Avolio, 1995). The idealized influence factor of the revised MLQ includes items that reference a values orientation of transformational leaders. For example, this factor includes items such as "Talks about most important values and beliefs" and "Considers the moral and ethical consequences of decisions."

This inclusion of "moral" and "ethical" raises a general issue regarding a subjective standard for defining what moral or ethical is. In addition, the relatively few values-oriented items raise the question regarding the completeness of a moral dimension aspect in the idealized influence factor of the MLQ. Furthermore, while transformational leadership was initially proposed by Burns (1978) to raise followers and leaders to a higher level of morality, transformational research has not supported this assertion (Dvir, Eden, Avolio, & Shamir, 2002). Support, though, has been found for an association between moral development and transformational leadership whereby leaders higher in moral reasoning demonstrated higher levels of transformational leadership (Turner, Barling, Epitropaki, Butcher, & Milner, 2002).

Overall, the results suggest that the MLQ's four dimensions for transformational leadership could be augmented by including a fifth explicit ethical dimension. This would be expected to particularly increase the power of the scale to explain employee outcomes. All three of the emerging forms emphasize social learning and behavioral modeling by the leader as a way of influencing followers to engage in normatively appropriate behavior by setting an example of appropriate, "do what is right," behaviors. In some respects, the Transformational Leadership Index (TLI) operationalization of Podsakoff, MacKenzie, Moorman, and Fetter (1990) includes a dimension that is similar to what we are suggesting here. Their TLI includes a dimension called "providing an appropriate model" that explicitly refers to setting a "positive example for others to follow" and leading by "doing rather than by telling." While this operationalization gets closer than the MLQ to representing an explicit ethical dimension, it is still not as robust of a conceptualization as is likely needed to adequately capture the incremental variance associated with a leader's ethical/moral behavior.

Implications

Consistent with previous meta-analyses (e.g., Eagly et al., 2003; Judge & Piccolo, 2004), one of the research implications of this study is that transformational leadership has generally high validity for explaining behavioral, attitudinal, and relational perception outcomes of followers. The relatively low levels of variance explained beyond transformational leadership by authentic leadership and ethical leadership coupled with the very high correlations between these two leadership forms and transformational leadership suggest the two emerging forms of ethically oriented leadership are of relatively limited usefulness in their current forms. While both authentic and ethical leadership may be useful ways to better understand a few focused employee outcomes (e.g., employee deviance), the empirical evidence does not suggest that either leadership approach (as they are currently operationalized) offer much that transformational leadership does not already provide.

Servant leadership, however, was found to be of significant utility across a fairly wide breadth of measures. This is likely true for a number of empirical and conceptual reasons. Empirically, servant leadership's low correlation with transformational leadership along with its high correlations with a large number of outcomes, make it attractive for future research and usage. Moreover, servant leadership's conceptual distinctness, which focuses upon the leader viewing his or her role as that of a servant rather than as a "master" provides an important distinction for researchers and practitioners alike.

From a practical perspective, the ethical component of ethical and authentic leadership had some incremental effects, suggesting that organizations trying to promote transformational leadership as well as enhance the specific outcomes may benefit from training managers in moral and/or ethical behavior. This effort would be facilitated by prescriptive research that identifies normative ethical/moral leader behaviors. Beyond training, incorporating an ethical/moral dimension in evaluation criteria could facilitate evaluation of transformational leaders' learning and engaging in these behaviors and influencing their followers to do the same. This could include the moral manager use of both behavioral modeling and transactional rewards to communicate and reinforce ethical behavior. Organizations that demonstrate patterns of unethical leadership could influence authentic and ethical leadership through cultural change and by hiring leaders who demonstrate behaviors consistent with the moral and ethical dimensions comprising the emerging forms of leadership.

Finally, while our focus in this study has been to let the statistical results speak for themselves, a pertinent issue has to do with the practical significance of the findings. The problem of practical versus statistical significance is certainly not a new one; the determination of practical significance can be somewhat subjective, and it is also beyond the scope of this paper (cf. Kirk, 1996). A general rule is that to be practically significant, the incremental validity of a leadership form in predicting an outcome above transformational leadership should be substantial and meaningful (Reeve, 2007). In spite of different judgments of what is practically significant, the results of this study indicate that adding the newer forms of leadership typically yields an increase in variance explained of around .075, which represents an additional 25% of variance explained; we expect this increase to be viewed by organizational scientists and practitioners as practically significant.⁴

Recommendations for Future Research

While these three emerging forms of ethically oriented leadership include a clear moral component, research has provided little prescriptive information as to the specific nature and forms of ethical behaviors. Hannah et al. (2014) highlighted this and explained that research on these positive leadership forms has evaluated leader ethical behavior through the eyes of the follower beholder. Hannah et al. wrote that while "these theories and measures prescribe that morality is a component of their theory, the form or nature of that morality is left to the respondent" (604). We highlighted the deficiency of values-oriented items in transformational leadership's idealized influence dimension, and, in comparison, the three forms of positive leadership are much more inclusive of values-oriented items. In light of the study's findings, indicating that these forms of leadership can explain additional variance in important employee behaviors, future scale development research is needed to identify normative measures that may be used to more uniformly capture the presence or absence of core ethical behaviors by leaders.

Another issue that was apparent when we coded articles was that the majority of studies on these positive forms of leadership have been cross-sectional. Although the call for longitudinal research has become virtually a boilerplate for future research suggestions, in the case of these leadership forms, this recommendation takes on special importance because the effect of leadership occurs over time. The best way to assess the impact of various leadership forms is through longitudinal research that will contribute to our knowing substantially more about the behavioral, attitudinal, and relational perception effects of the new leadership forms.

Furthermore, our review revealed a noticeable gap in research on antecedents of these emerging leadership forms. The primary emphasis in research to date has been on outcomes; thus, our focus in this review. A review of research on other leadership forms has demonstrated a similar trend. For example, this was the case with early research on LMX, as evidenced by Gerstner and Day's (1997) meta-analysis that was able to focus only on outcomes. In contrast, due to a larger literature base, the Dulebohn et al. (2012) meta-analysis was able to include relevant antecedents as well as consequences of LMX. Consequently, we encourage researchers to investigate antecedents in the operation of ethical leadership behaviors.

Limitations

The primary limitation to our findings was the quality and consistency of the extant research available. These concerns are more significant for authentic leadership and servant leadership than for ethical leadership but are relevant for all of the new leadership forms. The level of journals and the prevalence of unpublished and dissertation studies is common early in the life cycle of any research area, but the general quality of publication outlets causes concern regarding the extent data's quality. Furthermore, there has been little consistency in the research on these leadership forms, which makes comparing their associations with outcomes more difficult and subsequently limits knowledge accumulation. We encourage future research in this area to collect data on widely used attitudinal, behavioral, and relational perception measures.

Beyond the quality and consistency issues mentioned above, limitations more specific to our procedures and analyses are also relevant. As noted by a number of researchers (cf. Aguinis, Dalton, Bosco, Pierce, & Dalton, 2010), every meta-analytic study is subject to a variety of judgment calls. For example, one involves determining the population of relevant studies. Others involve coding data. To mitigate bias for the first, as described above, we did an exhaustive search of studies on these positive leadership forms. Second, to address coding issues, multiple raters coded the data and resolved their differences to minimize judgment impacts. In spite of these efforts, these decisions may have unintentionally influenced the findings.

An additional limitation is related to our use of the small number of available studies to estimate some effect sizes. More specifically, a relatively small number of studies (in our case, four) were used to make an estimate. Small-sample meta-analyses may be affected by individual study findings as a result of random sample selection in the studies themselves, and the aggregate estimates may be affected as a result of second-order sampling error (J. E. Hunter & Schmidt, 1990). Furthermore, when effect sizes are derived from a small number of studies, existing outliers or the addition of new studies with divergent results can strongly influence those estimates (J. E. Hunter & Schmidt, 1990). Thus, those estimates in this study, which are based on small samples, should be interpreted cautiously.

For example, the relationship between servant leadership and transformational leadership was based on five samples with a total of 774 employees. If these five samples and the relatively small sample size are not reflective of the "true" relationship between servant and transformational leadership, the conclusions about the potential promise of servant leadership as being a unique positive leadership form may not hold up to further scrutiny. These concerns are most serious for authentic and servant leadership and a number of their associated outcomes. This limitation is of less concern when it comes to the findings associated with ethical and certainly transformational leadership since both have larger extant literatures. Thus, future researchers should conduct subsequent meta-analyses on these emerging forms of leadership when the extant literature is larger in order to make inferences based on larger populations. While keeping in mind the potential limitations due to a small number of studies, Schmidt and colleagues concluded that "even with small numbers of studies and small Ns, meta-analysis is the still optimal method for integrating findings across studies" (1985: 749).

Next, the prevalence of same source data in the extant literature potentially biased results for a number of variables, potentially inflating the relationships as a result of common method variance (cf. Podsakoff & Organ, 1986). However, several of our correlate measures were provided by supervisor ratings, and the use of dissimilar source data mitigates common method variance in those relationships reported by studies included in this meta-analysis. Also, since studies in our analysis were cross-sectional, this prevents the establishment of causal direction.

Finally, a potential limitation is associated with the most common scale used to assess transformational leadership, the MLQ. Some early versions of the MLQ were critiqued as having items that contained both leader behaviors and outcomes (DeGroot et al., 2000). Outcomes included leader effectiveness, satisfaction with leader, and extra effort. Thus, the common source for leader transformational leadership and these three outcomes could potentially bias the overall results in favor of transformational leadership's efficacy. We present the meta-analysis results for these three outcomes in Table 5, but we were not able to include them in the comparative analyses because of the paucity of these outcomes in studies using the other three leadership forms.

Conclusion

The present study compared three ethical/moral values-based leadership forms (authentic leadership, ethical leadership, and servant leadership) with transformational leadership in their associations with a large set of organizationally relevant criterion measures. The results demonstrated incremental validity for some employee attitudes, behaviors, and perceptions resulting from the three leadership forms. The results also revealed that authentic and ethical leadership display significant construct redundancy as evidenced by their high correlations with transformational leadership and their overall similar pattern of associations with other measures. Consequently, the use of these two leadership forms appears problematic, likely narrowing their usefulness to specific instances where a relatively limited set of measures are the focus. In contrast, results revealed that servant leadership appears to exhibit a higher degree of conceptual and empirical distinctness from transformational leadership. At this point, the extant research for servant leadership is rather limited but it appears promising.

The results also indicated that transformational leadership, by itself, is a robust predictor of most of the outcomes examined in this meta-analysis. While underscoring the effectiveness of transformational leadership, in explaining employee behaviors, attitudes, and relational perceptions, the strong moral dimensions presented by these newer leadership forms appear to address a deficiency in transformational leadership. The development of these three leadership theories and subsequent research has underscored the relevance of a moral dimension within effective leadership in influencing followers. Thus, we argue that including an explicit moral or ethical dimension in transformational leadership could potentially contribute to transformational leadership being even more effective in explaining important employee or follower outcomes.

Notes

1. Google Scholar search conducted May 2016.

2. Although some may argue that leader-member exchange (LMX) could also be a relevant comparison, LMX focuses on the dyadic relationships and relational quality between leaders and followers rather than describing leader behaviors (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012). It is this specific focus upon leadership behaviors that makes transformational leadership the relevant leadership approach for testing the relative contribution and distinctness of the emerging leadership forms.

3. Although servant leadership was proposed by Greenleaf (1970), in his book *The Servant as Leader*, prior to Burns's (1978) transformational leadership, only during the past decade have leadership researchers directed significant research attention to examining servant leadership.

4. The authors express appreciation to the editor, Brian Hoffman, for this point.

References

- Aguinis, H., Dalton, D. R., Bosco, F. A., Pierce, C. A., & Dalton, C. M. 2010. Meta-analytic choices and judgment calls: Implications for theory building and testing, obtained effect sizes, and scholarly impact. *Journal of Management*, 37: 5-38.
- Avolio, B. J., & Gardner, W. L. 2005. Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16: 315-338.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. 2004. Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15: 801-823.
- Avolio, B. J., & Luthans, F. 2006. *High impact leader: Moments matter in authentic leadership development*. New York: McGraw-Hill.

- Bandura, A. 1986. Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
- Barbuto, J. E., & Wheeler, D. W. 2006. Scale development and construct clarification of servant leadership. Group & Organization Management, 31: 300-326.
- Bass, B. M. 1985. Leadership and performance beyond expectations. New York: Free Press.
- Bass, B. M. 1998. Transformational leadership: Industrial, military, and educational impact. Mahwah, NJ: Erlbaum.
- Bass, B. M. 2000. The future of leadership in learning organizations. Journal of Leadership & Organizational Studies, 7: 18-40.
- Bass, B. M., & Avolio, B. J. 1995. The Multifactor Leadership Questionnaire. Palo Alto, CA: Mind Garden.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. 2003. Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88: 207-218.
- Bass, B. M., & Riggio, R. E. 2006. Transformational leadership. Mahwah, NJ: Erlbaum.
- Bass, B. M., & Steidlmeier, P. 1999. Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, 10: 181-217.
- Bedi, A., Alpaslan, C. M., & Green, S. in press. A meta-analytic review of ethical leadership outcomes and moderators. *Journal of Business Ethics*. doi:10.1007/S10551-015-2625-1
- Bono, J. E., & Judge, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46: 554-571.
- Brown, M. E., & Treviño, L. K. 2006. Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17: 595-616.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. 2005. Ethical leadership: A social learning perspective for construct development and testing. Organizational Behavior and Human Decision Processes, 97: 117-134.
- Burns, J. M. 1978. Leadership. New York: Free Press.
- Chan, C. S., & Mak, W. M. 2014. The impact of servant leadership and subordinates' organizational tenure on trust in leader and attitudes. *Personnel Review*, 43: 272-287.
- Cole, M. S., Walter, F., Bedeian, A. G., & O'Boyle, E. H. 2012. Job burnout and employee engagement: A metaanalytic examination of construct proliferation. *Journal of Management*, 38: 1550-1581.
- Conger, J. A., & Kanungo, R. N. 1988. The empowerment process: Integrating theory and practice. Academy of Management Review, 13: 471-482.
- DeGroot, T., Kiker, D. S., & Cross, T. C. 2000. A meta-analysis to review organizational outcomes related to charismatic leadership. *Revue Canadienne des Sciences de l'Administration*, 17: 356-372.
- Den Hartog, D. N., & Belschak, F. D. 2012. Work engagement and Machiavellianism in the ethical leadership process. *Journal of Business Ethics*, 107: 35-47.
- DeRue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. 2011. Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64: 7-52.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. 2014. Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25: 36-62.
- Dirks, K. T., & Ferrin, D. L. 2002. Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87: 611-628.
- Dulebohn, J. H., Bommer, W., Liden, R., Brouer, R. L., & Ferris, G. R. 2012. A meta-analysis of the antecedents of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38: 1715-1759.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. 2002. A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. J. Avolio & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead*: 35-66. Oxford, England: Elsevier Science.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. 2002. Impact of transformational leadership on follower development and performance: A field experiment. Academy of Management Journal, 45: 735-744.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. 2003. Transformational, transactional, and laissezfaire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin*, 129: 569-591.
- Fastenburg, D. 2010. Top 10 worst bosses. Time, October 18.
- Fuller, J. B., Patterson, C. E., Hester, K., & Stringer, D. Y. 1996. A quantitative review of research on charismatic leadership. *Psychological Reports*, 78: 271-287.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. O. 2005. Can you see the real me? A selfbased model of authentic leader and follower development. *The Leadership Quarterly*, 16: 343-372.

- Gerstner, C. R., & Day, D. V. 1997. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82: 827-844.
- Greenleaf, R. K. 1970. The servant as leader. Indianapolis: Robert K. Greenleaf Center.
- Greenleaf, R. K. 1977. Servant-leadership: A journey into the nature of legitimate power and greatness. Mahwah, NJ: Paulist Press.
- Hannah, S. T., Sumanth, J. J., Lester, P., & Cavarretta, F. 2014. Debunking the false dichotomy of leadership idealism and pragmatism: Critical evaluation and support of newer genre leadership theories. *Journal of Organizational Behavior*, 35: 598-621.
- Haynes, S. N., & Lench, H. C. 2003. Incremental validity of new clinical assessment measures. *Psychological Assessment*, 15: 456-466.
- Hu, J., & Liden, R. C. 2013. Relative leader–member exchange within team contexts: How and when social comparison impacts individual effectiveness. *Personnel Psychology*, 66: 127-172.
- Hunsley, J., & Meyer, G. J. 2003. The incremental validity of psychological testing and assessment: Conceptual, methodological, and statistical issues. *Psychological Assessment*, 15: 446-455.
- Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M., & Weinberger, E. 2013. Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *The Leadership Quarterly*, 24: 316-331.
- Hunter, J. E., & Schmidt, F. L. 1990. Methods of meta-analysis: Correcting error and bias in research findings. Beverly Hills, CA: Sage.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. 2005. Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16: 373-394.
- Judge, T. A., & Piccolo, R. F. 2004. Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89: 755-768.
- Keith, K. 2008. The case for servant leadership. Westfield, IN: The Greenleaf Center for Servant Leadership.
- Kirk, R. E. 1996. Practical significance: A concept whose time has come. Educational and Psychological Measurement, 56: 746-759.
- Le, H., Schmidt, F. L., Harter, J. K., & Lauver, K. J. 2010. The problem of empirical redundancy of constructs in organizational research: An empirical investigation. Organizational Behavior and Human Decision Processes, 112: 112-125.
- LePine, J. A., Erez, A., & Johnson, D. E. 2002. The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87: 52-65.
- Leroy, H., Palanski, M. E., & Simons, T. 2012. Authentic leadership and behavioral integrity as drivers of follower commitment and performance. *Journal of Business Ethics*, 107: 255-264.
- Liao, H., & Chuang, A. 2007. Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92: 1006-1019.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. 2008. Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19: 161-177.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. 1996. Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7: 385-425.
- Luthans, F., & Avolio, B. J. 2003. Authentic leadership development. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship*: 241-258. San Francisco: Berrett-Koehler.
- Luthans, F., & Avolio, B. J. 2009. The "point" of positive organizational behavior. *Journal of Organizational Behavior*, 30: 291-307.
- Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. 2012. Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 55: 151-171.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. 2009. How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108: 1-13.
- Meyer, J. P., & Allen, N. J. 1984. Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69: 372-378.
- Morrow, P. C. 1983. Concept redundancy in organizational research: The case of work commitment. Academy of Management Review, 8: 486-500.
- Mowday, R. T., & Steers, R. M. 1979. The measure of organizational commitment. *Journal of Vocational Behavior*, 14: 224-247.

- Neider, L. L., & Schriesheim, C. A. 2011. The Authentic Leadership Inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, 22: 1146-1164.
- Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A., & Chonko, L. B. 2009. The virtuous influence of ethical leadership behavior: Evidence from the field. *Journal of Business Ethics*, 90: 157-170.
- Ng, T. W., & Feldman, D. C. 2015. Idiosyncratic deals and voice behavior. Journal of Management, 41: 893-928.

Northouse, S. G. 2010. Leadership, theory and practice. Thousand Oaks, CA: Sage.

- Podsakoff, P. M., Bommer, W. H., Podsakoff, N. P., & MacKenzie, S. B. 2006. Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions, and behaviors: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes*, 99: 113-142.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1: 107-142.
- Podsakoff, P. M., & Organ, D. W. 1986. Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12: 531-544.
- Price, T. L. 2003. The ethics of authentic transformational leadership. The Leadership Quarterly, 14: 67-81.
- Reeve, C. L. 2007. Cognitive abilities. In S. G. Rogelberg (Ed.), *Encyclopedia of industrial and organizational psychology*: 76-78. Thousand Oaks, CA: Sage.
- Riggio, R. E., Zhu, W., Reina, C., & Maroosis, J. A. 2010. Virtue-based measurement of ethical leadership: The Leadership Virtues Questionnaire. *Consulting Psychology Journal: Practice and Research*, 62: 235-250.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. 2002. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3: 71-92.
- Schmidt, F. L., Hunter, J. E., Pearlman, K., Hirsh, H. R., Sackett, P. R., Schmitt, N., Tenopyr, M. L., Kehoe, J., & Zedeck, S. 1985. Forty questions about validity generalization and meta-analysis. *Personnel Psychology*, 38: 697-798.
- Schwab, D. P. 1980. Construct validity in organizational behavior. Research in Organizational Behavior, 2: 3-43.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. Organization Science, 4: 577-594.
- Singh, J. 1991. Redundancy in constructs: Problem, assessment, and an illustrative example. Journal of Business Research, 22: 255-280.
- Spears, L. C. 2010. Character and servant leadership: Ten characteristics of effective, caring leaders. *The Journal of Virtues & Leadership*, 1: 25-30.
- Stone, A. G., Russell, R., & Patterson, K. 2003. Transformational versus servant leadership: A difference in leader focus. *Leadership and Organization Development Journal*, 25: 349-364.
- Tonidandel, S., & LeBreton, J. M. 2011. Relative weights analysis: A useful supplement to regression analysis. Journal of Business and Psychology, 26: 1-9.
- Tourish, D. 2013. The dark side of transformational leadership: A critical perspective. *Development and Learning in Organizations*, 28: 238-240.
- Turner, N., Barling, J., Epitropaki, O., Butcher, V., & Milner, C. 2002. Transformational leadership and moral reasoning. *Journal of Applied Psychology*, 87: 304-311.
- Turner, N., Barling, J., & Zacharatos, A. 2002. Positive psychology at work. In C. R. Snyder & S. J. Lopez (Eds.), Handbook of positive psychology: 715-728. New York: Oxford University Press.
- Van Dierendonck, D., Stam, D., Boersma, P., de Windt, N., & Alkema, J. 2014. Same difference? Exploring the differential mechanisms linking servant leadership and transformational leadership to follower outcomes. *The Leadership Quarterly*, 25: 544-562.
- Viswesvaran, C., & Ones, D. S. 1995. Theory testing: Combining psychometric meta-analysis and structural equations modeling. *Personnel Psychology*, 48: 865-885.
- Wang, G., Oh, I. S., Courtright, S. H., & Colbert, A. E. 2011. Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, 36: 223-270.
- Wong, C. A., Laschinger, H. S., & Cummings, G. G. 2010. Authentic leadership and nurses' voice behaviour and perceptions of care quality. *Journal of Nursing Management*, 18: 889-900.
- Woods, S. A., & West, M. A. 2010. The psychology of work and organizations. London: Cengage.