



Servant Leadership: A Quantitative Review of Instruments and Related Findings

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Abstract

Although Robert K. Greenleaf's servant leadership philosophy is almost 35 years old, only in the past decade have validated instruments been developed and described in peer-reviewed literature. This article provides a review of six instruments that measure constructs related to servant leadership, and summarizes 84 statistical results from 20 quantitative, peer-reviewed studies.

Keywords: Servant leadership instruments, organizational leadership

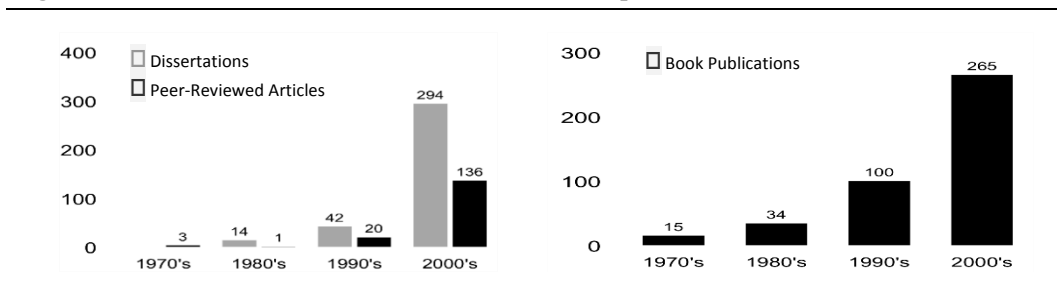
Among many leadership enthusiasts, the idea of being a servant leader is very appealing. However, the implementation of servant leadership brings to mind a bevy of academic queries. For instance, what is the most commonly accepted definition of servant leadership? Also, how do we know if someone is high or low on servant leadership? Finally, can we empirically confirm or deny the effectiveness of servant leadership? Obviously, servant leadership is a theory that needs measurable components. As such, social scientists are charged with developing and validating instruments that will help us gain a better understanding of servant leadership and its related concepts.

Since the 1970s, servant leadership has been a popular philosophy, but it has generally lacked a testable set of constructs. A step toward a more concrete definition occurred when Spears (1995) put forth his 10 aspects of servant leadership. Consequently, several researchers used his work as a foundation from which they were able to develop various models and instruments related to servant leadership. However, despite the appearance of advanced scholarly evolution on this topic, the current conceptual consensus leaves much to be desired. Therefore, true academic achievement with respect to servant leadership will require movement beyond the prevailing status quo of theoretical disunity (Brown & Bryant, 2015).

To that end, our readers will benefit from scholarly evidence presented primarily from a two-pronged approach. First, this article will provide data related to six major instruments that have been used to measure servant leadership. Next, because “more empirical research of servant leadership is needed at multiple levels of analysis in order to increase construct clarity,” (Brown & Bryant, 2015, p. 18) the tables in Appendix A provide a summary of the emerging empirical base for servant leadership. These tables reveal scientifically established relationships between servant leadership and a host of individual, dyadic and organizational level variables. It is our hope that this dual combination of information will serve as the impetus for continued academic inquiry in to the concept of servant leadership.

Figure 1 provides us with a general sense that interest in servant leadership has multiplied since the year 2000. Despite the large amount of attention that servant leadership has received, there is no widely agreed upon model of servant leadership, and there is no widely used instrument to measure servant leadership. Moreover, we do not believe that a sufficient number of studies exists that would allow for the creation of a meta-analysis. This assertion would appear to contradict the work of Hunter and Schmidt (2004) who posit that a minimum of six studies are needed in order to conduct a meta-analysis. To meet that minimum, however, would require that the same independent and dependent variables be used in each of the six studies. Nonetheless, we anxiously await the first meta-analysis on servant leadership, and we are optimistic that this review will serve as a catalyst for such erudite work.

Figure 1. Rise in Publications on Servant Leadership.



LITERATURE REVIEW

Models of Servant Leadership

Parris and Peachey (2013) found that many writers use all or part of Greenleaf's (1977) definition as a foundation for discussing servant leadership. "The best test, and difficult to administer, is: Do those served grow as persons? Do they, *while being served*, become healthier, wiser, freer, more autonomous and more likely themselves to become servants?" (Greenleaf, 1977, p. 6). In addition to Greenleaf's quotation, the two models proposed by Spears (1995, 1998) and Laub (1999) are often used as foundational models of servant leadership. Table 1 provides the constructs posited by Spears and Laub. Table 2 provides the servant leadership constructs created by researchers who have developed instruments over the last decade.

Table 1. The Most Frequently Referenced Models of Servant Leadership.

<i>Spears (1995, 1998)</i>		
Listening	Persuasion	Helping people grow
Empathy	Conceptualization	Community building
Healing	Foresight	
Awareness	Stewardship	
<i>Laub (1999)</i>		
Valuing people	Providing leadership	Displaying authenticity
Building community	Developing people	Sharing leadership

Table 2. Emerging Models of Servant Leadership.

<i>Ehrhart (2004)</i>		
Forming relationships with subordinates	Helping subordinates grow and succeed	Having conceptual skills
Empowering subordinates	Behaving ethically	Creating value for those outside the organization
	Putting subordinates first	
<i>Barbuto and Wheeler (2006)</i>		
Altruistic calling	Emotional healing	Persuasive mapping
Wisdom	Organizational stewardship	
<i>Liden, Wayne, Zhao and Henderson (2008)</i>		
Emotional healing	Helping subordinates grow and succeed	Putting subordinates first
Creating value for the community	Conceptual skills	Behaving ethically
		Empowering
<i>Sendjaya, Sarros and Santora (2008)</i>		
Voluntary subordination	Covenantal relationship	Transcendental spirituality
Authentic self	Responsible morality	Transforming influence
<i>van Dierendonck and Nuijten (2011)</i>		
Empowerment	Interpersonal acceptance	Courage
Standing back	Accountability	Stewardship
Authenticity	Humility	

Measuring Servant Leadership

To date, there are six instruments for which a sufficient amount of psychometric development has been reported in the peer-reviewed literature. First, Laub's (1999) dissertation provides us with details regarding the robust creation of the *Organizational Leadership Assessment*. Second, Ehrhart (2004) successfully reveals discriminant validity for his *Servant Leadership Scale*. Third, Barbuto and Wheeler (2006) provide us with evidence regarding four types of validity (face, convergent, discriminant and predictive) for the *Servant Leadership Questionnaire*; additionally, Mahembe and Engelbrecht (2013) report acceptable reliability scores for this instrument. Fourth, Liden, Wayne, Zhao and Henderson (2008) report empirical data related to face, convergent and predictive validity for their *Servant Leadership Scale*. Fifth, Sendjaya, Sarros and Santora (2008) reveal face validity and content validity with respect to the *Servant Leadership Behavior Scale*. Lastly, van Dierendonck and Nuijten (2011) report convergent validity and acceptable reliability scores for the *Servant Leadership Survey*. Based on these rich forms of empirical evidence, we have elected to include the aforementioned instruments in our review. Table 3 is a listing of these six instruments and their authors.

Table 3. Instruments to Measure Servant Leadership.

Instrument	Author(s)
<i>Organizational Leadership Assessment</i>	Laub (1999)
<i>Servant Leadership Scale</i>	Ehrhart (2004)
<i>Servant Leadership Questionnaire</i>	Barbuto and Wheeler (2006)
<i>Servant Leadership Scale</i>	Liden, Wayne, Zhao and Henderson (2008)
<i>Servant Leadership Behavior Scale</i>	Sendjaya, Sarros and Santora (2008)
<i>Servant Leadership Survey</i>	van Dierendonck and Nuijten (2011)

Organizational Leadership Assessment

The *Organizational Leadership Assessment* indicates that it measures six aspects of servant leadership, as shown in Table 4.

Table 4. Dimensions Measured by the Organizational Leadership Assessment.

Laub (1999)	
Valuing people	Believing in people Serving other's needs before his or her own Receptive, non-judgmental listening
Developing people	Providing opportunities for learning and growth Modeling appropriate behavior Building up others through encouragement and affirmation
Building community	Building strong personal relationships Working collaboratively with others Valuing the differences of others
Displaying authenticity	Being open and accountable to others A willingness to learn from others Maintaining integrity and trust
Providing leadership	Envisioning the future Taking initiative Clarifying goals
Sharing leadership	Facilitating a shared vision Sharing power and releasing control Sharing status and promoting others

Development

Laub (1999) developed the *Organizational Leadership Assessment* as part of his doctoral dissertation. First, he developed a pool of questions based on his review of the literature on servant leadership. In order to bolster his question bank, Laub recruited between 14 and 25 servant leadership experts to participate in a three step *Delphi* process. After the third iteration of the *Delphi* process, the *Organizational Leadership Assessment* contained 80 items. Those items were field tested with 828 participants, and a series of exploratory factor analyses (EFAs) were conducted. Laub found that 27 items loaded on one component (organizational assessment), and 53 items loaded on another component (leadership assessment). After the EFAs, the instrument was reduced to 60 questions in order to decrease the time it took to complete the instrument. Laub reported Cronbach Alpha scores for each subscale in the range of .90 to .93.

Research Acquisition

As of 2015, researchers interested in using the *Organizational Leadership Assessment* should contact Dr. Laub at the OLA Group.

The Servant Leadership Scale (Ehrhart, 2004)

The *Servant Leadership Scale* (Ehrhart, 2004) is based on seven aspects of servant leadership, as shown in Table 5.

Table 5. Dimensions Measured by the Servant Leadership Scale (Ehrhart, 2004)

Forming relationships with subordinates	Putting subordinates first
Empowering subordinates	Having conceptual skills
Helping subordinates grow and succeed	Creating value for those outside the organization
Behaving ethically	

Development

Ehrhart (2004) hypothesized seven aspects of servant leadership and developed 14 questions based on those seven aspects. He administered his *Servant Leadership Scale*, the LMX-7 and the MLQ-5X to 254 employed, university students. Next, he conducted a confirmatory factor analysis (CFA) that included all three measures. The results of the CFA showed loadings for three different factors ($X^2 = 429$, $df = 167$, $CFI = .95$, $SRMR = .04$, $RMSEA = .08$). This lent some support for discriminant validity, the notion that his *Servant Leadership Scale* seemed to be measuring something different from the MLQ-5X and the LMX-7. The average of the correlations between his *Servant Leadership Scale* dimensions and the LMX-7 was .61; other mean correlation scores included .61 for idealized influence, .53 for inspirational motivation, .53 for intellectual stimulation and .56 for individualized consideration.

Research Acquisition

As of 2015, researchers should contact Dr. Ehrhart at San Diego State University in order to acquire permission to use the instrument. The questions for his *Servant Leadership Scale* can be found in Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit level organizational citizenship behavior. *Personnel Psychology*, 57(1), 61–94.

The Servant Leadership Questionnaire

The *Servant Leadership Questionnaire* measures five aspects of servant leadership as shown in Table 6.

Table 6. Dimensions Measured by the Servant Leadership Questionnaire.

Altruistic calling	A leader's deep-rooted desire to make a positive difference in others' lives. A generosity of the spirit consistent with a philanthropic purpose in life.
Emotional healing	A leader's commitment and skill in fostering spiritual recovery from hardship or trauma. Leaders high on emotional healing are highly empathetic and great listeners.

Wisdom	A combination of an awareness of surroundings and anticipation of consequences. Leaders are adept at picking up environmental cues and understanding their implications.
Persuasive mapping	The extent to which leaders use sound reasoning and pragmatic mental frameworks. Leaders are skilled at mapping issues and conceptualizing greater possibilities, and they are compelling when articulating these opportunities.
Organizational stewardship	The extent to which leaders prepare an organization to make a positive contribution to society through community development programs and outreach. An ethic or value for taking responsibility for the well-being of the community.

Development

Barbuto and Wheeler (2006) created a conceptual model using 10 characteristics of servant leadership proposed by Spears (1995). They also added an 11th item (calling). In order to establish face validity, the authors generated between five and seven potential questions for each of the eleven posited factors. Next, they asked 11 experts to place the 56 potential questions into several different categories. After an iteration involving the revision of four questions, the experts were able to place each question into the most appropriate category with more than 80% accuracy. The 56-item version of the questionnaire was then tested with 388 followers. A series of EFAs using *Varimax* and *Oblique* rotations resulted in a reduced, five-factor model; twenty-three questions loaded on the five components with factor loadings greater than .50. A CFA was then conducted on the 23 questions produced by the EFA. With data from 80 leaders, this CFA generally supported the five-factor model ($X^2 = 1,410.69$, $df = 220$, $CFI = .96$, $RFI = .95$, $RMSEA = .10$).

Barbuto and Wheeler (2006) also sought to reveal evidence of three additional types of validity: convergent, discriminant and predictive. In order to establish convergent validity, the 388 followers from the Barbuto and Wheeler (2006) study were also asked to respond to seven leader-member exchange questions from the LMX-7. The five subscales of the *Servant Leadership Questionnaire* were correlated with the overall LMX-7 score in the range of .55 to .73. With respect to discriminant validity, the 388 followers also completed 16 transformational leadership questions from the MLQ-5X. The five subscales of the *Servant Leadership Questionnaire* were correlated with an overall transformational score in the range of .25 to .34. Lastly, in order to establish predictive validity, Barbuto and Wheeler (2006) ran correlations for the three outcome scores from the MLQ-5X. The follower ratings of servant leadership were weakly correlated with follower extra effort (.16 to .27) and moderately correlated with follower satisfaction with the leader (.23 to .44) and leader effectiveness (.27 to .55).

Mahembe and Engelbrecht (2013) conducted their own research study, ran a CFA, and also found a good fit for five, first-order factors ($CFI = .99$, $RFI = .98$, $RMSEA = .06$). With respect to internal reliability, they reported Cronbach's Alpha scores of between .87 and .93 for the five subscales of the *Servant Leadership Questionnaire*.

Research Acquisition

The *Servant Leadership Questionnaire* is copyrighted by Dr. Barbuto and Future Leadership. As of 2015, researchers should contact Dr. Barbuto at California State University, Fullerton to acquire permission to use the instrument. The *Servant Leadership Questionnaire* is included in Barbuto Jr., J. E., and Wheeler, D. W. (2006). Scale Development and Construct Clarification of Servant Leadership. *Group & Organization Management*, 31(3), 300-326.

The Servant Leadership Scale (Liden et al., 2008)

The *Servant Leadership Scale* (Liden et al., 2008) measures seven dimensions of servant leadership, as shown in Table 7.

Table 7. Dimensions Measured by the Servant Leadership Scale (Liden et al., 2008).

Emotional healing	The act of showing sensitivity to others' personal concerns.
Creating value for the community	A conscious, genuine concern for helping the community.
Conceptual skills	Possessing knowledge of the organization and tasks to be accomplished. Effectively supporting and assisting others, especially immediate followers.
Empowering	Encouraging and facilitating others, especially immediate followers, in identifying and solving problems. Determining when and how to complete work tasks.
Helping subordinates grow and succeed	Demonstrating genuine concern for others' career growth and development by providing support and mentoring.
Putting subordinates first	Using actions and words to make it clear to others, especially immediate followers, that satisfying their work needs is a priority.
Behaving ethically	Interacting openly, fairly, and honestly with others.

Development

Liden et al. (2008) began with a conceptual model that included nine characteristics of servant leadership: emotional healing, empowering, creating value for the community, helping subordinates grow and succeed, relationships, conceptual skills, behaving ethically, putting subordinates first, and servanthood. The authors sought to establish three types of validity: face, convergent and predictive. In order to show face validity,

they reviewed extant servant leadership instruments by Page and Wong (2000), Ehrhart (2004) and Barbuto and Wheeler (2006). Next, they created 85 potential questions to measure the nine characteristics from their conceptual model. From a sample of 283 undergraduate students, an EFA was run on responses to the 85 questions. Seven distinguishable factors were found. Relationships and servanthood failed to load on a single factor and were eliminated from the instrument. The authors kept four questions from each of the seven factors that had the highest factor loadings in order to create a 28-item version of their instrument. Scale reliabilities were as follows: conceptual skills ($\alpha = .86$), empowering ($\alpha = .90$), helping subordinates grow and succeed ($\alpha = .90$), putting subordinates first ($\alpha = .91$), behaving ethically ($\alpha = .90$), emotional healing ($\alpha = .89$) and creating value for the community ($\alpha = .89$).

Following the EFA, a CFA was conducted with data obtained from 182 followers who rated their superiors. The authors tested multiple models using CFAs and concluded that a seven-factor model was most appropriate ($X^2 = 549$, $df = 329$, $CFI = .98$, $SRMR = .05$, $RMSEA = .06$). In order to establish convergent validity, the authors found that all seven servant leadership dimensions were moderately to strongly correlated with transformational leadership (.43 to .79) and high-quality leader-member exchange (.48 to .75). Finally, as a means of establishing predictive validity, Liden et al. (2008) found that the seven dimensions of their instrument were weakly to moderately correlated with the affective commitment scale of the *Organizational Commitment Questionnaire* (.18 to .45).

Research Acquisition

As of 2015, researchers should request permission to use the *Servant Leadership Scale* (Liden, et. al., 2008) from Dr. Liden at the University of Illinois at Chicago. The instrument can be found in Liden, R., Wayne, S., Zhao, H. and Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *Leadership Quarterly*, 19(2), 161-177.

The Servant Leadership Behavior Scale

The *Servant Leadership Behavior Scale* measures six dimensions of servant leadership, as shown in Table 8.

Table 8. Dimensions Measured by the Servant Leadership Behavior Scale.

<i>Scale</i>	<i>Consists of</i>	<i>Definition</i>
Voluntary subordination	Being a servant Acts of service	A willingness to take up opportunities to serve others whenever there is a legitimate need, regardless of the nature of the service, the person served or the mood of the servant leader.
Authentic self	Humility Integrity Accountability Security Moral action Vulnerability	A consistent display of humility, integrity, accountability, security and vulnerability. A willingness to work quietly behind the scenes, spend time on small things and make seemingly inconsequential decisions in an unrewarded and unnoticed fashion.

Covenantal relationship	Collaboration Equality Availability Acceptance	Engaging with and accepting others for who they are, not for how they make servant leaders feel.
Responsible morality	Moral reasoning Moral action	Ensuring that both the ends they seek and the means they employ are morally legitimized, thoughtfully reasoned and ethically justified.
Transcendental spirituality	Interconnectedness Sense of mission Religiousness Wholeness	Attuned to the idea of calling in seeking to make a difference in the lives of others through service, from which one derives the meaning and purpose of life.
Transforming influence	Trust Mentoring Modeling Vision Empowerment	Positively transforming others in multiple dimensions (e.g. emotionally, intellectually, socially and spiritually) into servant leaders themselves.

Development

Sendjaya et al. (2008) established face validity for their instrument by interviewing 15 senior executives about what servant leadership entailed. Next, they performed a content analysis of those responses and identified 22 possible dimensions of servant leadership. Based on a literature review of servant leadership and the results of their content analysis, the authors reduced the original 22 dimensions to six. One hundred and one possible questions were then generated for those six dimensions.

In order to establish content validity, 15 servant leadership experts were identified and recruited from a mailing list of the International Leadership Association. These content experts were scholars who taught, performed research or both; they possessed the ability to create content validity ratios for each of the 101 possible items. Content validity ratios are numbers that range from -1 (meaning none of the experts believed a question was essential to servant leadership) to +1 (meaning all of the experts believed a question was essential to servant leadership). Based on this analysis, 73 items were retained from the original 101 questions.

Sendjaya et al. (2008) then ran a series of CFAs for each of the six subscales. Their final CFA was able to reduce the number of questions within each scale while concomitantly improving the model fit. The scale and number of questions were as follows: voluntary subordination (7), authentic self (6), covenantal relationship (6), responsible morality (5), transcendental spirituality (4) and transforming influence (7). In these reduced question sets, the goodness of fit indices were all above .97 and the RMSEA's ranged from .00 to .07. Also, the Cronbach Alpha scores for the scales ranged from .72 to .93.

Research Acquisition

The *Servant Leadership Behavior Scale* is copyrighted by Dr. Sendjaya. As of 2015, researchers who want to use the *Servant Leadership Behavior Scale* should contact Dr. Sendjaya at Monash University to request permission to use the instrument.

The Servant Leadership Survey

The *Servant Leadership Survey* measures eight dimensions of servant leadership, as shown in Table 9.

Table 9. Dimensions Measured by the Servant Leadership Survey.

Empowerment	A motivational concept focused on enabling people and encouraging personal development.
Accountability	Holding people accountable for performances that they can control.
Standing back	The extent to which a leader gives priority to the interests of others by giving them the necessary support and credit.
Humility	The ability to put one's own accomplishments and talents in a proper perspective.
Authenticity	Closely related to expressing the "True Self," expressing oneself in ways that are consistent with inner thoughts and feelings.
Courage	The ability to take risks and try out new approaches to old problems.
Interpersonal acceptance	The ability to understand and experience the feelings of others, and the ability to let go of perceived wrongdoings by not carrying a grudge into other situations.
Stewardship	The willingness to take responsibility for the larger institution and go for service instead of control and self-interest.

Development

The development of the *Servant Leadership Survey* occurred in three stages. First, van Dierendonck and Nuijten (2011) enlisted a sample of 688 volunteers to complete a 99-item survey. Based on that data, the authors conducted an EFA that found 14 factors with eigenvalues greater than 1. An iterative set of EFAs using *Varimax* and *Oblimin* rotations eventually produced a six-factor model that was based on 28 items. At this stage of development, neither *Humility* nor *Stewardship* loaded on a unique, single component. Consequently, the authors added 11 additional questions that were designed to measure these hypothesized dimensions. This resulted in a total of 39 possible questions. In stage two, the authors asked an additional 263 individuals to complete the 39-question instrument. Based on those responses, a CFA was conducted, and nine questions were removed. The resulting 30-question model produced an 8-factor model ($X^2 = 623$, $df = 377$, $CFI = .93$, $TLI = .92$, $SRMR = .05$, $AIC = 19354$, $RMSEA = .05$). In stage three, the

authors asked an additional 236 individuals to complete the 30-question survey. The authors conducted another CFA and, once again, found support for an 8-factor model ($X^2 = 600$, $df = 397$, $CFI = .94$, $TLI = .93$, $SRMR = .06$, $AIC = 17148$, $RMSEA = .05$).

The combined sample of all three studies demonstrated Cronbach Alpha scores of .89 for empowerment (7 items), .81 for accountability (3 items), .76 for standing back (3 items), .91 for humility (5 items), .82 for authenticity (4 items), .69 for courage (2 items), .72 for forgiveness (3 items) and .74 for stewardship (3 items).

As a means of establishing convergent validity, van Dierendonck and Nuijten (2011) found that seven of the eight scales from the *Servant Leadership Survey* were correlated in the range of .47 to .85 with the seven scales of the *Servant Leadership Scale* developed by Liden et al., (2008). The accountability scale of the *Servant Leadership Survey* was either uncorrelated or correlated at .20 or below for the seven scales of the *Servant Leadership Scale*. Five of the eight scales were highly correlated with LMX-7 scores in the range of .38 to .85. Additionally, three of the *Servant Leadership Survey* scales were also highly correlated with subscales from Rafferty and Griffin's (2004) measure of transformational leadership. Lastly, six of the *Servant Leadership Survey* scales were highly correlated with the contents of Brown, Trevino, and Harrison's *Ethical Leadership Survey* (2005).

Research Acquisition

The *Servant Leadership Survey* is copyrighted by van Dierendonck and Nuijten. In their 2011 article, the authors indicated that the *Servant Leadership Survey* may be used freely for scientific purposes. The instrument can be found in van Dierendonck, D. and Nuijten, I. (2011). The servant leadership survey: development and validation of a multidimensional measure. *Journal of Business and Psychology*, 26(3), 249-267.

Quantitative Findings on Servant Leadership

Parris and Peachey (2013) performed a systematic literature review of empirical articles involving servant leadership. They found 39 peer-reviewed articles published between 2004 and 2011; the primary areas in which research on servant leadership occurred were as follows: leadership ($n = 9$), education ($n = 7$), business ($n = 6$), psychology ($n = 6$) and nursing ($n = 3$). Parris and Peachey (2013) used appraisal tools from Letts, Wilkins, Law, Stewart, Bosch and Westmorland (2007), the Institute for Public Health Sciences (2002), and Stoltz, Udén and Willman (2004) to assess the quality of the 39 studies. Twenty-two of the 39 empirical studies were considered high-quality; four were qualitative and 18 were quantitative.

As of early 2015, no meta-analyses involving servant leadership had been published. The tables in Appendix A provide details regarding 17 of the high quality studies identified by Parris and Peachey (2013) and three additional peer-reviewed studies that were published since their review. The capital letters shown in parentheses refer to 20 different peer-reviewed articles, and a list of these articles is included in Appendix B.

Table 10 in Appendix A illustrates that follower ratings of servant leadership are, in general, moderately to strongly correlated with various aspects of leadership such as

leader trust, leader competence and leader effectiveness. Table 11 in Appendix A illustrates that follower ratings of servant leadership are, in general, weakly to moderately correlated with follower commitment and follower satisfaction, and Table 12 in Appendix A illustrates that follower ratings of servant leadership and organizational outcomes vary a great deal in their magnitude.

CONCLUSION

The development and validation of a psychological instrument is a long process. For the past three decades, the *Multifactor Leadership Questionnaire* (MLQ) has likely been the most frequently used assessment of leadership. Nonetheless, between 1985 and 2015, the publicly used MLQ has consisted of Form 1, Form 10, Form 5R and Form 5X. Even the widely used MLQ-5X has undergone multiple scoring changes as a result of various factor studies.

The main thrust of this article provided details pertaining to six instruments that have been used to measure servant leadership. These instruments are relatively new and untested, and the peer-reviewed literature generally provides us with analyses related to the validity of these assessments. A second area of importance involves a summary of scientific data related to servant leadership. Specifically, the empirical research to date (Appendix A) generally shows positive relationships between servant leadership and three types of outcomes (leader, follower and organizational).

With respect to future studies, it will be important for researchers to report the results of factor analyses. In that way, we will be able to learn more about the hidden constructs that make up servant leadership. A second line of inquiry is related to the discriminant validity of these instruments. Until more research is conducted, the theoretical uniqueness of servant leadership will remain in question. For example, there is likely a great deal of overlap between servant leadership and consideration, as measured by the *Leader Behavior Description Questionnaire* (LBDQ-XII), agreeableness, as measured by a big five assessment of personality, and individual consideration, as measured by the MLQ-5X.

A third line of inquiry relates to the incremental validity of servant leadership. The meta-analytic literature indicates that initiation of structure and consideration, as measured by the LBDQ-XII, the quality of the leader-member relationship, as measured by the LMX-7 and LMX-MDM, and the range of leader behaviors measured by the MLQ-5X are all related to assessments of effective leadership and desired follower outcomes. Therefore, research that uses both the MLQ-5X and a measure of servant leadership as predictor variables with respect to a criterion variable, such as follower job satisfaction, will assist in determining the amount of variance explained by each leadership theory. Consequently, we will possess a better understanding of just how much servant leadership improves upon our ability to predict follower job satisfaction beyond the effects of a juxtaposed theory of leadership.

Despite the need for many more empirical studies involving servant leadership, the movement toward providing a more measureable structure to the servant leadership

philosophy is a valuable contribution to our understanding of organizational leadership. For as Greenleaf (1977) once asserted, “Except as we venture to create, we cannot project ourselves beyond ourselves to serve and lead” (p. 27).

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APPENDIX A
Quantitative Results for Servant Leadership

Table 10. Conclusions for Servant Leadership and an Additional Aspect of Leadership.

Variables	N	Instrument	<i>r</i>
Leader Trust (A)	69	Organizational Leadership Assessment	.64**
Leader Trust (B)	555	Servant Leadership Behavior Scale (SLBS) Subscale: Voluntary Subordination	.47*
Leader Trust (B)	555	SLBS Authentic Self	.42*
Leader Trust (B)	555	SLBS Covenantal Relationship	.47*
Leader Trust (B)	555	SLBS Responsible Morality	.49*
Leader Trust (B)	555	SLBS Transcendental Spirituality	.46*
Leader Trust (B)	555	SLBS Transforming Influence	.50*
Leader Empathy (C)	283	Servant Leadership Scale (2003) ^a	.48*
Leader Integrity (C)	283	Servant Leadership Scale (2003) ^a	.58*
Leader Competence (C)	283	Servant Leadership Scale (2003) ^a	.57*
Leader Agreeableness (C)	126	Servant Leadership Scale (2003) ^a	.38*
Transformational Leadership	191 ^b	Servant Leadership Scale (2008)	.45*
Affect-Based Trust (H)	191 ^b	Servant Leadership Scale (2008)	.57*
Cognition-Based Trust (H)	191 ^b	Servant Leadership Scale (2008)	.39*
Role Inversion Behavior (K)	210	Servant Leadership Questionnaire	.59*
Initiating Structure (L)	250	Servant Leadership Scale (2004)	.58**
Leader Effectiveness (P)	97 ^c	Servant Leadership Assessment (2004) ^d (SLA) Subscale: Service	.78*
Leader Effectiveness (P)	97 ^c	SLA ^d Humility	.76*
Leader Effectiveness (P)	97 ^c	SLA ^d Vision	.54*
Leader Effectiveness (P)	97 ^c	SLA ^d Service	.85*
Leader Effectiveness (P)	60 ^e	SLA ^d Humility	.86*
Leader Effectiveness (P)	60 ^e	SLA ^d Vision	.89*
Transformational Leadership (Q)	155	Servant Leadership Assessment (2006) ^f	.55**

Note. ^aDennis and Winston. ^b91 teams consisting of 999 participants. ^cUS sample. ^dSix items from Dennis' instrument. ^eAfrican sample. ^fNine items from Jacobs' instrument. **p* > .01; ***p* < .001. The capital letters shown in parentheses refer to 20 different peer-reviewed articles. A list of these articles is included in Appendix B.

Table 11. Findings for Servant Leadership and Follower Behaviors.

Variables	N	Instrument	<i>r</i>
Commitment to Supervisor (F)	815	Servant Leadership Scale (2004)	.19**
Self-Efficacy (F)	815	Servant Leadership Scale (2004)	.39**
Overall Need Satisfaction (I)	187	Servant Leadership Scale (2004)	.42*
Autonomy Need Satisfaction (I)	187	Servant Leadership Scale (2004)	.39*
Competence Need Satisfaction (I)	187	Servant Leadership Scale (2004)	.30*
Relatedness Need Satisfaction (I)	187	Servant Leadership Scale (2004)	.31*
Job Satisfaction (I)	187	Servant Leadership Scale (2004)	.37*
Intrinsic Satisfaction (J)	595	Org. Leadership Assessment	.59**
Extrinsic Satisfaction (J)	595	Org. Leadership Assessment	.57**
Job Satisfaction (J)	595	Org. Leadership Assessment	.67**
Nurse Job Satisfaction (K)	210	Servant Leadership Questionnaire	.47***
Creative Behavior (L)	250	Servant Leadership Scale (2004)	.37***
Helping Behaviors (L)	250	Servant Leadership Scale (2004)	.37***
WRF Promotion (L)	250	Servant Leadership Scale (2004)	.48***
WRF Prevention (L)	250	Servant Leadership Scale (2004)	.32***
RFQ Promotion (L)	250	Servant Leadership Scale (2004)	.24***
Customer Orientation (M)	501	Servant Leadership Scale (2004)	.17**
Adaptive Selling (M)	501	Servant Leadership Scale (2004)	.14**
CD Extra-Role Performance (M)	501	Servant Leadership Scale (2004)	.15**
Outcome Performance (M)	501	Servant Leadership Scale (2004)	.24**
Job Satisfaction (M)	501	Servant Leadership Scale (2004)	.52**
Job Stress (M)	501	Servant Leadership Scale (2004)	-.18**
Customer Orientation (O)	530	SERV*OR ⁸	.49*
Person-Job Fit (O)	530	SERV*OR ⁸	.42*
Burnout (O)	530	SERV*OR ⁸	-.30*
Turnover Intentions (O)	530	SERV*OR ⁸	-.32*
Turnover Intentions (R)	425	Servant Leadership Scale (2004)	-.21**
Disengagement (R)	92	Servant Leadership Scale (2004)	-.32**
Organizational Commitment (S)	563	Org. Leadership Assessment	.83***
Interpersonal Trust (T)	137	Servant Leadership Behavior Scale	.66*

Note. WRF = Work Regulatory Focus Scale. RFQ = Regulatory Focus Questionnaire. CD = Customer-Directed. **p* < .05; ***p* < .01; ****p* < .001

Table 12. Findings for Servant Leadership and Organizational Behaviors.

Variables	N	Instrument	<i>r</i>
Organizational Trust (A)	69	Org. Leadership Assessment	.72***
Team Potency (D)	71 ^a	Servant Leadership Scale (2008)	.59***
Team Performance (D)	71 ^a	Servant Leadership Scale (2008)	.60***
Team- Level OCB (D)	71 ^a	Servant Leadership Scale (2008)	.58***
Task Interdependence (D)	71 ^a	Servant Leadership Scale (2008)	.46***
Procedural Justice Climate (E)	249	Servant Leadership Scale (2004)	.72*
OCB - Helping (E) ^b	249	Servant Leadership Scale (2004)	.60*
OCB - Conscientiousness (E) ^b	249	Servant Leadership Scale (2004)	.55*
OCB - Helping (E) ^c	120	Servant Leadership Scale (2004)	.24*
OCB - Conscientiousness (E) ^c	120	Servant Leadership Scale (2004)	.24*
Procedural Justice Climate (F)	815	Servant Leadership Scale (2004)	.17***
Service Climate (F)	815	Servant Leadership Scale (2004)	.45***
OCB (F)	123	Servant Leadership Scale (2004)	.45***
Team Effectiveness (G)	719	Org. Leadership Assessment	$R^2 =$.39***
Team Psychological Safety (H)	191 ^d	Servant Leadership Scale (2008)	.37***
Team Potency (H)	191 ^d	Servant Leadership Scale (2008)	.22***
Team Performance (H)	191 ^d	Servant Leadership Scale (2008)	.38***
Organizational Justice (I)	187	Servant Leadership Scale (2004)	.51**
Organizational Commitment (M)	501	Servant Leadership Scale (2004)	.67***
Performance Expectations (N)	195	RSLP-S (Subscale: Trust/Inclusion)	.24***
Performance Expectations (N)	195	RSLP-S (Subscale: Service)	.16**
Wins (N)	195	RSLP-S (Subscale: Trust/Inclusion)	.16**
Wins (N)	195	RSLP-S (Subscale: Service)	.15**
Losses (N)	195	RSLP-S (Subscale: Trust/Inclusion)	-.20***
Losses (N)	195	RSLP-S (Subscale: Service)	-.18**
Organizational Learning (Q)	155	Servant Leadership Assessment	.58***
Service Climate (R)	425	Servant Leadership Scale (2004)	.86***
Task-Focused OCB-I (R)	245	Servant Leadership Scale (2004)	.82***
Person-Focused OCB-I (R)	92	Servant Leadership Scale (2004)	.38***
Sales Behavior (R)	245	Servant Leadership Scale (2004)	.49***
Sales Performance (R)	40	Servant Leadership Scale (2004)	.38***

Note. ^aTeams consisting of 304 employees and 60 managers. ^bEmployee-rated. ^cManager-rated. ^d 191 teams consisting of 999 participants. OCB = Organizational Citizenship Behavior. RSLP-S = Revised Servant Leadership Profile for Sport. ^eNine items from Jacobs' instrument. OCB-I = OCB directed toward co-workers.

* $p \leq .05$; ** $p < .05$; *** $p < .01$; **** $p < .001$; ***** $p = .00$

APPENDIX B
Studies Referenced in Tables

- A. Joseph & Winston (2005)
- B. Senjaya & Pekerti (2010)
- C. Washington, Sutton, & Feild (2006)
- D. Hu & Liden (2011)
- E. Ehrhart (2004)
- F. Walumbwa, Hartnell, & Oke (2010)
- G. Irving & Longbotham (2007)
- H. Schaubroeck, Lam, & Peng (2011)
- I. Mayer, Bardes, & Piccolo (2008)
- J. Cerit (2009)
- K. Jenkins & Stewart (2010)
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- N. Rieke, Hammermeister, & Chase (2008)
- O. Babakus, Yavas, & Ashill (2011)
- P. Hale & Fields (2007)
- Q. Choudhart, Akhtar, & Zaheer (2013)
- R. Hunter, Neubert, Perry, Witt, Penney & Weinberger (2013)
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- T. Chatbury, Beaty & Kriek (2011)