Servant Leadership: A systematic review and call for future research

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ABSTRACT

Notwithstanding the proliferation of servant leadership studies with over 100 articles published in the last four years alone, a lack of coherence and clarity around the construct has impeded its theory development. We provide an integrative and comprehensive review of the 285 articles on servant leadership spanning 20 years (1998–2018), and in so doing extend the field in four different ways. First, we provide a conceptual clarity of servant leadership vis-à-vis other value-based leadership approaches and offer a new definition of servant leadership. Second, we evaluate 16 existing measures of servant leadership in light of their respective rigor of scale construction and validation. Third, we map the theoretical and nomological network of servant leadership in relation to its antecedents, outcomes, moderators, mediators. We finally conclude by presenting a detailed future research agenda to bring the field forward encompassing both theoretical and empirical advancement. All in all, our review paints a holistic picture of where the literature has been and where it should go into the future.

Introduction

van Vugt and Ronay (2014) in their review of evolutionary leadership biology argue that while we are evolving evolution takes time, and many of the hunter-gatherer needs embedded within us remain unfulfilled. In our hunter-gatherer tribes, we knew our leaders intimately, and there was no differentiation between the leader's private and public self (van Vugt, Johnson, Kaiser, & O'Gorman, 2008). We have since traded in the hunter-gatherer small, family-like tribes for large bureaucratic organizations with a globally-mobile workforce. The modern organization often does not deliver the sense of tribal belonging that our minds require (van Vugt, Hogan, & Kaiser, 2008; van Vugt & Ronay, 2014). Servant leadership has filled this gap by building a sense of social identity in their followers (Chen, Zhu, & Zhou, 2015), and creating teams that are more like the kinship found in hunter-gatherer societies as team members assist and build the capacity of others (Yoshida, Sendjaya, Hirst, & Cooper, 2014). Servant leadership might be able to deliver a leadership approach that can deal with challenges of the modern workplace while still delivering on our hunter-gatherer needs of belonging. This might be why organizations that implement servant leadership practices (e.g., Starbucks, Southwest Airlines, Ritz-Carlton, ServiceMaster, TDIndustries, SAS, Zappos.com, Container Store, Intel, Marriott, Synovus Financial) continue to surge, propelling research into servant leadership.

Servant leadership is a holistic leadership approach that engages followers in multiple dimensions (e.g., relational, ethical, emotional, spiritual), such that they are empowered to grow into what they are capable of becoming. It seeks first and foremost to develop followers on the basis of leaders' altruistic and ethical orientations (Greenleaf, 1977). When followers' well-being and growth are prioritized, they in turn are more engaged and effective in their work. Servant leaders see themselves as stewards of the organizations (van Dierendonck, 2011), who seek to grow the resources, financial and otherwise, that have been entrusted to them. As such, they do not ignore performance expectations even though they focus on the personal development of their followers. Unlike performance-oriented leadership approaches that often "sacrifice people on the altar of profit and growth" (Sendjaya, 2015, p. 4), servant leaders focus on sustainable performance over the long run.

Research on servant leadership can be categorized into three phases. The first focused on the conceptual development of servant leadership, focusing on the works of Greenleaf (1977) and Spears (1996). Second, a measurement phase where the research focused on developing measures of servant leadership and testing relationships between servant

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leadership and outcomes via cross-sectional research. We are currently into a third phase of servant leadership research, which is the model development phase where more sophisticated research designs are being utilized to go beyond simple relationships with outcomes to understand the antecedents, mediating mechanisms, and boundary conditions of servant leadership. This third phase has seen a proliferation of studies on servant leadership, with over 100 articles and two meta-analyses being published in the last four years alone. Thus, our review seeks to survey the full servant leadership literature to create a holistic picture of where it has been and where it should go.

We believe there is a need for a comprehensive and integrated review of research on servant leadership for four main reasons. First, since the pioneering work by Graham (1991) that laid a foundation for the development of servant leadership theory, research has demonstrated the empirical and theoretical differentiation of servant leadership from other forms of leadership (e.g. Hoch, Bommer, Dulebohn, & Wu, 2018; Peterson, Galvin, & Lange, 2012; Schaubroeck, Lam, & Peng, 2011). Second, despite the increasing academic interest in servant leadership, there is still a lack of coherence and clarity in the field. Although the majority of advances have appeared in top-tier management journals (e.g. Chen et al., 2015; Liden, Wayne, Liao, & Meuser, 2014; Neubert, Hunter, & Tolentino, 2016), research on servant leadership has also appeared in other disciplines, including nursing (Waterman, 2011), tourism (Ling, Lin, & Wu, 2016), and education (Cerit, 2009). Further, research has also been conducted in the non-for-profit (Parris & Peachey, 2012), public (Schwarz, Newman, Cooper, & Eva, 2016), and youth sectors (Eva & Sendjaya, 2013). While several decades of cross-disciplinary research have resulted in advancing the theory of servant leadership, this research is fragmented across disciplines and yet to be integrated. Third, there are currently 16 known measures of servant leadership, most of which are yet to be reviewed. We therefore provide our evaluation of the 16 measures to form the basis of our recommendation on which servant leadership measures should be used in future research. Finally, with a large body of empirical studies consistently demonstrating significant relationships between servant leadership and outcomes, we propose that the time is ripe to conduct a systematic literature review of the nomological network of servant leadership.

Given this rationale for the review, we approached our literature analysis with four overarching questions in mind:

(1) How is servant leadership understood and defined within the leadership literature?
(2) How is servant leadership measured, and what are the strengths and weaknesses of the research designs employed?
(3) What do we know about servant leadership through existing empirical research?
(4) What is the future of servant leadership research?

To address these questions, we conducted a systematic literature review to identify literature pertinent to servant leadership. For an article to be included in our review, it must have a focus on servant leadership as a key variable or subject area. We searched 10 databases (ABIInform, EBSO Host, Emerald, Expanded Academic, Google Scholar, Informit, Science Direct, ProQuest, PsychInfo, and Web of Science) using the keywords *servant leadership*, *servant leader*, *service leadership*, *servant behavior*, and *servant organization*. Secondly, we sought to obtain unpublished manuscripts by sending personalized emails to the prominent servant leadership scholars in the field and the past participants of the Global Servant Leadership Research Roundtable meetings, and sent a broader email via the LDRNET listserv to ensure that we gave all servant leadership authors the opportunity for their work to be included in the review. In addition, we examined the reference lists of all retrieved articles to identify additional literature that was not included in our database search.

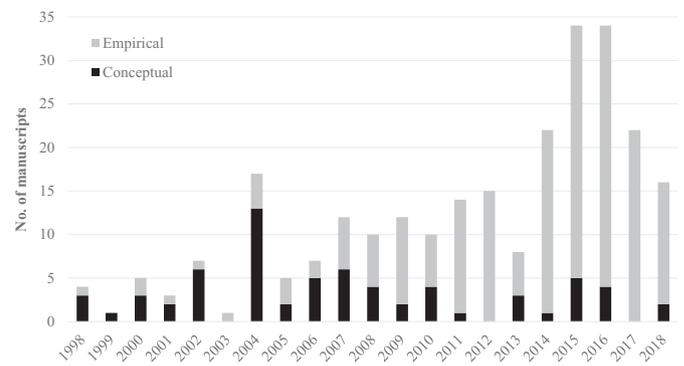Our review spans 20 years (1998 to 2018) as 1998 was the year

Fig. 1. Servant leadership publications by year and type.

when the first peer-reviewed servant leadership scale by Lytle, Hom, and Mokwa (1998) was published. In total, we have reviewed the 270 published across 122 academic journals and 15 unpublished manuscripts on servant leadership from 1998 to May 2018 inclusive. Within the sample, there were 205 empirical papers, 68 conceptual papers, and 12 literature reviews. In analyzing the trends in these publications, we can see that 2008 was the tipping point where servant leadership went from being a conceptual idea, to a research stream in its own right (see Fig. 1). Prior to 2008, there were 41 conceptual articles and only 21 empirical articles. From 2008 onwards, there have been 26 conceptual articles and 171 empirical articles. 2008 is significant in servant leadership research as it when the Sendjaya, Sarros, and Santora (2008) and the Liden, Wayne, Zhao, and Henderson (2008) measures were published, and we saw the first publications using the Ehrhart's (2004) measure (i.e. Mayer, Bardes, & Piccolo, 2008; Neubert, Kacmar, Carlson, Chonko, & Roberts, 2008).

Due to the interdisciplinary nature of leadership, servant leadership research has found a home in a number of different outlets (see Table 1). Since 2004, research on servant leadership has increasingly been published in high impact factor journals, including *Academy of Management Journal* and *The Leadership Quarterly*. Further, top-tier hospitality journals such as *Cornell Hospitality Quarterly* and *International Journal of Hospitality Management* have also published multiple works on servant leadership. However, a large number of articles on servant leadership still appear in second tier leadership journals. While an overwhelming majority has been conducted in the business/organizational psychology discipline (*n* = 203), servant leadership has

Table 1
Journals (select) publishing servant leadership research.

Journal	Number of articles	Impact factor
Leadership & Organization Development Journal	20	0.864
Journal of Business Ethics	17	3.526
The International Journal of Servant Leadership	13	NA
The Leadership Quarterly	12	4.269
Journal of Leadership & Organizational Studies	10	1.242
Global Virtue Ethics Review	6	NA
International Journal of Leadership Studies	6	NA
Journal of Applied Psychology	5	6.89
Leadership	5	1.597
Journal of Management Development	5	NA
Journal of Personal Selling & Sales Management	5	NA
Cornell Hospitality Quarterly	4	3.549
Journal of Managerial Psychology	4	1.844
Administrative Sciences	4	NA
Journal of Management	2	12.213
Personnel Psychology	2	8.176
International Journal of Hospitality Management	2	3.912
Academy of Management Journal	1	11.901
Journal of Management Studies	1	7.236

emerged in other disciplines, such as in healthcare ($n = 15$), education ($n = 10$), and hospitality ($n = 8$).

Drawing on our research questions, we have structured our review into four main sections. Specifically, we (1) discuss how servant leadership is positioned in the network of leadership theories and offer a refined definition of servant leadership; (2) provide a review and critique of the measurements and research design of servant leadership; (3) map the nomological network by reviewing empirical work on servant leadership by focusing on the theories used, antecedents, outcomes, as well as the mechanisms of the construct; and (4) recommend an agenda for expanding future research through both theoretical and empirical advancement.

How servant leadership is understood and defined within the leadership literature

In a recent meta-analysis, Banks, Gooty, Ross, Williams, and Harrington (2018) questioned if the proliferation of leadership theories was warranted considering the lack of evidence that each theory was theoretically and empirically different than those that preceded it. While Banks et al. (2018) and Hoch et al. (2018) have presented empirical evidence for the incremental validity of servant leadership over other leadership approaches, this has been hard to establish considering the limitations present in existing studies (i.e. endogeneity bias, measurement error, and common method bias (Antonakis, Bendahan, Jacquart, & Lalive, 2010)) and the small number of studies coupled with relatively low sample sizes that were used in the meta-analyses (Hoch et al., 2018). Thus, we present a brief overview of the theoretical and empirical arguments presented in the literature of how servant leadership differs from transformational, ethical, and authentic leadership before offering a definition of servant leadership. By providing explanation for the conceptual grouping and separation for servant leadership, we address the issue of unrationalized categorization (Fry & Smith, 1987; Stanfield, 1976) and avoid the erroneous assumption that servant leadership is homogeneous to other value-based leadership approaches.

A number of articles have sought to conceptually distinguish servant leadership from transformational leadership (i.e. Barbuto Jr & Wheeler, 2006; Stone, Russell, & Patterson, 2004) beyond the initial efforts of Graham (1991). However, it was the van Dierendonck (2011) review that demonstrated the most promise in conceptually distinguishing servant leadership from the broader leadership literature, reviewing the differences between servant leadership and seven other leadership approaches. Specifically, in comparison to transformational leadership, van Dierendonck stated that servant leadership is more focused on the psychological needs of followers as a goal in itself, whereas transformational leadership places these needs secondary to the organization's goals (van Dierendonck, Stam, Boersma, De Windt, & Alkema, 2014). While there might be a common overlap between servant leadership

and transformational leadership given that both focus on followers' needs, there is a qualitative difference in terms of *why* such focus is exemplified and *where* it stands relative to other competing priorities in the organization. Transformational leaders' motive to focus on followers' needs seems to be to enable them to better achieve organizational goals (i.e., a means to an end), whereas servant leaders' is on the multidimensional development of followers (i.e., an end in itself). In relation to the other priorities in the organization, Stone et al. (2004, p. 355) insinuated that organizational goals are merely a by-product achieved over a long-term of a deliberate focus on followers' needs. All in all, conceptually speaking, servant leaders have a greater likelihood than transformational leaders to set the following priorities in their leadership focus: followers first, organizations second, their own last (Sendjaya, 2015).

Similar to authentic leadership, servant leadership also acknowledges the importance of being authentic and true in one's interaction with others (Avolio & Gardner, 2005). However, for servant leaders, the propensity to operate with a deep clarity of self-awareness and self-regulation might spring from a spiritual and/or altruistic motive to serve others, both of which are absent in the authentic leadership framework. That is, servant leaders are authentic not for the sake of being authentic, but because they are driven either by a sense of higher calling or inner conviction to serve and make a positive difference for others.

Relative to ethical leadership (Brown & Treviño, 2006), servant leadership more explicitly incorporates stewardship as an essential element of effective leadership; this brings a focus on a long-term perspective that takes into account all stakeholders. Leader behavior in line with ethical leadership theory may have a more prescriptive character and be aligned with rules that one should follow in terms of what is good based on innate ethical rules, but servant leader behavior is more flexible and contingent, taking more explicitly both the follower and the organizational context into account. Ethical leadership emphasizes the need to care for people and being honest and trustworthy (Brown & Treviño, 2006), however, it offers little attention on authenticity and provision of direction for followers.

From an empirical standpoint, there have been four studies that have analyzed servant leadership with transformational leadership (see Table 2), demonstrating how servant leadership can predict follower outcomes above and beyond transformational leadership. Hoch et al. (2018) expanded this work by demonstrating that servant leadership explained 12% greater incremental variance over transformational leadership on follower outcomes, which was larger than the incremental variance predicted by authentic (5.2%) and ethical (6.2%) leadership, albeit with a small, unfocused sample from which to work (pp. 13–14). Delving deeper, the correlations between servant leadership and transformational leadership ranged from medium to large ($r = 0.32$–0.79). Similarity, based on their meta-analysis, Banks et al. (2018) reported moderate to large correlations between servant

Table 2
Servant leadership and transformational leadership research.

Authors	Correlation between SL & TL	Findings from the study
Liden et al. (2008)	0.53**–0.79**[a]	Servant leadership predicted an additional 19% variance in community citizenship behaviors, 5% variance in in-role performance, and 4% variance in organizational commitment over transformational leadership and LMX.
Schaubroeck et al. (2011)	0.45**	Servant leadership predicted an additional 10% variance in team performance over transformational leadership.
Peterson et al. (2012)	0.32**	Servant leadership predicted firm performance above and beyond transformational leadership, but no increment given[b]
van Dierendonck et al. (2014)	0.50**	Servant leadership is more strongly related to an expected enhancement of the psychological needs of followers, but transformational leadership is more strongly related to being perceived as a leader.

[**] $p < .01$.
[a] Liden et al. (2008) correlated their dimensions of servant leadership with transformational leadership, rather than correlating servant leadership as a second-order construct.
[b] Transformational leadership was used a control but entered in the same step as servant leadership.

leadership and transformational ($r = 0.52$), authentic ($r = 0.60$), and ethical ($r = 0.81$), which does raise concerns about the empirical distinctiveness of the measures.

Granted the aforementioned studies represent too small a sample, and further studies are needed before a definite conclusion that servant leadership is empirically distinct from the three other leadership theories. However, consistent with prior works (Barbuto Jr & Wheeler, 2006; Liden et al., 2008; Sendjaya, Eva, Butar-Butar, Robin, & Castles, 2018; Stone et al., 2004; van Dierendonck, 2011), we submit that conceptually servant leadership is distinct from other value-based leadership approaches in terms of its overarching motive and objective. The challenge is now for researchers to use more robust methods to test a) how servant leadership differs empirically from the other leadership theories, b) its incremental or predictive validity over existing leadership theories, and c) if the different foci of leadership theories would influence the paths by which they predict outcomes.

Defining servant leadership

An overwhelming majority of servant leadership studies provide loose descriptions of what, why, and how servant leaders behave towards their followers as they do. The most typical example is Greenleaf's (1977) oft-quoted paragraph, which reads in part, "The Servant-Leader is servant first ... It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead." While this definition is an important first and authoritative statement on servant leadership, it is not adequate for guiding empirical research on servant leadership. This lack of a clear definition spurred multiple conceptual papers on servant leadership where the definition and indicators were stretched to fit each author's argument. We are mindful of MacKenzie's (2003, p. 324) warning against poor conceptualization, i.e., it is virtually impossible to build a meaningful theoretical rationale for why Construct A should be related to Construct B, if the exact meaning of Construct A (in our case, servant leadership) has not been established. Across the servant leadership literature, we found examples of poor conceptualization of servant leadership, and consequently poor measurement, which undermined the credibility of the hypotheses and the validity of these studies. This might explain why early servant leadership research did not gain traction in top tier journals relative to other more well-defined leadership theories.

Attempts to define servant leadership based on its outcomes (e.g. organizational citizenship behavior), examples (e.g. self-sacrificing behavior), or to a lesser extent, antecedents (e.g. personality) have resulted in explanations too convoluted to be useful for both scholars and practitioners. Bearing this in mind, we offer a new definition of servant leadership and unfold it in the subsequent paragraphs:

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

The above definition has three features that make up the essence servant leadership, namely its motive, mode, and mindset. First, the *motive* of servant leadership (i.e. 'other-oriented approach to leadership') does not stem from within but outside the leader, as the initial Greenleaf's (1977) 'servant-first' seems to suggest. An essential, and often forgotten, point of Greenleaf is that he gave his booklet the title: 'The Servant as Leader', not 'The Leader as Servant'. As such, a crucial aspect of servant leadership, and where it differentiates itself from other perspectives on leadership, is the underlying personal motivation for taking up a leadership responsibility. This orientation towards others reflects the leader's resolve, conviction, or belief that leading others means a movement away from self-orientation. This is in stark contrast to other leadership approaches that focus on the advancement of the leaders' ambition or agenda. Their resolve to serve others emanates out

of their self-concept as an altruist, moral person. It therefore follows that servant leadership is not about being courteous or friendly. By default, it requires a strong sense of self, character, and psychological maturity. According to this definition, those who are unwilling to serve others are therefore unfit to be a servant leader.

Second, the *mode* of servant leadership ('manifested through one-on-one prioritizing of follower individual needs, interests, and goals above those of the leader') reflects a recognition that each individual follower is unique, and has different needs, interests, desires, goals, strengths, and limitations. While generic organizational policies and systems exist to ensure equity, each leader-follower relationship can take many different forms. The servant leader takes an interest in understanding each follower's background, core values, beliefs, assumptions, and idiosyncratic behaviors, and as such the line between professional and personal lives is blurred. Contrary to other leadership approaches that primarily aim to advance the organizational bottom line in both financial or non-financial terms, servant leadership focuses on followers' growth in multiple areas, such as their psychological wellbeing, emotional maturity, and ethical wisdom. This focus is aligned with the notion of stewardship, in that servant leaders act as stewards, treating followers as individuals entrusted to them to be elevated to their better selves. Followers in turn consider them to be trustworthy as leaders.

Finally, the *mindset* of servant leadership ('outward reorienting of their concern for self towards concern for others within the organization and the larger community') reflects that of a trustee. The deliberate focus on follower development is maintained within a concern towards the larger community and a commitment to be accountable for their well-being. In line with Block's (1993) notion of stewardship, servant leaders regard their followers as individuals who have been entrusted under their care. As trustees, they ensure that both their followers and other resources within the organization will be responsibly cultivated and grown. As such, servant leadership is a centrifugal force that move followers from a self-serving towards other-serving orientation, empowering them to be productive and prosocial catalysts who are able to make a positive difference in others' lives and alter broken structures of the social world within which they operate.

Taken together, the three features in the definition - motive, mode, and mindset – are the sine qua non of the accurate understanding of servant leadership. However, note that the definition also allows room for differences in terms understanding the servant leadership multi-dimensionality. Servant leadership scholars may choose to emphasize the ethical, spiritual, communal, or all of them as long as they agree on the aforementioned common denominators, namely that servant leadership is about (1) someone or something other than the leader, (2) one-on-one interactions between leaders and followers, and (3) an overarching concern towards the wellbeing of the wider organizational stakeholders and the larger community. We contend that the above definition will assist future research in further developing a comprehensive theory of servant leadership.

Measurement and research design in servant leadership research

Measures of servant leadership

To the best of our knowledge there are currently 16 measures of servant leadership in extant literature (see Table 3). Rather than reviewing each of the 16 measures against a set of predetermined servant leadership characteristics as done in a previous review (van Dierendonck, 2011),[1] we evaluate each one of them on their relative

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[1] The previous review by van Dierendonck (2011) examined seven measures, which means we add nine additional measures in the review process including two new scales published after the review (Reed et al., 2011; Robinson & Williamson, 2014) and the three short-form versions of the measures developed by Liden et al. (2015), van Dierendonck et al. (2017) and Sendjaya et al. (2018).

Table 3
Servant leadership measures against Hinkin's (1995) criteria.

Authors (chronological order)	Name of measure	No. of items	Item generation (deductive & inductive)	Content adequacy assessment	Questionnaire administration	Factor analysis EFA & CFA	Internal consistency assessment	Construct validity	Replication
Lytle et al. (1998)	SERV*OR (Servant Leadership subscale)	6	Yes	Yes	Yes	Yes	No	No	Yes
Laub (1999)	Organizational Leadership Assessment	60	Inductive only	Yes	Yes	EFA only	Yes	No	No
Page and Wong (2000)	Self-Assessment of Servant Leadership Profile	100	Deductive only	No	Pilot study only	No	Yes	No	No
Dennis and Winston (2003)	Self-Assessment of Servant Leadership Profile (a short-form of Page and Wong (2000))	20	No	No	Yes	EFA only	Yes	No	Yes
Ehrhart (1998, 2004)	Servant Leadership	14	Deductive only	No	Yes	Yes	Yes	Yes	Yes
Reinke (2004) & Reinke and Baldwin (2001)	Servant Leadership Inventory	7	Deductive only (for stewardship and vision)	No	Yes	EFA only	Yes	No	Yes
Dennis and Bocarnea (2005)	Servant Leadership Assessment Instrument	42	Deductive only	Yes	Yes	EFA only	Yes	No	Yes
Barbuto and Wheeler (2002); Barbuto Jr and Wheeler (2006)	The Servant Leadership Questionnaire	23	Deductive only	No	Yes	Yes	Yes	Yes	No
McCuddy and Cavin (2008)	Servant Leadership Composite Score	10	No	No	Yes	No	Yes	No	No
Rieke, Hammermeister, and Chase (2008)	Revised Servant Leadership Profile for Sport (RSLP-S)	22	No	No	EFA only	No	Yes	Yes	No
Fridell, Newcom Belcher, and Messner (2009)	Servant Leadership Styles Inventory	20	Deductive only	Yes	Yes	No	Yes	No	No
Reed, Vidaver-Cohen, and Colwell (2011)	Executive Servant Leadership Scale	25	No	No	Yes	Yes	Yes	No	No
Robinson and Williamson (2014)	SERV*OR Short	4	No	No	Yes	Yes	Yes	Yes	No
Liden et al. (2015, 2008)	SL-7; Global Servant Leadership Scale	7/28	Yes	Yes	Yes	Yes	Yes	Yes	Yes
van Dierendonck et al. (2017); van Dierendonck and Nuijten (2011)	Servant Leadership Survey	18/30	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sendjaya et al. (2018, 2008)	SLBS-6; Servant Leadership Behavioral Scale (SLBS)	6/35	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 4
Comparison of three recommended measures of servant leadership behavior.

	SL-7	SLBS-6	SLS
Key scale development articles	Liden et al. (2015, 2008)	Sendjaya et al. (2018, 2008)	van Dierendonck et al. (2017); van Dierendonck and Nuijten (2011)
Number of items	7/28	6/35	18/30
Number of dimensions	7	6	8
Dimensions	Emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, behaving ethically.	Voluntary subordination, authentic self, covenantal relationship, responsible morality, transcendental spirituality, transforming influence.	Empowerment, accountability, standing back, humility, authenticity, courage, interpersonal acceptance, stewardship.
Unique theorizing	Include concern towards community and followers' conceptual skills (not just character-and behaviors).	Holistic aspect of servant followers' development, including spirituality (meaning, purpose).	The eight dimensions operationalize the 'leader'-side and the 'servant'-side of servant leadership.

theoretical and methodological rigor in the construction and validation stages. To that end, we set out to trace the development and validation process of each measure, and subsequently examine the psychometric validity of each measure against state of the art scale development criteria and parameters set by scale development experts (e.g. DeVellis, 2017; Hinkin, 1995, 1998). More specifically, we employ the scale development guidelines established by Hinkin (1995) given their systematic and comprehensive inclusion of psychometric properties of a measure. Corroborating a previous landmark work of Churchill (1979), Hinkin, Tracey, and Enz (1997) developed seven steps of scale development and validation: item generation, content adequacy assessment, questionnaire administration, factor analysis, internal consistency assessment, construct validity, and replication. In addition to these seven steps, prior to item generation, it is also important to identify the domain of the construct through an assessment of theory (DeVellis, 2017) and qualitative interviews (e.g. Liden & Maslyn, 1998).

Hinkin (1995) argues that an overwhelming majority of measures in organizational research lack content validity, and that the first two steps are vital for building content validity into the measure. A meticulous approach to item generation and content adequacy assessment ensures that the measurement items have strong and clear linkages with their theoretical domain. As can be seen in Table 3, some of the servant leadership measures were published with no report on how the items were generated (Step 1). Those who did rely either on the deductive approach to item generation on the basis of review of extant literature (e.g. MacKenzie, Podsakoff, & Fetter, 1991; Venkatraman, 1989) and/or the inductive approach on the basis of analyses of interview data (Alimo-Metcalfe & Alban-Metcalfe, 2001; Butler, 1991).

As a further check on content validity, we set out to identify measures that employed content adequacy assessment (Step 2). Content adequacy assessment typically involves content experts who were invited to evaluate three elements of the items representativeness, comprehensiveness, and clarity (Grant & Davis, 1997). It is important for content validity to be assessed by content experts who have relevant training, experience, and qualifications (The Standards for Educational and Psychological Testing, 2014). As shown in Table 3, of the 16 measures we reviewed only seven reported this step with various degree of details included.

The subsequent steps (questionnaire administration, factor analysis, internal consistency assessment, construct validity, replication) that Hinkin (1995) recommends are now accepted as standard convention in scale development, as such they were included in the construction process of the majority of the measures. It is interesting to note that in some measures only exploratory, but no confirmatory factor analyses were performed (see Table 3). The latter is needed, preferably with an independent sample(s) to validate the hypothesized relationship between the construct and its indicators, particularly if a priori hypothesized structures specifying the number of factors and the items that loaded on each factor exists (Hurley et al., 1997; Tinsley & Tinsley, 1987). Researchers of only eight measures performed both EFA and CFA.

As for construct validity (Step 6), we tick those measures that establish discriminant validity, convergent validity, and criterion-related validity. We are cognizant of the fact that these types of validity may not be covered in one published study (i.e., the reference articles in Table 3), rather they might be established in subsequent published studies. To that end, we have thoroughly examined extant literature to check whether construct validity was built in later studies. Our review suggests that only seven measures have reported sufficient evidence of construct validity.

While it is obvious that a few measures have been employed and validated with independent samples more than others, replication (Step 7) in and of itself is a necessary but insufficient gauge of a psychometrically valid measure. As described above, a good measure will satisfy the rigorous criteria in the scale construction process. This is the reason we felt Ehrhart's (2004) measure, while used by multiple researchers, lacks evidence with respect to content adequacy.

Going forward, for both future research and practice (leadership recruitment or development) purposes, we recommend three measures of servant leadership behavior that have gone through rigorous process of construction and validation, namely (in alphabetical order), Liden et al.'s (2015) SL-7, Sendjaya et al.'s (2018) SLBS-6, and van Dierendonck and Nuijten's (2011) SLS. As shown in Table 4, each of these psychometrically sound measures is distinct, however, in its emphasis. As such which measure is most fitting to employ depends on the specific purposes of the study or program. What follows is a brief description of the relative strengths of each measure.

First, Liden et al.'s (2015) 7-item composite of the Servant Leadership measure (SL-7) is notable for its inclusion of the servant leaders' conscious and genuine concern towards creating value for the community around the organization as well as encouraging followers to be active in the community. This community-focused dimension is reflected in the item, "My leader emphasizes the importance of giving back to the community." Further, the SL-7 operationalization of servant leadership behaviors is unique in its inclusion of a competency-based dimension (i.e., conceptual skills) in addition to character-based dimensions. It is therefore fitting to use this measure specifically in relation to community-related outcome variables, or if the research model includes aspects of organizational or cognitive-based competencies. Given the few number of items (i.e., seven), this global measure of servant leadership is fairly easy and straightforward to use along with other measures in any study without turning the overall questionnaire unnecessarily long.

The second measure we recommend is Sendjaya et al.'s (2018) 6-item composite of the Servant Leadership Behavior Scale (SLBS-6). Construct validity studies of the original SLBS-35 demonstrated that the six dimensions are best considered as manifestations of a single, higher-order construct (Sendjaya & Cooper, 2011). The short form (SLBS-6) maintains this hierarchical model and the initial factorial structure remains intact. The unique contribution of the SLBS-6 is its spiritual dimension, a distinguishing feature that makes servant leadership a truly holistic leadership approach relative to other positive leadership

approaches (Sendjaya et al., 2018). The inclusion of spirituality faithfully reflects Greenleaf's (1977) initial, and Graham's (1991) subsequent theorizing, that servant leadership relies of spiritual insights and humility as its source of influence. We recommend this measure for future studies that examine spirituality-related constructs. Similar to the SL-7, the SLBS-6 is a short measure consisting of 6 items, as such its administration is not at all onerous.

Researchers desiring a short version should use either the SL-7 or SLBS-6. It is not appropriate to develop one's own short version, because when items are added or dropped from a scale, the psychometric properties change (see Bono and McNamara (2011) and Keller and Dansereau (2001)). Both the SL-7 and SLBS-6 underwent the necessary psychometric work verifying that these short versions accurately capture the essence of the full measures. For both the Liden et al. and Sendjaya et al. scales, the short versions are *only* recommended for research examining overall/global servant leadership. Researchers who plan to test servant leadership dimensions separately should use the full scales (SL-28 and SLBS-35) so that each dimension's reliability can be estimated and so that validity is enhanced. Specifically, it is not appropriate to conduct a dimensional analysis using single items from the short version of the scale that represents a dimension(s) of interest. Dimensional analyses may also be conducted using van Dierendonck and Nuijten's (2011) scale described below.

van Dierendonck and Nuijten's (2011) Servant Leadership Survey consists of 30 items that represent eight dimensions (standing back, forgiveness, courage, empowerment, accountability, authenticity, humility, and stewardship). While it is longer than the first two, it also has sound theorizing that takes into consideration the juxtaposition between the 'servant'-side and 'leader'-side of servant leadership. The underlying model emphasizes that servant leaders empower and develop people while holding people accountable for the outcomes of their work; they work with a humble attitude reflected in an openness to learn and a willingness to admit mistakes, they are willing to stand for their innate values, and their focus is the good of the whole. The original developmental article confirmed its construct validity (van Dierendonck & Nuijten, 2011). More recently, a short version has been introduced, an 18-items version that reflects cross-cultural factorial stability (van Dierendonck et al., 2017).

Similar to the leadership field in general, servant leadership measures have an inherent focus on the hierarchical leader-follower dyad. However, some modern organizations are embracing alternate structures, giving rise to non-traditional leader-follower situations. For example, the utilization of shared leadership in education and medicine and in non-for-profit and volunteer organizations. Recent studies show promise that existing servant leadership measures can be reformulated to reflect this different way of organizing in a valid and reliable way. For the shared leadership context, Sousa and Van Dierendonck (2016) constructed a 15-item shared servant leadership measure derived from van Dierendonck and Nuijten's (2011) SLS. This measure changes the focus from rating the leader, to rating the other members within the team and the items that are retained are team-member specific rather than leader-follower specific. Secondly, there have been a number of examples in the literature where the researchers have changed the referent of the items from manager to club president (and volunteers) (Schneider & George, 2011), principal (Cerit, 2009), and nurse manager (Neubert et al., 2016). For example, Liden et al.'s (2015) "I would seek help from my leader if I had a personal problem" might be changed to "I would seek help from my team mate/co-worker/shift supervisor/principal/scout leader, if I had a personal problem".

In order to accurately capture unique settings/situations (e.g., a specific sample or non-traditional forms of leadership) researchers may shift the referent of the servant leadership measure. In doing so, we suggest a close reading of Chan's (1998) work on referent-shift

consensus models as well as re-validating the servant leadership measure within that given context (exploratory and confirmatory factor analyses). Finally, it may be required to drop some items as they are not relevant to the context (e.g. "My leader makes my career development a priority" may not be relevant in volunteer organization). In these cases, it may be appropriate to drop the item, but only if the proper psychometric re-analyses are performed (Bono & McNamara, 2011; Keller & Dansereau, 2001). More generally speaking, given their robust psychometric validity, we recommend the three aforementioned measures with confidence.

Research design utilized in servant leadership research

Our review shows that within the two decades between 1998 and 2018 the majority of the published empirical research conducted on servant leadership has been quantitative in nature ($n = 156$), with only a small number of qualitative manuscripts being published ($n = 28$), and even fewer utilizing a mixture of both ($n = 8$). While there is a stark difference between the number of quantitative and qualitative papers, this is consistent with the trends found in the review of literature published in *The Leadership Quarterly* (Antonakis, Bastardoz, Liu, & Schriesheim, 2014). The empirical research has been conducted across 39 countries, with the majority (44%) coming from North American ($N = 64$) and Chinese ($N = 25$) samples. However, we are encouraged about the emergence of servant leadership research being conducted outside of these two nations (i.e. Turkey had 8 studies, Spain 8, and South Africa 7), which assists with the generalizability of servant leadership across borders. There were also 12 studies that drew samples from multiple countries, which we would encourage more of into the future. For a full breakdown, see Table 5.

The qualitative work on servant leadership has tended to focus on single case studies, utilizing interviews (e.g. Udani & Lorenzo-Molo, 2013), focus groups (e.g. Carter & Baghurst, 2014), secondary data (archival records) (e.g. Parris & Peachey, 2012), and observations (e.g. Ebener & O'Connell, 2010). Strikingly, only a third of the qualitative studies on servant leadership have been informed by theory, whereas the majority of the other qualitative studies have sought to understand how servant leadership has emerged within an organization. Of note, the *Journal of Business Ethics* was the only prominent journal to publish qualitative servant leadership work (i.e. Carter & Baghurst, 2014; Udani & Lorenzo-Molo, 2013). The limited mixed-method published research on servant leadership typically pairs an organizational survey with follow up interviews to have a greater understanding of why the phenomena has occurred (e.g. Beck, 2014; de Waal & Sivro, 2012; Holt & Marques, 2012). As with the qualitative research, very few of the studies informed by theory, which has become a concerning trend in servant leadership research, that needs to be addressed.

The quantitative research on servant leadership has been dominated by correlational field studies, with two meta-analyses (Banks et al., 2018; Hoch et al., 2018), and three studies utilizing experimental designs. Of the research containing experimental designs, the van Dierendonck et al. (2014) was the most promising given its inclusion of two scenario studies alongside a field study. In their two scenarios, they manipulated servant and transformational leadership, and required participants to read a case study. The other two, while about servant leadership, did not test servant leadership directly. For example, Neill, Hayward, and Peterson (2007) used a pre-test and post-test to see if teaching servant leadership principles would increase inter-professional practice in aged care students. However, there was no control group included in the study. Gillet, Cartwright, and van Vugt (2011) demonstrated that pro-social individuals (whom they labeled 'servants') emerge as leaders more significantly than pro-self-individuals in their money-based game. Considering the importance of experimental

Table 5
Study country and research design.

	Quantitative		Mixed	Qualitative	Total
	Individual	Team/multi-level			
Australia	4	1	0	0	5
Cambodia	1	0	0	0	1
Canada	3	0	0	2	5
China	14	10	0	1	25
Côte d'Ivoire	0	0	0	1	1
Cyprus	1	0	0	0	1
Finland	2	0	0	0	2
Germany	4	0	0	0	4
Ghana	1	0	0	0	1
Hong Kong	0	0	1	0	1
Iceland	1	0	0	0	1
India	3	0	0	3	6
Indonesia	2	2	0	0	4
Iran	4	0	0	0	4
Israel	0	0	0	1	1
Italy	3	0	0	0	3
Kenya	0	1	0	1	2
Korea	1	0	0	0	1
Malaysia	0	1	0	0	1
The Netherlands	3	0	1	0	4
New Zealand	2	0	0	0	2
Nigeria	1	0	0	0	1
North America	37	11	4	12	64
Pakistan	5	0	0	0	5
The Philippines	1	0	0	1	2
Portugal	3	0	0	1	4
Singapore	1	0	0	0	1
Slovenia	0	1	0	0	1
South Africa	6	0	0	1	7
South Korea	1	2	0	0	3
Spain	6	2	0	0	8
Sweden	1	0	0	0	1
Taiwan	1	1	0	0	2
Thailand	0	0	0	1	1
Turkey	8	0	0	0	8
Ukraine	1	0	0	0	1
United Kingdom	3	0	0	0	3
Vietnam	1	0	0	0	1
Multiple countries	7	4	1	0	12
No country stated	8	2	2	3	15

designs to protect against endogeneity (Antonakis, Bendahan, Jacquart, & Lalive, 2014), as well as the capability for making causal inferences, we endorse increased use of experimental research on servant leadership.

Our review shows that there are 159 correlational field studies published on servant leadership. At the individual level, there are 126 studies, of which 20 sought data from employees and supervisors to examine dyadic relationships. However, half of these studies pair two or more employees with the same supervisor (i.e. nested data), and use traditional regression methods to analyze the data, which is inappropriate, as the assumption of independence of observations is violated (Preacher, Zyphur, & Zhang, 2010). For the individual level studies, the samples ranged from 48 to 5201 employees (*Mean* = 364, *Median* = 240).

Our review also found 23 published articles based on multi-level data (e.g. Chiniara & Bentein, 2016; Neubert et al., 2016), and 10 articles which aggregate and analyze the data at the team level (e.g. Hu & Liden, 2011; Schaubroeck et al., 2011). Within the team-based research, the number of teams ranged from 20 to 352 (*Mean* = 92, *Median* = 71), and the number of employees ranged from 169 to 1884[2] (*Mean* = 518, *Median* = 401).

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[2] The mean is skewed due to the Song et al. (2015) study, which had 1884 employees within 67 sales teams.

Across all of the correlational field studies, there were only a limited number of manuscripts that used temporal separation to propose causation in their models. 130 of the studies were cross-sectional, with all variables being measured at the same time, 15 were measured at 2 time points, 11 studies were measured at 3 time points, 2 studies were measured at 4 time points, and Rodríguez-Carvajal, Herrero, van Dierendonck, de Rivas, and Moreno-Jiménez (2018) used a diary study to collect data over 5 consecutive days. Of those who have used temporal separation, the time between surveys has generally been two to four weeks. While we have been encouraged by the number of studies now utilizing multiple time points to elevate concerns with cross-sectional data, all of these studies have simply separated the measurement of the variables, rather than applying a repeated measures design where each of the study variables is measured at multiple time points. Nor have any of the studies explored reverse causation or discussed issues of endogeneity (see Antonakis et al., 2010; Antonakis, Bendahan, et al., 2014).

Nomological network of servant leadership research

Theories utilized in servant leadership research

The theoretical frameworks for empirical research on servant leadership predominantly draw from social-based theories. Social exchange theory (Blau, 1964) is based on the norm of reciprocity (Gouldner, 1960) in which servant leaders and their followers provide valued resources and support in exchange for resources and support received from the dyadic partner. Specifically, as servant leaders focus on the growth and development of their followers, followers feel obliged to reciprocate these positive leader behaviors with positive follower behaviors of their own. For example, social exchange theory has been used to explain how servant leaders enhance followers' helping/ organizational citizenship behaviors (Newman, Schwarz, Cooper, & Sendjaya, 2017) and commitment (Ling, Liu, & Wu, 2017), through mediating mechanisms such as trust (Chan & Mak, 2014) and justice (Schwepker Jr, 2016).

While social exchange theory has provided an important base for servant leadership research, the conceptualization of servant leadership lends itself to behavioral theories that transform their followers' mindset and behaviors long-term, rather than seek a short-term quid pro quo from their followers (i.e. Greenleaf's (1991) argument that servant leaders are likely transform their followers into servant leaders themselves). To that end, scholars have argued that a servant leader creates transforming effects on their followers, changing followers' mindsets and behaviors, as explained by the social learning and social identity theories.

Social learning theory (Bandura, 1977) posits that when an employee believes their leader is a credible role model in their organization, they observe and then emulate the attitudes, values, and behaviors of the leader. Servant leaders are likely to be viewed as credible role models within their workplace as they act altruistically and are motivated to serve others without expecting anything in return (Schwarz et al., 2016). Through this role modelling process, social learning theory has explained how servant leaders influence performance (Liden, Wayne, et al., 2014) and innovation/creativity (Newman, Neesham, Manville, & Tse, 2017), through fostering positive team environments such as a service climate (Hunter et al., 2013) and a knowledge-sharing climate (Song, Park, & Kang, 2015).

Social identity theory (Tajfel, 1978) has been used to explain how servant leaders make employees feel like partners in the organization, by developing strong bonds with employees through their follower-centric and authentic nature. Once the employees self-identify with the group, they are more likely to engage in behaviors that are beneficial to their organization (Chen et al., 2015). For example, through enhancing followers' identification with the organization (Chughtai, 2016), team (Chen et al., 2015), or the leader (Yoshida et al., 2014), servant leaders

are able to increase employee voice (Chughtai, 2016), OCBs (Yoshida et al., 2014), and reduce burnout (Rivkin, Diestel, & Schmidt, 2014).

Antecedents of servant leadership

Antecedents of leader behavior generally incorporate organizational and team culture, policies, influences from above, and the personality and demographics of the leader. However, thus far in the servant leadership literature our knowledge is limited only to leader characteristics. Although there has been some promising conceptual work on the antecedents of servant leadership by Liden, Panaccio, Meuser, Hu, and Wayne (2014) and van Dierendonck (2011) who suggested specific attitudes, behaviors, and situational influences that may predict servant leadership, there have only been 11 empirical studies that have tested these assumptions, focusing on the leader's personality and sex.

To analyze if the personality of the leader has an effect on their servant leader behaviors, researchers have asked the leader to report on their own personality, and follower(s) to rate their servant leadership behaviors. Research has shown that leaders who are high in agreeableness, low on extraversion (Hunter et al., 2013), high in core self-evaluation (Flynn, Smither, & Walker, 2016), high in mindfulness (Verdorfer, 2016), and exhibit low levels of narcissism (Peterson et al., 2012) all displayed higher levels of servant leadership. The study by Peterson et al. (2012) also showed that organizational identification is strongly related to servant leadership behaviors. One study reported on the relationship between emotional intelligence and servant leadership, but no significant relationship was present (Barbuto, Gottfredson, & Searle, 2014). Taking this limited evidence together, a tentative conclusion is that leaders who are more agreeable, less extraverted, with a strong sense of confidence in themselves and who identify strongly with their organization are more likely to exemplify servant leadership behaviors. It cannot be ignored though that the limited number of studies relating personality with servant leadership, combined with several studies that reported no relationship at all, indicates that the leader's personality is related to servant leadership behaviors only to a limited extent.

In terms of sex (measured as a dichotomy), two studies reported that relative to their male counterparts, female leaders are more likely to display behaviors of altruistic calling, emotional healing, and organizational stewardship (Beck, 2014), and are more inclined to hold service and altruistic values (de Rubio & Kiser, 2015), which are both similar to servant leadership. Similarly, there is a higher expectation for females to display servant leadership behaviors than males (Hogue, 2016). In analyzing the correlation matrices of the manuscripts, very few provided the correlations between servant leadership and the leader's age, sex, education and tenure to make a meaningful interpretation. We therefore call upon future studies and meta-analyses to analyze these relationships to create a more holistic picture of sex and servant leadership.

Outcomes of servant leadership

While progress has been made in identifying group and organizational level outcomes, the majority of empirical studies on servant leadership have focused on how leader's influence follower outcomes and the mechanisms that explain these relationships. An overarching view of these relationships and the related studies can be found in Tables 6–8 and in Fig. 2.

Follower behavioral outcomes

The relationship between servant leadership and organizational citizenship behaviors (OCB) is the most commonly examined relationship in the servant leadership nomological network. This includes OCB focused on the community (Liden et al., 2008), co-workers (Zhao, Liu, & Gao, 2016), and customers (Chen et al., 2015). In the same vein, servant leadership is also found to be positively related with helping behavior (Neubert et al., 2016), collaboration among nurses (Garber, Madigan, Click, & Fitzpatrick, 2009), self-rated employee corporate social responsibility (Grisaffe, VanMeter, & Chonko, 2016), and proactive behavior (Bande, Fernández-Ferrín, Varela-Neira, & Otero-Neira, 2016). Additionally, servant leadership has been found to be negatively associated with followers' avoidance of assuming leadership responsibility (Lacroix & Verdorfer, 2017), and linked with lower levels of employee deviance (Sendjaya et al., 2018). OCB and helping behaviors are naturally relevant outcomes for servant leadership given the propensity of servant leaders to demonstrate altruism (Parris & Peachey, 2013) and engage in OCB themselves. This is consistent with the 'acid test' of servant leadership (Greenleaf, 1977), which proposes that servant leadership should produce followers who will likely serve their organization and people around them.

Follower attitudinal outcomes

Given the holistic and developmental nature of servant leadership, it is not surprising that servant leadership is found to be positively associated with a broad range of job-related attitudinal outcomes. These include employee engagement (van Dierendonck et al., 2014), job satisfaction (Mayer et al., 2008), thriving at work (Walumbwa, Muchiri, Misati, Wu, & Meiliani, 2018), perceptions of meaningful work (Khan, Khan, & Chaudhry, 2015), and psychological well-being (Gotsis & Grimani, 2016). Research also reveals that servant leadership is negatively linked with emotional exhaustion and ego-depletion (Rivkin et al., 2014), job cynicism (Bobbio, Dierendonck, & Manganelli, 2012), job boredom (Walumbwa et al., 2018), and turnover intention (Hunter et al., 2013). A nascent and emerging body of research has also demonstrated that servant leadership is positively linked with employees' perception of work-life balance and family support (Tang, Kwan, Zhang, & Zhu, 2016), as well as reducing work-family conflict (Zhang, Kwong Kwan, Everett, & Jian, 2012).

Extant research findings also point to the evidence that employees are more likely to view their organization positively in the presence of servant leaders. This includes increased levels of organizational identification (Zhao et al., 2016), increased levels of perceived person-organization fit (Irving & Berndt, 2017), and person-job fit (Babakus, Yavas, & Ashill, 2010). In turn, servant leadership has also been found to be positively related to commitment to change (Kool & van Dierendonck, 2012), and organizational commitment (Miao, Newman, Schwarz, & Xu, 2014).

Performance outcomes

The positive relationship between servant leadership and multiple levels of performance has been demonstrated through employee (Liden et al., 2008), team (Sousa & Van Dierendonck, 2016) and organizational performance (Choudhary, Akhtar, & Zaheer, 2013). There is also a growing literature linking servant leadership to innovation-oriented outcomes (Panaccio, Henderson, Liden, Wayne, & Cao, 2015) and knowledge-sharing among employees (Luu, 2016). Further, the trickle-down effect of servant leadership and customer-oriented performance outcomes have been empirically supported, such as customer service quality and performance (Chen et al., 2015), customer satisfaction (Yang, Zhang, Kwan, & Chen, 2018), customer value co-creation (Hsiao, Lee, & Chen, 2015) and customer-oriented prosocial behavior (Chen et al., 2015).

Table 6
Servant leadership and follower behavioral outcomes.

Level	Mediator	Outcome	Authors
Individual	LMX	OCB	Amah (2018); Wu, Tse, Fu, Kwan, and Liu (2013)
Individual	Commitment to the supervisor	OCB	Walumbwa et al. (2010)
Individual	Trust	OCB	Shim, Park, and Eom (2016)
Individual	Communication arrangements	OCB	Abu Bakar and McCann (2016)
Individual	Lack of fear of being close to supervisor	OCB	Zhao et al. (2016)
Individual	Employee self-identity	OCB	Chen et al. (2015)
Individual	Employee self-efficacy	OCB	Walumbwa et al. (2010)
Individual	Psychological capital	OCB	Bouzari and Karatepe (2017)
Individual	Employee need satisfaction	OCB	Chiniara and Bentein (2016)
Individual	Psychological contract fulfillment	OCB	Panaccio, Henderson, et al. (2015)
Individual	Employee job satisfaction	OCB	Grisaffe et al. (2016); Ozyilmaz and Cicek (2015)
Individual	Employee job crafting	OCB	Bavik, Bavik, and Tang (2017)
Individual	Positive organizational climate	OCB	Gotsis and Grimani (2016); Ozyilmaz and Cicek (2015); Shim et al. (2016)
Group	Positive organizational climate	OCB	Hunter et al. (2013); Walumbwa et al. (2010)
Group	Team cohesion	OCB	Chiniara and Bentein (2018)
Group	Team potency	OCB	Hu and Liden (2011); Liden et al. (2015)
Individual	Leader-member exchange	Helping behavior	Zou, Tian, and Liu (2015)
Individual	Team-member exchange	Helping behavior	Zou et al. (2015)
Individual	Promotion focus	Helping behavior	Neubert et al. (2008)
Individual	Nurse job satisfaction	Helping behavior	Neubert et al. (2016)
Individual	Follower self-efficacy	Proactive behavior	Bande et al. (2016)
Individual	Follower intrinsic motivation	Proactive behavior	Bande et al. (2016)
Individual	Follower core-self evaluation	Leadership avoidance	Lacroix and Verdorfer (2017)
Individual	Affective motivation to lead	Leadership avoidance	Lacroix and Verdorfer (2017)
Individual	Socio-moral climate	Workplace deviant behavior	Verdorfer, Steinheider, and Burkus (2015)
Individual	Employee engagement	Workplace deviant behavior	Sendjaya et al. (2018)
Individual	Employee voice efficacy	Voice behavior	Duan, Kwan, and Ling (2014)
Individual	Organizational identification	Voice behavior	Chughtai (2016)
Individual	Psychological safety	Voice behavior	Chughtai (2016)
Individual	Employee commitment	Voice behavior	Lapointe and Vandenberghe (2018)

Table 7
Servant leadership and follower attitudinal outcomes.

Level	Mediator	Outcome	Authors
Individual	Organizational identification	Employee engagement	de Sousa and van Dierendonck (2014)
Individual	Psychological empowerment	Employee engagement	de Sousa and van Dierendonck (2014)
Individual	Follower need satisfaction	Employee engagement	van Dierendonck et al. (2014)
Individual	Job resources	Employee engagement	Coetzer, Bussin, and Geldenhuys (2017)
Group	Trust climate	Employee engagement	Ling et al. (2017)
Individual	Employee empowerment	Employee commitment	Schneider and George (2011)
Individual	Organizational justice	Job satisfaction	Mayer et al. (2008)
Individual	Empowerment	Job satisfaction	Schneider and George (2011)
Individual	Trust	Job satisfaction	Chan and Mak (2014)
Individual	LMX	Job satisfaction	Amah (2018)
Group	Collective thriving at work	Thriving at work	Walumbwa et al. (2018)
Group	Organizational commitment	Thriving at work	Walumbwa et al. (2018)
Individual	Supervisor identification	Turnover intention	Zhao et al. (2016)
Individual	Person-organizational fit	Turnover intention	Jaramillo, Grisaffe, Chonko, and Roberts (2009b)
Individual	Person-job fit	Turnover intention	Babakus et al. (2010)
Individual	Organizational commitment	Turnover intention	Jaramillo et al. (2009b); Yavas, Jha, and Babakus (2015)
Individual	Trust in the leader	Turnover intention	Kashyap and Rangnekar (2016)
Group	Service climate	Turnover intention	Hunter et al. (2013)
Individual	Inclusive organizational practices	Psychological well-being	Gotsis and Grimani (2016)
Individual	Org.-based self-esteem	Quality of family life	Yang et al. (2018)
Individual	Leader identification	Work-family balance	Wang, Kwan, and Zhou (2017)
Individual	Work-to-family positive spillover	Work-family balance	Wang et al. (2017)
Individual	Reduced emotional exhaustion	Work-family conflict	Zhang et al. (2012)
Individual	Personal learning	Work-family conflict	Zhang et al. (2012)
Individual	Employee job involvement	Organizational identity	Akbari, Kashani, Nikookar, and Ghaemi (2014)
Individual	Inclusive organizational practices	Organizational identification	Gotsis and Grimani (2016)
Individual	Supervisor-specific avoidance	Organizational identification	Zhao et al. (2016)
Individual	Follower need satisfaction	Organizational commitment	van Dierendonck et al. (2014)
Individual	Affective and cognitive trust	Organizational commitment	Miao et al. (2014)
Group	Trust	Organizational commitment	Ling et al. (2017)
Individual	Socio-moral climate	Organizational cynicism	Verdorfer et al. (2015)

Table 8
Servant leadership and performance outcomes.

Level	Mediator	Outcome	Authors
Individual	Promotion focus	Creative behavior	Neubert et al. (2008)
Individual	Creative self-efficacy	Creativity	Yang et al. (2017)
Individual	Nurse job satisfaction	Creativity	Neubert et al. (2016)
Individual	Workplace spirituality	Creativity	Williams Jr, Brandon, Hayek, Haden, and Atinc (2017)
Individual	Leader identification	Creativity	Yoshida et al. (2014)
Group	Leader prototypically	Creativity	Yoshida et al. (2014)
Group	Team efficacy	Creativity	Yang et al. (2017)
Group	Team potency	Creativity	Liden et al. (2015)
Organization	Serving culture	Creativity	Liden, Wayne, et al. (2014)
Individual	Psychological capital	Customer value co-creation	Hsiao et al. (2015)
Individual	Employee self-efficacy	Customer-oriented prosocial behavior	Chen et al. (2015)
Individual	Group identification	Customer-oriented prosocial behavior	Chen et al. (2015)
Individual	Service climate	Customer service performance	Linuesa-Langreo, Ruiz-Palomino, and Elche-Hortelano (2017)
Group	Co-operative and competitive conflict	Customer service performance	Yang et al. (2018)
Individual	Service climate	Firm performance	Huang et al. (2016)
Individual	Organizational commitment	Firm performance	Overstreet et al. (2014)
Individual	Operational performance	Firm performance	Overstreet et al. (2014)
Group	Group citizenship behavior	Group social capital	Linuesa-Langreo, Ruiz-Palomino, and Elche-Hortelano (2018)
Individual	Psychological contract fulfillment	Innovative behavior	Panaccio, Henderson, et al. (2015)
Individual	Employee engagement	Innovative behavior	Rasheed, Lodhi, and Habiba (2016)
Individual	Employee empowerment	Innovative behavior	Krog and Govender (2015)
Individual	Interoperability	Innovation	Oliveira and Ferreira (2012)
Group	Team potency	In-role performance	Liden et al. (2015)
Individual	Public service motivation	Job performance	Schwarz et al. (2016)
Individual	Public service motivation	Knowledge-sharing	Luu (2016)
Individual	Nurse job satisfaction	Patient satisfaction	Neubert et al. (2016)
Individual	Self-efficacy	Service performance	Chen et al. (2015)
Individual	Group identification	Service performance	Chen et al. (2015)
Individual	Organizational tenure	Service quality	Koyuncu, Burke, Astakhova, Eren, and Cetin (2014)
Individual/ Group	OCB	Service quality	Kwak and Kim (2015)
Individual	Follower helping behavior	Store performance	Hunter et al. (2013)
Organization	Serving culture	Store performance	Liden, Wayne, et al. (2014)
Individual	Need satisfaction	Task performance	Chiniara and Bentein (2016)
Individual	Affect-based trust	Team performance	Schaubroeck et al. (2011)
Group	Team psychological safety	Team performance	Schaubroeck et al. (2011)
Group	Knowledge sharing climate	Team performance	Song et al. (2015)
Group	Team potency	Team performance	Hu and Liden (2011)
Individual	Leader identification	Team innovation	Yoshida et al. (2014)
Group	Leader prototypically	Team innovation	Yoshida et al. (2014)

Leader-related outcomes

Research has found support for relationships between servant leadership and a number of relational outcomes, such as perceptions of trust in the leader (Schaubroeck et al., 2011), perceived leader effectiveness (Taylor, Martin, Hutchinson, & Jinks, 2007) and integrity (Bobbio et al., 2012), as well as higher quality of relationships between the leader and follower (Hanse, Harlin, Jarebrant, Ulin, & Winkel, 2016).

Team- and organizational-level outcomes

At the team level, servant leadership has been linked with team-level OCB (Hu & Liden, 2011), task-focused and person-focused OCB (Hunter et al., 2013), service-oriented OCB (Chiniara & Bentein, 2016), as well as helping and conscientiousness-focused OCB (Ehrhart, 2004). In regards to performance, servant leadership has been linked to performance at the team (Hu & Liden, 2011) and store levels (Hunter et al., 2013). Further, servant leadership team research has demonstrated increased levels of team effectiveness (Irving & Longbotham, 2007), team psychological safety (Schaubroeck et al., 2011), and team-level creativity and innovation (Yang, Liu, & Gu, 2017; Yoshida et al., 2014).

At the organizational level, servant leadership has been found to be positively related with firm performance through service climate (Huang, Li, Qiu, Yim, & Wan, 2016), as well as organizational commitment and operational performance (Overstreet, Hazen, Skipper, & Hanna, 2014).

Moderators in servant leadership research

A promising start has been made in unpacking the boundary conditions in which servant leadership operates (see Table 9 for an outline of studies that have utilized moderators in servant leadership research). At the organizational level, the industry (environmental uncertainty, competition intensity) the organizational structure, and employees' views of the overall culture of the organization (CSR, ethical behaviors) influence the effectiveness of servant leadership on the performance of the organization, and followers' organizational identification, creativity, knowledge sharing and job satisfaction. At a team level, the team's perceptions of power distance and caring ethical climate have been analyzed as moderators of servant leadership and team efficiency and value enhancing performance respectively. The leader-follower relations have been a common moderator of choice for researchers, analyzing LMX, trust, and leader-follower interactions. Predominantly though, the research has mainly focused on the moderating roles of followers' personality (proactive personality, extraversion), beliefs (ideal leader prototype, collectivism), and experience (tenure, inexperience) on a range of follower behaviors (e.g. OCB) and attitudes (e.g. psychological contract, satisfaction). However, we want to caveat the organizational and team based results, as an overwhelming majority of the research using moderators still comes from an individual rating their perceptions of the team or organizational climate, as opposed to objective or multiple ratings.
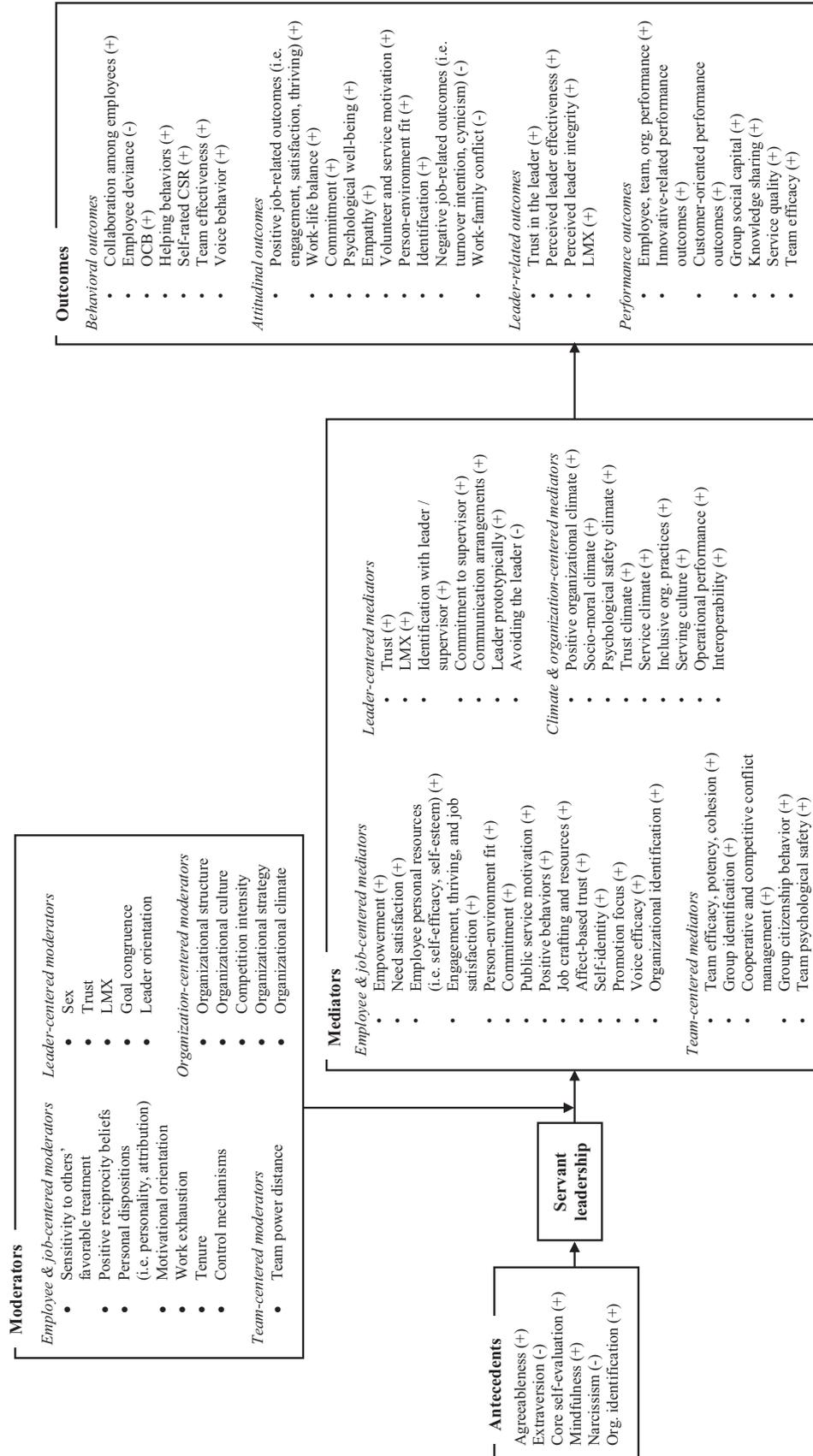
Fig. 2. The nomological network of servant leadership research.

There have been two studies that have used servant leadership as a moderator. Hu and Liden (2011) found that servant leadership strengthened the relationships between both goal and process clarity and team potency and Bande, Fernández-Ferrín, Varela, and Jaramillo (2015) demonstrated that servant leadership weakened the relationship between emotional exhaustion and turnover.

mediated servant leadership to firm performance (Huang et al., 2016)).

Due to the lack of published non-significant findings, it is difficult to discern meaning from these non-findings. What the organizational level moderator non-findings may have started to indicate though is that the effect of servant leadership on followers may not be affected by distal organizational policies, procedures, and environments, as servant

Table 9
Moderators of servant leadership.

Level	Moderator	Outcome	Authors
Follower behaviors			
Leader	Supervisor's sex	Agency problems	Politis and Politis (2018)
Leader	Trust in supervisor	Unethical peer behaviors	Jaramillo, Bande, and Varela (2015)
Leader	Trust in supervisor	Ethical responsibility and trust	Jaramillo et al. (2015)
Individual	Ideal leader prototype	Followers' leadership avoidance	Lacroix and Verdorfer (2017)
Individual	Positive reciprocity beliefs	LMX and TMX	Zou et al. (2015)
Individual	Sensitivity to others' favorable treatment	OCB	Wu et al. (2013)
Individual	Follower motivation orientations	OCB	Donia, Raja, Panaccio, and Wang (2016)
Individual	Follower altruism	Taking charge behavior	van Dierendonck (2012-2013)
Individual	Follower attributions	Follower deviant behaviors	Peng, Jien, and Lin (2016)
Follower attitudes			
Organization	Organizational structure	Job satisfaction	Neubert et al. (2016)
Organization	Organizational culture	Workplace spirituality	Khan et al. (2015)
Organization	Sharing family concerns climate	Work-to-family enrichment	Zhang et al. (2012)
Organization	Sharing family concerns climate	Organizational identification	Zhang et al. (2012)
Organization	Follower perceptions of the ethical level of the organization	Person-organization fit	Jaramillo et al. (2009b)
Leader	Leader-follower social interactions and goal congruence	Follower engagement	de Clercq, Bouckenooghe, Raja, and Matsyborska (2014)
Leader	Leader political skill	Workplace spirituality	Williams Jr et al. (2017)
Leader	LMX	Psychological capital	Coggins and Bocarnea (2015)
Leader	Leader's hierarchical power and action-oriented leadership style	Follower engagement	Sousa and van Dierendonck (2017)
Leader	Outcome-based control mechanisms	Intrinsic motivation	Bande et al. (2016)
Leader	Behavioral control systems	Follower SL perceptions	Jaramillo et al. (2015)
Individual	Follower tenure	Trust	Chan and Mak (2014)
Individual	Follower extraversion	Psychological contract fulfillment	Panaccio, Henderson, et al. (2015)
Individual	Follower collectivism	Psychological contract fulfillment	Panaccio, Henderson, et al. (2015)
Individual	Follower proactive personality	Psychological contract fulfillment	Panaccio, Henderson, et al. (2015)
Individual	Follower proactive personality	LMX	Newman, Schwarz, et al. (2017)
Individual	Follower proactive personality	Meaningful life	Rodríguez-Carvajal et al. (2018)
Individual	Follower motivation orientations	Job satisfaction	Donia et al. (2016)
Performance related outcomes			
Organization	Competition intensity	Organizational performance	Huang et al. (2016)
Organization	Strategy and structure	Organizational performance	Eva et al. (2018)
Organization	Organizational structure	Creative behavior	Neubert et al. (2016)
Organization	Perception of CSR	Knowledge sharing	Luu (2016)
Team	Caring ethical climate	Value enhancing performance	Schwepker and Schultz (2015)
Team	Team power distance	Team efficacy	Yang et al. (2017)
Individual	Salespersons' inexperience	Customer orientation	Jaramillo, Grisaffe, Chonko, and Roberts (2009a)

Non-significant results

Not surprisingly, the majority of manuscripts we reviewed, both published and unpublished, had every hypothesis supported. In analyzing the relatively few non-supported hypotheses that have been published, two patterns emerged. The first, and most common, was that the mediation paths were significant but the moderation paths were not. These non-significant moderators tended to be organizational or climate variables such as environmental uncertainty (van Dierendonck et al., 2014), organizational structure (Neubert et al., 2016), procedural justice climate (Walumbwa, Hartnell, & Oke, 2010), group competition climate (Chen et al., 2015), and support for innovation (Yoshida et al., 2014). Second, sometimes a single mediation path was not significant in a larger model with multiple mediation paths (e.g., psychological empowerment did not mediate servant leadership to OCB (Newman, Schwarz, et al., 2017); service climate did not mediate servant leadership to store performance and follower disengagement (Hunter et al., 2013)). However, these same variables have been found to mediate servant leadership to alternative outcomes in other manuscripts (e.g., psychological empowerment mediated servant leadership to employee engagement (de Sousa & van Dierendonck, 2014); service climate

leader creates their own strong, service based-culture within their team. Further, the non-supported mediation model findings have happened when other variables (such as leader personality, or competing mediators) partial out the effects of the non-significant mediators. We believe that this indicates the importance for researchers to include competing mediators in their designs, especially those which have already been proven to mediate the relationship between servant leadership and the dependent variable in question. Echoing Antonakis (2017) we encourage future research to include and report non-significant findings so that we will build a more comprehensive understanding of the influence of servant leadership.

Agenda for future research

In reviewing the literature on servant leadership, we were encouraged at the initial steps that have been taken to advance this theory, but as identified, there are still considerable gaps. Below, we offer a detailed agenda for future research on servant leadership separated into two parts. The first, theoretical advancements, seeks to break the theoretical lens in which servant leadership has been confined, and reshape the way in which we analyze servant leadership. In order to

enhance our understandings of contexts of how servant leadership impacts followers, teams, and organizations, we argue that researchers should consider alternative theoretical perspectives, such as the conservation of resources, situational strength, and self-determination theory. The second is a methodological roadmap to guide servant leadership research. Our review confirmed that servant leadership research is being held back by an over-reliance on cross-sectional, single-respondent survey designs. In response, we have outlined alternative methodological avenues and corresponding research questions that can help confirm our knowledge on servant leadership.

Researchers however should proceed with caution to ensure that outcomes of servant leadership research can be utilized as evidence-based practices that add value to practitioners, rather than merely adding more variables to the existing nomological network. In other words, practical implications for practitioners should not be an after-thought ingeniously made up after the fact but should be well integrated into the study overall objective. This implies for example that in introducing new mediators into the nomological network, researchers should seek to include the existing mediators of this relationship to demonstrate the new mediator's incremental variance. In the next section, we offer our perspectives on how future servant leadership research could look like.

Theoretical advancement

We acknowledge that the theoretical base for servant leadership research can be fruitfully expanded beyond social exchange, social learning, and identity theories. These theories have been instrumental in explaining the processes through which servant leadership influences follower behavior. But as research begins to extend beyond servant leadership to follower outcomes to consider antecedents of servant leadership, boundary conditions, and effects of servant leadership on leaders, additional theoretical perspectives are needed. In an effort to broaden the nomological network associated with servant leadership and present a number of new empirical avenues to research servant leadership, we present three theories that offer potential for extending the theoretical framework for servant leadership research.

Conservation of resources theory

Conservation of resources theory (COR) (Hobfoll, 1989) can be used to understand the consequences of utilizing a servant leadership approach on the leaders themselves, and how the negative consequences can be mitigated and positive outcomes enhanced. Specifically, COR theory argues that individuals seek to gain resources (e.g. supportive work practices, supportive leaders, feedback) to protect against resource loss, with resource loss primarily being linked to negative outcomes (e.g. stress, burnout, mental illness). It has been argued in the LMX literature that leaders form differentiated relationships (of varying quality), because they do not have the resources available to form high quality relationships with all followers (Henderson, Liden, Glibkowski, & Chaudhry, 2009). Conversely, servant leaders are expected to form high quality relationships with all followers, and indeed, LMX and servant leadership exhibit moderate to high positive correlations (Ehrhart, 2004; Liden et al., 2008), indicating that servant leaders tend to differentiate little as they form high quality relationships with all followers. But how can these leaders provide the support needed to sustain high quality relationships if they do not have the resources to do so (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014)? In order to understand the balance between workers' job demands (e.g. work overload) and job resources (e.g. feedback), the job demands-resources (JD-R) model is often applied within the COR theory (Bakker & Demerouti, 2014; Schaufeli & Bakker, 2004). Drawing on this model, as servant leadership has a greater focus on followers than other leadership approaches (van Dierendonck, 2011), the physical and emotional demands on servant leaders is high due to their time spent with, and the emotional energy exhorted on employees (Sendjaya, 2015). Therefore,

there may be a positive relationship between servant leadership behaviors displayed and the burnout, stress, and subsequent health outcomes felt by the leader (Panaccio, Donia, Saint-Michel, & Liden, 2015). Conversely, servant leaders may gain resources, such as self-actualization, pride, and well-being from providing help and support to others (Panaccio, Donia, et al., 2015). Addressing this paradox between resource gain and loss experienced by servant leaders, Xu and Wang (2018) found in a cross-lagged 3-time period field study covering 8 months that the resources gained through engaging in servant leadership buffered the negative effects of resource loss occurring from practicing servant leadership. These preliminary results suggest that the relation between practicing servant leadership and effects on leaders is complex and warrants additional research.

Another key issue in need of research attention is the role of the organization in supporting servant leadership. Central is the influence that the organization's culture may have on the provision of resources that servant leaders need for supporting their followers. We contend that attempting to engage in servant leadership within a culture based on values that are not consistent with servant leadership, such as aggressiveness (O'Reilly, Chatman, & Caldwell, 1991) would be substantially more difficult than leading within a culture whose values fit well with servant leadership, such as a serving culture (Liden, Wayne, et al., 2014) or a culture defined by 'respect for people' (O'Reilly et al., 1991). We reason that organizations characterized by respect for people would be rated by employees as being high in perceived organizational support (Eisenberger, Huntington, Hutchison, & Sowa, 1986), indicating a flow of resources. Thus, the more cultures are harmonious with servant leadership, the more support leaders would receive from the organization, as well as opportunities for professional development, job security, and social support. According to COR theory, such support would provide them with the resources they need to fulfill their ambition to provide to followers all that they need to reach their full potential (Hobfoll, 2011). In essence, the organization would provide servant leaders with the resources that enable them to invest in their employees. Furthermore, while the investment in employees might be interpreted as a resource loss, it can also be a resource gain, as servant leaders create employees who are more likely to share information between themselves (Luu, 2016), are more proactive and adaptive (Bande et al., 2016), and have lower levels of emotional exhaustion and burnout (Rivkin et al., 2014), and are thus able to assist the servant leader with their work role. Investing in followers can also represent a resource gain for leaders in the form of intrinsic satisfaction and pride associated in making a positive difference in the lives of followers.

In sum, we encourage research that examines culture and perceived organizational support with respect to creating an environment that is conducive to servant leadership. We recommend COR theory as a framework for examining the role of organizations in determining the resources available to leaders.

Situational strength theory

We encourage a continuation of the increase in multi-level servant leadership studies to understand how the team, organization and social climate influences the relationship between servant leadership and outcomes via the situational strength theory (Meyer, Dalal, & Hermida, 2010). Situational strength theory explains the psychological pressure on an employee to engage or refrain from a particular behavior (Meyer, Dalal, & Bonaccio, 2009). In servant leadership research, it offers a unique perspective to understand how situational constraints (e.g. occupational characteristics and situational ambiguity) might accentuate or attenuate the effects of servant leaders over organizations, teams, and individuals. Through situational strength theory, researchers are able to address concerns regarding the lack of boundary conditions and context in servant leadership research (Mumford & Fried, 2014) as our review found that only a limited number of studies have examined the moderating factors that alter the influence of servant leadership. To materialize how this theory can be utilized in servant leadership

research, we draw upon the situational strength theory review by Meyer et al. (2010) and the context and leadership review by Oc (2018).

In their review of the situational strength theory, Meyer et al. (2010) distinguished between micro-level influences, focusing predominantly on the task at hand for the employee (i.e. task clarity, consistent messaging of what tasks are required, task constraints, and consequences of completing the task); and macro-level influences that incorporate national culture, and the organizational and occupational climate. The tasks that employees undertake offer a rich tapestry of variables to examine the influence of servant leadership. Within the leadership literature more broadly, task/job characteristics, design, autonomy, demands, and complexity are commonly modeled moderators between leadership and outcomes (Oc, 2018). For servant leadership research, the relationship between servant leadership and outcomes should be stronger the more followers are interacting with the leader (Eva, Sendjaya, Prajogo, Cavanagh, & Robin, 2018); therefore typical job design elements such as task complexity and task ambiguity, which generally have a negative impact on the leader-outcome relationship (Oc, 2018), may actually strengthen the relationship between servant leadership and follower outcomes as the followers are interacting more often with the servant leader.

At the top of the macro-level is the national culture in which the servant leader is embedded. As servant leadership was developed in the United States, there is an assumption that it is better suited to countries where the power distance between leaders and employees is low. To test and challenge these assumptions, we recommend scholars draw on the influential work of Hofstede (1980) and House, Javidan, Hanges, and Dorfman (2002) to understand the role national culture plays for servant leadership. For example, is servant leadership as effective in countries with high power distance/masculinity and how does servant leadership's influence over helping behaviors differ in countries with individualistic versus collectivist values? While servant leadership has been found to be present in many cultures (e.g. Australia, China, Indonesia, Netherlands, Portugal, Turkey), cross-cultural research that includes multiple national cultures within the same study is needed so that comparisons across cultures can be made. The van Dierendonck et al. (2017) eight country, cross-cultural equivalence of servant leadership study has provided an important first step in this direction.

Meyer et al. (2010) further state that at the macro-level, organizational climate and occupational characteristics have a multi-level moderating effect on the leader-follower relationship. Thus, at the organizational level, we contend that servant leadership has differing levels of success depending on the organizational type (i.e. bureaucratic, organic, mechanistic, entrepreneurial, non-for-profit, volunteer). For example, servant leaders would be able to have a greater focus and influence on serving the community in a non-for-profit or volunteer organization (Ebener & O'Connell, 2010). Counter, utilizing servant leadership in an entrepreneurial firm may be less effective as the leader is required to think short term to recognize and exploit entrepreneurial opportunities (Miao, Eva, Newman, & Cooper, 2018) which may be at odds with the long-term focus of the servant leader (van Dierendonck, 2011). This could be conceptualized at the team level (i.e. an aggregated measure of servant leadership and team outcomes moderated by an upper level organizational variable) or a dyadic level (i.e. individual rating of servant leadership and individual outcome moderated by an upper level organizational variable). Further, in this analysis, researchers should juxtapose servant leadership with other forms of leadership (transformational, entrepreneurial, ethical, authentic, instrumental) to determine whether the organizational context has a differential influence on the effectiveness of servant leadership relative to other approaches.

Self-determination theory

Self-determination theory (SDT) has been utilized by servant leadership scholars to examine how servant leaders fulfill their followers'

needs (i.e. Chiniara & Bentein, 2016; van Dierendonck et al., 2014). However, we also believe that there is merit in utilizing SDT as a framework for investigating the antecedents of servant leadership. We argue that because the gap in understanding the antecedents of servant leadership may be due to the lack of a guiding theory, self-determination theory may provide the focus needed to begin bridging this gap.

Gagné and Deci (2005) proposed that SDT can be used to understand why people engage in OCB. Specifically, they argued that individuals who engage in pro-social behaviors (such as servant leadership), were autonomously motivated to do so, rather than through controlled motivation (e.g. Gagné, 2003). Therefore, we reason that individuals who are predisposed to gain enjoyment out of engaging in servant leadership (i.e. autonomous motivation), such as those possessing personality traits such as prosocial motivation, service orientation, and compassion, are more likely to be servant leaders.

However, the relationship between the leader's personality traits and the display of servant leadership behaviors is impacted through the autonomy, competence, and relatedness that the leader feels within their role (Gagné, 2003). Drawing on SDT, we argue that the relationship between the leader possessing servant personality traits such as prosocial motivation and the display of servant leader behaviors will be stronger when the leader has the autonomy to determine how they lead (autonomy), engages in leadership training programs (competence), and has access to mentors (relatedness). Counter, we would also expect that this relationship would also be governed by external pressures to not engage in servant leadership. For example, bureaucratic organizations, characterized by centralized decision making based on abiding by rules and procedures, may discourage the display of servant leadership, as the leader is unable to fully engage their employees in the decisions of the organization.[3]

Research design and analysis advancement

Advancing the measurement of servant leadership

The servant leadership field has had no shortages of measures, with an ongoing, incomplete assumption that a series of follower-rated items on a Likert-scale fully captures a rather complex phenomenon. While the notion of follow-rated questionnaires has been challenged in previous work on leadership (e.g. Antonakis, Bastardoz, Jacquart, & Shamir, 2016 on charismatic leadership), servant leadership has yet to be held to the same standard. With the advancement of statistical procedures in the leadership field, how we measure servant leadership needs to evolve and expand.

First, servant leadership researchers are strongly encouraged to employ field experiments, as they have been underutilized thus far in leadership research. Although this might be due to a lack of access to data, it offers a unique opportunity for servant leadership scholars to be able to make causal inferences. We draw researchers' attention to two studies previously published in *The Leadership Quarterly*, for inspiration. The first by Yeow and Martin (2013) utilized a leadership intervention where a leadership coach worked with students on their own leadership self-regulation. In the second, Seifert and Yukl (2010) demonstrated the influence of multiple feedback workshops on changing leader behaviors in organizations. Considering the lack of evidence on how servant leaders are developed, we encourage researchers to partner with organizations to run servant leadership training workshops to identify if servant leadership training interventions increase servant leadership behaviors among managers. Specifically, researchers should identify an intervention group who receives the servant leadership training over several months, and a non-intervention, control group who do not. Across multiple measurement time points (≥ 3), researchers could measure the servant leadership behaviors displayed by the leader and

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[3] See Eva et al. (2018) and Neubert et al. (2016) for further discussion on organizational structure and servant leadership.

Table 10
Suggestions for servant leadership behavior in experimental designs.

Example servant leader behavior	Vignette example behavior	Actor-led example behavior
Serving followers	Your supervisor has often assisted you with your work/your career and did not look for acknowledgement from higher up.	The leader (actor) puts their own work aside to help the follower (participant).
Being authentic	Your supervisor acted with integrity and honesty and gives you the opportunity to challenge their decisions.	The leader follows through on their actions (accountability, integrity and honesty) and is humble in the language they use.
Building leader-follower relationships	Your supervisor constantly listened to your opinions, and did not take one employees' side over another.	The leader treats the team members equally and is available for follow up consultation on the task.
Acting morally and ethically	Your supervisor openly discussed the ethical dilemma put in front of you, emphasizing that it is more important to do the right thing than looking good in front of your workmates.	The leader explains why the followers should take a particular moral action on the given task, rather than an unethical way to complete it.
Meaning and purpose	Your supervisor took time to explain how your role is important within the organization and how your tasks will contribute to the overall mission of the team.	The leader takes time to explain why the task is important for the team and organization.
Transforming followers	Your supervisor has been a mentor to you, helping you through a variety of different professional and personal situations.	The leader empowers the followers to make decisions, take risks, and make mistakes on the task, acting as a mentor rather than a dictator.

other outcome variables of interest (e.g. performance, service behaviors) to demonstrate if servant leadership can be learnt and then implemented for the benefit of employees and the organization (see Day, 2000 for a review of leadership development measurement tools). Taking this further, researchers might examine how servant leaders create more servant leaders (Greenleaf, 1977) through a 'trickle-down-approach' throughout the organization from senior managers to middle managers via a social learning process (see Mayer, Aquino, Greenbaum, and Kuenzi (2012); Mayer, Kuenzi, Greenbaum, Bardes, and Salvador (2009) for examples with ethical leadership). While there will be compromises on the research design as the organizations' needs need to be taken into account (i.e. a non-randomized design), Shadish and Cook (2009) provide a number of recommendations to deal with these potential issues. Through the use of field experiments, researchers can not only advance the research on servant leadership, but also advance the practice of servant leadership within organizations.

Second, there have been a lack of experimental designs in general across the servant leadership field. Rather than undertaking a field experiment, researchers can utilize online panels, student samples, and general participants to test the effects of servant leadership in a controlled setting. This could be done via manipulation of the servant leader (i.e. high or low servant leadership behaviors), or comparing servant leadership to other leadership approaches (e.g., transformational, ethical, or authentic leadership), both of which will offer validity of causal findings. van Dierendonck et al.'s (2014) study offers a promising template of how servant leadership behaviors can be manipulated within an experiment. van Dierendonck et al. (2014) used behavioral descriptions of a servant leader, highlighting the servant leader behaviors of emphasizing followers' needs, the character of the servant leader, and the developmental focus of the servant leader (e.g., "Your supervisor knows what you personally need. Your supervisor is modest, of integrity, honest, and authentic and shares his/her thoughts and feelings with you. Your supervisor is courageous, allows for mistakes, and provides freedom so you can develop your own abilities. Your supervisor shows great humanity and understanding of your position" (p. 550)). In order to spur more research on servant leadership using experimental designs, we have outlined some behaviors that servant leaders exhibit, and examples of how these may be manipulated in a vignette or actor-led experimental design (see Table 10).

Third, eye tracking has emerged as a promising alternative to surveys in order to understand followers' behaviors (see Meißner & Oll, 2018 for a review on eye tracking and management studies). In servant leadership research, eye tracking can be used to examine emotional arousal of the followers towards the servant leader through pupil diameter. We can examine the attention patterns of the follower and their attention directed to the servant leader by examining the position and number of fixations of the followers' eyes. This can be used as a moderator (strong v weak fixation) which may influence the receptivity to servant leadership. Finally, we can analyze the leaders' eye fixations (duration and count) to examine how eye contact may predict servant leadership. While there are benefits to using eye tracking, servant leadership still needs to be either manipulated by the researchers (through actors) or measured by the participants.

Fourth, in order to combat the weaknesses in the current designs, we recommend combining the quantitative work with qualitative studies. By combining these designs, it allows researchers to more adequately answer applied research questions, such as 'how servant leadership influences employees during significant organizational change', and 'how servant leaders develop other servant leaders'. In designing mixed methods studies, researchers should draw on the work by Creswell and Plano Clark (2018) as well as Gibson (2017) to consider the extent to which the qualitative and quantitative study components interact. For example, in collecting data for 'how servant leadership influences employees during significant change', a researcher might choose to pair experience sampling methodology (ESM) and interviews, using ESM to focus on servant leadership and employee wellbeing variables, but use the interviews to analyze the missing 'why' component of this relationship. In this example, we would collect data simultaneously, prioritize the qualitative findings, and mix the data during the interpretation of findings.

Stronger survey design

The over-reliance on self-report, single-time point studies within the servant leadership field has put a significant caveat on the meaning we can draw from these findings, especially considering that none of these studies have dealt with the issues of endogeneity within their design. This is not unique to servant leadership and there have been a number of efforts to improve survey design within the leadership field (see Antonakis et al., 2010; Antonakis et al., 2016; Antonakis, Bendahan, et al., 2014; Antonakis & House, 2014). In the cases where survey research is the most appropriate research design for the question at hand, we recommend a number of methods to strengthen survey designs in servant leadership research.

First, in the design phase researchers should be aiming to collect data from multiple time points to create temporal separation to help assess processes that explain relationships between the antecedents and outcomes of servant leadership (Fischer, Dietz, & Antonakis, 2017) and from multiple sources to assist with common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). Especially needed in servant leadership research are longitudinal designs in which Time 1 captures the beginning of the relationship between leader and follower. As the relationship between the servant leader and the follower matures overtime

(Graen & Uhl-Bien, 1995), we would expect to see the servant leader focus less on the professional elements of the relationship (i.e. assisting with task-related behavior) and focus more on the personal capacity building elements of the relationship (i.e. developing the follower into a servant leader in their own rights). Methodologically, such a design would help to isolate follower characteristics and behaviors that influence servant leader behavior from the influence of servant leadership on followers. If servant leadership and follower behavior are assessed at three or more time periods, latent change analysis to capture reciprocal spiraling effects would also be possible. Further, this would allow the researcher to test for reverse causation, which has yet to be established in servant leadership.

One way that researchers have sought to implement longitudinal designs is through experience sampling methodology (ESM), which allows researchers to repeatedly sample the immediate experiences of followers in their natural environment. Researchers typically employee ESM to survey participants regularly (i.e. every few hours up to daily) across 1 to 2 weeks (Beal, 2015). Utilizing ESM allows researchers to protect against common method bias usually associated with cross-sectional survey designs and memory bias where followers have to recall specific behaviors (Beal, 2015). While this method has been used for research on abusive supervision (Barnes, Lucianetti, Bhave, & Christian, 2015) and transformational leadership (Johnson, Venus, Lanaj, Mao, & Chang, 2012), it is just beginning to be utilized in servant leadership research (Sun, Liden, & Ouyang, 2018). For example, Sun and colleagues examined follower gratitude each morning and OCB each afternoon for 10 consecutive work days. Servant leadership, measured in a traditional survey prior to the start of the event sampling data collection was positively related to daily gratitude, which in turn was related to engagement in OCB. Interestingly, the relationship between servant leadership and daily gratitude was weaker for those making relational attributions than for those who did not. Specifically, followers who interpret leader behavior in terms of the relationship they have with the leader are less likely to feel gratitude for the servant leadership behaviors received. We suggest that ESM could also be an important tool to examine antecedents of servant leadership (e.g., sleep quality/quantity, moral licensing, ego depletion, trickle-down servant behaviors, job stress, home-work conflict), where the leader reports daily on the antecedents, and followers report daily on their servant leadership behaviors and relevant moderating factors (e.g. task and job contexts). As ESM requires followers to complete surveys at least daily (often via smart phone), we suggest using shortened servant leadership measures (i.e. SL-7 or SLBS-6).

Second, researchers should look to include as many competing variables within their research design in order to demonstrate the true effects of servant leadership (Antonakis et al., 2010). In their analysis of instrumental leadership, Antonakis and House (2014) argued that due to existing transformational leadership research not including instrumental leadership, the transformational leadership field has overstated its effects. Further, they bring into question existing meta-analyses as they do not account for the effects of instrumental leadership. For servant leadership research and meta-analyses, we recommend that scholars more heavily psychometrically scrutinize servant leadership by including differing leadership theories, organizational culture, HR practices (e.g. leadership training), within their research designs in order to demonstrate the criterion-related validity of servant leadership above and beyond that of the existing organizational ecosystem.

Third, researchers need to deal with the potential that servant leadership is an endogenous independent variable within their designs (see Antonakis et al., 2010; Antonakis, Bendahan, et al., 2014). As endogeneity is not dealt with across the vast majority of servant leadership studies, we cannot be confident that servant leadership truly predicts y (outcomes), as there could be an infinite amount of potential causes of y which have not been modeled. To help purge servant leadership models of endogeneity bias, it is recommended that studies include an instrumental variable that does not depend on other variables in the model (Antonakis et al., 2010; Antonakis, Bendahan, et al., 2014). Therefore, researchers should include an instrumental variable in their studies that a) strongly predicts servant leadership (assuming servant leadership is the independent variable) and b) is unrelated to the outcome variables measured in the study. Antonakis et al. (2010) outline a number of potential example instrumental variables, such as physical characteristics (age, height, appearance), stable individual differences (personality and cognitive ability), and geographical distance (i.e. proximity to the followers). No study reviewed in servant leadership utilized instrumental variables. However, there have been examples for other leadership approaches such as ethical and supportive leadership who use the leader's personality as the instrumental variable (de Vries, 2012). Drawing on this research, we recommend the use of personality variables, such as agreeableness and honesty/humility as potential instrumental variables. For model testing, we refer to Antonakis et al. (2010, pp. 1105–1106) who outline how to correctly estimate the model using instrumental variables.

Fourth, rather than relying solely on follower's ratings, either individually or an aggregated team rating, we suggest that future research triangulate this rating by adapting the measure to be self-reported for the leader, and other reported for the leader's direct supervisor. Thus, researchers are able to ascertain inter-rater reliability of servant leadership from three levels (leader's superior; the leader themselves; the leader's followers).[4] One such example might be looking at the level of agreement between the three levels the leader's servant behaviors and work outcomes (see Matta, Scott, Koopman, and Conlon (2015) for an example with LMX). Rather than analyzing servant leadership based on its Likert scale value, researchers could look at the level of agreement between the three levels on their ratings of the leader's servant behaviors, or the interaction effects between the ratings of servant leadership behaviors. We would expect that when the ratings are in agreement that the leader displays servant leadership, employees' positive attitudes and behaviors should be greater.

Finally, we recommend a number of improvements in the sophistication of analyses employed in servant leadership research. First, as with leadership research in general, in many studies the nesting of followers into leader work groups needs to be taken into consideration by using multi-level analytic techniques. Multi-level analyses take into consideration the lack of independence in ratings made by leaders and followers as well as address within versus between leader effects (Preacher et al., 2010). Research designs that include organizational level variables similarly require multi-level analysis. Analyses attempting to capture mediation or moderated mediation become even more complicated with multi-level data, because bootstrapping is not yet possible with multi-level data. Currently, the approach used is to model the mediating effects with Monte Carlo techniques that simulate intervening variable under investigation (e.g. Liden, Wayne, et al., 2014). Studying change over time requires the use of latent change structural equations analyses, which become even more complicated due to the need to account for nesting of followers in leader work groups. Lastly, paralleling the recommendation for more sophisticated research designs is the need for utilizing analytic techniques capable of accurately assessing the complexity of such designs. For example, latent profile analysis (see Howard, Gagné, Morin, & van den Broeck, 2016) is better able (than traditional techniques, such as OLS regression) to untangle the complexity of assessing multiple antecedents of servant leadership, such as personality and motivation as well as the interactions of these with organizational characteristics.

By bringing together the existing research on servant leadership, we

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[4] For scholars who are interested in researching differing perspectives of servant leadership, we suggest reading Lee and Carpenter's (2018) meta-analysis of self-other agreement in leadership. Their findings showed that leaders tended to over-reported their own servant leadership behaviors relative to follower ratings, whereas they reported similar ratings to their superiors.

Table 11

Suggestions for future research.

Theory	Foci	Research question
Conservation of resources theory	Organizational	How does the organizational culture influence the display of servant leadership?
	Organizational	Does perceived organizational support create an environment for servant leadership to develop?
	Leader	Does displaying servant leadership lead to stress, burnout, and mental illness?
	Leader	Do supportive work practices protect against servant leaders' stress, burnout, and mental illness?
	Leader	How does the resource investment in employees protect against resource loss for the servant leader?
	Leader	Does sleep quality and quantity influence servant leadership behaviors?
	Leader	Does job stress and/or work-home conflict influence servant leadership behaviors?
	Follower	How does servant leadership increase information sharing among followers?
	Follower	How does servant leadership reduce follower emotional exhaustion and burnout?
Situational strength theory	Country	How does servant leadership's influence over helping behaviors differ in countries with individualistic versus collectivist values?
	Country	Is servant leadership as effective in countries with high power distance/masculinity?
	Organization	Does the organizational context moderate the relationship between servant leadership and organizational outcomes?
	Organization	Does servant leadership have a different level of success depending on the type of organization (i.e. bureaucratic, organic, mechanistic, entrepreneurial, non-for-profit, volunteer)?
	Team	How does team autonomy moderate the relationship between servant leadership and team outcomes?
	Follower	How does task ambiguity, complexity, and design moderate the relationship between servant leadership and follower outcomes?
Self-determination theory	Organizational	Do HR practices moderate the relationship between leader personality and servant leader behaviors?
	Organizational	Does the organizational structure moderate the relationship between leader personality and servant leader behaviors?
	Leader	Do high levels of prosocial motivation, service orientation, and compassion lead to servant leader behaviors?
	Leader	Does having access to mentors and training programs influence the development of servant leadership?
	Leader	Does servant leadership have a trickle-down effect?
Servant leadership (general)		Is servant leadership empirically distinct from ethical, authentic, and transformational leadership?
		Does servant leadership predict organizational, team, and follower outcomes above and beyond instrumental, authentic, ethical, transformational leadership?
		Are there different paths by which servant leadership predicts outcomes relative to ethical, authentic, and transformational leadership?
		Does servant leadership predict organizational, team, and follower outcomes above and beyond organizational culture and HR practices?
		Is there a relationship between the leader's age, gender, education, and tenure and servant leadership behaviors?
		How does the relationship between servant leadership and followers develop overtime?
		How servant leadership influences employees during significant organizational change?

hope that we have been able to guide existing scholars on how to research servant leadership is a more robust manner, and offer insight to new scholars about where we have been as a field, and where we would like them to take us. Based on our analysis, we present Table 11, which offers a number of research questions to guide future research in servant leadership. Further, we offer three overarching ideals for future servant leadership studies:

1. Where possible, use experimental designs to establish causality and protect against endogeneity. For example:
   a. Video manipulation of the servant leader (see Podsakoff, Podsakoff, MacKenzie, & Klinger, 2013)
   b. Pen and paper manipulation of the servant leader (see van Dierendonck et al., 2014)
2. Seek to use alternate methods to measure servant leadership:
   a. Eye-tracking
   b. Field experiments
   c. Mixed methods design
   d. Latent profile analysis
3. If a survey design is required:
   a. Measure each variable across multiple time points (e.g. ESM)
   b. Include multiple competing variables (e.g. instrumental leadership)
   c. Include an instrumental variable for servant leadership (e.g. agreeableness)
   d. Include multiple raters in the design (e.g. superior, leader self-rating, followers)

Implications for practitioners

With over 200 studies having been published on servant leadership, we now are able to provide substantial advice for practitioners. The consistent positive relationships found between servant leadership and valued outcomes (even when controlling dominant forms of leaderships, such as transformational and LMX) at the individual level (e.g., individual citizenship behaviors, task performance, creativity), team level (e.g., team potency, team performance), and organizational level (e.g., customer satisfaction, return on investment) provide strong evidence in favor of selecting and training leaders to practice servant leadership. It appears that servant leadership is especially well-suited for organizations that desire long-term growth profiles designed to benefit all stakeholders (as opposed to a focus on short term profits for shareholders only). Practitioners need to understand that servant leadership has an *indirect* influence on organizational outcomes. Servant leaders focus on providing for followers so that they reach their full potential, become empowered to handle tasks and decisions on their own, and who adapt to communal sharing and a culture of serving others. With such a culture in place, customers are well-served by employees. Customer satisfaction results in loyalty to the organization in the form of repeat purchases and promotive voice, which in turn translates into revenue growth and higher stock prices.

Along with the many benefits of servant leadership, practitioners must be prepared to exert tremendous effort in developing a servant leadership culture, starting with themselves as role-models. Prioritizing the needs of followers is in many ways counter to humans' survival instincts that are driven by a focus on self-interest. It takes discipline for servant leaders to minimize these instincts within themselves through role-modelling, and within their followers through encouragement of

sharing and helping among followers. Because servant leadership is difficult to master, it requires deliberate and continuous practice to maintain a servant leadership orientation. As with other endeavors that require a long obedience in the same direction, however, it is worthwhile, because the benefits of developing strong bonds of mutual trust between leaders and followers pay dividends to organizations. That is, followers *want to* engage in the behaviors that help fellow workers, customers, and the organization.

We suggest that building a servant leadership culture requires a combination of selecting pro-socially motivated conscientious people, combined with servant leadership training. Selection is important because there is a limit to how much training can change individuals' stable personality characteristics. For example, regardless of the quality of a training program, we contend that it is unlikely that self-centered, dogmatic, narcissistic people can be trained to be other-centered, sensitive, empathetic, socially sensitive servant leaders. And as with virtually every major organizational change, moving an organization from a command and control culture to one based on servant leadership will take several years to complete. Thus, organizations attempting to implement servant leadership cultures need to be patient.

Conclusion

In response to this increased interest in servant leadership and the proliferation of studies, our objectives for this paper were four-fold. First, we reviewed how servant leadership was understood within the leadership literature and offered a clear definition of servant leadership. Second, we presented a critique of the measures used in servant leadership research, concluding that the Liden et al. (2015, 2008), Sendjaya et al. (2018, 2008), and van Dierendonck et al. (2017), van Dierendonck and Nuijten (2011) measures were the only measures that had gone through rigorous process of construction and validation. Third, we mapped the nomological network of servant leadership research offering scholars an overview of what has been studied thus far. Finally, we detailed a research agenda targeted specifically to improve how the field studies servant leadership.

The review has demonstrated that the servant leadership field has made progress in the last 20 years, however, the field of servant leadership still has its critics. Namely, as there are still lingering questions the conceptual and empirical overlap between servant leadership and transformational, ethical and authentic leadership and there are criticisms about how much the existing research in this field can tell us as it is restricted by its own limitations in research design. Our view is that it would be premature to hit the restart button on the field. Many of the problems have arisen from poor construct clarity, poor measurement, and poor design. We hope by heeding the advice offered in this review to resolve these problems, the servant leadership research can move forward and continue to offer significant insights to the leadership field over the next 20 years.

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