

Servant leadership measurement: a comparison of five instruments in China

Servant leadership in China

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Abstract

Purpose – This article provides deeper insights into the measurement of servant leadership within the Chinese culture. Servant leadership is viewed as a responsible leadership style that is beneficial to organizations by awaking, engaging and developing employees and working from a sense of service and stewardship for the world with a long-term perspective.

Design/methodology/approach – The paper consists of a survey study that examines the relationships between 5 servant leadership measures translated into Chinese and outcome measures using a sample of 463 participants.

Findings – The authors' results show that the five measures are very comparable. Although some differences exist, the combined conclusions from internal consistency, intercorrelations and correlations to outcome variables and factor analysis confirmed their overall commonality. A core group of 11 items is introduced as a potential scale to represent the underlying variance of all 55 items.

Originality/value – This study validates how the five instruments are grounded in the core aspects of servant leadership described by Robert Greenleaf, the service aspect of choosing to become a leader and the importance for a leader to give attention to the followers' personal growth, meaningful work and well-being.

Keywords Servant leadership, Measurement, China

Paper type Research paper

Introduction

Servant leadership is seen as a responsible leadership style that benefits organizations by awakening, engaging and developing employees, and by relating to people as whole individuals. Servant leadership provides real insights on how to prioritize collaboration by focusing on a sense of purpose, the needs and strengths of people and their personal growth, ethical behavior, community building and stewardship for the world with a long-term perspective (Van Dierendonck, 2011). Since the first servant leadership measure was developed by Lytle *et al.* (1998), at least 17 measures have been developed. This proliferation of measures raises the question of to what extent they operationalize the same underlying construct.

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A recent review article by [Eva et al. \(2019\)](#) described three of them in more detail given that attention to content validity in their scale development process was the strongest. These are [Van Dierendonck and Nuijten \(2011\)](#), [Liden et al. \(2008\)](#) and [Sendjaya et al. \(2008\)](#). The review article also showed that few studies combined more than one measure, usually two at the most ([Eva et al., 2019](#)). Therefore, we know little about how these measures compare to each other.

This study aims to provide this insight. We start with the short versions of the three instruments identified and recommended by [Eva et al. \(2019\)](#); [Van Dierendonck et al. \(2017\)](#), [Liden et al. \(2015\)](#), and [Sendjaya et al. \(2018\)](#). These were originally developed as long multi-dimensional measures. Additionally, we include two one-dimensional measures: [Ehrhart \(2004\)](#) and [Winston and Fields \(2015\)](#). [Ehrhart's \(2004\)](#) measure was one of the first instruments to be developed and is among the most used ([Gui et al., 2021](#)). In the review by [Eva et al. \(2019\)](#), it was noted that [Ehrhart's](#) original publication lacked an explicit description of the construction process of the scale items, which raised concerns over content validity, something that our study aims to further evaluate and address. [Winston and Fields's \(2015\)](#)'s measure is the fifth instrument included in this paper. It is the most recent addition to the measurement instruments of servant leadership. It is included here because it entered the field at a late stage, so their measure was able to build on the conceptual and empirical knowledge available from both servant leadership experts and previous measures.

The study is conducted within mainland China to provide deeper insights into the measurement of servant leadership within the Chinese culture. "Great leaders serve" is a general belief held by society in both ancient times and the present in China. It is integrated into Chinese culture and manifests itself in social norms. As a country culture, China scores high on both long-term orientation and collectivism, which provide a context that fosters servant leadership ([Hofstede, 2001](#)). Although a culture with high power distance, like China, tends to associate leadership positions with respect and high social status, it also requires leaders to assume responsibilities for protecting and developing their followers. In a collective culture, leaders are expected to take care of the members in the group and provide support to ensure the attainment of members' collective well-being. The key elements of servant leadership reflect the classic teachings in Chinese philosophies. For instance, Mencius (372–289 BC), a Chinese thinker whose importance in the Confucian tradition is second only to Confucius himself, had a famous saying, "Least is the ruler oneself . . . the people are the most important element." Another very important thinker in Chinese history, Lao Tzu, emphasized the importance of kindness in leadership in his famous words, "Kindness in words creates confidence. Kindness in giving creates love." Servant leadership is a leadership style that aligns with China's unique social-economic features ([CPC, 2021](#)). "Serving the people" (为人民服务, *wei ren min fu wu*) is a widely adopted standard for evaluating leadership effectiveness.

The use of these five measures in the Chinese context requires special consideration for the content validity concerning language translation. Three of the five measures – [Ehrhart \(2004\)](#), [Liden et al. \(2008\)](#) and [Winston and Fields \(2015\)](#) – were originally developed in the USA and one – [Sendjaya et al. \(2008\)](#) – was developed in Australia, all in English. The other measure, [Van Dierendonck and Nuijten \(2011\)](#), was originally developed in The Netherlands in Dutch and has been translated into English and other languages. Together, the five measures are available in at least fourteen languages, namely English, Dutch, Chinese, German, Finnish, Spanish, Italian, Portuguese, Turkish, Icelandic, Japanese, Indonesian and South Korean ([Van Dierendonck et al., 2017](#); [Zhang et al., 2019](#)). In almost all cases, in which a scale is used in a language context that differs from where it was originally developed, the measure is translated using a forward-backward translation procedure to ensure that the translated version matches the original as best as possible. However, research on the cross-cultural validity of servant leadership scales is scarce. An exception is [Van Dierendonck et al. \(2017\)](#), who examined the cross-cultural validity of the Servant Leadership Survey (SLS) developed by [Van Dierendonck and Nuijten \(2011\)](#) across eight countries and languages:

The Netherlands, Portugal, Germany, Iceland, Italy, Spain, Turkey and Finland. Their study confirms the scale's configural invariance and partial measurement equivalence in these eight European languages but not in Chinese. Different than the evidence shown in [Van Dierendonck et al. \(2017\)](#) with regards to the scale's content validity that compared European languages, we note some major differences between Chinese and English that may make translation particularly challenging. Among these are the appearance of terms in characters instead of alphabetic words, the use of short sentences, the preference for the active voice and the tendency to use more concrete nouns rather than abstract nouns in Chinese compared to English.

Overall, studies that examine the impact of servant leadership across the globe confirm that servant leadership has predictive power over a broad range of affective (e.g. job satisfaction) and behavioral (e.g. task performance) workplace outcomes in different cultural settings ([Neubert et al., 2022](#)). Specifically for China, the meta-analysis by [Stein et al. \(2020\)](#) provided arguments for and against the effectiveness of servant leadership in China compared to Anglo countries. Pro-arguments include the Confucian concept of benevolence and the emphasis on integrity. Contra arguments include a preference for a more directive and less participative leadership style in China. The [Stein et al. \(2020\)](#) meta-analysis did not find significant differences in the links between servant leadership and workplace outcome variables such as organizational commitment behavior (OCB), in-role performance, creative behaviors, affective commitment and job satisfaction in China and Anglo countries. This confirms the relevance of servant leadership for workplace outcomes in China.

What is lacking are insights into how the different servant leadership measures compare to each other, given that they are seldom included in the same study. The only exception for the Chinese context seems to be [Liu et al. \(2015\)](#) who reported a correlation of 0.85 between the 28-item Liden *et al.* scale and the Ehrhart scale. They also observed correlations of 0.55 and 0.49 for Liden *et al.* and Ehrhart, respectively, with public service motivation. This lack of comparison makes it difficult to evaluate the convergence or divergence of research findings of studies that adopt different servant leadership scales. For instance, if one study finds a 0.40 correlation between servant leadership and job satisfaction and another study that used a different scale shows a 0.20 correlation between the same two variables, it is hard to tell whether the diverging findings are due to the use of different servant leadership scales or different research settings.

The current study includes the five servant leadership measures described above and a selected group of outcome variables. Our purpose is to examine how these five measures of servant leadership are related to the same set of commonly used and important outcome variables. As such, we chose the outcome variables purposefully to together represent employee well-being and identification with the organization: organizational commitment, psychological needs, flourishing and psychological ownership.

Organizational commitment, defined as “a force [that] binds an individual to a course of action that is of relevance to a particular target” ([Meyer and Herscovitch, 2001](#), p. 301), whereby three different forms of commitment are usually focused on, that is affective, continuance, and normative commitment ([Allen and Meyer, 1996](#)). Servant leadership is positively correlated with organizational commitment and in particular, affective commitment. According to the meta-analysis by [Stein et al. \(2020\)](#), the mean corrected correlation was 0.54 in studies conducted in the Chinese context.

Psychological needs are key determinants of health and well-being ([Ryan and Deci, 2000](#)). Following self-determination theory, we focus on four key psychological needs: competence, autonomy, relatedness and meaning. Competence refers to effectively acting on and influencing one's environment. Autonomy is the experience of one's own will and initiative in one's behavior. Relatedness refers to feelings of connection and belonging. Meaning is added as the fourth need, which reflects how a person conceives the world and can set and foster

one's values. Servant leadership encourages people in their individual development and enhances a sense of purpose (Correia de Sousa and Van Dierendonck, 2010). A central element of servant leadership is understanding the needs of people in one's team and taking them explicitly into account. It is the core element of the famous quote by Greenleaf (1977) on what he considers the true test of servant leadership, "The difference manifests itself in the care taken by the servant first to make sure that other people's highest priority needs are being served. The best test, and difficult to administer, is: Do those served grow as persons?" Building on this, we included flourishing as a general measure of well-being which represents people's active and relational participation in realizing their unique potential (McMullin, 2019; Waterman, 2007). Flourishing is an integrative construct (Ribera and Ceja, 2018) that integrates elements of job satisfaction, fulfilling basic psychological needs and their sense of meaning in their activities (Seligman, 2011).

Finally, we added psychological ownership (Pierce *et al.*, 2003) which echoes a strong sense of identification and reflects the cognitive-affective state as if the organization is part of themselves. We expect that servant leadership is positively associated with employees' psychological ownership. In the survey, we use Avey *et al.* (2009) and Sendjaya *et al.* (2019) conceptualization with five dimensions: self-efficacy, accountability, sense of place or belongingness, self-identity and territoriality.

In sum, the current research aims to provide insights into the validity of the above-mentioned five measures when translated into Chinese with a survey study using a sample of 463 Chinese persons. They filled out an assessment that included the five servant leadership measures and the outcome measures. This allows us to examine the extent to which the five servant leadership scales are comparable to each other in the same research setting.

Methods

Sample

The participants were alumni of an MBA program from a large business school in China. The alumni were approached through the alumni office and asked to participate in an anonymous online survey. Participation was voluntary. In total, 463 individuals filled out the survey; 227 were male and 238 were female. Their age range was between 25 and 51 years: 38 persons were 25/26 years, 126 persons between 27 and 31, 156 persons between 32 and 36, 102 persons between 37 and 41 and 43 persons between 42 and 51. Their work experience ranged from less than a year (7), one to three years (30), four to six years (72), seven to 10 years (99) to more than 10 years (257). The size of the organization differed between less than 50 employees (44), between 50 and 100 employees (46), between 100 and 500 employees (133), between 500 and 2000 (95) and larger than 2000 (147). The participants worked at different hierarchical positions: 126 persons in a staff function, 120 as supervisors, 151 as managers, 55 as directors (deputy general manager) and 13 as general managers.

Measures

All self-reported variables were measured with a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Demographic data, such as gender and age, were also collected. All materials were originally developed and published in English. They were translated into Chinese and validated through a translation-back-translation process. To ensure the accuracy of the translation, two bilingual scholars compared the results to ensure each of the survey questions was phrased clearly and accurately after the double-translation procedure.

Servant leadership. Servant leadership was measured with the short versions of three multi-dimensional servant leadership measures and two one-dimensional measures.

Van Dierendonck *et al.* (2017). The original scale consists of 30 items (Van Dierendonck and Nuijten, 2011). The short scale was developed using a combined sample of 5,201 respondents from eight countries with specific attention for configural invariance, measurement equivalence and structural equivalence across the different language versions. The short version consists of 18 items. Internal consistency in terms of Cronbach's alpha is 0.96.

Liden *et al.* (2015). The original scale consists of 27 items (Liden *et al.* 2008). The short scale was developed using three samples of 729 undergraduates, in total, 218 graduate students, and 552 leader–follower dyads with specific attention to keeping the core item of each of the original seven dimensions. A core item was defined as having the highest factor loading on a dimension. The short version consists of 7 items. Internal consistency, Cronbach's alpha is 0.85.

Sendjaya *et al.* (2019). The original scale consists of 35 items (Sendjaya *et al.*, 2008). The short scale was developed using a combined sample of 3072 respondents. The highest loading item of each dimension from confirmatory factor analysis (CFA) analysis was chosen for the short version. The short version consists of 6 items. Internal consistency, Cronbach's alpha is 0.93.

Ehrhart (2004). This is a one-dimensional scale consisting of 14 items. It was developed as part of a study among grocery stores employees in the eastern region of the U.S. It was developed to cover seven core dimensions of servant leadership formulated based on an extensive literature review and Greenleaf's writings. Internal consistency, Cronbach's alpha is 0.96.

Winston and Fields (2015). This is a one-dimensional scale consisting of 10 items. It was developed by having 23 researchers at a conference on servant leadership rate items from 5 prominent servant leadership measures on their reflection of servant leadership. The highest-ranking items were tested among a sample of 456 working adults. Internal consistency in terms of Cronbach's alpha is 0.95.

Organizational commitment. This is measured using the three-dimensional scale of Allen and Meyer (1996). The scale consists of 18 items divided over 3 dimensions: affective commitment, continuous commitment and normative commitment. The internal consistency in terms of Cronbach's alpha is 0.80, 0.81, and 0.83, respectively.

Psychological needs. Four dimensions of psychological needs were measured with items from Sheldon *et al.* (2001). Each dimension was measured with three items. The internal consistency (Cronbach's alpha) for the subscales is 0.86 for autonomy, 0.86 for competence, 0.86 for connectedness and 0.85 for meaningfulness.

Flourishing. Flourishing was measured with the 15-item scale developed by Butler and Kern (2016). We are using the full scale here as a general indicator of employee wellbeing. Internal consistency in terms of Cronbach's alpha is 0.95.

Psychological ownership. Psychological ownership was measured by the 16 item-scale of Avey *et al.* (2009). The conceptualization of Avey *et al.* consists of five dimensions, measured by three or four items: self-efficacy, accountability, sense of place or belongingness, self-identity and territoriality and the internal consistency in terms of Cronbach's alpha are 0.90, 0.88, 0.87, 0.83 and 0.86 respectively.

Results

The comparison of the five servant leadership measures was done in five steps. First, we tested the omega values as an alternative measure of internal consistency. Second, the measures were compared with each other by calculating the intercorrelations and a second-order CFA. Third, we tested the convergent and discriminant validity of the five measures by comparing the strength of the relation between them and the outcome variables. Additionally, a second-order exploratory factor analysis was carried out including all

variables in this study. Fourth, we explored which servant leadership items best reflect servant leadership as the underlying concept.

The first step was to examine the reliability of the measures by calculating the omega values in addition to Cronbach's alpha, using Hayes and Coutts (2020) SPSS syntax. Omega has been suggested as an alternative internal consistency measure, given some of the flaws identified with the Cronbach's alpha. The values of Omega were similar to the alpha values, i.e. 0.96 for Van Dierendonck *et al.* (2017), 0.85 for Liden *et al.* (2015), 0.94 for Sendjaya *et al.* (2019), 0.96 for Ehrhart (2004) and 0.95 for Winston and Fields. We may, therefore, conclude that the internal consistency of all five short scales is good to excellent.

In the second step, we compared the five instruments with each other. Table 1 shows their intercorrelations and they ranged between 0.79 and 0.92, whereby the majority of the correlations were in the high eighties. This confirms that they are all strongly related, as expected. To provide insights into the relative contribution of the five measures toward servant leadership as the overarching concept underlying all five measures, a CFA with Mplus 8.5 was carried out. The mean scores of the five measures were tested as first-order manifest variables of one second-order latent variable. The fit was excellent: $X^2_{(5)} = 29.979$, Comparative Fit Index (CFI) = 0.99, Tucker-Lewis Index (TLI) = 0.98. Root Mean Square Error of Approximation (RMSEA) = 0.10 and Standardized Root Mean Square Residual (SRMR) = 0.01. The standardized coefficients were 0.95 (Van Dierendonck *et al.*, 2017), 0.87 (Liden *et al.*, 2015), 0.94 (Sendjaya *et al.*, 2019), 0.96 (Ehrhart, 2004) and 0.92 (Winston and Fields, 2015). The overall image reflected the intercorrelations; all measures carried strong aspects of servant leadership. The highest value was found for Ehrhart's measure, followed by the Van Dierendonck *et al.* measure.

In the third step, we examined the relations of these measures to the outcome variables. Most striking from Tables 2 and 3 is how similar these values are. Although some differences exist, they are usually within a different range of 0.02 or 0.03. Also, it seems that whereas some instruments show a stronger ability to predict some outcome variables, others are stronger with different ones. As such, it is difficult to take one as the best one or rank them in order. The values themselves are similar to those reported in recent meta-analyses (e.g. Stein *et al.*, 2020). This was confirmed when we analyzed the predictive validity of each of the five measures to one overall second-order follower well-being factor, using Mplus 8.5. The standardized coefficients were as follows: 0.65, 0.66, 0.66, 0.65 and 0.65 for the five measures, respectively. So, in essence, they predicted the same amount of variance in the underlying variance of our outcome variables.

As a final step, we explored which of the 55 items were most central to servant leadership within the current sample. This provides valuable insights into the underlying conceptual validity of how servant leadership is currently measured. Using Mplus 8.5, a one latent factor model was tested with all 55 items as manifest variables. This one-factor latent variable model with all 55 items loading on that dimension gave a fit of $X^2_{(1430)} = 5890.369$, CFI = 0.82, TLI = 0.81. RMSEA = 0.08 and SRMR = 0.04. This indicates that the variance of the 55 items

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Van Dierendonck <i>et al.</i> (2017)	4.66	1.23				
2. Liden <i>et al.</i> (2015)	4.41	1.19	0.86			
3. Sendjaya <i>et al.</i> (2019)	4.38	1.44	0.89	0.81		
4. Ehrhart (2004)	4.49	1.30	0.92	0.83	0.90	
5. Winston and Fields (2015)	4.55	1.31	0.87	0.79	0.87	0.90

Note(s): All correlations are significant, $p < 0.001$

Source(s): Authors' work

Table 1.
Descriptives and intercorrelations of the servant leadership measures ($N = 465$)

	Affective Commitment	Normative Commitment	Continuous Commitment	Autonomy	Competence	Connectedness	Meaningfulness	Flourishing
1. Van Dierendonck <i>et al.</i> (2017)	0.54	0.59	0.45	0.58	0.32	0.34	0.29	0.43
2. Liden <i>et al.</i> (2015)	0.52	0.57	0.41	0.58	0.32	0.30	0.29	0.45
3. Sengjaya <i>et al.</i> (2019)	0.55	0.60	0.42	0.58	0.31	0.32	0.28	0.44
4. Ehrhart (2004)	0.54	0.59	0.46	0.57	0.31	0.32	0.26	0.42
5. Winston and Fields (2015)	0.50	0.59	0.47	0.58	0.31	0.33	0.30	0.41

Source(s): Authors' work

Table 2.
Correlations between
servant leadership
measures and well-
being outcome
variables ($N = 465$)

is more diverse than one factor only. This was confirmed by running an exploratory factor analysis using principal component analysis with SPSS 27.0, where the eigenvalue of five components loaded above 1.0. A parallel analysis suggested two factors. However, checking out the varimax rotated solution with two factors showed that 90% of the items loaded relatively strongly on both factors; only 3 of the 55 items loaded below 0.30 on one factor and above 0.50 on another. A similar outcome was shown with an obliminal rotation, where one factor was dominant, and no item loaded strongly on the second factor alone. Similarly, the scree plot suggested only one dimension, with an eigenvalue of 57.512. The Mplus modification indices showed that most of the unexplained variance in the one-factor latent variable model was due to within measures items, most notably, the humility items of [Van Dierendonck et al. \(2017\)](#) and the community service items of [Ehrhart \(2004\)](#). This acknowledges the underlying multidimensional nature of the original scales as well as the existence of one latent servant leadership dimension. Within the one-factor latent model, the factor loadings of the 55 individual items ranged between 0.43 and 0.87, with the majority over 0.70.

For additional insights into the core focus of the five measures together, [Table 4](#) provides the 11 items that had a standardized factor loading of at least 0.82 on the latent servant leadership factor. In the two-factor solution of the exploratory factor analysis described above, these items, in particular, loaded strongly on both factors, confirming that together they represent the core of servant leadership. As could be expected, the 11 items are strongly interrelated as is exemplified by a high internal consistency with a Cronbach's alpha of 0.96.

Table 3.
Correlations between servant leadership measures and psychological ownership (N = 465)

	Self-efficacy	Accountability	Sense of place or belongingness	Self-identity	Territoriality
1. Van Dierendonck et al. (2017)	0.38	0.45	0.56	0.51	0.15
2. Liden et al. (2015)	0.38	0.49	0.59	0.52	0.11
3. Sendjaya et al. (2019)	0.37	0.45	0.60	0.52	0.13
4. Ehrhart (2004)	0.36	0.45	0.60	0.52	0.16
5. Winston and Fields (2015)	0.35	0.45	0.59	0.52	0.18

Source(s): Authors work

Table 4.
Eleven highest loading servant leadership items

	My direct supervisor ...
1. Sendjaya et al. (2019) , item 1	... uses power in service to others, not for his or her ambition
2. Sendjaya et al. (2019) , item 5	... helps me generate a sense of meaning out of everyday work
3. Sendjaya et al. (2019) , item 6	... contributes to my personal and professional growth
4. Ehrhart (2004) , item 2	... creates a sense of community among departmental employees
5. Ehrhart (2004) , item 6	... makes the personal development of department employees a priority
6. Ehrhart (2004) , item 9	... balances concern for day-to-day details with projections for the future
7. Ehrhart (2004) , item 11	... makes me feel like I work with him/her, not for him/her
8. Ehrhart (2004) , item 12	... works hard to find ways to help others be the best they can be
9. Winston and Fields (2015) , item 4	... is genuinely interested in employees as people
10. Winston and Fields (2015) , item 5	... understands that serving others is most important
11. Winston and Fields (2015) , item 8	... is always honest

Note(s): All standardized factor loadings on the general servant leadership factor: 0.82 or higher
Source(s): Authors' work. The individual items are from the original articles

Their averaged mean correlated highly with the five original scales, that is 0.92 for [Van Dierendonck et al. \(2017\)](#), 0.84 for [Liden et al. \(2015\)](#), 0.95 for [Sendjaya et al. \(2019\)](#), 0.97 for [Ehrhart \(2004\)](#) and 0.93 for Winston and Fields.

Conclusion

The research in this paper was carried out to provide deeper insights into the comparative reliability and validity of five core servant leadership measures after their translations into Chinese. The general conclusion is that all five are very comparable. Although some differences exist, the combined insights based on analysis of internal consistency, intercorrelations, correlations to outcome variables and factor analysis show their commonality. Some measures show strengths in some areas, whereas others perform slightly better in other aspects. On the whole, however, the differences are small.

The first contribution of this article is that we show for the first time how closely connected the five most important servant leadership measures are. Most notably hereby is the content validity whereby the differences in correlations for the majority of the concepts are not more than 0.04. This is an important finding given that it provides confidence in the comparability of results reported in different studies.

The second contribution is that we provide extra validity information on two measures not recommended in the [Eva et al. \(2019\)](#) review article. Most particularly, the review mentioned a lack of information on the construct validity of the [Ehrhart \(2004\)](#) measure. The current article confirms that it has strong content validity with high correlations with the other four instruments and comparable predictive validity. Notable are the high factor loadings in the second-order factor analysis, confirming that this measure addresses the core aspects of servant leadership and its content validity in relation to the other measures. [Ehrhart's \(2004\)](#) instrument was among the first measures available and still is one of the most used. It is an important finding that we show that researchers can have confidence in their findings.

The third contribution is that we show for the Chinese context, which elements are experienced as core aspects of servant leadership underlying the combined variance of the five measures. In particular, two aspects come to the front looking at the content of the 11 items: the service aspect of being a leader and the importance of attention for the personal growth and a sense of meaningfulness of their people. This is very much in line with [Greenleaf's \(1977\)](#) definition:

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 . . . The difference manifests itself in the care taken by the servant first to make sure that other people's highest priority needs are being served. The best test, and difficult to administer, is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And, what is the effect on the least privileged in society? Will they benefit or at least not be further deprived? ([Greenleaf, 1977](#), p. 6)

It is also possible to link the items directly to [Eva et al.'s \(2019\)](#) definition of servant leadership: "an (1) other-oriented approach to leadership (2) manifested through one-on-one prioritizing of follower individual needs and interests, (3) and outwards reorienting of their concern for self toward concern for others within the organization and the larger community" (p. 114). The first aspect is reflected in items 1, 2 and 10. The second aspect is reflected in items 3, 5 and 8. The third aspect is reflected in items 4 and 6. The remaining three other items reflect a first-among-equals attitude that also characterizes servant leadership ([Van Dierendonck, 2011](#)) but was not explicitly mentioned as a part of [Eva et al.'s \(2019\)](#) definition.

The items themselves came from three of the five measures (i.e. [Sendjaya et al., 2019](#); [Ehrhart, 2004](#); [Winston and Fields, 2015](#)). This may be because these 11 items are more attitudinal and less behaviorally oriented. The [Liden et al. \(2015\)](#) and [Van Dierendonck et al. \(2017\)](#) measures

have a stronger behavioral orientation with items that are more specific and less generic. It confirms the importance of asking several questions representing different aspects that together give an indication of the level of servant leadership as depicted by a leader.

This study has some limitations that should be taken into consideration. The most important one is that the survey study is a single-sample study within China. Although the sample size is respectful, it is likely that the exact values of the correlations and factor loadings will be different if this study is replicated in a different country and setting. This is important to take into consideration given the small differences between the measures. This is related to possible criticism of the number of items related to the sample size which is 1–8.5. However, with close to 500 participants and the high communality between the items, this can be perceived as enough and even as excellent (Mundfrom *et al.*, 2005). Furthermore, it is a cross-sectional study, so only correlations are reported. Common source variance can play a role when interpreting the strength of the correlations with the outcome variables in Tables 2 and 3, and as such, no causal effects can be concluded. Given that common source variance will likely be similar across the full survey, the interpretation of comparing the measures with each other with respect to their relative predictive validity holds.

It remains essential to choose the right instrument for a specific context. There is also the necessity to start studying moderators and mediators within the servant leadership process. Although a broad range of studies is available that do so, there is still limited information that allows for generalization across studies. We recommend not only looking at the numbers as presented here and in other articles, but also checking out the content of the items and choosing an instrument that will reflect best with the professional context, the outcome variables of interest and participants' background. Additionally, the items in Table 4 could together potentially be used as a new measure of servant leadership. Our results already provide a first indication of its reliability and validity. Given that the current sample was from mainland China, we recommend future studies from other countries and in other languages. Of special interest would be its predictive validity regarding employee performance, the relation to organizational culture and its sensitivity regarding servant leadership development.

In conclusion, we have shown that servant leadership can be reliable and validly measured with Chinese translation versions of the five most prominent survey measures with a sample from China. We have provided future researchers with additional information as to the choice of servant leadership measurement instruments.

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