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Correlation of Essential Servant Leadership Behaviors, Perceived
Organizational Support, and Employee Well-being

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Abstract

This current research follows up on Greenleaf's oft-quoted best test of servant leadership that calls for employees to be better off financially, emotionally, physically, psychologically, etc. because of the time spent with the servant leader. While oft-quoted, little empirical work exists to see if this is true. In this study, 170 participants provided their perception of their supervisors' level of servant leadership, their perception of the organization's support, and their self-report of their general well-being. Gender and age bracket information described the participants, and there were no significant differences between gender or age brackets for participants' perception of their supervisors' servant leadership. The analysis showed that there was a moderate positive correlation between servant leadership, perceived organizational support, and general well-being. A modification of an existing general well-being instrument provided a new eight-item general well-being scale with a Cronbach's alpha of 0.956.

Keywords: Servant Leadership, Perceived Organizational Support, Employee Wellbeing; Correlation

Introduction

Greenleaf (1977) said that a test of servant leadership includes the evidence that the employee is/was better off because of his/her working in the organization. Greenleaf stated:

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? (Kindle Locations 351-352).

To further the literature on servant leaders' impact on employees' well-being, the research question for this study is: What correlation exists among employees' perception of their supervisors' servant leadership behaviors, the employees' perception of organizational support, and employees self-report of general well-being. The following sections on servant leadership, perceived organizational support, and employees' general well-being precede the hypotheses tested in this study.

Servant leadership

Bass (2000) said that servant leadership focused on the employees, while transformational leadership focused on the organization. Bass' comment aligns well with Greenleaf's (1977) test of servant leadership. Patterson (2003), in her model of servant leadership, commented about the importance of the leader's moral love for the employees. Also, an alignment with Greenleaf's test. Page and Wong (2000) included 'caring for others' in their servant leadership model. Barbuto and Wheeler (2006) included 'emotional healing' in their servant leadership model. All of these dimensions of

servant leadership point to a relationship between the leader's level of servant leadership and the employees' general well-being.

Servant leadership instruments by Page and Wong (2000), Sendjaya and Sarros (2002), van Dierendork and Nuijten (2011), Dennis and Bocarnea (2005), Barbuto and Wheeler (2006), Hale and Fields (2007), along with Liden, Wayne, Zhao, and Henderson (2008) include multiple dimensions, which, according to Winston and Fields (2015) obfuscate the ability to measure that which is essentially servant leadership and not dimensions of other leadership styles.

Essential Servant Leadership Behaviors Instrument

To clarify the measurement of servant leadership Winston and Fields (2015) created an item-pool of servant leadership behaviors from the multi-dimensional servant leadership instruments created in the studies cited above, asked a panel of experts to review the list and vote on keeping or removing each behavior, sent the resultant list of 22 items to 443 working adults and asked them to evaluate their supervisors using the 22 items. After principal component analysis and scale optimization, Winston and Fields produced a 10-item single-scale measure of essential servant leadership behaviors (ESLB) that had a Cronbach's alpha of 0.96. Examples of the items in the scale include:

- 1. Practices what he/she preaches.
- 2. Serves people without regard to their nationality, gender, or race.
- 3. Sees serving as a mission of responsibility to others.
- 4. Genuinely interested in employees as people.

Subsequent research studies showed Cronbach alphas ranging from 0.88 to 0.96 (Cancino, 2019; Hargadon, 2018; Hirschy; Phillips, 2018). Participants in this study used the ESLB to provide their perception of their supervisor's servant leadership behaviors.

Perceived Organizational Support

Eisenberger, Huntington, Hutchison, and Sowa (1986), in their effort to understand the antecedents to organizational commitment, developed an instrument to measure employees' perception of organizational support (POS). According to Eisenberger et al., perceived organizational support was the "breadth and consistency of the employee's beliefs concerning the organization's commitment to him or her, and the effects of such perceived organizational support, and of the employee's exchange ideology on absenteeism" (p. 501). Eisenberger et al. believed that the organization's level of concern for the employee's well-being positively correlated with the employee's actual well-being. Eisenberger et al.'s level of concern seems to align with Greenleaf's (1977) test of servant leadership. Eisenberger's focus on the organization is replaced in this current study with the leader's servant leadership behaviors with the underlying premise that the leader's values and behaviors positively impact the organization's culture, which is supported by Hambrick and Mason's (1984) upper echelon theory. Since a possible moderation may exist, this research study includes a regression analysis testing for a moderating effect by POS on the ESLB-General Well-being relationship.

Eisenberger, Stinglhamber, Vandenberg, Sucharski, and Rhoades (2002) recommended an eight-item short form of Eisenberger, et al.'s (1986) measure, which Dawley, Houghton, and Bucklew (2010) used in a study of Perceived organizational support and turnover intention. Dawley et al. found that the short form scale had a

Cronbach's alpha of 0.89. Although van Sonderen, Sanderman, and Coyne (2013) argue that scales should not use reversed wording, I used the eight-item short form in this current study due to Dawley et al.'s success with the scale. The rating scale for the POS instrument consisted of: (a) Strongly Disagree, (b) Moderately Disagree, (c) Slightly Disagree, (d) Neither Agree nor Disagree, (e) Slightly Agree, (f) Moderately Agree, and (g) Strongly Agree.

Four of the eight items are listed below. The (R) denotes that the item required reversed scoring.

- 1. The organization values my contribution to its well-being.
- 2. The organization fails to appreciate any extra effort from me. (R)
- 3. The organization would ignore any complaint from me. (R)
- 4. The organization really cares about my well-being.

General Employee Well-being

Page and Vella-Brodrick (2009) reported that employee well-being consisted of "high-levels of positive impact, low levels of negative impact, and cognitive evaluation of one's satisfaction with their life as a whole" (p. 443). Also, according to Page and Vella-Brodrick, someone with positive well-being is said to be in a state of "positive psychological functioning" (p. 443). Bakker and Demerouti (2007) posited that resources provided by the organization (organizational-support) that help employees do their assigned jobs and tasks might contribute to employees' well-being. These definitions help augment Greenleaf's (1977) test of whether employees are better off because of the servant leader and the organization.

Taylor et al. (2003) reviewed the General Employee Well-being (GWB) scale developed by Dupuy (1978) and noted concerns about the lack of empirical testing of the dimensions, and inconsistent results from factor analysis. In addition to Taylor et al.'s concerns, 14 of the 18 items were scored on a six-point rating scale, four items were scored on a 0-10 rating scale, and eight of the 18 items were reversed scored. Noting van Sonderen, Sanderman, and Coyne (2013) concern about using reversed scored items and considering Wen-Chung Wang, Chen, and Jin's (2015) admonition about not using mixed response ratings, I created a modified version of the 18-item General Employee Well-being instrument and test the instrument using principal component analysis and scale reliability analysis.

Modified General Employee Well-being Instrument

Table 1 shows the original 18 items from the GWB instrument and the revised items for the Modified General Employee Well-being Instrument (Modified GWB).

Table 1: Items from the original GWB and modified GWB instrument

General Well-being Instrument	Modified General Well-being Instrument						
1. How have you been feeling in general? ac	In general, I felt great for the past two months.						
2. Have you been bothered by nervousness or your 'nerves'? ^a	I have felt calm rather than nervous for the past two months.						
3. Have you been in firm control of your behavior, thoughts, emotions, or feelings? ^{a c}	I have been in firm control of my emotions for the past two months.						
4. Have you felt so sad, discouraged, hopeless, or had so many problems that you wondered if anything is worthwhile? ^a	I generally felt that my life was worthwhile for the past two months.						
5. Have you been under or felt you were under any strain, stress, or pressure? ^a	I felt no strain during the past two months.						
6. How happy, satisfied, or pleased have you been with your personal life? ^{a c}	I felt pleased with my personal life for the past two months.						
7. Have you had any reason to wonder if you were losing your mind, or losing control over	I felt confident in the quality of my memory for the past two months.						

General Well-being Instrument	Modified General Well-being Instrument						
the way you act, talk, think, feel, or of your memory? a c							
8. Have you been anxious, worried, or upset? ^a	I felt calm, rather than anxious, during the past two months.						
9. Have you been waking up fresh and rested?	I woke up feeling fresh and rested for the past two months.						
10. Have you been bothered by any illness, bodily disorder, pains, or fears about your health? ^a	I have felt physically healthy during the past two months.						
11. Has your daily life been full of things that were interesting to you? ^{a c}	My daily life has been full of things that were interesting to me for the past two months.						
12. Have you felt downhearted and blue? ^a	I felt up-beat for the past two months.						
13. Have you been feeling emotionally stable and sure of yourself? ^a	I felt emotionally stable for the past two months.						
14. Have you felt tired, worn out, used-up, or exhausted? ^a	I felt energized for the past two months.						
15. How concerned or worried about your health have you been? b c	I felt good about my health for the past two months.						
16. How relaxed or tense have you been? bc	I felt relaxed for the past two months.						
17. How much energy, pep, or vitality have you felt? ^b	I felt energetic for the past two months.						
18. How depressed or cheerful have you been? ^b	I felt cheerful for the past two months.						

Notes: a = six-point rating scale; b = 11-point rating scale; c = reversed scored

Note: response scale for the Modified General Well-being instrument:

Never 1 2 3 4 5 6 7 8 9 10 Always.

Materials and Methods

The research question is: are servant leadership, as measured by the ESLB, perceived organizational support, as measured by the Eisenberger et al. (1986) shortform, and employee well-being, as measured by the Modified General Well-being measure created in this study, correlated? Hypotheses, related to the research question are:

H1: servant leadership correlates with POS.

H2: servant leadership correlates with employee general well-being

H3: POS correlates with employee general well-being

Analysis of correlation is the preferred method of testing the hypotheses.

Sample size for correlation, according to the G*Power 3 sample size calculator (http://gpower.hhu.de) using effect size of 0.6, a = .05, and Power (1-b) = 0.9 was 102 participants. Sample size for regression with effect size of 0.15, a = .05, Power (1-b) of 0.95, and number of predictors = 4 was 129 participants. SurveyMonkey collected the data through their data collection services.

Data collection followed the rules of the Declaration of Helsinki of 1975 (https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/). I received the approval of the Human Subject Review Board form from my university before data collection. All participants gave their informed consent to participate in the study by responding to the first item of the data collection survey.

Results

Participant Demographics

While the required minimum sample size was 129, 170 participants completed the survey. Of the 170 participants, 113 were female, 55 were male, one indicated 'other', and one preferred to not respond to the question. The participants reported that of the 170: (a) 46 were 18-29 years old; 50 were 30-39 years old; 34 were 40-49 years old; 24 were 50-59 years old; 12 were 60-69 years old; 3 were 70+ years old, and 1 person declined to report his/her age.

Modified General Employee Well-being Instrument Analysis

Factor analysis can make use of a rotation, and the selection of a rotation depends on the level of correlation between the items. A Pearson-r correlation of the 18 items showed moderate to high correlation implies that the data was oblique and that a direct oblimin rotation would be appropriate (Brown, 2009). An initial principal component analysis resulted in a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of .951 and Bartlett's Test of Sphericity approximate C^2 of 2643.581, which was significant at p=.000, implying that the data might benefit from factor analysis. All 18 items loaded on two factors with eigenvalues greater than one, but the second factor consisted of one item that cross-loaded on factor 1.

After removing the cross-loading item, a new principal component analysis showed KMO of .951 and Bartlett's Test f Sphericity $C^2 = 2852.810$, also implying that the data might benefit from factor analysis. The principal component analysis showed all 17 items loading on one factor with an eigenvalue of 10.886 that explained 64% of the data and had a Cronbach's alpha of 0.964.

According to DeVellis (2017), when Cronbach's Alpha is high (above 0.90), the scale would benefit from optimization, which implies selecting the highest factor-load items and run another principal component analysis. Of the 17 items, eight had factor loads higher than 0.80. The final principal component analysis of the eight highest-loading items showed KMO of .937 and Bartlett's Test f Sphericity $C^2 = 1359.921$ (p=.000) and a Cronbach's Alpha of .956. The eight items remaining in the Modified General Well-being instrument are:

1. I felt calm, rather than anxious, during the past two months.

- 2. I have felt physically healthy during the past two months.
- 3. I felt emotionally stable for the past two months.
- 4. I felt energized for the past two months.
- 5. I felt good about my health for the past two months.
- 6. I felt relaxed for the past two months.
- 7. I felt energetic for the past two months.
- 8. I felt cheerful for the past two months.

Variable Descriptives

Table 2 shows the means, standard deviations,

Table 2: Scale Descriptives

	Cronbach's	Mean	Std.	Skev	wness	Kurtosis		
	Alpha		Dev.	Mean	Std Err	Mean	Std Err	
ESLB	.931	3.719	0.868	-0.469	0.186	-0.488	0.37	
POS	.913	3.371	1.423	-0.084	0.186	-0.319	0.37	
Modified GWB	.956	5.896	2.145	-0.066	0.186	-0.745	0.37	

Notes: ESLB = Essential Servant Leadership Behaviors; POS = Perceived Organizational Support; Modified GWB = Modified General Well-being; Std. Dev. = Standard Deviation; Std Err = Standard Error

Note: N = 170

Since the Skewness and Kurtosis scores are between -3.00 and +3.00 the data are parametric (Kim, 2013), thus for correlation tests, the Pearson-r test is appropriate.

Correlations

Table 3 shows the Pearson-r correlations for the three scales.

Table 3 Pearson-r of ESLB, POS, and Modified GWB

	ESLB	POS	Modified GWB
ESLB			
POS	.391**		
Modified GWB	.305**	.375**	

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Notes: ESLB = Essential Servant Leadership Behaviors; POS = Perceived Organizational

Support; Modified GWB = Modified General Well-being

Note: N = 170

Note: **p=.000

Moderation Analysis

ANOVA analysis of the Modified GWB scale across the two gender groups and the five Age groups did not show any significance, however, in the moderation analysis,

age, treated as an ordinal variable, showed significance.

Moderation analysis followed Baron and Kenny;s (1986) suggested methods.

Table 4 shows the three models of regression with the first model, the control variables,

the second model with the two predictor variables, and the third model with the

moderator interactive variable (ESLB multiplied by POS), and the result became the

moderator variable. Model 1 showed significance with age, when age was an ordinal

variable. Model 2 showed significance for ESLB and POS, but model 3, not only did not

show significant moderation, but ESLB and POS were not significant.

Table 4 Regression and moderation of the ESLB-Modified GWB relationship by POS

Variable	Model 1				Model 2	Model 2				Model 3			
	В	SE	β	p	В	SE	β	p	В	SE	β	p	
Constant	5.16	.397		.000	1.84	.76		.017	1.98	1.74		.257	
Gender	.20	.338	.046	.550	.24	.31	.05	.450	.24	.32	.05	.457	
Age	.35	.125	.03	.713	.36	.12	.22	.003	.36	.12	.22	.003	
ESLB					.55	.19	.22	.005	.51	.45	.21	.257	
POS					.39	.12	.26	.001	.34	.54	.22	.553	
Combined ESLB and POS									.01	.13	.04	.927	
R^2	.05				.20				.20				
F	3.92				10.27				8.17				
df	2				4				5				
ΔR^2					.15				.00				
R^2 adjusted	.03					.18 .1			.18	8			

Note. N = 170

Discussion

The finding that there is no significant difference between men and women's perception of supervisor's servant leadership aligns with Barbuto and Gifford (2010) but contrasts with Duff's (2013) assertion:

Social role theory, suggesting that women are socialized towards norms of communal support in a manner in which men are not, lends theoretical support to suggest that as with transformational leadership, female leaders should be more likely to employ a servant leadership style than male leaders. (p. 214)

The positive correlation between servant leadership perceived organizational support, and general well-being supports the notion that servant leadership may contribute to employees' well-being. More qualitative and quantitative research should occur to understand if, and how servant leaders affect employees' well-being. The lack of significance in the test for moderation, in the presence of a moderate correlation between perceived organizational support and employees' well-being, implies more research should occur to determine if servant leaders impact organizational support or if organizational support is a separate, unrelated concept to servant leadership.

An additional benefit of this current study is the development of the eight-item scale to measure employees' general well-being. The new Modified General Well-being scale should be helpful for researchers who wish to measure employees' self-report of well-being using a parsimonious reliable instrument.

References

- Bakker, A. and Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328. DOI:10.1108/02683940710733115
- Barbuto, J. E. and Gifford, G. T. (2010). Examining Gender Differences of Servant Leadership:

 An Analysis of the Agentic and Communal Properties of the Servant Leadership

 Questionnaire. *Journal of Leadership Education*, 9(2), 4-22.
- Barbuto, J. E. and Wheeler, D.W. (2006) Scale development and construct clarification of servant leadership. *Group & Organization Management*, 31(3), 300-326.
- Baron, R. M. and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173
- Bass, B. M. (2000). The future of leadership in learning organizations. *Journal of Leadership Studies*, 7(3), 18-40.
- Brown, J. D. (2009). Choosing the Right Type of Rotation in PCA and EFA. *Shiken: JALT Testing & Evaluation SIG Newsletter*. 13(3), 20–25.
- Cancino, D., Jr. (2019). Servant leadership: The effects on work-family conflict and work-family positive spillover (Order No. 13864420). Available from Dissertations & Theses @ Regent University. (2219357630).
- Dawley, D., Houghton, J. D., and Bucklew, N. S. (2010). Perceived organizational support and turnover intention: The mediating effects of personal sacrifice and job fit. *The Journal of Social Psychology*, 150(3), 238-257.
- Dennis, R. S. and Bocarnea, M. (2005). Development of the servant leadership assessment instrument. *Leadership & Organization Development Journal*, 26(8), 600-615.

- DeVellis, R. F. (2017). *Scale Development Theory and Applications Fourth Edition*. Los Angeles: Sage Publications.
- Duff, A. J. (2013). Performance management coaching: Servant leadership and gender implications. *Leadership & Organization Development Journal*, 34(3), 204-221. doi:10.1108/01437731311326657
- Dupuy, H. J. (1978). Self-representations of General Psychological Well-Being of American Adults. Paper presented at the American Public Health Association Meeting, Los Angeles, CA.
- Eisenberger, R., Huntington, R., Hutchison, S., and Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507
- Eisenberger, R., Stinglhamber, F., Vandenberg, C., Sucharski, I. L., and Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565–573.
- Greenleaf, R. (1977). Servant leadership: A journey into the nature of legitimate power and greatness 25th Anniversary Edition (Kindle). New York, NY: Paulist.
- Hale, J. R. and Fields, D. L. (2007), Exploring servant leadership across cultures: a study of followers in Ghana and the USA. *Leadership*, *3*(4), 397-417.
- Hambrick, D. C. and Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2) 193-206.
- Hargadon, J. E. (2018). The effects of servant leadership and job stress on job satisfaction among online university administrators and faculty (Order No. 10809716). Available from Dissertations & Theses @ Regent University. (2038477300).

- Hirschy, M. J. J. (2012). Servant leadership in China: An exploration of servant leadership, humane orientation, and Confucian doctrine of Jen (Order No. 3515408). Available from Dissertations & Theses @ Regent University. (1022632105).
- Kim, H. (2013). Statistical notes for clinical researchers: assessing normal distribution using skewness and kurtosis. *Restorative Dentistry and Endodontics* 52-54. http://dx.doi.org/10.5395/rde.2013.38.1.52
- Liden, R. C., Wayne, S. J., Zhao, H. and Henderson, D. (2008). Servant leadership: development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19(2), 161-177.
- Page, D. and Wong, P. (2000). A conceptual framework for measuring servant-leadership, in Adjibolosoo, S. (Ed.), *The human factor in shaping the course of history and development*, University Press of America, Lanham, MD
- Page, K. M. and Vella-Brodrick, D. A. (2009). The 'What,' 'Why' and 'How' of Employee Well-Being: A New Model. *Social Indicators Research*, 90(3), 441-458. URL: https://www.jstor.org/stable/27734803
- Patterson, K. (2003). Servant leadership: a theoretical model. doctoral dissertation, Retrieved from ProQuest-UMI AAT 3082719, Regent University, Virginia Beach, VA.
- Phillips, L. D. (2018). Investigating the link between essential servant leader behavior and employee engagement in the knowledge economic era: An autonomous motivation critique of servant leader behavior (Order No. 10826311). Available from Dissertations & Theses @ Regent University; ProQuest Central; ProQuest Dissertations & Theses Global. (2057565236). Retrieved from

- http://eres.regent.edu:2048/login?url=https://search-proquest-com.ezproxy.regent.edu/docview/2057565236?accountid=13479
- Sendjaya, S. and Sarros, J.C. (2002). Servant leadership: It's origin, development, and application in organizations. *Journal of Leadership & Organizational Studies*, 9(2), 57-64.
- Taylor, T. E., Poston II, W. S. C, Haddock, C. K., Blackburn, G. I., Heber, D., Heymsfield, S. B. and Foreyt. J. P. (2003). Psychometric characteristics of the general well-being schedule (GWB) with African-American women. *Quality of Life Research*, 12(1), 31-9. doi:http://dx.doi.org.ezproxy.regent.edu:2048/10.1023/A:1022052804109
- Van Dierendonck, D. and Nuijten, I. A. P. M. (2011). The servant leadership survey: development and validation of a multidimensional measure. *Journal of Business and Psychology*, 26(3), 249-267.
- van Sonderen, E., Sanderman, R., and Coyne, J. C. (2013) Ineffectiveness of reverse wording of questionnaire items: Let's learn from cows in the rain. *PLoS One*; 8(7), (no page numbers provided) Retrieved from https://search-proquest-countid=13479
- Wen-Chung Wang, W., Chen, H., and Jin, K. (2015). Item Response Theory Models for Wording Effects in Mixed-Format Scales. *Educational and Psychological Measurement*, 75(1) 157–178. DOI: 10.1177/0013164414528209.
- Winston, B. and Fields, D. (2015). Seeking and measuring the essential behaviors of servant leadership, *Leadership & Organization Development Journal*, *36*(4) 413-434.