

The Impact of Servant Leadership on the Responsibility-Taking Behavior of Grassroots Administrators in Colleges and Universities: The Mediating Role of Prosocial Motivation

Keqin Huang

Wenzhou Polytechnic, Wenzhou 325000, China

Abstract

With the growing problems such as insufficient initiative and ineffective performance among grassroots administrators in colleges and universities, how to effectively stimulate their responsibility-taking behavior has become an urgent issue to be addressed in current higher education governance. Through a literature review of servant leadership and responsibility-taking behavior, combined with practically observed phenomena, this study finds that servant leadership may exert a positive impact on the responsibility-taking behavior of grassroots administrators in colleges and universities, which calls for further empirical exploration. Therefore, drawing on prosocial theory, social learning theory, and job relational design theory, this study investigates the mechanism underlying the influence of servant leadership on subordinates' responsibility-taking behavior. A questionnaire survey, as an empirical research method, is adopted to test the research hypotheses. Based on 417 valid questionnaires collected, the results show that servant leadership positively promotes the responsibility-taking of grassroots administrators in colleges and universities, and their prosocial motivation plays a mediating role between servant leadership and their responsibility-taking. According to the findings, this paper elaborates on the theoretical value and practical implications of the study, discusses its limitations, and provides prospects for future research.

Keywords

Servant Leadership, Responsibility-Taking Behavior, Prosocial Motivation.

1. Introduction

Higher education serves as a cradle for talent cultivation, a source of scientific and technological innovation, and a driver of innovative practice. Its supporting capacity and contribution are directly related to the speed and quality of national high-quality development. As higher education gradually shifts from expansion in scale to improvement in connotation quality, colleges and universities are currently confronted with key tasks including enhancing the quality of discipline and major construction, optimizing the structure of teaching and administrative staff, and promoting the modernization of campus governance. As the actual implementers of university operation and governance, grassroots administrators in colleges and universities largely determine the implementation effect of education and teaching reforms, the improvement of campus governance efficiency, and the achievement of educational goals by their level of responsibility-taking behavior. However, due to the complexity of grassroots work in colleges and universities, high work intensity, and limited opportunities for promotion, problems such as job burnout and work pressure among grassroots administrators have become increasingly prominent. Some grassroots administrators exhibit insufficient initiative, ineffective performance of duties, and weak service awareness, which have severely hindered the development of higher education institutions. Therefore, how to effectively stimulate the

responsibility-taking behavior of grassroots administrators in colleges and universities has become an urgent issue to be addressed in current higher education governance.

Leadership style, as a core factor influencing administrators' behavior, has long been a research focus in the field of organizational management. In practice, it has been observed that leaders who dedicate themselves selflessly to teachers and students and work hard tend to have subordinates demonstrating a stronger sense of responsibility. This is reminiscent of servant leadership proposed by Greenleaf in the 1970s. Different from other types of leaders, servant leaders regard their leadership role as an opportunity to serve others, prioritize the interests of subordinates, the organization and even the community over their own personal interests, and commit themselves to helping subordinates grow and realize their full potential. They help subordinates achieve career success while accomplishing organizational goals. Eva et al. pointed out that three essential components of servant leadership are: other-oriented motivation, a one-on-one interaction pattern between leaders and followers, and an inherent concern for the well-being of broader stakeholders and the larger community [1]. It can be found that the key characteristics of servant leadership are similar to those of prosocial leadership in the literature on prosocial theory. In fact, some researchers have proposed that servant leadership reflects typical prosocial leadership behavior [2], and in empirical studies, some scholars have regarded it as a prosocial form of leadership and explored it within the prosocial research framework [3]. Within the prosocial research framework, organizational citizenship behavior is a typical representative of prosocial behavior, and it has often been used as a proxy variable for grassroots administrators' responsibility-taking behavior in the Chinese context in existing research. Current prosocial theories hold that prosocial leadership enhances subordinates' prosocial motivation, which further influences the occurrence of subordinates' prosocial behavior [4]. Therefore, this study introduces prosocial motivation from the prosocial literature as a mediating variable to explore the influence mechanism between servant leadership and the responsibility-taking behavior of grassroots administrators in colleges and universities. It aims to provide theoretical and practical implications for universities to optimize their leadership models and stimulate the vitality of responsibility-taking among grassroots administrators, so as to support the high-quality development of colleges and universities and better fulfill the mission and responsibility of higher education in the new era.

2. Literature Review and Theoretical Hypotheses

2.1. Servant Leadership and Responsibility-Taking Behavior

At present, studies on responsibility-taking behavior mainly focus on how to motivate university administrators to take responsibility. Only a few studies regard administrators' initiative and responsibility-taking as organizational citizenship behavior, and conduct preliminary explorations on the relationship between leadership style and administrators' responsibility-taking behavior based on self-determination theory, social exchange theory and organizational support theory, leaving the underlying mechanism underexplored. Servant leaders act as stewards in organizations. They are committed to helping subordinates grow and achieve career success, and serving the interests of the organization and the broader community. Accordingly, servant leaders are willing to perform extra-role behaviors beneficial to individuals, organizations and communities. According to the modeling feature in social learning theory, individuals learn by imitating the attitudes and behaviors of attractive role models. In organizational contexts, Ma & Wang suggested that leaders with positive leadership traits will be regarded as role models by subordinates, thus promoting organizational citizenship behavior [5]. Specifically, when leaders act beyond self-interest and demonstrate positive traits such as prioritizing subordinates' interests, assisting subordinates in growth and success, behaving ethically and exercising empowerment, subordinates will perceive higher

levels of support and care, thereby increasing their satisfaction and loyalty toward leaders. Such leaders are therefore more likely to gain sincere respect from subordinates, who view them as credible role models in the workplace and observe and imitate their attitudes and behaviors. Existing research also indirectly supports the above viewpoint. Khan et al. found that servant leadership can promote subordinates' prosocial behavior [6], and the responsibility-taking behavior of subordinates is a typical manifestation of prosocial behavior. Therefore, servant leadership is likely to promote the responsibility-taking behavior of grassroots administrators in colleges and universities. Based on the above analysis, we thus hypothesize:

Hypothesis 1: Servant leadership has a positive impact on the responsibility-taking behavior of grassroots administrators in colleges and universities.

2.2. The Mediating Role of Prosocial Motivation

Dierendonck proposed that an important outcome of servant leadership is transforming followers into servers [7]. Servant leadership shifts subordinates' focus from self-concern to concern for others within the organization and the broader community. Prosocial motivation has also been broadly defined by scholars as concern for collective welfare and joint success [8], which is consistent with the outcomes of servant leadership. Furthermore, some researchers have argued that servant leadership reflects a typical prosocial leadership style, and that such a prosocial leadership style will enhance subordinates' prosocial motivation. In addition, according to job relational design theory [9], prosocial motivation is associated with perceived impact on beneficiaries and affective commitment to beneficiaries. Beneficiaries here refer to individuals or groups whose work behaviors are believed to exert positive effects, such as colleagues, leaders and the organization. Servant leadership is characterized by higher-quality job contact with subordinates [10]. Based on the core proposition of job relational design theory, this will enhance individuals' perceived impact on and affective commitment to beneficiaries (colleagues, leaders and the organization), which in turn further improves subordinates' prosocial motivation. In the framework of prosocial theory, elevated prosocial motivation will promote the occurrence of prosocial behavior represented by responsibility-taking. Existing studies also provide indirect evidence for the above viewpoint: people who value public interests, show empathy for others and possess self-sacrificing spirit are more likely to engage in prosocial behavior. Based on the above analysis, we thus hypothesize:

Hypothesis 2: Prosocial motivation of grassroots administrators in colleges and universities plays a mediating role between servant leadership and their responsibility-taking behavior.

3. Method

3.1. Sample and Data collection

To improve the quality of questionnaire data in this study, preparations were made for the distribution and collection of questionnaires prior to the formal survey, as outlined below. First, a questionnaire suitable for this research was developed. Mature scales from relevant foreign studies were adopted, and back-translation was conducted for all items to ensure conceptual equivalence between the original English scales and the Chinese version. Demographic information of respondents was then added to form the final questionnaire. Second, the distribution method and target respondents were determined. The questionnaire was mainly distributed online, targeting grass-roots cadres in colleges and universities. A total of 450 questionnaires were distributed, and 417 valid paired questionnaires were obtained, representing an effective recovery rate of 92.67%.

3.2. Measures

All measurement scales used in this study were translated from English into Chinese using the back-translation method. Except for control variables, all variables were measured using a 5-

point Likert scale, where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Higher scores indicate a higher level of agreement with the statement.

(1) Servant Leadership

Servant leadership was measured using a 7-item scale developed by Liden et al. [11]. Respondents were asked to evaluate the extent to which their supervisor exhibited servant leadership behaviors. Sample items include: "My leader emphasizes the importance of giving back to the community" and "My leader gives me the freedom to handle difficult situations in the way that I feel is best." The Cronbach's α coefficient for the servant leadership scale in this study was 0.87, indicating good reliability.

(2) Prosocial Motivation

Prosocial motivation was assessed using a 5-item scale developed by Grant & Sumanth [12]. Respondents were asked to reflect on their work motivation. Sample items include: "I like to work on tasks that have the potential to benefit others" and "I prefer to work on tasks that allow me to have a positive impact on others." The Cronbach's α coefficient for the prosocial motivation scale was 0.88, indicating good reliability.

(3) Organizational Citizenship Behavior

Organizational citizenship behavior was measured using a 4-item scale for change-oriented organizational citizenship behavior developed by Choi [13]. Respondents rated the extent to which they performed the described behaviors. Sample items include: "I frequently come up with new ideas or new work methods to perform my task" and "I often suggest work improvement ideas to others." The Cronbach's α coefficient for the organizational citizenship behavior scale was 0.85, indicating good reliability.

(4) Control Variables

Control variables in this study included gender, age, educational background, and work tenure. Gender was coded as: 1 = male, 2 = female. Educational background was converted into years of education: bachelor's degree = 16 years, master's degree = 17 years, doctorate = 20 years.

4. Results

4.1. Discriminant Validity Test and Common Method Bias Test

Before formal analysis, confirmatory factor analysis (CFA) was conducted using Mplus 8.3. A baseline three-factor model (including servant leadership, prosocial motivation and organizational citizenship behavior) was compared with alternative models (two-factor and one-factor models) to examine the model-data fit. As shown in Table 1, the three-factor model yielded a satisfactory fit ($\chi^2/df = 2.19$, SRMR = 0.04, RMSEA = 0.05, CFI = 0.96, TLI = 0.95) and was significantly better than both the two-factor and one-factor models. This indicates that the three-factor model fitted the data optimally and the variables possessed good discriminant validity.

In addition, since all scales for servant leadership, prosocial motivation, and organizational citizenship behavior were self-rated by respondents, the data might be susceptible to common method bias. Following the recommendation of Podsakoff et al., the Harman one-factor test was adopted by conducting exploratory factor analysis on all items of the three variables [14]. The results showed that the first factor accounted for 32.86% of the total variance, which is below the 40% critical threshold. This suggests that no severe common method bias exists in this study.

Table 1. Main Fit Indices of Confirmatory Factor Analysis for the Measurement Model

	χ^2/df	RMSEA	SRMR	TLI	CFI
Baseline Model (SL;PM;OCB)	2.19	0.05	0.04	0.95	0.96
Two-Factor Model a (SL;PM+OCB)	7.70	0.13	0.15	0.74	0.77
Two-Factor Model b (SL+OCB;PM)	9.02	0.14	0.13	0.69	0.74
Two-Factor Model c (SL+PM;OCB)	11.26	0.16	0.14	0.61	0.66
One-Factor Model (SL+PM+OCB)	12.58	0.16	0.14	0.43	0.49

Note. n = 417. SL = Servant Leadership; PM = Prosocial Motivation; OCB = Organizational Citizenship Behavior.

4.2. Descriptive Statistics and Correlation Analysis

This study used Pearson correlation coefficients to examine the correlations among variables. The larger the absolute value of the correlation coefficient, the stronger the correlation. The means, standard deviations, and correlation coefficients of all variables are presented in Table 2.

Table 2. Descriptive Statistics and Correlation Analysis

Variables	M	SD	1	2	3	4	5	6
1.Gender	1.43	.50						
2.Age	35.08	5.89	-.12*					
3.Tenure	7.25	4.68	-.08	.54**				
4.Education	17.59	1.45	.02	-.03	.17**			
5.Servant leadership	4.06	.69	-.02	.02	-.06	-.12*		
6.Prosocial motivation	4.28	.52	-.03	.09	-.02	.05	.27**	
7.Organizational citizenship behavior	4.04	.62	-.10*	.16**	.06	-.06	.20**	.32**

Note. n = 417. Alpha reliability estimates are reported along the diagonal.

*p < .05, **p < .01.

Correlation analysis results showed that: Servant leadership was significantly and positively correlated with organizational citizenship behavior ($r = 0.20$, $p < 0.01$), preliminarily indicating that subordinates of leaders with higher levels of servant leadership exhibited higher levels of organizational citizenship behavior. Servant leadership was significantly and positively correlated with prosocial motivation ($r = 0.27$, $p < 0.01$), and prosocial motivation was significantly and positively correlated with organizational citizenship behavior ($r = 0.32$, $p < 0.01$).

These results preliminarily suggest that subordinates under servant leadership have higher prosocial motivation, which in turn further promotes their organizational citizenship behavior. Therefore, Hypotheses 1 and 2 of this study are preliminarily supported.

4.3. Hypothesis Testing

This study used SPSS 26.0 to test Hypothesis 1 through hierarchical regression analysis with the following procedures: In the first step, gender, age, years of education and work tenure were

included as control variables. In the second step, the independent variable servant leadership was added. Model 2 in Table 3 present the results of the regression analysis. The results show that servant leadership has a significantly positive effect on subordinates' organizational citizenship behavior ($r = 0.17, p < 0.001$), indicating that subordinates are more likely to exhibit organizational citizenship behavior under the influence of servant leadership. Therefore, Hypothesis 1 of this study is supported.

Table 3. Results of Regression Analysis and Mediating Effect Test

Variables		Prosocial motivation	Organizational citizenship behavior	
		Model1	Model2	Model3
Control variables	Gender	-.02	-.10	-.10
	Age	.01*	.02**	.01*
	Tenure	-.01	-.01	.01
	Education	.03*	-.01	-.03
Independent variable	Servant leadership	.21***	.17***	.10*
Mediating variable	Prosocial motivation			.33***
	R ²	.09***	.07***	.14***
	F	8.25	6.35	11.32

Note. $n = 417$. Alpha reliability estimates are reported along the diagonal.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4. Main Fit Indices of Confirmatory Factor Analysis for the Measurement Model

Type	Effect Value	Boot SE	Boot 95%CI	
			LL	UL
Direct Effect	.10	.04	.02	.19
Indirect Effect	.07	.02	.03	.11

Note. Bootstrap = 5000.

The existence of a mediating effect requires that the indirect effect of the independent variable on the dependent variable through the mediator is significant [15], meaning that the 95% confidence interval of the indirect effect does not contain zero. Following this testing procedure, this study used Model 4 in the SPSS Process macro (Version 4.2) developed by Hayes to test Hypothesis 2. As shown in Table 3 and Table 4, the indirect effect of servant leadership on organizational citizenship behavior through prosocial motivation was 0.07, with a bias-corrected 95% confidence interval of [0.03, 0.11]. Since the confidence interval does not contain zero, Hypothesis 2 is supported.

5. General Discussion

5.1. Conclusions

This study constructed and tested a mediating model to explore the influence mechanism of servant leadership on promoting the organizational citizenship behavior of grass-roots cadres in colleges and universities. Based on prosocial theory, social learning theory, and job relational design theory, this study examined how servant leadership enhances the level of organizational citizenship behavior of grass-roots cadres in colleges and universities by improving their

prosocial motivation. According to the empirical research results, the following conclusions are drawn:

First, servant leadership has a positive promoting effect on the organizational citizenship behavior of grass-roots cadres in colleges and universities. Servant leaders care about others, prioritize the interests of followers and society over their own personal interests, and are willing to engage in organizational citizenship behaviors that are beneficial to others and the organization. Therefore, servant leaders are more likely to be respected and admired by their subordinates. In the workplace, subordinates regard them as role models and learn from their words and deeds; thus, grass-roots cadres in colleges and universities will also engage in organizational citizenship behaviors in the organization just like servant leaders.

Second, prosocial motivation plays a mediating role between servant leadership and the organizational citizenship behavior of grass-roots cadres in colleges and universities. Servant leadership is a prosocial leadership style, where the interests of others, the organization, and the entire society are the key driving factors for servant leaders. Under the influence of servant leadership, grass-roots cadres in colleges and universities gradually begin to pay attention to the interests of others and society. As a result, they are more likely to discover that they can bring positive impacts on others' lives, which further stimulates their inner desire to serve others and society, enhances their internal prosocial motivation, and transforms them into servers like their leaders. Organizational citizenship behavior is extremely important for the organization, as it can help the organization develop healthily and is prosocial in nature. Therefore, for the well-being of organizational members and the entire organization, grass-roots cadres in colleges and universities with prosocial motivation will be willing to engage in prosocial organizational citizenship behaviors.

5.2. Contributions

First, this study provides theoretical explanations and empirical evidence for how and why servant leadership influences the organizational citizenship behavior of grass-roots cadres in colleges and universities. It reveals the "black box" of the influence mechanism between them, expands the research on the positive outcomes of servant leadership, and further promotes theoretical and empirical research in this direction. Second, this study makes contributions to the field of prosocial motivation research. In early studies on prosocial motivation, prosocial motivation was mostly regarded as a stable trait, and thus was more often used as an individual-level moderator in research. Therefore, some researchers called for more research on prosocial motivation as a personal state in their review of prosocial research. Following this suggestion, this study treats prosocial motivation as a context-dependent state and regards it as a mediating variable between servant leadership and the organizational citizenship behavior of college grass-roots cadres. Combining prosocial theory, servant leadership theory, and job relational design theory to explain this mechanism, this study explores the antecedent and outcome variables of prosocial motivation when it is regarded as a state, providing empirical evidence for the theoretical research on prosocial motivation.

5.3. Future Research

First, all scales adopted in this study are self-reported scales, which means that all obtained data are self-reported, leading to the problem of common method bias. However, Harman's single-factor test showed that there was no serious common method bias in this study. In future research, data on predictors and outcome variables can be obtained from different sources in the research design to further reduce the impact of common method bias. Second, this study adopted a cross-sectional design to test the proposed research model, which cannot fully prove the causal relationship between servant leadership, the prosocial motivation of college grass-roots cadres, and organizational citizenship behavior. In the future, longitudinal research can be used to explore the relationship more accurately, and further explore whether the

improvement of organizational citizenship behavior of college grass-roots cadres can in turn promote the improvement of their prosocial motivation level. Because prosocial theory holds that prosocial motivation promotes prosocial behavior and produces prosocial impacts. When college grass-roots cadres perceive the prosocial impacts they have caused, it may further enhance their prosocial motivation. Third, although beyond the scope of this study, it is meaningful to explore the impact of servant leadership on the organizational citizenship behavior of college grass-roots cadres in different cultural contexts. This is because servant leadership has been found to have different impacts in different cultural contexts, which means that different cultural contexts may be an important boundary condition in the relationship between servant leadership and organizational citizenship behavior, which is worthy of exploration in future research.

Acknowledgements

This research work is supported by Wenzhou Polytechnic Research Project (WZY2025022).

References

- [1] Eva, N., Robin, M., Sendjaya, S., Van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111-132.
- [2] Panaccio, A., Henderson, D. J., Liden, R. C., Wayne, S. J., & Cao, X. (2015). Toward an understanding of when and why servant leadership accounts for employee extra-role behaviors. *Journal of Business and Psychology*, 30(4), 657-675.
- [3] Stollberger, J., Las Heras, M., Rofcanin, Y., & Bosch, M. J. (2019). Serving followers and family? A trickle-down model of how servant leadership shapes employee work performance. *Journal of Vocational Behavior*, 112(1), 158-171.
- [4] Bolino, M. C., & Grant, A. M. (2016). The bright side of being prosocial at work, and the dark side, too: A review and agenda for research on other-oriented motives, behavior, and impact in organizations. *The Academy of Management Annals*, 10(1), 599-670.
- [5] Ma, Z., Qi, L., & Wang, K. (2008). Knowledge sharing in Chinese construction project teams and its affecting factors: an empirical study. *Chinese Management Studies*, 2(2), 97-108.
- [6] Khan, N. U., Zada, M., Ullah, A., Khattak, A., Han, H., Ariza-Montes, A., & Araya-Castilo, L. (2022). Servant leadership and followers prosocial rule-breaking: The mediating role of public service motivation. *Frontiers in Psychology*, 13(1), 848531.
- [7] Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 1228-1261.
- [8] De Dreu, C. K., Nijstad, B. A., & Van Knippenberg, D. (2008). Motivated information processing in group judgment and decision making. *Personality and Social Psychology review*, 12(1), 22-49.
- [9] Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393-417.
- [10] Qin, D., Xu, Y., Li, C., & Meng, X. (2021). How servant leadership sparks feedback-seeking behavior: A moderated mediation model. *Frontiers in Psychology*, 12(1), 748751-748751.
- [11] Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26(2), 254-269.
- [12] Grant, A. M., & Sumanth, J. J. (2009). Mission possible? The performance of prosocially motivated employees depends on manager trustworthiness. *Journal of Applied Psychology*, 94(4), 927.

- [13] Choi. (2007). Change-oriented organizational citizenship behavior: effects of work environment characteristics and intervening psychological processes. *Journal of Organizational Behavior*, 28(4), 467–484.
- [14] Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- [15] Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.