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Original Article

The Interactive Effect Between Servent Leadership And Perceived Organizational Citizenship Behavior With Mediating Role Of Organizational Identification Among Health Care Professionals

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ABSTRACT

Background: Servant leadership is increasingly recognized as an employee-centered leadership approach that may promote positive workplace behavior in healthcare organizations, where teamwork, support, and discretionary effort are essential for effective service delivery. Objective: This study examined the relationship between servant leadership and organizational citizenship behavior among healthcare professionals, with organizational identification assessed as a mediator and perceived organizational support evaluated as a moderator. Methods: A quantitative cross-sectional survey was conducted among 249 healthcare professionals selected through convenience sampling. Data were collected using standardized measures of servant leadership, perceived organizational support, organizational identification, and organizational citizenship behavior. Descriptive statistics, one-way ANOVA, Pearson correlation, and regression-based mediation and moderation analyses were performed. Results: Servant leadership was positively associated with perceived organizational support, organizational identification, and organizational citizenship behavior. Organizational identification showed the strongest correlation with organizational citizenship behavior, $r = 0.647$, $p < 0.001$. Mediation analysis showed that organizational identification significantly mediated the relationship between servant leadership and organizational citizenship behavior, $\beta = 0.1609$, 95% CI: 0.0703 to 0.2533. The interaction between servant leadership and perceived organizational support was not significant, $\beta = -0.0184$, $p = 0.8186$. Conclusion: Servant leadership was associated with higher organizational citizenship behavior among healthcare professionals, primarily through stronger organizational identification. Keywords: Servant leadership; perceived organizational support; organizational identification; organizational citizenship behavior; healthcare professionals.

INTRODUCTION

Servant leadership has gained increasing attention as a relational and employee-centered leadership approach that is particularly relevant to healthcare organizations, where service quality depends heavily on teamwork, ethical conduct, staff commitment, and discretionary effort. Unlike traditional command-oriented leadership models, servant leadership emphasizes serving followers first by prioritizing their development, empowerment, well-being, and professional growth. Greenleaf conceptualized servant

leadership as beginning with the natural desire to serve, while later work identified core attributes such as listening, empathy, healing, awareness, persuasion, stewardship, commitment to people's growth, and community building (1,2). In healthcare settings, these attributes are especially important because professionals work under high emotional, interpersonal, and organizational demands, and supportive leadership may shape how employees perceive their organization and contribute beyond formal job expectations.

Organizational citizenship behavior refers to discretionary employee behavior that is not formally required by the job description but contributes to effective organizational functioning. Such behavior includes helping colleagues, voluntarily accepting additional responsibilities, maintaining cooperation, showing conscientiousness, and supporting organizational goals beyond assigned duties (3,4). In healthcare organizations, organizational citizenship behavior is clinically meaningful because patient care often depends on coordination, teamwork, responsiveness, and willingness to assist others beyond minimum role requirements. Previous research has shown that leadership style, organizational support, work environment, and employee attitudes are associated with organizational citizenship behavior in healthcare and other organizational settings (5,6). However, the psychological pathways through which servant leadership encourages organizational citizenship behavior among healthcare professionals remain insufficiently clarified.

Perceived organizational support is another important construct in organizational behavior and refers to employees' belief that their organization values their contribution and cares about their well-being (7). Employees who perceive stronger organizational support are more likely to develop trust, commitment, and willingness to reciprocate through positive work behaviors. In healthcare institutions, perceived support may be expressed through fair treatment, recognition, adequate resources, welfare measures, training opportunities, and concern for staff well-being. These supportive experiences may strengthen employees' emotional connection with the organization and encourage extra-role behaviors that improve team functioning and service quality (8,9).

Organizational identification provides a useful psychological explanation for how supportive leadership and organizational conditions translate into employee behavior. It refers to the perception of oneness with, or belongingness to, an organization, whereby employees define part of their self-concept through organizational membership (10). Employees with strong organizational identification are more likely to internalize organizational goals, protect organizational interests, and engage in citizenship behaviors because they perceive organizational success as personally meaningful. Prior research has linked organizational identification with job performance, reduced turnover intention, stronger commitment, and higher organizational citizenship behavior (11,12). Therefore, organizational identification may operate as a mediating mechanism through which servant leadership contributes to organizational citizenship behavior.

Although servant leadership, perceived organizational support, organizational identification, and organizational citizenship behavior have been examined separately, limited evidence is available regarding their combined relationship among healthcare professionals. In particular, the mediating role of organizational identification between servant leadership and organizational citizenship behavior requires further empirical testing in healthcare contexts. Similarly, perceived organizational support may act as a boundary condition by strengthening or weakening the relationship between servant leadership and organizational identification; however, this moderating role remains uncertain. Addressing this gap is important because healthcare managers need evidence on whether leadership behaviors alone are sufficient to encourage citizenship behavior or whether organizational-level support enhances these effects.

Based on this rationale, the present study examined the relationship between servant leadership and organizational citizenship behavior among healthcare professionals, with organizational identification evaluated as a mediating mechanism and perceived organizational support assessed as a moderating

factor. The study hypothesized that servant leadership would be positively associated with organizational citizenship behavior, that organizational identification would mediate this relationship, and that perceived organizational support would strengthen the association between servant leadership and organizational identification.

MATERIALS AND METHODS

This study used a quantitative cross-sectional survey design to examine the association between servant leadership, perceived organizational support, organizational identification, and organizational citizenship behavior among healthcare professionals. The cross-sectional design was appropriate because the study aimed to assess employees' perceptions and behavioral tendencies at a single point in time and to test mediation and moderation pathways using standardized self-report measures. The study was conducted among healthcare professionals working in healthcare-related organizational settings, including clinical, laboratory, administrative, and allied health roles. Data were collected through both physical questionnaires and online Google Forms to improve accessibility for participants with varying duty schedules.

Healthcare professionals were eligible to participate if they were currently employed in a healthcare-related role and were willing to provide informed consent. Participants included medical laboratory technologists, administrative or managerial staff, doctors, nurses, paramedical staff, psychologists, and other allied health professionals. Individuals who did not provide consent or submitted incomplete questionnaires were excluded from the final analysis. A convenience sampling technique was used because healthcare professionals often have demanding work schedules, rotating duties, and limited availability for research participation. A total of 400 questionnaires were distributed, and 249 complete responses were received, producing a response rate of approximately 62.3%.

Data collection was carried out using a structured questionnaire composed of demographic items and standardized measurement scales. Demographic information included gender, marital status, age, employment status, professional position, and job experience. Servant leadership was measured using the Servant Leadership Survey developed by van Dierendonck and Nuijten, which includes 28 items covering empowerment, accountability, standing back, humility, authenticity, courage, forgiveness, and stewardship (13). Perceived organizational support was assessed using the eight-item scale developed by Eisenberger and colleagues, which evaluates employees' perceptions that the organization values their contribution and cares about their well-being (7). Organizational identification was measured using the six-item Mael and Ashforth scale, which assesses employees' sense of belongingness and psychological attachment to the organization (10). Organizational citizenship behavior was assessed using the Podsakoff scale, which covers altruism, conscientiousness, sportsmanship, civic virtue, and courtesy (14). All scale items were scored on a five-point Likert scale ranging from 1, strongly disagree, to 5, strongly agree.

The reliability of the study instruments was assessed using Cronbach's alpha. Servant leadership demonstrated strong internal consistency with Cronbach's alpha of 0.908, perceived organizational support showed strong reliability with Cronbach's alpha of 0.883, organizational identification showed acceptable reliability with Cronbach's alpha of 0.779, and organizational citizenship behavior showed good reliability with Cronbach's alpha of 0.814. These reliability estimates indicated that the instruments were suitable for measuring the intended constructs in the current sample.

The primary independent variable was servant leadership, and the primary outcome variable was organizational citizenship behavior. Organizational identification was evaluated as a mediator in the relationship between servant leadership and organizational citizenship behavior, while perceived organizational support was assessed as a moderator of the relationship between servant leadership and organizational identification. Demographic and work-related variables, including gender, marital status, age, work status, professional position, and job experience, were examined as control variables because

these characteristics may influence organizational identification and citizenship behavior. Operationally, higher mean scores on each scale indicated stronger perceived servant leadership, stronger perceived organizational support, stronger organizational identification, and higher organizational citizenship behavior.

Several steps were taken to reduce bias and improve data quality. Participation was voluntary, anonymity was maintained by avoiding personally identifiable information, and respondents were informed that their responses would be used only for research purposes. The use of validated scales reduced measurement bias, while clear response options minimized ambiguity. Complete responses were retained for analysis to reduce missing-data-related distortion. The inclusion of relevant demographic and employment-related variables allowed assessment of potential confounding influences on organizational identification and organizational citizenship behavior.

Data were analyzed using descriptive and inferential statistical procedures. Frequencies and percentages were used to summarize categorical demographic variables, while means and standard deviations were calculated for continuous scale scores. One-way analysis of variance was used to examine differences in organizational citizenship behavior and organizational identification across demographic and work-related categories. Pearson correlation analysis was used to assess bivariate relationships among servant leadership, perceived organizational support, organizational identification, and organizational citizenship behavior. Regression-based mediation analysis was performed to test whether organizational identification mediated the relationship between servant leadership and organizational citizenship behavior. The indirect effect was interpreted using the lower and upper limits of the confidence interval, with mediation considered statistically significant when the confidence interval did not include zero. Moderation analysis was conducted by testing the interaction term between servant leadership and perceived organizational support. Statistical significance was assessed at $p < 0.05$.

Ethical principles were followed throughout the study. Participants were informed about the study purpose, voluntary participation, confidentiality, and anonymity before completing the questionnaire. Informed consent was obtained from all participants. Data were handled in aggregated form to preserve confidentiality and ensure that individual responses could not be identified. Reproducibility and data integrity were supported by the use of standardized instruments, uniform scoring procedures, predefined variables, reliability testing, and consistent statistical decision criteria.

RESULTS

A total of 249 complete responses were analyzed. Gender showed no significant association with organizational citizenship behavior or organizational identification. Work status was significantly associated with both organizational citizenship behavior, $F = 12.093$, $p < 0.001$, and organizational identification, $F = 7.512$, $p = 0.007$. Experience was also significantly associated with organizational citizenship behavior, $F = 2.912$, $p = 0.022$, and organizational identification, $F = 2.429$, $p = 0.048$. Marital status, age, and professional position were significantly associated with organizational identification but not organizational citizenship behavior, indicating that work-related characteristics were more consistently related to both behavioral and psychological outcomes than personal demographic variables.

Table 1. Association of demographic and work-related variables with organizational citizenship behavior and organizational identification

Variable	OCB F	OCB p-value	OI F	OI p-value	Interpretation
Gender	0.126	0.723	0.182	0.670	Not significant for either outcome
Marital status	0.006	0.941	12.439	<0.001	Significant for OI only
Age	2.303	0.102	3.118	0.046	Significant for OI only
Work status	12.093	<0.001	7.512	0.007	Significant for both outcomes
Position	2.103	0.066	3.043	0.011	Significant for OI only
Experience	2.912	0.022	2.429	0.048	Significant for both outcomes

Respondents reported moderate to high mean scores across all main variables. Organizational citizenship behavior had the highest mean score, 3.809 ± 0.544, followed by organizational identification, 3.765 ± 0.573, servant leadership, 3.688 ± 0.607, and perceived organizational support, 3.468 ± 0.510. Pearson correlation analysis showed that servant leadership was positively correlated with perceived organizational support, r = 0.600, organizational identification, r = 0.303, and organizational citizenship behavior, r = 0.356. Perceived organizational support was positively correlated with organizational identification, r = 0.607, and organizational citizenship behavior, r = 0.493. The strongest observed correlation was between organizational identification and organizational citizenship behavior, r = 0.647, indicating that employees with stronger organizational belongingness reported higher extra-role work behavior.

Table 2. Descriptive statistics and Pearson correlation coefficients among study variables

Variable	Mean	SD	1	2	3	4
1. Servant Leadership	3.6876	0.6072	—			
2. Perceived Organizational Support	3.4684	0.5098	0.600**	—		
3. Organizational Identification	3.7651	0.5733	0.303**	0.607**	—	
4. Organizational Citizenship Behavior	3.8094	0.5439	0.356**	0.493**	0.647**	—

Note. N = 249; **p < 0.001.

Regression-based mediation analysis showed that servant leadership had a significant direct positive effect on organizational citizenship behavior, β = 0.1576, SE = 0.0446, t = 3.5351, p = 0.0005. Servant leadership also significantly predicted organizational identification, β = 0.2858, SE = 0.0573, t = 4.9919, p < 0.001. Organizational identification strongly predicted organizational citizenship behavior, β = 0.5630, SE = 0.0472, t = 11.9217, p < 0.001. The indirect effect of servant leadership on organizational citizenship behavior through organizational identification was significant, β = 0.1609, SE = 0.0468, 95% CI: 0.0703 to 0.2533. Because the confidence interval did not include zero, organizational identification significantly mediated the relationship between servant leadership and organizational citizenship behavior.

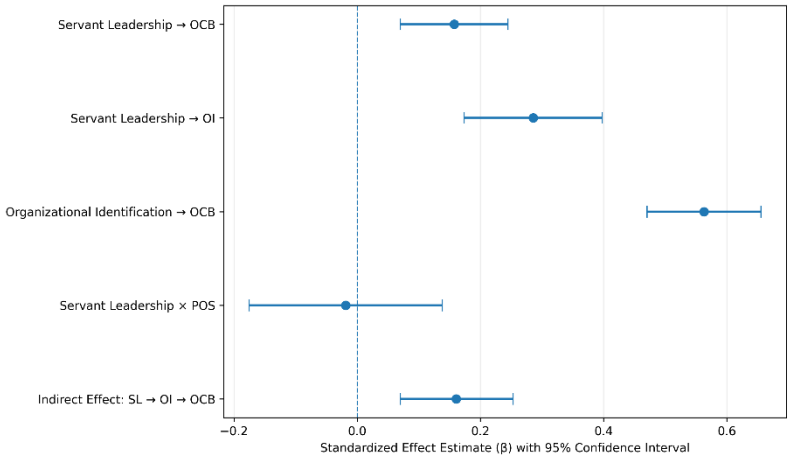

Figure 1 Effect pattern linking servant leadership, organizational identification, perceived organizational support, and organizational citizenship behavior. The strongest positive effect was observed for organizational identification predicting organizational citizenship behavior, β = 0.5630, 95% CI: 0.4705 to 0.6555, followed by servant leadership predicting organizational identification, β = 0.2858, 95% CI: 0.1735 to 0.3981. The indirect effect of servant leadership on organizational citizenship behavior through organizational identification was significant, β = 0.1609, 95% CI: 0.0703 to 0.2533, whereas the interaction between servant leadership and perceived organizational support crossed zero, β = −0.0184, 95% CI: −0.1752 to 0.1384, confirming mediation without meaningful moderation.

Table 3. Mediation analysis for servant leadership, organizational identification, and organizational citizenship behavior

Pathway	β	SE	t	p-value	95% CI
Servant Leadership → OCB	0.1576	0.0446	3.5351	0.0005	0.0702 to 0.2450
Servant Leadership → OI	0.2858	0.0573	4.9919	<0.001	0.1735 to 0.3981
OI → OCB	0.5630	0.0472	11.9217	<0.001	0.4705 to 0.6555
Indirect effect: SL → OI → OCB	0.1609	0.0468	—	Significant	0.0703 to 0.2533

Table 4. Moderation analysis testing the interaction between servant leadership and perceived organizational support

Predictor	β	SE	t	p-value	95% CI
Servant Leadership × Perceived Organizational Support	−0.0184	0.0800	−0.2296	0.8186	−0.1752 to 0.1384

Moderation analysis showed that the interaction between servant leadership and perceived organizational support was not statistically significant, β = −0.0184, SE = 0.0800, t = −0.2296, p = 0.8186, 95% CI: −0.1752 to 0.1384. This indicates that perceived organizational support did not significantly strengthen or weaken the relationship tested in the moderation model. Therefore, the moderation hypothesis was not supported.

DISCUSSION

The present study examined servant leadership, perceived organizational support, organizational identification, and organizational citizenship behavior among healthcare professionals. The findings showed that servant leadership was positively associated with organizational citizenship behavior and organizational identification, while organizational identification demonstrated the strongest association with organizational citizenship behavior. These results support the view that servant leadership may encourage discretionary workplace behavior by creating a relational and supportive environment in which employees feel respected, valued, and psychologically connected to their organization (1,2,5). In healthcare settings, where effective service delivery depends on cooperation, responsiveness, and voluntary support among staff, this relationship is particularly important because citizenship behavior can contribute to smoother coordination, stronger teamwork, and improved organizational functioning.

The significant mediating role of organizational identification provides the most important contribution of the study. Servant leadership had a significant positive effect on organizational identification, and organizational identification strongly predicted organizational citizenship behavior. The indirect effect was also significant, indicating that healthcare professionals who experience servant leadership may be more likely to internalize organizational values and develop a stronger sense of belonging, which subsequently encourages extra-role behavior. This finding is consistent with social identity theory, which suggests that employees who define themselves through organizational membership are more likely to act in ways that protect and benefit the organization (10,11). The result also aligns with previous evidence linking organizational identification with stronger commitment, lower turnover intention, and greater citizenship behavior (11,12).

Perceived organizational support showed strong positive correlations with both organizational identification and organizational citizenship behavior, suggesting that employees who feel supported by their organization are more likely to report stronger attachment and discretionary contribution. However, perceived organizational support did not significantly moderate the relationship tested in the model. This non-significant moderation result may indicate that servant leadership itself already reflects many supportive features, including care, empowerment, recognition, and concern for employee well-being. Therefore, additional perceived organizational support may not substantially strengthen the leadership-identification pathway. Another possible explanation is that perceived organizational support scores were relatively moderate to high in the sample, which may have reduced variability and limited the ability to detect an interaction effect.

The control-variable findings further suggest that work-related characteristics may be more relevant than personal demographic factors in shaping organizational outcomes. Work status and experience were significantly associated with both organizational citizenship behavior and organizational identification, whereas gender was not significantly associated with either outcome. Marital status, age, and professional position were associated with organizational identification but not organizational citizenship behavior. These findings indicate that employees' workplace exposure, employment stability, and professional experience may be more important for developing organizational belongingness and citizenship behavior than demographic characteristics alone. In healthcare organizations, experienced

employees may have stronger role clarity, deeper institutional familiarity, and greater responsibility toward colleagues and patients, which may explain their stronger citizenship-oriented behavior.

The findings have practical implications for healthcare administrators and supervisors. Leadership development programs should emphasize servant leadership competencies such as empathy, ethical behavior, empowerment, accountability, humility, stewardship, and support for professional growth. Strengthening these leadership behaviors may enhance organizational identification and indirectly promote citizenship behavior among healthcare professionals. At the organizational level, managers should also maintain visible support systems, fair treatment, recognition of employee contributions, and opportunities for participation in decision-making, as perceived organizational support remains strongly associated with both identification and citizenship behavior.

This study has several limitations. The cross-sectional design prevents causal interpretation, and the observed relationships should therefore be interpreted as associations rather than evidence of temporal or causal effects. The use of self-reported questionnaires may increase the risk of common method bias and socially desirable responses. The convenience sampling approach may also limit generalizability beyond the included healthcare professionals. In addition, although important demographic and work-related variables were assessed, other relevant factors such as workload, burnout, job stress, organizational culture, and leadership level were not included. Future research should use longitudinal or multi-source designs, include supervisor-rated organizational citizenship behavior, and test the model across different healthcare institutions and professional groups to improve causal inference and external validity.

CONCLUSION

Servant leadership was positively associated with organizational citizenship behavior among healthcare professionals, and this relationship was significantly mediated by organizational identification. The findings indicate that employees who perceive stronger servant leadership are more likely to identify with their organization, and this stronger identification is associated with greater willingness to engage in discretionary, extra-role behaviors. Although perceived organizational support was positively correlated with both organizational identification and organizational citizenship behavior, it did not significantly moderate the tested relationship. These results highlight organizational identification as a key psychological mechanism linking servant leadership with citizenship behavior in healthcare settings and suggest that leadership practices focused on employee support, empowerment, and belongingness may help strengthen positive organizational behavior.

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