



# **SERVANT LEADERSHIP AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR AMONG NURSES OF TERTIARY HEALTHCARE INSTITUTIONS IN PLATEAU STATE, NIGERIA: DOES THRIVING AT WORK MATTER?**

**Catherine Aiyedime Nyabam<sup>1,\*</sup>, Monica Gajere<sup>1</sup>**

<sup>1</sup>University of Jos

\*Corresponding author: [knyabam@gmail.com](mailto:knyabam@gmail.com); 08036165014

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## **ABSTRACT**

*This study examined how servant leadership is associated with organisational citizenship behaviour (OCB) through the mediating role of thriving at work among nurses in public tertiary healthcare institutions in Plateau State, Nigeria. Using a quantitative, cross-sectional survey design, data were collected from registered nurses at Jos University Teaching Hospital and the Plateau State Specialist Hospital with a structured questionnaire adapted from validated measures of servant leadership, thriving at work and OCB. Data were analysed with partial least squares structural equation modelling (PLS-SEM). The measurement model showed satisfactory reliability and validity, and full-collinearity assessments indicated that common method bias was unlikely to distort the estimates. Servant leadership was significantly positively associated with thriving at work and OCB, and thriving at work was significantly associated with OCB. Servant leadership explained a substantial proportion of the variance in thriving, and the two predictors jointly explained a substantial proportion of the variance in OCB. Bootstrapped mediation analysis showed a significant indirect association through thriving, consistent with complementary partial mediation. The findings extend social exchange theory and self-determination theory to a resource-constrained public healthcare setting and suggest that hospital administrators should develop servant leadership capability, regularise precarious contract terms and redesign shift patterns to protect nurses' vitality, learning and voluntary extra-role performance.*

## **1. INTRODUCTION**

Healthcare systems are both social safety nets and substantial economic sectors, and countries that prioritise health commit a substantial share of their national income to it. In 2024, national health expenditure reached 18.0% of gross domestic product (GDP) in the United States (Centres for Medicare & Medicaid Services, 2025) and 11.1% in the United Kingdom (Office for National Statistics, 2026), and the most recent figure

for Germany is 12.4% (Federal Statistical Office of Germany, 2026). Among emerging economies, South Africa spent 8.9% of GDP on health in 2023 (World Bank, 2026). Nigeria, by contrast, devoted only 4.2% of its GDP to current health expenditure in 2023, less than half of South Africa's level and less than a quarter of that of the United States (World Bank, 2026). Such limited spending constrains facilities, equipment and staffing across the health system, and the strain is felt most acutely in federal teaching hospitals and state specialist hospitals, which carry the country's heaviest burden of high-acuity care. In these settings, the quality and continuity of care depend heavily on the people who deliver it, above all nurses.

Nigerian tertiary hospitals operate with chronic staff shortages that have been intensified by large-scale nurse emigration: an estimated 42,000 nurses left the country between 2022 and 2024 (Samuel & Haruna, 2025), including more than 15,000 in 2023 alone (Ajala et al., 2025). Under such conditions, formal job design and contractual obligation cannot on their own guarantee continuity of care. Hospitals depend instead on organisational citizenship behaviour (OCB), the discretionary, extra-role conduct that formal reward systems do not recognise but that supports organisational functioning (Organ, 1988). On a hospital ward, OCB appears when a nurse covers for an absent colleague, mentors a junior nurse or stays beyond a shift to stabilise an emergency admission. Heavy workloads, precarious contract terms and top-down command structures can, however, deplete the energy nurses need to offer such effort. If that willingness erodes, the voluntary collaboration on which tertiary hospitals rely may weaken, with consequences for patient safety, turnover and health-system resilience.

Servant leadership is a values-based approach in which leaders place the growth, well-being and empowerment of followers ahead of their own interests (Greenleaf, 1977; van Dierendonck, 2011). Where such leadership prevails, employees are expected to feel secure and supported enough to invest discretionary effort in their work. Thriving at work, the joint experience of vitality (feeling energised) and learning (feeling that one is growing) (Spreitzer et al., 2005), has been associated meta-analytically with a range of favourable employee outcomes, including citizenship behaviour (Kleine et al., 2019). Drawing on social exchange theory (Blau, 1964) and self-determination theory (Deci & Ryan, 1985), this study proposes that servant leadership is positively associated with thriving among nurses, which in turn is positively associated with their OCB.

Servant leadership has been linked to OCB among university lecturers (Dami et al., 2023), local government employees (Gnankob et al., 2022) and hospital nurses (Bayati et al., 2025), and to thriving among civil servants (Jiang & Wei, 2024). Less is known about the psychological pathway through which servant leadership is associated with nurses' citizenship behaviour, and we are not aware of any study that has tested thriving at work as a mediating pathway in this relationship among nurses in Nigerian tertiary hospitals. This study addresses that gap. Its objectives are to examine (i) the association between servant leadership and OCB, (ii) the association between servant leadership and thriving at work, (iii) the association between thriving at work and OCB and (iv) the mediating role of thriving at work in the servant leadership–OCB relationship among nurses in tertiary health institutions in Plateau State. The corresponding hypotheses are developed in Section 2.

The study makes three contributions. Theoretically, it combines self-determination theory and social exchange theory as complementary explanations of a statistical pathway from leadership to discretionary behaviour. Empirically, it provides evidence from an under-researched sub-Saharan African healthcare context in which servant leadership has rarely been examined in relation to nurse thriving and voluntary performance. Practically, it offers hospital administrators and health policymakers guidance on supporting discretionary performance among a nursing workforce that is highly qualified but structurally overstretched.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **2.1 Theoretical Foundations**

Social exchange theory (Blau, 1964) holds that relationships are governed by a norm of reciprocity: favourable treatment from one party is associated with an expectation in the other to respond in kind (Cropanzano & Mitchell, 2005). Applied to the leader–follower relationship, employees who perceive that their leaders serve their interests are expected to reciprocate through discretionary citizenship behaviour. Self-determination theory (Deci & Ryan, 1985, 2000) complements this account by specifying three basic psychological needs, namely autonomy, competence and relatedness, whose satisfaction supports intrinsic motivation and psychological growth (Deci & Ryan, 2008; Gagné & Deci, 2005). Servant leadership is theoretically associated with satisfaction of these needs: autonomy through delegated decision-making, competence through mentoring and skill development, and relatedness through empathetic, person-centred engagement. Taken together, the two theories imply a sequential statistical pathway in which servant leadership is associated with psychological need satisfaction and thriving, and thriving is associated with voluntary citizenship behaviour.

### **2.2 Organisational Citizenship Behaviour**

Organ (1988, 1997) described OCB as individual behaviour that is discretionary, is not directly or explicitly recognised by the formal reward system and, in the aggregate, is associated with effective organisational functioning. It includes helping colleagues, volunteering for additional tasks and offering constructive suggestions (Bateman & Organ, 1983), and it is commonly explained through the reciprocity norm at the centre of social exchange theory (Cropanzano & Mitchell, 2005). Citizenship behaviour is associated with co-worker and managerial productivity, resource availability, coordination within and across work groups and organisational adaptation to environmental change (Podsakoff & MacKenzie, 1997). In nursing, OCB has been shown to be closely associated with head nurses' leadership behaviour (Bayati et al., 2025).

Organ's (1988) taxonomy distinguishes five dimensions of citizenship behaviour: altruism (voluntarily helping colleagues with work-related problems), conscientiousness (exceeding minimum role requirements), sportsmanship (tolerating inevitable inconveniences without complaint), courtesy (acting to minimise work-related problems for others) and civic virtue (responsible participation in organisational life). On a tertiary hospital ward, altruism may take the form of a nurse assisting an overwhelmed colleague during a surge of admissions; sportsmanship may appear as acceptance of an unexpected schedule change; and civic virtue may be reflected in participation in ward quality-improvement initiatives. Because none of these behaviours is formally compensated, their occurrence depends on employees' willingness, which is associated with the psychological and relational climate described in the leadership literature (Podsakoff & MacKenzie, 1997).

### **2.3 Servant Leadership**

Greenleaf (1977) conceptualised servant leadership as an inversion of the conventional leader–follower hierarchy: the leader's primary motivation is to serve, and authority is legitimised through demonstrated commitment to followers' growth and well-being. Servant leaders act both as stewards of organisational performance and as champions of individual development (Sendjaya, 2015; van Dierendonck, 2011). The approach has attracted particular attention in healthcare because the other-oriented nature of clinical work is well suited to it (Schwartz & Tumblin, 2002; Sturm, 2009). In hospital settings, servant leadership has been associated with nurses' helping behaviour and patient satisfaction (Neubert et al., 2016), with virtuous

unit climates characterised by lower incivility and better indicators of patient care (Neubert et al., 2022) and with hospital performance through nurses' trust in the leader and psychological empowerment (Saleem et al., 2022). Beyond healthcare, it has been linked to individual and unit performance through the development of a serving culture (Liden et al., 2014).

Liden et al. (2008), whose scale is used in this study, operationalise servant leadership across seven behavioural dimensions: emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first and behaving ethically. Each dimension has a clear counterpart in nursing. Emotional healing corresponds to a supervisor's readiness to recognise and respond to a nurse's distress after a difficult clinical outcome; empowering corresponds to delegating meaningful authority over patient-care routines; and putting subordinates first corresponds to a supervisor absorbing organisational pressure rather than passing it on to frontline staff. Because these behaviours signal that authority is exercised on behalf of followers, they are likely to matter most where formal structural support for nurses is limited, as in Nigerian tertiary hospitals.

## **2.4 Thriving at Work**

Thriving at work is a psychological state in which individuals experience both vitality and learning (Spreitzer et al., 2005). Vitality refers to the sense of having energy available, and learning refers to the sense of acquiring and applying knowledge and skill; the two dimensions reinforce one another (Porath et al., 2012). Thriving has been validated as a higher-order construct comprising learning and vitality in non-Western settings (Jiang et al., 2019), and meta-analytic and review evidence links it to health, reduced burnout, organisational commitment, lower turnover intention and performance outcomes that include citizenship behaviour (Goh et al., 2022; Kleine et al., 2019; Liang et al., 2024).

Spreitzer et al.'s (2005) socially embedded model identifies the immediate work context, rather than stable personality traits, as the main source of thriving, and specifies decision-making discretion, broad information sharing and a climate of trust and respect as key contextual resources. This framing matters for the present study because it suggests that thriving is responsive to contextual conditions: supervisors' decision latitude, information flow and interpersonal trust are potential correlates of how much nurses thrive, even where external structural constraints are severe. Servant leadership, expressed through delegation, mentoring and empathetic engagement, is therefore a plausible upstream correlate of thriving within this model.

## **2.5 Servant Leadership and Organisational Citizenship Behaviour**

Empirical evidence across sectors supports a positive relationship between servant leadership and OCB. In hospitality, Elche et al. (2020) found a positive association between servant leadership and OCB alongside empathy and service climate. Among private-sector employees in China, Lu et al. (2024) reported a statistical relationship involving servant leadership, relational identification, perceived organisational support and OCB. In the public sector, Gnankob et al. (2022) reported that servant leadership was significantly associated with OCB among local government employees in Ghana, partly through public service motivation, and Dami et al. (2023) found that trust mediated the relationship among university lecturers in Indonesia. Alajhar and Salam (2022) likewise reported a positive relationship between servant leadership and OCB, with OCB partially mediating the relationship between servant leadership and innovative work behaviour. In healthcare, head nurses' servant leadership was the strongest statistical predictor of nurses' OCB in a study of Iranian hospitals (Bayati et al., 2025). On the strength of this evidence, it is hypothesised that:

***H1: Servant leadership is significantly positively associated with organisational citizenship behaviour among nurses in tertiary health institutions in Plateau State.***

## **2.6 Servant Leadership and Thriving at Work**

Because servant leadership is theoretically associated with employees' basic psychological needs, it is well positioned to be associated with thriving. In a scenario experiment and a time-lagged survey of civil servants, Jiang and Wei (2024) found that servant leadership was positively associated with followers' thriving at work and that satisfaction of the needs for autonomy, competence and relatedness each mediated this relationship, a self-determination theory pathway relevant to the present model. Conversely, in a large sample of police employees, a demanding operational setting comparable in some respects to tertiary healthcare, Chénard-Poirier et al. (2022) showed that employees whose supervisors combined destructive and constructive behaviours reported the lowest levels of thriving, underscoring the importance of consistently supportive leadership. On this basis, it is hypothesised that:

***H2: Servant leadership is significantly positively associated with thriving at work among nurses in tertiary health institutions in Plateau State.***

## **2.7 Thriving at Work and Organisational Citizenship Behaviour**

Thriving employees are expected to reinvest their surplus energy and learning in the organisation. Suryani et al. (2023), studying employees of Islamic banks and universities in Indonesia, found that thriving at work was associated with the relationship between Islamic work ethics and OCB, with thriving forming part of the statistical pathway to OCB. Meta-analytic evidence similarly identifies citizenship behaviour among the performance outcomes associated with thriving (Kleine et al., 2019), and a recent bibliometric review confirms the growing body of research positioning thriving as an antecedent of beneficial work behaviours (Liang et al., 2024). Accordingly, it is hypothesised that:

***H3: Thriving at work is significantly positively associated with organisational citizenship behaviour among nurses in tertiary health institutions in Plateau State.***

## **2.8 The Mediating Role of Thriving at Work**

Integrating these arguments, thriving at work is expected to represent a statistical pathway between servant leadership and OCB. Servant leadership is theoretically associated with the psychological needs emphasised by self-determination theory, which are associated with thriving; thriving employees then reciprocate, consistent with social exchange theory, through discretionary citizenship behaviour. Jiang and Wei (2024) established the servant leadership–thriving link, and Suryani et al. (2023) and Kleine et al. (2019) established the thriving–OCB link, but these links have not been tested as a single mediated statistical pathway among nurses in Nigeria's tertiary healthcare sector, a context marked by high emotional labour, workload pressure and resource constraints. Existing studies of the servant leadership–OCB relationship have instead examined statistical pathways involving public service motivation (Gnankob et al., 2022), trust (Dami et al., 2023), perceived organisational politics (Demissie et al., 2026), relational identification and perceived organisational support (Lu et al., 2024), and psychological well-being and meaningful work (Nguyen et al., 2025). Thriving at work, which combines energy and growth, therefore remains under-examined as a mediator. The present study addresses this gap by testing:

***H4: Thriving at work significantly mediates the relationship between servant leadership and organisational citizenship behaviour among nurses in tertiary health institutions in Plateau State.***

## 2.9 Conceptual Framework

Figure 1 presents the hypothesised model, in which servant leadership is the exogenous construct, thriving at work is the mediating construct and OCB is the endogenous outcome. The model specifies a direct path from servant leadership to OCB (H1), a direct path from servant leadership to thriving at work (H2), a direct path from thriving at work to OCB (H3) and an indirect path from servant leadership to OCB through thriving at work (H4).

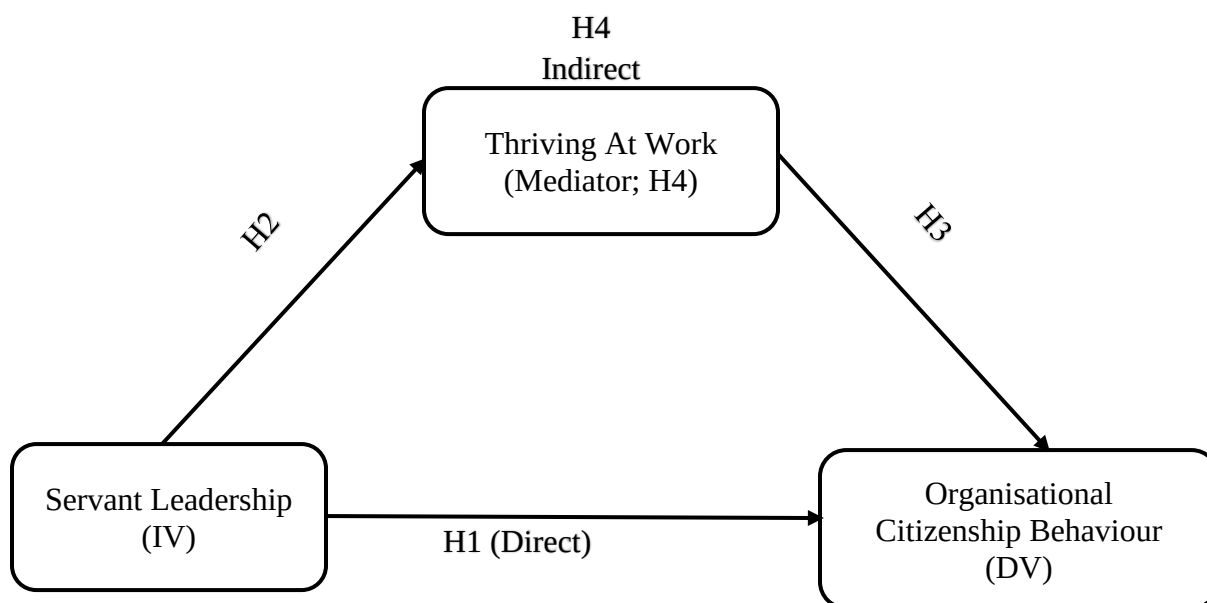


**Figure 1**  
*Conceptual Framework*

*Source: Authors' construction (2026)*

## 3. METHODOLOGY

### 3.1 Research Design

The study adopted an explanatory, quantitative research design based on a cross-sectional survey (Churchill & Iacobucci, 2006; Sekaran & Bougie, 2016). Data were collected at a single point in time in a non-contrived setting, without interference in participants' normal work.

### 3.2 Population, Sample Size and Sampling Procedure

The population comprised all registered nurses employed at the two major public tertiary healthcare institutions in Plateau State: Jos University Teaching Hospital (JUTH) and the Plateau State Specialist Hospital. According to nominal rolls obtained from the Human Resource Management departments of both institutions, the sampling frame comprised 1,800 registered nurses, 1,050 at JUTH and 750 at the Plateau

State Specialist Hospital, distributed across medical, surgical, paediatric, maternity, accident and emergency, intensive care and theatre departments. Krejcie and Morgan's (1970) table indicates a minimum sample of 317 for a population of 1,800. This figure was increased by 10–15% to allow for non-response and unusable returns, giving a target sample of 330 nurses.

A multi-stage sampling procedure was used. First, the two hospitals were purposively selected on the basis of their size and nursing workforce. Second, departments within each hospital were stratified to reflect the range of clinical specialities. Third, individual nurses were selected by simple random sampling to minimise selection bias (Creswell, 2014): within each department, nurses listed on the nominal rolls were numbered consecutively, and the required number of respondents was drawn using a computer-generated random number sequence, so that every listed nurse had a known and equal probability of selection.

### **3.3 Measures**

Data were collected with a structured, self-administered questionnaire in four sections. Section A captured demographic characteristics. Section B measured servant leadership with the 28-item multidimensional Servant Leadership Scale of Liden et al. (2008), which covers seven dimensions. Section C measured thriving at work with the seven-item workplace thriving scale of Jiang et al. (2019), which captures the learning and vitality dimensions conceptualised by Spreitzer et al. (2005). Section D measured OCB with a 15-item adaptation of Podsakoff et al.'s (1990) OCB scale, drawing on the version validated in an Asian context by Kumar and Shah (2015) and reflecting Organ's (1988) dimensions of citizenship behaviour. All items were rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), adapted from the response formats of the original instruments (Saunders et al., 2019). Item wording was kept as close as possible to the validated originals, with minor contextual changes to reflect the hospital setting, and negatively worded items were reverse coded before analysis. Item refinement during measurement-model assessment is reported in Section 4.3.

### **3.4 Data Collection and Ethical Considerations**

Research assistants distributed and retrieved questionnaires in person on the wards within the same shift, which limited loss to follow-up. Of the 330 questionnaires administered, 326 were returned (a response rate of 98.8%), and 319 were retained as usable after screening for completeness and consistency (96.7% of those administered). Both figures are high relative to conventional social-science benchmarks but consistent with same-day, on-site collection (Babbie, 2016; Sekaran & Bougie, 2019). Participation was voluntary, informed consent was obtained from all respondents, and anonymity and confidentiality were assured.

### **3.5 Data Analysis**

We assessed common method bias using Harman's single-factor test and Kock's (2015) full-collinearity approach. The analysis then proceeded in two stages: assessment of the reflective measurement model (indicator loadings, internal consistency reliability, and convergent and discriminant validity), followed by assessment of the structural model (collinearity, coefficient of determination [ $R^2$ ], effect size [ $f^2$ ], predictive relevance [ $Q^2$ ] and path coefficients bootstrapped with 5,000 resamples), in line with established PLS-SEM guidelines (Hair et al., 2019, 2022; Henseler et al., 2015).

## 4. RESULTS

### 4.1 Sample Characteristics

The 319 usable responses were almost evenly split between the State Specialist Hospital (50.8%) and JUTH (49.2%), and between female (50.8%) and male (49.2%) nurses. Most respondents (76.2%) were aged 25–54 years. The sample was highly qualified: 69.6% held a bachelor's degree or higher, including 20.1% with a master's degree and 6.3% with a doctorate, and 71.8% held the rank of Senior Nursing Officer or above. Working conditions were nonetheless demanding: 53.0% of nurses worked night shifts only, and 73.7% held contract or temporary rather than permanent appointments. Table 1 summarises these characteristics.

**Table 1**

*Demographic Profile of Respondents (N = 319)*

| Variable              | Category                         | Freq.     | %           |
|-----------------------|----------------------------------|-----------|-------------|
| Gender                | Male / Female                    | 157 / 162 | 49.2 / 50.8 |
| Age                   | 25-54 years                      | 243       | 76.2        |
| Highest qualification | Bachelor's degree or higher      | 222       | 69.6        |
| Professional rank     | Senior Nursing Officer and above | 229       | 71.8        |
| Length of service     | 5-15 years                       | 214       | 67.1        |
| Employment status     | Contract / Temporary staff       | 235       | 73.7        |
| Work schedule         | Night shift only                 | 169       | 53.0        |
| Institution           | JUTH / State Specialist Hospital | 157 / 162 | 49.2 / 50.8 |

*Source: Field survey (2026).*

### 4.2 Descriptive Statistics and Common Method Bias

Mean scores indicated moderately high levels of all three constructs: OCB ( $M = 4.22$ ,  $SD = 0.53$ ), servant leadership ( $M = 4.01$ ,  $SD = 0.64$ ) and thriving at work ( $M = 4.28$ ,  $SD = 0.58$ ). Skewness ( $-0.37$  to  $-0.03$ ) and kurtosis ( $-0.70$  to  $-0.55$ ) values were within the  $\pm 2$  range generally regarded as acceptable for social-science data.

Because all constructs were self-reported by the same respondents at one point in time, common method bias was examined in two ways. First, Harman's single-factor test (unrotated principal axis factoring of the 37 retained items) produced a first factor accounting for 53.64% of the variance, above the 50% level at which method bias is considered a potential concern (Podsakoff & Organ, 1986). Harman's test is, however, an insensitive diagnostic that cannot distinguish method variance from substantive covariation among conceptually related constructs (Podsakoff et al., 2003). Second, therefore, the full-collinearity test recommended for PLS-SEM by Kock (2015) was applied. In this procedure each latent variable is regressed on all other latent variables in the model (equivalently, all latent variables are regressed on a random dummy criterion), and a variance inflation factor (VIF) above 3.3 signals possible contamination by common method bias. As Table 2 shows, the full-collinearity VIFs were 2.13 for servant leadership, 1.98 for thriving at work and 2.34 for OCB, all below 3.3. Taken together, the results indicate that common method bias is unlikely to distort the structural estimates materially. The elevated Harman's result is reported transparently and is considered further in Section 6.3.

**Table 2***Full-Collinearity Assessment of Common Method Bias*

| Construct                                  | Full-collinearity VIF | Threshold | Assessment     |
|--------------------------------------------|-----------------------|-----------|----------------|
| Servant leadership (SL)                    | 2.13                  | < 3.3     | No CMB concern |
| Thriving at work (TAW)                     | 1.98                  | < 3.3     | No CMB concern |
| Organisational citizenship behaviour (OCB) | 2.34                  | < 3.3     | No CMB concern |

Source: *SEMinR output (2026)*. VIFs were obtained by regressing each latent variable score on the remaining latent variable scores (Kock, 2015). SL = servant leadership; TAW = thriving at work; OCB = organisational citizenship behaviour.

### 4.3 Measurement Model Assessment

Indicator loadings were evaluated against the recommended threshold of 0.708 (Hair et al., 2019). In line with Hair et al. (2022), indicators with loadings below this level were not automatically deleted. Each was removed only if its deletion improved composite reliability or average variance extracted (AVE), or if its loading was too weak to support the construct. On this basis, nine servant leadership items and four OCB items were removed, while all seven thriving items were retained, leaving 37 indicators (19 for servant leadership, 7 for thriving at work and 11 for OCB). The retained loadings ranged from 0.74 to 0.89 for servant leadership, 0.80 to 0.91 for thriving at work and 0.67 to 0.87 for OCB (Table 3).

One OCB indicator (OCB5,  $\lambda = 0.67$ ) fell slightly below 0.708 and was retained for three reasons. First, Hair et al. (2022) recommend deleting an indicator loading between 0.40 and 0.708 only when its removal raises composite reliability or AVE above the recommended threshold. OCB already exceeded both thresholds with OCB5 included (composite reliability = 0.95; AVE = 0.62), and recomputing these statistics from the reported loadings shows that dropping OCB5 would raise AVE only marginally, to 0.64, and leave composite reliability unchanged at 0.95. Second, the indicator's reliability ( $\lambda^2 = 0.45$ ) is close to the 0.50 benchmark, meaning that the construct still explains almost half of the item's variance. Deleting it would therefore have reduced content validity for no meaningful psychometric gain. All other indicators loaded at 0.71 or above, and most exceeded 0.80.

Cronbach's alpha and composite reliability exceeded 0.94 for all three constructs, well above the 0.70 benchmark, and AVE exceeded 0.50 in every case (0.62–0.75), confirming convergent validity (Hair et al., 2019). Discriminant validity was assessed with the heterotrait–monotrait ratio (HTMT). The values were 0.64 for servant leadership–thriving, 0.72 for servant leadership–OCB and 0.70 for thriving–OCB, all below the conservative 0.85 threshold (Henseler et al., 2015).

**Table 3***Measurement Model: Loadings, Reliability and Validity*

| Construct                            | Items retained | Loading range ( $\lambda$ ) | CR   | Cronbach's $\alpha$ | AVE  |
|--------------------------------------|----------------|-----------------------------|------|---------------------|------|
| Servant leadership                   | 19 of 28       | 0.74–0.89                   | 0.98 | 0.98                | 0.70 |
| Thriving at work                     | 7 of 7         | 0.80–0.91                   | 0.95 | 0.94                | 0.75 |
| Organisational citizenship behaviour | 11 of 15       | 0.67–0.87                   | 0.95 | 0.94                | 0.62 |

Source: *SEMinR output (2026)*.  $\lambda$  = standardised indicator loading; CR = composite reliability; AVE = average variance extracted. OCB5 ( $\lambda = 0.67$ ) is the only retained indicator below 0.708; see Section 4.3.

#### 4.4 Structural Model Assessment

Collinearity among predictor constructs in the structural model was not a concern: servant leadership and thriving at work, the two predictors of OCB, each had an inner VIF of 1.64, well below the threshold of 3 (Hair et al., 2022). The model explained 39% of the variance in thriving at work ( $R^2 = 0.39$ ) and 57% of the variance in OCB ( $R^2 = 0.57$ ). Against the PLS-SEM benchmarks of 0.25, 0.50 and 0.75 for weak, moderate and substantial explanatory power (Hair et al., 2019), these values are weak-to-moderate and moderate, respectively. Both exceed the 0.26 value that Cohen (1988) classifies as large in behavioural research. Servant leadership showed a large effect size in relation to thriving at work ( $f^2 = 0.64$ ) and a medium effect size in relation to OCB ( $f^2 = 0.29$ ), and thriving at work showed a medium effect size in relation to OCB ( $f^2 = 0.20$ ) (Cohen, 1988). Blindfolding produced  $Q^2$  values of 0.48 for OCB and 0.25 for thriving at work. Both exceed zero, indicating predictive relevance.

#### 4.5 Hypothesis Testing

Bootstrapped path estimates based on 5,000 resamples supported all three direct hypotheses (Table 4). Servant leadership was significantly positively associated with OCB ( $\beta = 0.45$ ,  $t = 8.92$ , 95% CI [0.35, 0.55],  $p < .001$ ), supporting H1. Servant leadership was significantly associated with thriving at work ( $\beta = 0.63$ ,  $t = 10.63$ , 95% CI [0.51, 0.73],  $p < .001$ ), supporting H2. Thriving at work was significantly associated with OCB ( $\beta = 0.38$ ,  $t = 4.68$ , 95% CI [0.21, 0.53],  $p < .001$ ), supporting H3.

**Table 4**

*Structural Path Coefficients and Hypothesis Testing*

| Path                       | $\beta$ | t-value | 95% CI       | p     | Decision  |
|----------------------------|---------|---------|--------------|-------|-----------|
| SL $\rightarrow$ OCB (H1)  | 0.45    | 8.92    | [0.35, 0.55] | <.001 | Supported |
| SL $\rightarrow$ TAW (H2)  | 0.63    | 10.63   | [0.51, 0.73] | <.001 | Supported |
| TAW $\rightarrow$ OCB (H3) | 0.38    | 4.68    | [0.21, 0.53] | <.001 | Supported |

Source: *SEMinR* output (2026). SL = servant leadership; TAW = thriving at work; OCB = organisational citizenship behaviour. Bootstrapping based on 5,000 resamples.

#### 4.6 Mediation Analysis

The total association of servant leadership with OCB was  $\beta = 0.69$  ( $t = 14.73$ , 95% CI [0.60, 0.78],  $p < .001$ ). Of this total, the direct association was  $\beta = 0.45$  ( $p < .001$ ), and the indirect association through thriving at work was  $\beta = 0.24$  ( $t = 4.53$ , 95% CI [0.14, 0.34],  $p < .001$ ). Because both the direct and indirect paths were significant and had the same sign, the results are consistent with complementary partial mediation of the servant leadership–OCB relationship by thriving at work (Hair et al., 2022), supporting H4. The indirect association accounts for about 35% of the total association (variance accounted for =  $0.24/0.69$ ), which falls within the 20–80% range that Hair et al. (2022) associate with partial mediation. Table 5 presents the mediation results.

**Table 5**  
Mediation Analysis Summary

| Path                   | Total association<br>n | Direct association<br>n | Indirect association<br>[95% CI] | t<br>(indirect) | VAF | Conclusion                      |
|------------------------|------------------------|-------------------------|----------------------------------|-----------------|-----|---------------------------------|
| SL → TAW → OCB<br>(H4) | 0.69                   | 0.45                    | 0.24 [0.14, 0.34]                | 4.53            | 35% | Complementary partial mediation |

Source: SEMinR output (2026). SL = servant leadership; TAW = thriving at work; OCB = organisational citizenship behaviour; VAF = variance accounted for (indirect ÷ total association). All associations significant at  $p < .001$ .

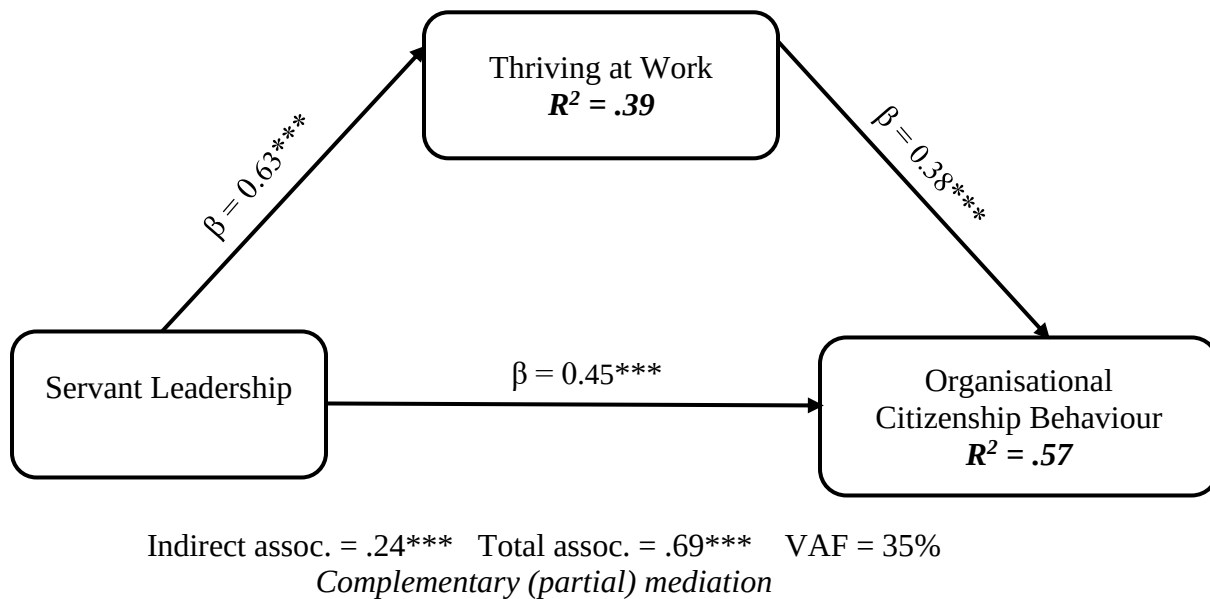


**Figure 2**  
Structural model with standardised path coefficients

\*\* $p < .01$  \*\*\* $p < .001$ ; bootstrap, 5,000 resamples

Source: authors' analysis.

## 5. DISCUSSION

The significant positive association of servant leadership with OCB (H1) is consistent with evidence from hospitality (Elche et al., 2020), private enterprises (Lu et al., 2024), the public sector (Gnankob et al., 2022) and nursing (Bayati et al., 2025), and it extends this pattern to Nigerian tertiary healthcare. The result supports social exchange theory: when nurse managers listen to staff, mentor junior clinicians and attend to nurses' well-being, they initiate a high-quality exchange that nurses reciprocate with voluntary effort, even without formal incentives. This association may be especially salient in a workforce in which most nurses hold contract or temporary appointments, because servant leadership may buffer the insecurity that could otherwise erode discretionary commitment.

The significant association between servant leadership and thriving at work (H2) is consistent with self-determination theory's account of need satisfaction as a pathway linking supportive leadership with psychological flourishing. By empowering nurses and involving them in decisions, servant leaders are likely to be associated with satisfaction of the need for autonomy; by mentoring and giving developmental feedback, they are associated with competence development; and by showing empathetic concern, they are associated with satisfaction of the need for relatedness. This pattern is consistent with Jiang and Wei's (2024) finding that need satisfaction mediates the association of servant leadership with thriving, and with Chénard-Poirier et al.'s (2022) evidence that inconsistent supervisory behaviour is associated with lower thriving. That servant leadership alone explains 39% of the variance in thriving is practically meaningful, because it indicates that a sizeable share of nurses' day-to-day vitality and learning is statistically accounted for by the leadership construct in this model.

The significant relationship between thriving at work and OCB (H3) indicates that nurses who feel energised and continually developing do not hoard their psychological resources but reinvest them in voluntary, prosocial conduct. This finding mirrors evidence from banking and higher education (Suryani et al., 2023) and meta-analytic evidence across occupations (Kleine et al., 2019). Because thriving is a resource-rich state, nurses who experience it appear more, rather than less, willing to extend themselves on behalf of colleagues and patients.

Finally, the complementary partial mediation (H4) is consistent with servant leadership being associated with OCB through two statistical pathways: a direct association, and an indirect association via thriving. About one-third of the total association runs through thriving, which indicates that the link between servant leadership and discretionary performance is only partly accounted for by direct reciprocity; a meaningful share is associated with nurses' psychological resources of vitality and learning. The pattern is notable given the profile of the sample. Nurses were highly qualified and professionally senior yet operationally precarious, with more than half working night shifts only and nearly three-quarters lacking permanent appointments. Such insecurity might be associated with lower discretionary effort, yet servant leadership and thriving together explained 57% of the variance in OCB. The observed relationships therefore suggest that relational leadership resources and structural conditions should be considered together; the cross-sectional design does not establish whether leadership resources offset or substitute for structural reform.

## **6. IMPLICATIONS AND LIMITATIONS**

### **6.1 Theoretical Implications**

This study advances an integrated account of how servant leadership is associated with discretionary behaviour by applying self-determination theory and social exchange theory jointly within a single mediated model, rather than treating them as competing or unrelated explanations. The mediating role of thriving at work is consistent with need satisfaction being associated with thriving, and reciprocal exchange, through which thriving employees report or demonstrate supportive treatment alongside citizenship behaviour, operating as sequential and complementary stages of one statistical pathway.

The study also extends servant leadership theory, which has been developed largely in Western, resource-rich organisations, to a resource-constrained public healthcare system in sub-Saharan Africa. That servant leadership remained significantly associated with both thriving and OCB despite the considerable precarity of the sample suggests that the theory's explanatory value holds under conditions markedly different from those in which it was developed. Finally, the study provides among the first empirical tests of thriving at work as a mediator of the servant leadership–OCB relationship among nurses in Nigeria. It identifies a

dual-dimensional psychological pathway, vitality and learning, that complements the statistical pathways examined in prior mediation studies, such as public service motivation, trust, perceived organisational politics and meaningful work.

## **6.2 Practical and Policy Implications**

For hospital administrators, the results indicate that investment in servant leadership development may be associated with higher levels of nurses' voluntary extra-role performance, but that this relationship may depend on nurses' psychological state and may therefore be limited by adverse structural conditions such as permanent night-shift assignment and contract insecurity. Three recommendations follow. First, the Federal and Plateau State Ministries of Health should include demonstrated servant leadership competencies, such as empathy, ethical conduct and staff empowerment, among the criteria for appointing and promoting senior nursing officers, rather than relying on clinical seniority alone. Second, hospital administrators should pair continuing professional development in servant leadership with structural measures, particularly the regularisation of contract appointments and the redesign of shift schedules, to protect the psychological resources on which thriving depends. Third, hospital management boards should assess nurses' thriving at work regularly, tracking vitality and learning as indicators, so that leadership and workforce interventions can be targeted and evaluated over time.

For policymakers, the model, which explains 57% of the variance in nurses' citizenship behaviour, can inform leadership-appointment criteria, professional development programmes and workforce policy in tertiary institutions operating under chronic resource constraints. Because the sampled nurses were both highly qualified and operationally precarious, the findings suggest that leadership-focused interventions may be relevant to sustaining discretionary performance in the short to medium term, but that lasting improvements in workforce outcomes cannot be inferred from this cross-sectional evidence and would require evaluation alongside reforms to contract terms and shift design.

## **6.3 Limitations and Suggestions for Future Research**

The findings should be interpreted in light of several limitations. The cross-sectional design precludes strong causal inference. The use of single-source, self-reported data raises the possibility of common method variance; although full-collinearity VIFs were below the 3.3 threshold, the first factor in Harman's test exceeded 50% of the variance, so some shared method variance cannot be ruled out. Nine servant leadership items and four OCB items were removed during measurement refinement, which may narrow the content coverage of those scales. Finally, the sample was drawn from two public tertiary hospitals in one Nigerian state, which may limit generalisability to private facilities, other regions and other sectors.

Future research should test the model with longitudinal or time-lagged data to strengthen causal inference, and with multi-source data, for example by pairing nurses' self-reports of thriving with supervisor or peer ratings of OCB. The model should also be tested in private and mission hospitals and in other geopolitical zones of Nigeria. Future studies could further examine boundary conditions, such as ward-level climate, individual resilience or institutional stressors, that strengthen or weaken the mediating role of thriving at work.

## **7. CONCLUSION**

This study examined the association of servant leadership with OCB through the mediating role of thriving at work among nurses in public tertiary healthcare institutions in Plateau State, Nigeria. Using PLS-SEM on data from 319 nurses, it found that servant leadership is significantly associated with both thriving at

work and OCB, that thriving at work is significantly associated with OCB and that thriving at work partially mediates the servant leadership–OCB relationship, accounting for about one-third of the total association. Together, servant leadership and thriving at work explained 57% of the variance in nurses' OCB. The study concludes that servant leadership is a viable, theoretically grounded correlate of voluntary performance among nurses working under considerable structural strain, and that it is statistically associated with OCB both directly and through nurses' psychological state of thriving.

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