

Perceived Organisational Support Enhances Work Engagement Through Organisational Citizenship Behavior: Evidence from Algerian Public Hospitals

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SUMMARY

This study investigates whether perceived organisational support (POS) enhances work engagement (WE) among Algerian hospital employees and examines organisational citizenship behavior (OCB) as a mediating mechanism. Drawing on Social Exchange Theory, survey data were collected from 544 nurses and firstline managers across multiple public hospitals in Algeria and analysed using a twostage structural equation modelling approach in AMOS. The results show that POS has a significant positive direct effect on work engagement and a significant positive effect on OCB, which in turn is positively related to work engagement. Mediation analysis indicates that OCB partially transmits the influence of POS on work engagement, suggesting that supportive organisational climates foster discretionary prosocial behaviours that subsequently reinforce employees' psychological investment in their work roles. The findings provide evidencebased guidance for hospital administrators seeking to strengthen employee engagement through organisational support practices.

Keywords: Algeria, hospitals, organisational citizenship behavior, perceived organisational support, work engagement

JEL classification: I10, M12

1. Introduction

Healthcare organizations worldwide are confronting mounting pressures related to workforce retention, employee burnout, and the sustained delivery of quality patient care (Bakker & Demerouti, 2008). Within this context, work engagement a positive, fulfilling state characterized by vigor, dedication, and absorption has emerged as a critical construct linking individual wellbeing to organisational performance (Schaufeli et al., 2002). Engaged employees invest greater cognitive, emotional, and physical resources in their roles, which has been associated with improved clinical outcomes and higher patient satisfaction (Simpson, 2009). Algeria's public healthcare system is under sustained strain. The national network of over 270 public hospitals serving more than 45 million people operates with chronic staff shortages, constrained resources, and a highly centralized administrative structure, conditions that increase

the likelihood of reduced engagement, absenteeism, and intentions to leave among healthcare workers. Beyond the healthcare sector, recent evidence from European corporate settings shows that workrelated burnout is a multidimensional syndrome involving exhaustion, cynicism, and reduced professional efficacy (Cvjetković et al., 2026). In Algerian public hospitals, similar imbalances between job demands and available resources may manifest not only in burnout but also in reduced work engagement and weaker extrarole behaviours, underscoring the need to identify organisational resources that can buffer these risks. From a broader macroeconomic standpoint, recent empirical work indicates that labour productivity is a crucial engine of Algeria's sustainable economic development, especially in the agricultural sector (Zemri & Khetib, 2023). This evidence underlines the wider significance of organisational practices that sustain employees' motivation and encourage extrarole contributions within essential public services such as healthcare. Against this backdrop, perceived organisational support (POS) stands out as a key organisational resource. POS captures employees' overall perception of how much their organisation values their contributions and cares about their wellbeing (Eisenberger et al., 1986), and higher POS has consistently been linked to stronger organisational commitment, better performance, and lower intentions to quit. Organisational citizenship behaviour (OCB discretionary behaviours that exceed formal job requirements (Organ, 1988 represents a theoretically plausible mechanism through which POS fosters work engagement: when employees feel supported, social exchange processes motivate them to reciprocate with prosocial extrarole behaviours that create interpersonal environments conducive to deeper engagement. Yet empirical evidence on this mediation chain in Algerian public hospitals remains scarce. This study therefore investigates whether POS enhances work engagement among Algerian hospital employees and whether OCB operates as a mediating mechanism in this relationship.

Research Hypotheses:

- **H1:** POS positively affects work engagement among Algerian hospital employees.
- **H2:** POS positively influences organisational citizenship behavior among Algerian hospital employees.
- **H3:** OCB mediates the relationship between POS and work engagement among Algerian hospital employees.

2. Literature Review and Hypotheses Development

2.1 Social Exchange Theory

This study is anchored in Social Exchange Theory (SET; Blau, 1964), which posits that social relationships are governed by reciprocal exchanges of resources rather than purely economic transactions. In social exchanges, the receipt of benefits creates diffuse obligations to reciprocate in kind, fostering ongoing cycles of giveandtake between parties (Cropanzano & Mitchell, 2005). Applied to the employment relationship, SET suggests that when organisations demonstrate care for employees' wellbeing and value their contributions, employees develop a felt obligation to "give back" through enhanced performance, loyalty, and discretionary effort. In the present context, perceived organisational support (POS) represents a key organisational signal that initiates such exchange processes, while organisational citizenship behaviour (OCB)

and work engagement (WE) can be viewed as behavioural and psychological reciprocation outcomes.

2.2 Perceived Organisational Support and Work Engagement

Perceived organisational support reflects the extent to which employees believe that their organisation values their contributions and cares about their wellbeing (Eisenberger et al., 1986). Within organisational support theory, POS is conceptualised as a socioemotional resource that fulfils employees' needs for approval, esteem and belongingness, thereby fostering stronger affective bonds with the organisation (Eisenberger et al., 2020). Empirical evidence consistently links higher POS to greater job satisfaction, organisational commitment, performance, and lower turnover intentions (Rhoades & Eisenberger, 2002). In healthcare settings, perceived support has also been associated with reduced burnout and better clinical performance among medical staff (Kang et al., 2010; Opoku & Boateng, 2024).

A growing body of research indicates that POS is positively related to work engagement. From a Job Demands–Resources (JD–R) perspective, organisational support functions as a critical job resource that buffers demand-induced strain and enables employees to invest their cognitive, emotional and physical energies in their work roles (Bakker & Demerouti, 2008). Saks (2006) reported that employees who feel supported by their organisation reciprocate with higher engagement levels, and recent studies in healthcare contexts similarly highlight POS as a key antecedent of engagement (Rosdianto & Dudija, 2025; Opoku & Boateng, 2024). This line of evidence suggests that enhancing POS may be an effective lever for fostering engagement among hospital employees.

Complementary findings from other public service contexts show that organisational resources fostering psychological empowerment are positively associated with favourable attitudinal outcomes such as organisational commitment (Marič et al., 2025), reinforcing the broader argument that supportive and enabling work environments cultivate stronger bonds with the organisation and greater discretionary effort. Based on this literature, the following hypothesis is proposed:

H1: Perceived organisational support positively affects work engagement among Algerian hospital employees.

2.3 Organisational Citizenship Behaviour

Organisational citizenship behaviour refers to discretionary behaviours that are not formally prescribed or directly rewarded, yet contribute to the effective functioning of the organisation, such as helping colleagues, tolerating inconveniences, and responsibly participating in organisational life (Organ, 1988; Podsakoff et al., 2000). OCB is typically conceptualised along dimensions such as altruism, sportsmanship and civic virtue, and has been linked to improved team performance, service quality and customer satisfaction, particularly in labour-intensive service sectors. In healthcare organisations, citizenship behaviours among nurses and other clinical staff can play a crucial role in maintaining smooth operations under conditions of chronic resource constraints (Mansour & Tremblay, 2018; Hasibuan & Farisi, 2025).

A substantial body of research suggests that OCB is shaped by social exchange processes. Employees who perceive favourable treatment from their organization such as support, fairness

and recognition are more likely to reciprocate through extrarole behaviours that exceed formal job requirements (Nisar et al., 2014; Abdulrab et al., 2018). Perceived organisational support has therefore been identified as a key antecedent of OCB in various organisational settings, including healthcare (Ali et al., 2018). These findings imply that POS may encourage hospital employees to engage in discretionary helping and civic behaviours that support colleagues and organisational functioning.

On this basis, the second hypothesis is formulated as follows:

H2: Perceived organisational support positively influences organisational citizenship behaviour among Algerian hospital employees.

2.4 OCB as a Mediator between POS and Work Engagement

The potential mediating role of OCB in the POS engagement relationship can be understood through a behavioural lens. Engagement is not merely a passive reaction to organisational conditions; rather, it emerges from employees' active behavioural efforts that transform organisational resources into positive psychological states (Saks, 2006). When employees who feel supported engage in citizenship behaviours such as assisting overburdened colleagues, maintaining a constructive attitude in the face of difficulties, and contributing to ward governance they help create richer interpersonal environments characterised by mutual support, shared purpose and trust (Mansour & Tremblay, 2018). These enriched environments, in turn, are conducive to greater vigour, dedication and absorption at work.

Empirical studies provide initial support for this sequential process. Ali et al. (2018) found that OCB carries the effect of POS to work engagement via employees' wellbeing in service organisations, while Abdulrab et al. (2018) reported that psychological empowerment mediates the POS–OCB link, underscoring the complex interplay between support, empowerment and citizenship behaviour. In healthcare contexts, Hasibuan and Farisi (2025) showed that engagement and OCB are jointly influenced by perceived organisational support among nurses, highlighting the centrality of supportive climates for extrarole behaviours. Related evidence from Croatian organisations indicates that employee engagement and organisational justice can fully transmit the influence of purposedriven leadership on extrarole behaviour (Dreven et al., 2026), suggesting that discretionary behaviours are rooted in favourable psychological states and fairness perceptions rather than direct leadership effects.

Building on these insights, the present study posits that POS enhances work engagement not only directly but also indirectly by fostering OCB, which creates social and task environments that, in turn, reinforce employees' psychological investment in their work roles. Accordingly, the third hypothesis is proposed:

H3: Organisational citizenship behaviour mediates the relationship between perceived organisational support and work engagement among Algerian hospital employees.

3. Methodology

3.1 Participants and sampling

Participants were recruited from multiple Algerian public hospitals, including public university hospitals (CHUs, 50.7%), regional public hospitals (EPHs, 34.7%) and specialised public hospitals (14.5%). A stratified purposive sampling strategy was employed to ensure

representation across hospital types and professional categories. Data were collected using selfadministered structured questionnaires distributed during staff meetings over a threemonth period.

The final sample comprised N=544 hospital employees: 412 nurses (75.7%) and 132 firstline managers (24.3%). The sample was predominantly female (67.6%), and 40.1% of participants were in the 30–39 age bracket. All respondents provided informed consent, and ethical guidelines regarding confidentiality and voluntary participation were strictly observed.

3.2 Measures

Perceived organisational support (POS): POS was assessed using the 10item shortened version of the Survey of Perceived Organisational Support developed by Eisenberger et al. (1986) and refined by Stassen and Ursel (2009). Items were rated on a 5point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item reads: “The organisation values my contribution to its wellbeing.” This scale has demonstrated high reliability and validity in healthcare research contexts (Türe & Yıldırım, 2018).

Organisational citizenship behaviour (OCB): OCB was measured using Organ’s (1988) multidimensional scale, capturing three dimensions: altruism (helping colleagues), sportsmanship (tolerating inconveniences without complaint) and civic virtue (responsible participation in organisational governance). Items were rated on a 5point Likert scale.

Work engagement (WE): WE was assessed using the 9item Utrecht Work Engagement Scale (UWES9; Schaufeli et al., 2002), comprising three subscales: vigour (for example, “At my work, I feel bursting with energy”), dedication (for example, “I am enthusiastic about my job”) and absorption (for example, “I am immersed in my work”). Items were rated on a 7point frequency scale ranging from 0 (*never*) to 6 (*always*).

3.3 Common method bias control

Given the crosssectional, selfreported design, common method variance (CMV) was assessed using Harman’s singlefactor test. The dominant factor accounted for 38.7% of the total variance, which is well below the 50% threshold commonly used as an indication of serious CMV problems (Podsakoff et al., 2003), suggesting that CMV does not critically threaten the validity of the findings.

3.4 Analytical Strategy

Data were analysed using a twostage structural equation modelling (SEM) procedure in IBM AMOS 24. First, a confirmatory factor analysis (CFA) was carried out to assess the adequacy of the measurement model, with convergent validity evaluated through factor loadings above 0.60 and average variance extracted (AVE) values exceeding 0.50, and discriminant validity examined by comparing AVE values with the squared interconstruct correlations (Anderson & Gerbing, 1988). In the second stage, the structural model was estimated to obtain the direct and indirect path coefficients. Overall model fit was assessed using a combination of indices, including the chisquare to degrees of freedom ratio ($\chi^2/df < 3.0$), the comparative fit index (CFI > 0.90), and the root mean square error of approximation (RMSEA < 0.08) in line with Hu and Bentler’s (1999) recommendations. To test the mediation hypotheses, a nonparametric

bootstrapping procedure with 5,000 resamples was employed to derive biascorrected 95% confidence intervals for the indirect effects (Hayes, 2009).

The growing reliance on advanced statistical models in economics and social sciences also highlights the importance of conceptual understanding of these techniques. Idris (2022), for example, documented substantial conceptual difficulties with linear regression among economics students at the University Center of Tipaza in Algeria, suggesting that modelbased findings should be interpreted with careful attention to statistical literacy and training.

4. Results

4.1 Descriptive statistics and reliability

Descriptive statistics indicated moderatetohigh levels across all constructs. Perceived organisational support had a mean of $3.85=M$ ($0.67=SD$), organisational citizenship behaviour a mean of $M=3.92$ ($SD=0.62$), and work engagement a mean of $M=3.78$ ($SD=0.70$). Internal consistency was excellent across all scales, with Cronbach's alpha values of $\alpha=0.88$ for POS, $\alpha=0.90$ for OCB and $\alpha=0.86$ for WE, all well above the commonly accepted threshold of 0.70.

4.2 Measurement model validation

The confirmatory factor analysis (CFA) supported the proposed threefactor measurement model. All standardised factor loadings were statistically significant and exceeded 0.70, indicating strong item construct relationships. Average variance extracted (AVE) values were above the 0.50 threshold for all constructs, confirming convergent validity, while discriminant validity was established as the AVE for each construct exceeded the squared correlation with any other construct in the model.

Table 1. Measurement model validation

Construct	Factor loadings	AVE	Cronbach's α	CR
Perceived organisational support (POS)	0.71– 0.82	0.58	0.88	0.9 1
Organisational citizenship behaviour (OCB)	0.74– 0.84	0.61	0.90	0.9 3
Work engagement (WE)	0.73– 0.85	0.56	0.86	0.8 9

Note: CR = composite reliability; AVE = average variance extracted.

4.3 Structural model fit

The structural model demonstrated excellent fit to the data: $\chi^2/df=2.10$ (below the 3.0 benchmark), CFI = 0.95 (above the 0.90 benchmark) and RMSEA = 0.048 (below the 0.05 benchmark for close fit), indicating that the hypothesised model provides an adequate representation of the observed relationships.

4.4 Hypothesis testing: path coefficients

Table 2 presents the standardised path coefficients and significance levels for all hypothesised relationships.

Table 2. Standardised path coefficients and hypothesis testing

Pathway	Standardised β	SE	95% CI	pvalue	Decision
H1: POS $\rightarrow$ work engagement	0.38	0.04	[0.30, 0.46]	< 0.001	Supported
H2: POS $\rightarrow$ OCB	0.45	0.05	[0.35, 0.55]	< 0.001	Supported
OCB $\rightarrow$ work engagement	0.49	0.05	[0.39, 0.59]	< 0.001	Significant
H3: POS $\rightarrow$ OCB $\rightarrow$ WE (indirect)	0.22	0.03	[0.16, 0.28]	< 0.001	Supported
Total effect: POS $\rightarrow$ WE	0.60	0.05	[0.50, 0.70]	< 0.001	—

Note: Bootstrap resamples = 5,000; biascorrected 95% confidence intervals.

H1 was supported: POS exerted a significant positive direct effect on work engagement ($\beta=0.38$, $p<0.001$), indicating that employees who perceive greater organisational support report higher levels of engagement.

H2 was supported: POS significantly and positively predicted OCB ($\beta=0.45$, $p<0.001$), confirming that perceived organisational appreciation motivates employees to engage in discretionary prosocial behaviours.

H3 was supported, indicating partial mediation: the indirect effect of POS on work engagement through OCB was statistically significant ($\beta=0.22$, $p<0.001$; 95% CI [0.16, 0.28]). Because the direct effect of POS on work engagement remained significant after including OCB in the model, OCB can be interpreted as a partial mediator, accounting for approximately 36% of the total effect ($0.22/0.60$) of POS on work engagement.

5. Discussion

5.1 Interpretation of main findings

The present study provides robust empirical support for the hypothesised model, showing that perceived organisational support enhances work engagement among Algerian hospital employees both directly and indirectly through organisational citizenship behaviour. The substantial total effect ($\beta=0.60$) underscores POS as a powerful lever for engagement in healthcare settings, in line with prior research from clinical environments (Opoku & Boateng, 2024; Saks, 2006).

The direct pathway from POS to work engagement ($\beta=0.38$) is consistent with organisational support theory, which posits that perceived organisational care fulfils fundamental socioemotional needs for approval and esteem and thereby fosters positive affective states that manifest as vigour, dedication and absorption (Eisenberger et al., 2020). In the Algerian hospital context characterised by chronic resource constraints and administrative rigidity the emotional significance of perceived organisational care may be particularly heightened, making POS an especially salient predictor of engagement.

The POS–OCB pathway ($\beta=0.45$) aligns with the core reciprocity mechanism of Social Exchange Theory (Blau, 1964; Cropanzano & Mitchell, 2005). Employees who perceive that their hospital values their contributions develop a psychological “felt obligation” to give back,

which they express through discretionary behaviours such as assisting overburdened colleagues, tolerating administrative frustrations and actively participating in ward governance, a pattern consistent with evidence from comparable healthcare contexts (Hasibuan & Farisi, 2025; Mansour & Tremblay, 2018).

The OCB work engagement pathway ($\beta=0.49$) is particularly noteworthy, as it suggests that citizenship behaviours are not merely byproducts of engagement but also active drivers of engagement. When nurses and managers engage in altruistic and civic behaviours, they help create enriched interpersonal environments characterised by mutual assistance and a shared sense of purpose conditions that, in turn, deepen their own psychological investment in work, consistent with the “positive spiral” hypothesis in engagement research (Bakker & Demerouti, 2008).

5.2 The mediating role of OCB

The confirmation of partial mediation, with OCB accounting for roughly onethird of the total effect of POS on work engagement, highlights the behavioural pathway through which organisational support translates into psychological engagement. Rather than being a purely passive outcome, engagement appears to be reinforced by employees’ active citizenship behaviours, which create work environments characterised by mutual support and shared purpose.

This finding is broadly consistent with prior evidence indicating that OCB can carry the effects of favourable organisational conditions to engagement and related outcomes in service settings (Ali et al., 2018; Mansour & Tremblay, 2018). At the same time, the sizeable portion of the POS engagement link that is not transmitted through OCB suggests that other mechanisms, such as affective commitment, psychological empowerment and job satisfaction, are likely to play a role and merit examination in future research (Saks, 2006).

5.3 Contextual significance for Algerian healthcare

In the Algerian public hospital context, where staff shortages, resource constraints and hierarchical structures are persistent challenges, the positive levels of POS and engagement observed in this study provide an encouraging starting point. The results suggest that relatively lowcost interventions aimed at signalling support such as formal recognition of extrarole contributions, supportive supervisory practices and opportunities for participation in decisionmaking may generate virtuous cycles of citizenship behaviour and engagement with tangible implications for patient care quality.

5.4 Practical implications

For hospital administrators

Recognition systems: Establish structured programmes that acknowledge extrarole contributions (for example, peernomination awards and public recognition in staff meetings), signalling that the organisation notices and values discretionary effort.

Supervisory development: Train ward managers and unit heads in supportive leadership behaviours, given that supervisory support is often perceived by employees as a direct proxy for organisational support.

Resource adequacy: Demonstrate organisational commitment through visible investments in staffing levels and clinical equipment, as resource provision represents a tangible signal of organisational care.

Participative governance: Create channels for nursing staff and frontline managers to contribute to decisionmaking (such as clinical advisory committees and qualityimprovement teams), thereby fostering civicvirtue dimensions of organisational citizenship behaviour.

For healthcare policymakers

Integrate indicators of perceived organisational support into regular employee surveys as an earlywarning signal of disengagement risk, particularly in highstress hospital units. Develop national guidelines for supportive management practices in public hospitals, recognising that employee engagement is a systemic driver of healthcare quality rather than merely an individuallevel outcome.

6. Limitations and future research

Several limitations should be acknowledged. First, the crosssectional design precludes definitive causal inferences; although the observed relationships are consistent with the hypothesised model, longitudinal or experimental designs are needed to establish temporal precedence. Second, although Harman's singlefactor test did not indicate substantial common method variance, sharedmethod bias cannot be entirely ruled out; future studies should employ multisource data (for example, peerrated organisational citizenship behaviour alongside selfreported POS and engagement). Third, the study did not distinguish between different sources of support (such as immediate supervisors versus senior administration), a distinction that may have differential motivational consequences. Fourth, the sample was limited to nurses and firstline managers, which may restrict the generalisability of the findings to other professional groups such as physicians or allied health staff.

Future research should employ longitudinal designs to track the development of the POS–OCB–engagement spiral over time. Examining potential moderators such as personality traits (for example, conscientiousness and agreeableness), organisational culture and national cultural dimensions would help clarify boundary conditions. Crossnational comparative studies across North African and Middle Eastern healthcare systems could further test the robustness of the proposed mediation model and enhance its theoretical contribution.

7. Conclusion

This study adds to the growing evidence that supportive organisational climates are not merely “nicetohave” features of healthcare management but are strategically critical drivers of employee engagement and, by extension, patient care quality. By showing that organisational citizenship behaviour acts as a partial behavioural mediator of the relationship between perceived organisational support and work engagement in Algerian public hospitals, the study clarifies how organisational support translates into psychological engagement: supported employees reciprocate through discretionary prosocial behaviours that collectively create more meaningful and energising work environments.

For healthcare administrators operating under simultaneous cost pressures and quality imperatives, the findings highlight a highleverage intervention point: systematic investment in

perceived organisational support can trigger a selfreinforcing cycle of citizenship behaviour and engagement, with measurable benefits for both the healthcare system and the patients it serves.

References

- Abdulrab, M., Zumrah, A. R., Almaamari, Q., & AlTahitah, A. N. (2018). The mediating role of psychological empowerment on the relationship between perceived organizational support and organizational citizenship behaviour. *International Journal of Management and Human Science*, 2(2), 23–32.
- Ali, B. H., Ghani, M., & Hamzah, S. R. (2018). Effects of perceived organizational support on organizational citizenship behavior: Sequential mediation by wellbeing and work engagement. *Journal of Management Development*, 37(9), 786–797.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended twostep approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/00332909.103.3.411>.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>.
- Cvjetković, M., Primorac, D., & Vargović, E. (2026). Burnout dimensions among corporate employees in Croatia: Differences by gender, working hours, job position, and company size. *Business Systems Research*, 17(1), 102–130. <https://doi.org/10.2478/bsrj20260006>.
- Dreven, N., Malbašić, I., & Piki, L. (2026). Exploring the link between purposedriven leadership and extrarole behavior: The mediating roles of engagement and justice. *Zagreb International Review of Economics & Business*, 29(1), 141–155. <https://doi.org/10.2478/zireb20260008>.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. <https://doi.org/10.1037/00219010.71.3.500>.
- Eisenberger, R., Rhoades Shanock, L., & Wen, X. (2020). Perceived organizational support: Why caring about employees counts. *Annual Review of Organizational Psychology and Organizational Behavior*, 7(1), 101–124. <https://doi.org/10.1146/annurevpsych012119044917>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson.
- Hasibuan, J., & Farisi, S. (2025). Determinants of employee engagement and organizational citizenship behavior of nurses in public hospitals in Indonesia. *Problems and Perspectives in Management*, 23(1), 584–596.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420. <https://doi.org/10.1080/03637750903310360>.

- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>.
- Idris, D. (2022). Conceptual understanding of linear regression among economics students at the University Center of Tipaza, Algeria. *Croatian Review of Economic, Business and Social Statistics*, 8(2), 66–83. <https://doi.org/10.2478/crebss20220011>.
- Kang, B., Twigg, N., & Hertzman, J. (2010). An examination of social support and social identity factors and their relationship to certified chefs' burnout. *International Journal of Hospitality Management*, 29(1), 168–171.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30. <https://doi.org/10.1111/j.17549434.2007.0002.x>.
- Mansour, S., & Tremblay, D. G. (2018). The mediating role of work engagement between psychosocial safety climate and organisational citizenship behaviours. *International Journal of Human Resources Development and Management*, 18(1–2), 51–71.
- Marič, M., Jordan, G., & Meško, M. (2025). Psychological empowerment and organisational commitment among higher education lecturers in Central and Eastern European countries. *Business Systems Research*, 16(2), 183–197. <https://doi.org/10.2478/bsrj20250024>.
- Nisar, Q. A., Marwa, S., Ahmad, U., & Ahmad, S. (2014). Impact of perceived organizational support on organizational citizenship behavior: Empirical evidence from Pakistan. *International Journal of Research*, 1(2), 231–247.
- Opoku, F., & Boateng, R. (2024). Employee engagement, perceived organizational support, and job performance of medical staff at the Cape Coast Teaching Hospital. *PLoS One*, 19(12), e0315451. <https://doi.org/10.1371/journal.pone.0315451>.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- 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), 879–903.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature. *Journal of Management*, 26(3), 513–563.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714. <https://doi.org/10.1037/00219010.87.4.698>.
- Rosdianto, F., & Dudija, N. (2025). The influence of perceived organizational support and worklife balance on work engagement. *International Journal of Science, Technology & Management*, 6(4), 616–628.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>.



- Schaufeli, W. B., Salanova, M., GonzálezRomá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A twosample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>.
- Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46(7), 1012–1024. <https://doi.org/10.1016/j.ijnurstu.2008.05.003>.
- Stassen, M., & Ursel, N. D. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational and Organizational Psychology*, 82(1), 201–220. <https://doi.org/10.1348/096317908X288838>.
- Türe, A., & Yıldırım, A. (2018). The validity and reliability of scale of perceived organizational support for nursing. *Journal of Health and Nursing Management*, 5(1), 9–18.
- Zemri, B. E., & Khetib, S. M. B. (2023). The role of labour productivity within Algeria's sustainable economic development: Findings from agricultural sector. *Croatian Review of Economic, Business and Social Statistics*, 9(2), 93–108. <https://doi.org/10.62366/crebss.2023.2.002>.