



The Role of Work Attachment as a Mediator of the Influence of Psychological Capital and Organizational Support on Employees' Innovative Behavior

Laily Musyrifah*

Universitas Negeri Jakarta,
Indonesia

Osly Usman

Universitas Negeri Jakarta,
Indonesia

***Corresponding author:**

Laily Musyrifah, Universitas Negeri Jakarta,
Indonesia.

✉ Laily_1708825025@mhs.unj.ac.id

Article Info:

Article history:

Received: June 2, 2026

Revised: August 12, 2026

Accepted: August 21, 2026

Available Online: September 07,
2026

Keywords:

Perceived Organizational Support;
Psychological Capital; Work
Engagement; Innovative Work
Behavior.



This is an open access article under the
[CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2026 by Author. Published by
Politeknik Siber Cerdika International

Abstract

Background: Employee innovation is increasingly important for public organizations that must improve services while operating within procedural constraints.

Objective: This study examined whether perceived organizational support (POS) and psychological capital (PsyCAP) explain innovative work behavior (IWB), and whether work engagement carries either effect.

Methods: Survey data were obtained from 100 employees of the Technology and Information Data Center, Ministry of Primary and Secondary Education, using simple random sampling. Responses to a five-point Likert instrument were analyzed with PLS-SEM in SmartPLS 4. Measurement quality and structural paths were assessed, followed by bootstrap tests of direct and indirect effects.

Results: PsyCAP was associated with IWB ($\beta = 0.628$; $p = 0.001$) and work engagement ($\beta = 0.818$; $p < 0.001$). POS predicted PsyCAP ($\beta = 0.658$; $p < 0.001$) but not IWB directly ($\beta = -0.069$; $p = 0.265$). Work engagement did not significantly predict IWB ($\beta = 0.292$; $p = 0.070$). The indirect POS-PsyCAP-IWB pathway was significant ($\beta = 0.413$; $p = 0.006$), whereas pathways ending through work engagement were not supported.

Conclusion: The findings place PsyCAP, rather than engagement, as the principal psychological pathway linking organizational support with innovative behavior.

To cite this article: Musyrifah, L. & Usman, O. (2026). The Role of Work Attachment as a Mediator of the Influence of Psychological Capital and Organizational Support on Employees' Innovative Behavior. *Journal of Business, Social and Technology*, 7(3), 1600-1608. <https://doi.org/10.59261/bustechno.v7i3.690>

INTRODUCTION

Organizations do not innovate through policy statements alone; innovation depends on employees who notice problems, propose alternatives, and turn useful ideas into practice. This behavioral contribution is captured by innovative work behavior (IWB). Two resource domains may shape it. The first is psychological capital (PsyCAP), which combines self-efficacy, hope, resilience, and optimism and can help employees continue acting constructively when new ideas involve uncertainty or resistance (Farrukh et al., 2022). Conservation of Resources Theory suggests that such personal resources make demanding action easier to sustain. The second domain is perceived organizational support (POS), or employees' sense that the organization values their contribution and welfare. Recognition and developmental support can signal that initiative is legitimate and worthwhile (Abbas & Khattak, 2024). These issues are especially relevant in public institutions, where formal procedures and uneven readiness for change may restrict experimentation.

Work engagement is examined here as a possible connecting process rather than as an

automatic source of innovation. Employees who invest energy, concentration, and commitment in their work may be better positioned to act on opportunities for improvement. Prior studies report that both PsyCAP and organizational support can strengthen engagement (Alwali, 2024), and engagement has also been proposed as a route from individual and organizational resources to innovative behavior (Singh et al., 2023). However, the combined evidence is not yet consistent, particularly in public-sector settings in developing economies. This study therefore tests POS, PsyCAP, work engagement, and IWB within one structural model while separating direct effects from mediated effects.

POS concerns the meaning employees attach to organizational treatment. When support is experienced as credible, employees may be more willing to contribute beyond minimum role requirements (Eisenberger et al., 1986; Guo et al., 2026). Previous studies associate POS with creativity, engagement, psychological empowerment, affective commitment, and other favorable outcomes relevant to innovation (Abbas & Khattak, 2024; Alshaabani et al., 2021; Choi et al., 2021; Park & Kim, 2022). Leadership and an innovation-oriented culture can strengthen these perceptions of support (Ekmekcioglu & Öner, 2024), while supportive conditions during periods of uncertainty may help preserve confidence and knowledge exchange (Peng et al., 2023). Accordingly, POS may influence innovative behavior either directly or by first strengthening employees' psychological resources.

One such resource is PsyCAP. Organizational support may provide feedback, reassurance, and access to assistance that make employees more confident and persistent when facing demanding work (Ho & Chan, 2022; Tian et al., 2023). Within the Job Demands-Resources and Conservation of Resources perspectives, these contextual resources can contribute to self-efficacy, hope, resilience, and optimism (Ren et al., 2024; Xin et al., 2021). Higher PsyCAP has been linked with greater engagement and well-being and with lower strain (Ho & Chan, 2022; Huang & Zhang, 2022). Prior research also identifies PsyCAP as a mechanism through which organizational or social support is translated into positive work outcomes (Ren et al., 2024; Tian et al., 2023).

PsyCAP is treated as a developable psychological capacity rather than a fixed disposition. Confidence supports difficult action, hope sustains goal pursuit, resilience supports recovery from setbacks, and optimism shapes expectations about future outcomes (Luthans et al., 2015; Sen et al., 2026). Together, these resources can make employees more willing to propose and pursue unfamiliar solutions. Empirical studies have reported positive links between PsyCAP and innovative behavior (Alshebami, 2021; Mutonyi, 2021; Saber Seleem et al., 2026). Its role may also operate through psychological safety, well-being, job satisfaction, and willingness to accept calculated risk (Sen et al., 2026; Wang et al., 2021). Evidence from empowering, transformational, and entrepreneurial leadership research further suggests that organizational conditions can build PsyCAP and, through it, support innovation (Ercantan et al., 2024; Jabid et al., 2025; Karimi et al., 2023).

The Job Demands-Resources framework also predicts a connection between PsyCAP and work engagement because personal resources help employees remain effective when demands are high. Research has linked PsyCAP with engagement, job performance, satisfaction, and adaptive functioning (Díaz-Fúnez et al., 2024; Niswaty et al., 2021; Yao et al., 2022). Other studies show that PsyCAP can alter or transmit the effects of organizational resources on outcomes such as citizenship behavior, performance, and turnover intentions (Ansori & Wulansari, 2021; Kavgacı & Öztürk, 2023; Niswaty et al., 2021). The present study therefore expects employees with stronger PsyCAP to show greater work engagement.

Engagement may subsequently support innovation because sustained attention and effort increase the likelihood that employees recognize opportunities and persist with implementation. Prior evidence relates engagement to innovative activity and performance (Afsar et al., 2020; Iqbal et al., 2023; van Zyl et al., 2021; Wulandari et al., 2025). Its strength can also depend on contextual factors such as leadership and cultural intelligence (Alateeg & Alhammadi, 2024). This study tests whether that expected relationship is evident in the present organizational setting.

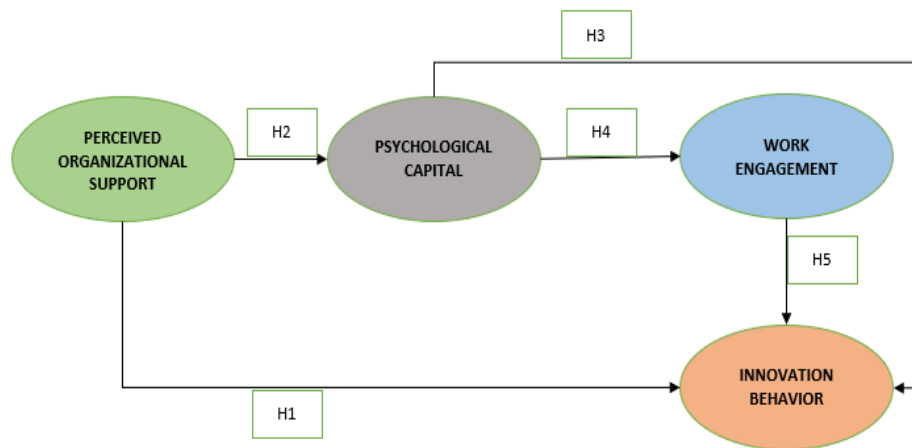


Figure 1. Research Hypotheses

- 1) H1: Perceived Organizational Support (POS) affects Innovation Behavior (IB)
- 2) H2: Perceived Organizational Support (POS) affects Psychological Capital (PSYCAP).
- 3) H3: Psychological Capital (PSYCAP) affects Innovation Behavior (IB).
- 4) H4: Psychological Capital (PSYCAP) affects Work Engagement (WE).
- 5) H5: Work Engagement (WE) affects Innovation Behavior (IB).

METHOD

A quantitative explanatory design was used to test the proposed relationships among POS, PsyCAP, work engagement, and IWB. PLS-SEM was selected because the research model contains several latent constructs and includes both direct and indirect paths. The model was informed by Positive Organizational Behavior, Conservation of Resources Theory, and Social Exchange Theory, which together explain how personal resources and organizational treatment can shape discretionary employee behavior (Alwali, 2024; Farrukh et al., 2022; Singh et al., 2023).

The study involved 100 employees of the Technology and Information Data Center of the Ministry of Primary and Secondary Education. Respondents were drawn through simple random sampling, with at least one year of tenure required to ensure adequate familiarity with organizational practices. Data were collected using a closed five-point Likert questionnaire. PsyCAP covered self-efficacy, hope, resilience, and optimism (Farrukh et al., 2022; Vilariño del Castillo & Lopez-Zafra, 2022). POS measured perceived appreciation and assistance from the organization (Wahid & Ayub, 2024). Work engagement covered vigor, dedication, and absorption (Alwali, 2024) and IWB addressed idea generation, promotion, and implementation (Mutonyi et al., 2021; Saber Seleem et al., 2026; Singh et al., 2023).

The questionnaire was administered electronically after content review and preliminary instrument testing. SmartPLS 4 was used for PLS-SEM estimation. Convergent validity was checked through indicator loadings and Average Variance Extracted (AVE), internal consistency through Cronbach's alpha and Composite Reliability, and discriminant validity through HTMT and the Fornell-Larcker criterion. Structural assessment relied on path coefficients, bootstrap t-statistics and p-values, R^2 , f^2 , Q^2 , and SRMR where applicable. Direct and indirect effects were judged at the stated significance level.

RESULTS AND DISCUSSION

Analysis proceeded in two stages. The measurement model was first checked to determine whether the indicators represented the four constructs adequately. Only after the validity and reliability evidence was considered acceptable were the structural paths interpreted. The structural analysis then compared the relative roles of POS, PsyCAP, and work engagement in explaining IWB and evaluated whether the proposed indirect relationships were supported.

Outer Model Test

For convergent validity, the reported AVE criterion was 0.50. Innovation Behavior had an AVE of 0.797, POS 0.835, and PsyCAP 0.781. Because each value exceeded the criterion, the reported indicators shared sufficient variance with their intended constructs.

Table 1*Average Variance Extracted (AVE)*

Instruments	AVE	Remarks
Innovation Behavior	0,797	Applicable
Perceived Organizational Support	0,835	Applicable
Psychological Capital	0,781	Applicable

The AVE evidence therefore supported retention of the reported constructs for structural testing. Reliability was also satisfactory. Cronbach's alpha and Composite Reliability were above 0.70 for every reported construct.

Table 2*Cronbach's Alpha Values*

Instruments	Cronbach's alpha	Remarks
Innovation Behavior	0.936	Reliable
Perceived Organizational Support	0.951	Reliable
Psychological Capital	0.930	Reliable
Work Engagement	0.911	Reliable

Table 3*Composite Reliability*

Instruments	Composite reliability	Remarks
Innovation Behavior	0.952	Reliable
Perceived Organizational Support	0.962	Reliable
Psychological Capital	0.947	Reliable
Work Engagement	0.934	Reliable

Composite Reliability was 0.952 for IWB, 0.962 for POS, 0.947 for PsyCAP, and 0.934 for work engagement. Together with the alpha coefficients, these results indicate acceptable internal consistency.

Inner Model Test

Structural-model interpretation used R^2 to summarize the proportion of variance explained in each endogenous construct. The model specification also included f^2 , Q^2 , and SRMR as supplementary indicators of model performance.

Table 4*Coefficients of Determination*

Dependent Variable	R-square	R-square adjusted
Innovation Behavior	0.697	0.678
Psychological Capital	0.434	0.423
Work Engagement	0.669	0.662

The predictors explained 69.7% of IWB variance ($R^2 = 0.697$), 66.9% of work-engagement variance ($R^2 = 0.669$), and 43.4% of PsyCAP variance ($R^2 = 0.434$). These coefficients show that the model captured a sizeable share of variation in the endogenous constructs within this sample.

The R^2 pattern justified closer examination of the individual paths, particularly those involving PsyCAP.

Hypothesis Testing

Direct hypotheses were evaluated with bootstrapped path estimates. Statistical support was determined from the reported coefficient, t-value, and p-value using a 5% significance threshold.

Table 5*Bootstrapped Direct Effects*

Path Coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Verdict
Perceived Organizational Support -> Innovation Behavior	-0.069	-0.055	0.110	0.629	0.265	Unproven
Perceived Organizational Support -> Psychological Capital	0.658	0.648	0.123	5.347	0.000	Proven
Psychological Capital -> Innovation Behavior	0.628	0.591	0.197	3.178	0.001	Proven
Psychological Capital -> Work Engagement	0.818	0.813	0.067	12.239	0.000	Proven
Work Engagement -> Innovation Behavior	0.292	0.320	0.198	1.474	0.070	Unproven

H1 was not supported. POS had a small negative coefficient for IWB ($\beta = -0.069$; $t = 0.629$; $p = 0.265$), but the estimate was statistically indistinguishable from zero. Accordingly, the data do not support a direct POS-IWB relationship.

H2 was supported. POS was positively related to PsyCAP ($\beta = 0.658$; $t = 5.347$; $p < 0.001$), indicating that employees reporting stronger organizational support also reported stronger positive psychological resources.

H3 was supported because PsyCAP predicted IWB positively ($\beta = 0.628$; $t = 3.178$; $p = 0.001$). This result links stronger psychological resources with greater reported innovative behavior.

H4 received the strongest statistical support in the model. PsyCAP predicted work engagement with $\beta = 0.818$ ($t = 12.239$; $p < 0.001$), showing a close association between positive psychological resources and employees' investment in their work.

H5 was not supported. Although the coefficient from work engagement to IWB was positive ($\beta = 0.292$), it was not significant ($t = 1.474$; $p = 0.070$). Engagement therefore did not independently explain IWB at the 5% level.

Overall, the direct paths place PsyCAP in the central position: POS feeds into PsyCAP, and PsyCAP is related to both engagement and IWB, whereas neither POS nor engagement directly predicts IWB significantly. Bootstrap estimates were also used to assess the indirect paths.

Table 6*Bootstrapped Indirect Effects Bootstrapped Indirect Effects*

Path Coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Verdict
Perceived Organizational Support -> Psychological Capital -> Work Engagement -> Innovation Behavior	0.157	0.176	0.125	1.259	0.208	Unproven
Perceived Organizational Support -> Psychological Capital -> Work Engagement	0.539	0.533	0.130	4.140	0.000	Proven
Perceived Organizational Support -> Psychological Capital -> Innovation Behavior	0.413	0.382	0.151	2.730	0.006	Proven
Psychological Capital -> Work Engagement -> Innovation Behavior	0.239	0.263	0.169	1.416	0.157	Unproven

The serial POS-PsyCAP-work engagement-IWB path was not supported ($\beta = 0.157$; $t = 1.259$; $p = 0.208$). The nonsignificant final engagement-IWB link prevents evidence of complete serial mediation.

POS showed a significant indirect association with work engagement through PsyCAP ($\beta = 0.539$; $t = 4.140$; $p < 0.001$), consistent with the two significant component paths.

The POS-PsyCAP-IWB indirect effect was also significant ($\beta = 0.413$; $t = 2.730$; $p = 0.006$). Thus, POS was related to innovation through PsyCAP even though its direct relationship with IWB was unsupported.

The PsyCAP-work engagement-IWB indirect effect was not significant ($\beta = 0.239$; $t = 1.416$; $p = 0.157$), providing no evidence that engagement mediates the PsyCAP-IWB relationship.

Taken together, the indirect results identify PsyCAP as the effective transmitting resource in the tested model; work engagement did not carry the effect forward to IWB.

Discussion

The findings distinguish the roles of the three explanatory resources rather than treating them as equally influential. PsyCAP was directly related to IWB ($\beta = 0.628$; $p = 0.001$), supporting earlier evidence that confidence, hope, resilience, and optimism help employees persist when innovation is uncertain or demanding (Farrukh et al., 2022; Mutonyi, 2021; Saber Seleem et al., 2026; Wang et al., 2021). POS, by contrast, did not predict IWB directly ($\beta = -0.069$; $p = 0.265$), but it strongly predicted PsyCAP ($\beta = 0.658$; $p < 0.001$). The significant POS-PsyCAP-IWB indirect effect ($\beta = 0.413$; $p = 0.006$) suggests that support becomes behaviorally relevant when it strengthens employees' psychological resources. This interpretation is compatible with Tian et al. (2023), Ren et al. (2024), and Jia et al. (2022).

Work engagement did not operate as expected. PsyCAP was strongly related to engagement ($\beta = 0.818$; $p < 0.001$), consistent with research showing that psychologically resourceful employees approach work with greater energy and dedication (Díaz-Fúnez et al., 2024; Niswaty et al., 2021; Yao et al., 2022). Yet engagement did not significantly predict IWB ($\beta = 0.292$; $p = 0.070$), and the PsyCAP-engagement-IWB indirect effect was also nonsignificant ($\beta = 0.239$; $p = 0.157$). This differs from Alwali (2024) and Singh et al. (2023). One explanation is that engagement supplies effort but not necessarily the discretion, psychological safety, or opportunity required to convert effort into experimentation and implementation.

The model explained 69.7% of IWB variance and 66.9% of work-engagement variance. The pattern implies a sequence in which POS serves mainly as an upstream contextual resource and PsyCAP as the key psychological mechanism, while engagement is better interpreted as an outcome of PsyCAP than as a route to innovation in this sample. For practice, supportive management should be paired with deliberate PsyCAP development, including mastery experiences, realistic goal pathways, resilience-building opportunities, and constructive feedback. The findings should be interpreted within the limits of a cross-sectional, self-report design and a model that omitted variables such as leadership, organizational culture, psychological safety, and autonomy. Longitudinal or multi-wave research could test temporal ordering and identify conditions under which engagement contributes more strongly to innovative action.

CONCLUSION

The results show that PsyCAP is the most consistently supported explanatory resource in the model. It was positively related to both IWB and work engagement. POS did not show a direct relationship with IWB, but it predicted PsyCAP and was indirectly associated with IWB through PsyCAP. This pattern indicates that organizational support is more likely to encourage innovation when employees convert that support into stronger confidence, hope, resilience, and optimism.

Work engagement neither predicted IWB significantly nor mediated the PsyCAP-IWB relationship. Organizations should therefore avoid assuming that engagement alone will produce innovative behavior. A more defensible approach is to combine supportive leadership and a constructive work environment with explicit development of PsyCAP. Future studies should use longitudinal or multi-wave designs and examine additional contextual conditions, particularly leadership, organizational climate, psychological safety, and work autonomy.

ACKNOWLEDGEMENT

The authors thank Universitas Negeri Jakarta for institutional and academic support. Appreciation is also extended to the employees who completed the survey and to colleagues who provided assistance or feedback during the research and manuscript preparation.

AUTHOR CONTRIBUTION STATEMENT

Laily Musyrifah led the conceptual design, instrument preparation, methodological development, data collection, PLS-SEM processing, interpretation, and initial drafting. Osly Usman contributed to study design refinement, methodological appraisal, interpretation of the empirical findings, and substantive manuscript revision. Both authors discussed the results, reviewed and approved the final manuscript, and accept responsibility for the integrity of the work.

REFERENCES

- Abbas, M. Z., & Khattak, A. N. (2024). The Impact of Coaching Leadership on Innovative Work Behavior, Psychological Capital as Mediator, and Perceived Organizational Support as Moderator. *Global Management Sciences Review*, 9(3), 77–90. [https://doi.org/10.31703/gmsr.2024\(IX-III\).07](https://doi.org/10.31703/gmsr.2024(IX-III).07)
- Afsar, B., Al-Ghazali, B. M., Cheema, S., & Javed, F. (2020). Cultural intelligence and innovative work behavior: The role of work engagement and interpersonal trust. *European Journal of Innovation Management*, 24(4), 1082–1109. <https://doi.org/10.1108/EJIM-01-2020-0008>
- Alateeg, S., & Alhammadi, A. (2024). The role of employee engagement towards innovative work behavior mediated by leadership in small businesses. *International Journal of Advanced and Applied Sciences*, 11(2), 145–156. <https://doi.org/10.21833/ijaas.2024.02.016>
- Alshaabani, A., Naz, F., & Magda, R. (2021). Impact of Perceived Organizational Support on OCB in the Time of COVID-19 Pandemic in Hungary: Employee Engagement and Affective Commitment as Mediators. *Sustainability*, 13(14), 7800. <https://doi.org/10.3390/su13147800>
- Alshebami, A. S. (2021). The Influence of Psychological Capital on Employees' Innovative Behavior: Mediating Role of Employees' Innovative Intention and Employees' Job Satisfaction. *SAGE Open*, 11(3), 1–14. <https://doi.org/10.1177/21582440211040809>
- Alwali, A. (2024). Unpacking the Role of Transformational Leadership and Work Engagement in the Relationship Between Psychological Capital and Innovative Work Behavior. *Industrial and Commercial Training*, 56(4), 343–358. <https://doi.org/10.1108/ICT-01-2024-0010>
- Ansori, M. A., & Wulansari, N. A. (2021). The effect of perceived organizational support and psychological capital on OCB: mediating role of engagement. *Diponegoro International Journal of Business*, 4(2), 69–81. <https://doi.org/10.14710/dijb.4.2.2021.69-81>
- Choi, W.-S., Kang, S.-W., & Choi, S. B. (2021). Innovative Behavior in the Workplace: An Empirical Study of Moderated Mediation Model of Self-Efficacy, Perceived Organizational Support, and Leader-Member Exchange. *Behavioral Sciences*, 11(12), 182. <https://doi.org/10.3390/bs11120182>
- Díaz-Fúnez, P. A., Cardella, G. M., Hernández-Sánchez, B. R., Sánchez-García, J. C., & Mañas-Rodríguez, M. Á. (2024). Is adding resources always beneficial? Multiplicative impact of psychological capital and goal-oriented climate on Spanish public worker satisfaction and engagement. *Frontiers in Psychology*, 15, 1418409. <https://doi.org/10.3389/fpsyg.2024.1418409>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Ekmekcioglu, E. B., & Öner, K. (2024). Servant leadership, innovative work behavior and innovative organizational culture: the mediating role of perceived organizational support. *European Journal of Management and Business Economics*, 33(3), 272–288. <https://doi.org/10.1108/EJMBE-08-2022-0251>
- Ercantan, K., Eyupoglu, Ş. Z., & Ercantan, Ö. (2024). The Entrepreneurial Leadership, Innovative Behaviour, and Competitive Advantage Relationship in Manufacturing Companies: A Key to Manufactural Development and Sustainable Business. *Sustainability*, 16(6), 2407. <https://doi.org/10.3390/su16062407>

- Farrukh, M., Ansari, N. Y., Raza, A., Meng, F., & Wang, H. (2022). High-performance work practices do much, but HERO does more: an empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management*, 25(3), 791–812.
- Guo, Y., Jiang, Q., & Bian, W. (2026). Career shocks and career sustainability: the role of career crafting and perceived organizational support. *International Journal of Contemporary Hospitality Management*, 38(3), 1131–1149.
- Ho, H. C. Y., & Chan, Y. C. (2022). Flourishing in the Workplace: A One-Year Prospective Study on the Effects of Perceived Organizational Support and Psychological Capital. *International Journal of Environmental Research and Public Health*, 19(2), 922. <https://doi.org/10.3390/ijerph19020922>
- Huang, L., & Zhang, T. (2022). Perceived Social Support, Psychological Capital, and Subjective Well-Being among College Students in the Context of Online Learning during the COVID-19 Pandemic. *The Asia-Pacific Education Researcher*, 31(5), 563–574. <https://doi.org/10.1007/s40299-021-00608-3>
- Iqbal, M. T., Warraich, I. A., & Haq, S. U. (2023). Impact of Employee Resilience and Job Engagement on Project Success: Mediating role of Innovative Work Behavior. *Research Journal for Societal Issues*, 5(3), 234–257. <https://doi.org/10.56976/rjsi.v5i3.144>
- Jabid, A. W., Amarullah, D., Soleman, M. M., Sabuhari, R., & Zulkifli. (2025). From empowering leaders to innovative work behavior of SME employees: the mediating role of psychological well-being and psychological capital. *Cogent Business & Management*, 12(1), 2492401. <https://doi.org/10.1080/23311975.2025.2492401>
- Jia, K., Zhu, T., Zhang, W., Rasool, S. F., Asghar, A., & Chin, T. (2022). The Linkage Between Ethical Leadership, Well-Being, Work Engagement, and Innovative Work Behavior: The Empirical Evidence From the Higher Education Sector of China. *International Journal of Environmental Research and Public Health*, 19(9), 5414. <https://doi.org/10.3390/ijerph19095414>
- Karimi, S., Ahmadi Malek, F., Yaghoubi Farani, A., & Liobikienė, G. (2023). The Role of Transformational Leadership in Developing Innovative Work Behaviors: The Mediating Role of Employees' Psychological Capital. *Sustainability*, 15(2), 1267. <https://doi.org/10.3390/su15021267>
- Kavgacı, H., & Öztürk, A. (2023). How distributed leadership and teachers' psychological capital influence turnover intention? Understanding the mediating role of trust in principal and work engagement. *Participatory Educational Research*, 10(1), 190–212. <https://doi.org/10.17275/per.23.11.10.1>
- Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological Capital and Beyond*. Oxford University Press. <https://books.google.com/books?id=oqSuBgAAQBAJ>
- Mutonyi, B. R. (2021). Employees' psychological capital and innovative behavior in higher education. *International Journal of Quality and Service Sciences*, 13(2), 198–215. <https://doi.org/10.1108/IJQSS-02-2020-0024>
- Mutonyi, B. R., Slåtten, T., & Lien, G. (2021). Fostering innovative behavior in health organizations: a PLS-SEM analysis of Norwegian hospital employees. *BMC Health Services Research*, 21(1), 470. <https://doi.org/10.1186/s12913-021-06505-1>
- Niswaty, R., Wirawan, H., Akib, H., Saggaf, M. S., & Daraba, D. (2021). Investigating the effect of authentic leadership and employees' psychological capital on work engagement: evidence from Indonesia. *Heliyon*, 7(5), e06992. <https://doi.org/10.1016/j.heliyon.2021.e06992>
- Park, J., & Kim, W. (2022). The Impact of Perceived Organizational Support on Innovative Work Behaviour Through Psychological Empowerment: Focusing on the Moderated Mediating Role of Organizational Procedural Justice. *Journal of Technical Education and Training*, 14(1), 178–191. <https://doi.org/10.30880/jtet.2022.14.01.015>
- Peng, M. Y.-P., Xu, C., Zheng, R., & He, Y. (2023). The impact of perceived organizational support on employees' knowledge transfer and innovative behavior: comparisons between Taiwan and mainland China. *Humanities and Social Sciences Communications*, 10(1), 741. <https://doi.org/10.1057/s41599-023-02242-4>
- Ren, Y., Li, G., Pu, D., He, L., Huang, X., Lu, Q., Du, J., & Huang, H. (2024). The relationship between perceived organizational support and burnout in newly graduated nurses from southwest China: the chain mediating roles of psychological capital and work engagement. *BMC*

- Nursing*, 23(1), 719. <https://doi.org/10.1186/s12912-024-02386-x>
- Saber Seleem, E. A. E., Ahmed, G. K., El-hameed, N. A. E. A., & Abdullah, S. O. (2026). Psychological drivers of innovative work behavior in nursing: the roles of creative self-efficacy, trust in supervisors, uncertainty avoidance, and psychological capital. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, 62(1), 49.
- Sen, A., Kulkarni, V., & Tembhre, M. (2026). Psychological Capital Mitigates the Negative Effects of Technostress on Employee Performance and Innovation in the Indian Construction Industry. *Journal of Excellence in Management Sciences*, 5(1), 1–24.
- Singh, S., Khan, E., & Rehman, A. (2023). The Impact of Transformational Leadership on Innovative Work Behavior, the Mediating Role of Employee Engagement and Psychological Capital in Karachi Hospitals. *International Journal of Business and Economic Affairs*, 8(3), 112–126. <https://doi.org/10.24088/IJBEA-2023-83009>
- Tian, L., Wu, A., Li, W., Huang, X., Ren, N., Feng, X., & Zhang, Y. (2023). Relationships Between Perceived Organizational Support, Psychological Capital and Work Engagement Among Chinese Infection Control Nurses. *Risk Management and Healthcare Policy*, 16, 551–562. <https://doi.org/10.2147/RMHP.S395918>
- van Zyl, L. E., van Oort, A., Rispens, S., & Olckers, C. (2021). Work engagement and task performance within a global Dutch ICT consulting firm: The mediating role of innovative work behaviors. *Current Psychology*, 40(8), 4012–4023. <https://doi.org/10.1007/s12144-019-00339-1>
- Vilariño del Castillo, D., & Lopez-Zafra, E. (2022). Antecedents of Psychological Capital at Work: A Systematic Review of Moderator–mediator Effects and a New Integrative Proposal. *European Management Review*, 19(1), 154–169. <https://doi.org/10.1111/emre.12460>
- Wahid, M., & Ayub, N. (2024). Predictive Role of Psychological Capital and Perceived Organizational Support on Innovative Work Behavior Among Higher Education Teachers of Pakistan. *Tuning Journal for Higher Education*, 11(2), 191–219. <https://doi.org/10.18543/tjhe.2715>
- Wang, Y., Chen, Y., & Zhu, Y. (2021). Promoting Innovative Behavior in Employees: The Mechanism of Leader Psychological Capital. *Frontiers in Psychology*, 11, 598090. <https://doi.org/10.3389/fpsyg.2020.598090>
- Wulandari, G. A., Susita, D., & Effendi, M. S. (2025). The Impact of Work Engagement on Job Performance: Exploring the Mediating Role of Innovative Work Behavior in the Public Sector. *Pakistan Journal of Life and Social Sciences*, 23(1), 5005–5017. <https://doi.org/10.57239/PJLSS-2025-23.1.00399>
- Xin, X., Cai, W., Gao, X., & Liu, T. (2021). Will Job Crafters Stay or Leave? The Roles of Organizational Instrumentality and Inclusive Leadership. *Frontiers in Psychology*, 12, 743828. <https://doi.org/10.3389/fpsyg.2021.743828>
- Yao, J., Qiu, X., Yang, L., Han, X., & Li, Y. (2022). The Relationship Between Work Engagement and Job Performance: Psychological Capital as a Moderating Factor. *Frontiers in Psychology*, 13, 729131. <https://doi.org/10.3389/fpsyg.2022.729131>