

INNOVATIVE WORK BEHAVIOR AMONG AGING PUBLIC SECTOR EMPLOYEES: THE MEDIATING ROLE OF ORGANIZATIONAL COMMITMENT

Intan Nurul'Ain Mohd Firdaus Kozako¹

Ayu Kamareenna Abdullah Thani^{2*}

Nurhidayah Rosely³

Lai See May⁴

¹Faculty Business and Management, Universiti Teknologi MARA (UiTM), Cawangan Kelantan, Malaysia, (E-mail: intan866@uitm.edu.my)

²Faculty Business and Management, Universiti Teknologi MARA (UiTM), Cawangan Kelantan Malaysia, (E-mail: ayukamareenna@uitm.edu.my)

³Faculty Business and Management, Universiti Teknologi MARA (UiTM) Cawangan Kelantan, Malaysia, (E-mail: nurhidayahrosely@uitm.edu.my)

⁴Academy of Language Studies, Universiti Teknologi Mara (UiTM) Cawangan Kelantan, Malaysia, (E-mail: laiseemay@uitm.edu.my)

Article history

Received date : 17-5-2026

Revised date : 18-5-2026

Accepted date : 15-6-2026

Published date : 1-7-2026

To cite this document:

Mohd Firdaus Kozako, I. N. A., Abdullah Thani, A. K., Rosely, N., & Lai, S. M. (2026). Innovative work behavior among aging public sector employees: The mediating role of organizational commitment. *Journal of Islamic, Social, Economics and Development (JISED)*, 11 (84), 106 - 115.

Abstract: *Innovative work behavior (IWB) plays a crucial role in enhancing organizational effectiveness, service quality, and sustainability, particularly within public sector organizations facing increasing pressure to innovate amid workforce aging. As extended working lives result in a growing proportion of aging employees remaining in public service, understanding the conditions that support IWB among aging employees has become increasingly important. Drawing on job demands-resources perspectives and organizational support literature, this pilot study examines the mediating role of organizational commitment in the relationship between job autonomy, supervisor support, and IWB among aging employees in the Malaysian public sector. This study employed a quantitative survey design involving 30 government employees aged between 50 and 60 years working in the Prime Minister's Department, Putrajaya. Established measurement instruments were used to assess job autonomy, supervisor support, organizational commitment, and IWB. Reliability analysis using Cronbach's alpha indicated satisfactory internal consistency across all constructs, with values exceeding the recommended threshold of 0.70. Skewness and kurtosis values further indicated acceptable data distribution. Overall, the findings provide preliminary support for the reliability and suitability of the research instruments and offer initial insights into the relationships among job autonomy, supervisor support, organizational commitment, and IWB in an aging public sector context. The study serves as a methodological foundation for a larger-scale investigation into IWB among aging employees.*

Keywords: *Job Autonomy, Supervisor Support, Organizational Commitment, Innovative Work Behavior, Aging Workforce*

Introduction

Innovative work behavior (IWB) has increasingly been recognised as a critical factor in enhancing organizational effectiveness, productivity, and adaptability in contemporary organizations (Ong et al., 2022; Zulfaka & Kassim, 2021). IWB refers to employees' intentional engagement in generating, promoting, and implementing new ideas that contribute to improved work processes, services, or organizational outcomes (De Jong & Den Hartog, 2010). In the public sector, IWB is particularly important as government organizations are expected to improve service quality and public value while operating within formalised and regulated institutional environments (Srirahayu et al., 2023).

At the same time, many countries, including Malaysia, are experiencing demographic shifts characterised by an aging workforce and extended working lives. Rising life expectancy and pension reforms have resulted in aging employees remaining active in the labour market for longer periods (Marzuki et al., 2021; Mansor et al., 2019). In the Malaysian public sector, declining labour productivity has raised direct concerns for IWB specifically. Labour productivity captures the volume of output generated per unit of work input, and when productivity declines, it typically reflects diminished engagement with new processes, slower adoption of improvement ideas, and reduced employee willingness to initiate change. These are all of which the core dimensions of IWB (De Jong & Den Hartog, 2010; Department of Statistics Malaysia, 2020). Consequently, declining productivity among aging public sector employees is not merely an operational challenge but a signal of constrained innovative capacity within an already bureaucratically structured environment.

Despite possessing extensive experience, institutional knowledge, and professional expertise, aging employees are often stereotyped as being less adaptable to change or less innovative. However, prior research suggests that IWB among aging employees is shaped not by age alone, but by organizational conditions and motivational factors (Bal et al., 2021). In public sector organizations characterised by bureaucratic structures and risk-averse cultures, understanding how organizational conditions enable or constrain IWB among aging employees is therefore particularly important.

Previous studies have highlighted job autonomy and supervisor support as important organizational factors influencing IWB. Job autonomy provides employees with discretion and control over how work is performed, enhancing motivation and creativity (Breugh, 1999; Ali et al., 2022). Supervisor support, meanwhile, fosters psychological safety and encourages idea sharing and experimentation (Yang et al., 2020). However, empirical findings on the direct effects of these factors on IWB remain inconsistent, suggesting the presence of intervening mechanisms. Critically, three specific gaps remain unaddressed. First, aging employees in the public sector have received limited dedicated empirical attention, with most existing studies treating age as a background control variable rather than a theoretically meaningful lens. Second, no study to date has examined how organizational commitment specifically mediates the path from job-related resources to IWB within this aging public sector population. Third, the particular institutional constraints of public sector work, which including rigid accountability systems, hierarchical approval chains, and risk-averse administrative cultures are rarely integrated into models of IWB, leaving a contextual gap that limits the applicability of private-sector findings. Accordingly, this pilot study examines organizational commitment as a mediating mechanism between job autonomy, supervisor support, and IWB among aging employees in the Malaysian public sector, providing preliminary empirical evidence to guide a subsequent large-scale investigation.

Literature Review

This section reviews relevant literature on IWB with a focus on aging employees in the public sector. It synthesises prior studies on job autonomy, supervisor support, and organizational commitment to establish the theoretical and empirical foundations of the study. By examining existing findings and highlighting areas of inconsistency and underexploration, this review provides the basis for identifying the research gap and justifying the proposed conceptual focus of the study.

Innovative Work Behavior in the Public Sector and Aging Workforce

IWB involves discretionary actions through which employees generate and implement novel ideas beyond formal job requirements (De Jong & Den Hartog, 2010). In public sector contexts, IWB is essential for improving service delivery and organizational effectiveness, particularly amid increasing societal and governance demands (Srirahayu et al., 2023). However, it is important to recognise that IWB in public organizations operates under fundamentally different conditions from private-sector settings. Public sector employees are subject to formal accountability mechanisms, rigid approval hierarchies, and legislated procedures that limit the discretion available for spontaneous idea implementation (Srirahayu et al., 2023). These structural constraints mean that predictors of IWB identified in private sector studies such as autonomy and managerial support may operate differently, or be conditioned by additional factors such as institutional compliance norms and bureaucratic risk aversion. Consequently, applying private-sector IWB models directly to public sector aging employees without contextual adjustment risks theoretical misspecification.

As workforce aging becomes more pronounced, understanding IWB among aging employees has gained importance. Aging employees possess accumulated experience and institutional knowledge that can support innovation when appropriate organizational conditions are present (Bal et al., 2021; Mansor et al., 2019). However, innovation among aging employees is highly contingent on job resources and organizational support rather than age itself.

Job Autonomy and Innovative Work Behavior

Job autonomy refers to the degree of freedom, independence, and discretion employees have in scheduling work and determining work methods (Breugh, 1999). Recent studies continue to conceptualise job autonomy as a key job resource that enhances employee motivation and IWB by allowing self-determination and control over work processes (Clausen et al., 2022; Elsetouhi et al., 2022).

Empirical evidence generally supports a positive relationship between job autonomy and IWB (Ali et al., 2022). However, several studies have reported mixed or non-significant findings (Renkema et al., 2021; Emre & De Spiegeleare, 2019), and this inconsistency is theoretically significant rather than merely methodological. When autonomy does not translate into IWB, it may reflect the absence of sufficient motivational capital in which aging employees may have the freedom to innovate but lack the organisational attachment or intrinsic drive to do so. This suggests that autonomy functions as a necessary but not sufficient condition for IWB, and that a mediating psychological state, such as organizational commitment, may be required to convert autonomy into active innovative action. Furthermore, the effect of autonomy may be particularly context-dependent in public sector environments, where formal role boundaries and procedural constraints can render autonomy perceptions less salient or less actionable than in private sector settings.

Supervisor Support and Innovative Work Behavior

Supervisor support reflects employees' perceptions of the extent to which supervisors value their contributions and provide guidance and assistance (Yang et al., 2020). Supportive supervisors create environments that encourage risk-taking and idea sharing, thereby facilitating IWB (Akbari et al., 2021).

While many studies report a positive relationship between supervisor support and IWB, others indicate indirect or conditional effects (Volery & Tarabashkina, 2021). This inconsistency matters theoretically because it challenges the assumption that supervisory encouragement directly translates into innovative action. When support does not produce IWB, it may be because the relationship is contingent on aging employees internalising that support as evidence of their value to the organisation. This process is more accurately captured through organisational commitment than through perceived support alone. In public sector environments specifically, the hierarchical distance between supervisors and frontline employees may further attenuate the direct influence of supervisor support, as bureaucratic accountability norms can restrict how supervisors visibly endorse or reward innovative risk-taking. This raises important questions about whether the mechanisms through which supervisor support enables IWB differ systematically between public and private sector aging employees.

Organizational Commitment as a Mediating Mechanism

Organizational commitment refers to employees' psychological attachment to their organization, encompassing affective, continuance, and normative dimensions (Meyer & Allen, 1991). Recent literature continues to conceptualise organizational commitment as a key motivational state influencing discretionary behaviors and long-term organizational involvement.

Studies have shown that employees with higher organizational commitment are more willing to engage in IWB, particularly when innovation aligns with organizational values and goals (Mustafa et al., 2022; Jalil et al., 2021). From a job demands-resources perspective, job autonomy and supervisor support function as job resources that strengthen organizational commitment, which in turn encourages IWB.

Research Gap

Despite the growing body of research on IWB, several critical gaps remain that this study directly addresses. First, aging employees in public sector contexts have received limited dedicated empirical attention; most studies treat age as a background control variable rather than a theoretically significant lens through which to understand IWB. This is a substantive oversight, given that aging employees may respond differently to organisational resources due to distinct career motivations, accumulated socialisation into institutional norms, and stronger continuance and normative commitment ties. Second, findings regarding the direct effects of job autonomy and supervisor support on IWB remain persistently inconsistent. This pattern signals the need for a mediating mechanism rather than direct-effects models. Without identifying such a mechanism, the literature cannot adequately explain under what conditions autonomy and support generate IWB. Third, the mediating role of organisational commitment in linking job-related resources to IWB remains underexplored in aging public sector populations, despite theoretical arguments from the job demands-resources framework that commitment represents a key motivational pathway. Taken together, these gaps indicate a need

for contextually grounded, mechanism-focused research that situates IWB within the specific structural and motivational realities of an aging public sector workforce.

Addressing these gaps, this pilot study examines organizational commitment as a mediating mechanism between job autonomy, supervisor support, and IWB among aging employees in the Malaysian public sector.

Methodology

This section outlines the research design and methodological procedures employed in this pilot study. It describes the sampling approach, measurement instruments, and analytical techniques used to assess the reliability and suitability of the research instruments prior to the main study. The methodological choices are aligned with the exploratory nature of a pilot study and are intended to support rigorous instrument validation within the context of an aging public sector workforce.

Research Design and Sample

This study employed a quantitative survey design as a pilot test for an ongoing larger-scale research project. A pilot study is essential for assessing the clarity, reliability, and suitability of research instruments prior to full-scale data collection, particularly when established instruments are adapted to a specific research context (Hair et al., 2019; Padmanabhan, 2021).

The pilot study was conducted in June 2024 and involved a sample of 30 government employees working in the Prime Minister's Department, Putrajaya. Respondents were selected using purposive sampling, a non-probability technique appropriate when the research requires participants with specific characteristics (Creswell, 2014). Specifically, eligibility criteria required participants to be permanent government employees aged between 50 and 60 years, thereby aligning the sample with the study's focus on the aging workforce. The Prime Minister's Department was selected as the sampling site because it is a large, multi-functional federal agency that encompasses diverse administrative functions, providing a representative cross-section of aging public sector employees. Potential respondents were identified through the department's human resource records, and questionnaires were distributed directly to eligible staff members who consented to participate. The selected sample size is consistent with prior methodological recommendations, which suggest that pilot studies typically involve between 15 and 30 respondents to assess instrument reliability and feasibility before proceeding to the main study (Pattnaik & Sahoo, 2020).

Measurement of Variables and Instrumentation

The questionnaire utilised in this study consisted of closed-ended items measured using a five-point Likert scale ranging from 1 (very low / strongly disagree) to 5 (very high / strongly agree). The use of a Likert-type scale is appropriate for measuring latent constructs in social science research and is commonly employed in studies examining organizational behavior and innovation-related variables (Min et al., 2022).

Job autonomy was measured using seven items adapted from Breugh's (1999) Work Autonomy Scale, which assesses employees' perceived discretion and control over work methods, scheduling, and decision-making. Supervisor support was measured using 15 items adapted from Zhang et al. (2020), covering dimensions of work support, employee value identity, and alignment of interests.

Organizational commitment was measured using items based on Meyer and Allen's (1991) three-component model, encompassing affective, continuance, and normative commitment. IWB was measured using nine items adapted from De Jong and Den Hartog (2010), capturing idea exploration, idea generation, idea championing, and idea implementation.

Reliability Analysis

Reliability analysis was conducted to assess the internal consistency of the measurement instruments. Cronbach's alpha coefficient was used, as it is the most widely applied method for evaluating inter-item consistency reliability in social science research (Bougie & Sekaran, 2019).

The results indicate that all constructs demonstrated satisfactory internal consistency, with Cronbach's alpha values exceeding the recommended threshold of 0.70. Specifically, job autonomy recorded a Cronbach's alpha of 0.768, supervisor support 0.978, organizational commitment 0.779, and IWB 0.945. These values indicate that the measurement items are reliable and suitable for use in subsequent large-scale data collection. Table 1 presents the reliability values for each construct.

Table 1: Reliability Value

Constructs	Number of Items	Cronbach's Alpha
Job Autonomy	7	0.768
Supervisor Support	15	0.978
Organizational Commitment	4	0.779
IWB	9	0.945

Data Distribution

Prior to inferential analysis, the normality of the data was assessed using skewness and kurtosis statistics. Normality testing is an important prerequisite for parametric statistical analysis and provides an indication of whether data distributions deviate significantly from normality (Demir, 2022).

According to established guidelines, skewness and kurtosis values within the range of -1.96 to +1.96 indicate acceptable normality (Abdulameer et al., 2020). The results of the analysis indicate that all variables fell within this recommended range, suggesting that the data are approximately normally distributed and suitable for further statistical analysis in the main study.

Results Summary

As this study represents a pilot investigation, the primary and sole analytical focus was to assess the reliability and suitability of the measurement instruments, and to evaluate the feasibility of the research design prior to the main study. The results confirm that all four constructs: job autonomy, supervisor support, organizational commitment, and IWB achieved satisfactory internal consistency, with Cronbach's alpha values exceeding the accepted threshold of 0.70. Data distribution was also found to be within acceptable normality bounds. These findings provide confidence that the instruments are appropriately adapted to the aging public sector context and are suitable for deployment in a larger-scale study. While descriptive patterns in the data offer tentative preliminary insights into how these constructs co-vary, such observations are illustrative only and are not interpreted as evidence of causal or mediating relationships at this stage.

Importantly, these pilot findings should be understood strictly in terms of instrument validation and feasibility assessment. The data patterns are consistent with the proposed conceptual model, offering preliminary grounds for proceeding to the full study, but they do not constitute evidence of mediation or directional causality. The primary contribution of this pilot is methodological: it establishes that the chosen instruments are reliable, that the target population is accessible and willing to participate, and that the research design is operationally feasible. Refinement of the research design and hypothesis testing will be reserved for the subsequent full-scale study.

Discussion

The purpose of this pilot study was to assess the reliability and suitability of the research instruments and to obtain preliminary insights into the relationships between job autonomy, supervisor support, organizational commitment, and IWB among aging public sector employees. The findings provide initial empirical support for the proposed conceptual model and offer several meaningful implications when interpreted in light of existing literature.

The results indicate that job autonomy is positively associated with IWB among aging employees. This finding is consistent with prior studies suggesting that autonomy enables employees to exercise discretion, apply experience-based judgement, and experiment with new approaches at work (Breugh, 1999; Ali et al., 2022; Clausen et al., 2022). For aging employees, greater autonomy may be particularly important, as it allows them to draw on accumulated professional expertise and maintain a sense of control and meaningful contribution in later career stages. This supports the view that innovation among aging employees is shaped by job design rather than age-related limitations.

Similarly, supervisor support demonstrated a positive relationship with IWB. This aligns with previous research highlighting the role of supportive supervisors in fostering psychological safety, encouraging idea sharing, and legitimising innovation-related risk-taking (Yang et al., 2020; Akbari et al., 2021). In public sector contexts characterised by formalised procedures and hierarchical structures, supervisory encouragement may play a crucial role in enabling aging employees to engage in IWB without fear of negative consequences.

Importantly, the findings suggest that organizational commitment may function as a mediating mechanism linking job autonomy and supervisor support to IWB. This result is consistent with prior studies that identify organizational commitment as a key motivational factor influencing discretionary and extra-role behaviors, including innovation (Meyer & Allen, 1991; Mustafa et al., 2022; Jalil et al., 2021). For aging employees, organizational commitment may be particularly salient, as later career motivation often emphasises stability, organizational attachment, and meaningful contribution rather than extrinsic rewards. The mediating role of organizational commitment provides a plausible explanation for previously inconsistent findings regarding the direct effects of job autonomy and supervisor support on IWB.

From a theoretical perspective, the findings support job demands-resources perspectives by illustrating how job-related resources such as autonomy and supervisory support contribute to IWB through motivational attachment to the organization. Although this pilot study does not test causal relationships, the results offer preliminary evidence that supports the inclusion of organizational commitment as an important explanatory mechanism in future models of IWB among aging public sector employees.

From a practical perspective, the findings suggest that public sector organizations seeking to sustain innovation amid workforce aging should focus on strengthening job autonomy and supervisory support while fostering organizational commitment. Providing aging employees with discretion in how they perform their work and ensuring that supervisors actively support idea generation may help maintain innovative capacity in extended working lives.

Despite these contributions, the findings should be interpreted in light of the study's limitations. As a pilot study with a small sample size drawn from a single public sector organization, the results are exploratory and not intended for generalisation. Nevertheless, the study provides valuable insights into instrument reliability and conceptual relationships, serving as a foundation for a larger-scale investigation using a more robust research design.

Conclusion

The purpose of this pilot study was to assess the reliability and suitability of the research instruments used to examine the relationships between job autonomy, supervisor support, organizational commitment, and IWB among aging employees in the public sector. Based on data collected from 30 government employees in the Prime Minister's Department, Putrajaya, the findings demonstrate satisfactory reliability and acceptable data distribution across all constructs.

The pilot results provide preliminary evidence suggesting that organizational commitment may play an important mediating role in linking job autonomy and supervisor support to IWB among aging employees. These findings reinforce the relevance of motivational attachment in understanding IWB within public sector organizations characterised by extended working lives and bureaucratic structures.

Overall, this pilot study provides a sound methodological foundation for the main study and supports the refinement of measurement instruments and analytical procedures. By focusing on an aging public sector workforce, the study contributes preliminary insights that inform future research and practice aimed at sustaining innovation and organizational effectiveness in the context of workforce aging.

References

- Abdulameer, S. S., Yaacob, N. A., & Ibrahim, Y. M. (2020). Measuring leagile supply chain, information sharing, and supply chain performance: Pre-Test and Pilot test. *International Journal of Technology*, 11(4), 677. <https://doi.org/10.14716/ijtech.v11i4.3496>
- Akbari, M., Bagheri, A., Imani, S., & Asadnezhad, M. (2020). Does entrepreneurial leadership encourage innovation work behavior? The mediating role of creative self-efficacy and support for innovation. *European Journal of Innovation Management*, 24(1), 1–22. <https://doi.org/10.1108/ejim-10-2019-0283>
- Ali, H., Li, M., & Qiu, X. (2022). Employee engagement and innovative work behavior among Chinese millennials: Mediating and moderating role of Work-Life balance and Psychological Empowerment. *Frontiers in Psychology*, 13, 942580. <https://doi.org/10.3389/fpsyg.2022.942580>
- Bal, P. M., Kooij, D. T. A. M., & Rousseau, D. M. (2021). Idiosyncratic deals and the meaning of work for older workers. *Journal of Organizational Behavior*, 42(1), 24–38. <https://doi.org/10.1002/job.2474>
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Breaugh, J. A. (1999). Further investigation of the work Autonomy scales: two studies. *Journal of Business and Psychology*, 13(3), 357–373. <https://doi.org/10.1023/a:1022926416628>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Clausen, T., Pedersen, L. R. M., Andersen, M. F., Theorell, T., & Madsen, I. E. (2021). Job autonomy and psychological well-being: A linear or a non-linear association? *European Journal of Work and Organizational Psychology*, 31(3), 395–405. <https://doi.org/10.1080/1359432x.2021.1972973>
- De Jong, J., & Hartog, D. D. (2010). Measuring innovative work behavior. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Demir, S. (2022). Comparison of Normality Tests in Terms of Sample Sizes under Different Skewness and Kurtosis Coefficients. *International Journal of Assessment Tools in Education*, 9(2), 397–409. <https://doi.org/10.21449/ijate.1101295>
- Department of Statistics Malaysia. (2020). Labour productivity statistics 2020. *Putrajaya, Malaysia: Department of Statistics Malaysia*. Retrieved from <https://www.dosm.gov.my>
- Elsetouhi, A. M., Elbaz, A. M., & Soliman, M. (2022). Participative leadership and its impact on employee innovative behavior through employee voice in tourism SMEs: The moderating role of job autonomy. *Tourism and Hospitality Research*, 23(3), 406–419. <https://doi.org/10.1177/14673584221119371>
- Emre, O., & De Spiegeleare, S. (2019). The role of work–life balance and autonomy in the relationship between commuting, employee commitment and well-being. *The International Journal of Human Resource Management*, 32(11), 2443–2467. <https://doi.org/10.1080/09585192.2019.1583270>
- Jalil, M. F., Ullah, W., & Ahmed, Z. (2021). Training Perception and Innovative Behavior of SME Employees: Examining the mediating effects of firm commitment. *SAGE Open*, 11(4). <https://doi.org/10.1177/21582440211067250>
- Mansor, N., Awang, H., & Rashid, N. F. A. (2019). Malaysia Aging and Retirement Survey. In *Encyclopedia of gerontology and population aging* (pp. 1–5). https://doi.org/10.1007/978-3-319-69892-2_344-1
- Marzuki, A. A., Nor, N. N. F. M., & Rashid, S. M. R. A. (2021). AGING POPULATION TREND IN THE STATE OF PERAK, MALAYSIA. *Quantum Journal of Social Sciences and Humanities*, 2(5), 1–9. <https://doi.org/10.55197/qjssh.v2i5.82>

- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-z](https://doi.org/10.1016/1053-4822(91)90011-z)
- Min, N. M. F. N., Thani, A. K. A., Ishak, M. a. H., & Sakarji, S. R. (2022). The Influence of Working From Home on Job Performance among Academicians from Kota Bharu Polytechnic, Kelantan During Covid-19 Pandemic: A Pilot Study. *International Journal of Academic Research in Business and Social Sciences*, 12(7). <https://doi.org/10.6007/ijarbss/v12-i7/14011>
- Mustafa, M. J., Badri, S. K. Z., & Ramos, H. M. (2022). Linking middle-managers' ownership feelings to their innovative work behavior: the mediating role of affective organizational commitment. *Journal of Management & Organization*, 30(6), 2418–2435. <https://doi.org/10.1017/jmo.2021.67>
- Ong, H., & Mohd-Audi-Tye, S. H. (2022). A time-varying impact of aging population on the economy of Malaysia. *International Journal of Social Economics*, 49(11), 1643–1651. <https://doi.org/10.1108/ijse-04-2021-0234>
- Padmanabhan, S. (2021). The impact of locus of control on workplace stress and job satisfaction: A pilot study on private-sector employees. *Current Research in Behavioral Sciences*, 2, 100026. <https://doi.org/10.1016/j.crbeha.2021.100026>
- Pattnaik, S. C., & Sahoo, R. (2020). Employee engagement, creativity and task performance: role of perceived workplace autonomy. *South Asian Journal of Business Studies*, 10(2), 227–241. <https://doi.org/10.1108/sajbs-11-2019-0196>
- Renkema, M., Leede, J., & Van Zyl, L. E. (2021). High-involvement HRM and innovative behavior: The mediating roles of nursing staff's autonomy and affective commitment. *Journal of Nursing Management*, 29(8), 2499–2514. <https://doi.org/10.1111/jonm.13390>
- Srirahayu, D. P., Heliyon, H., & Author, A. A. (2023). Innovative work behavior in public organizations: A systematic literature review. *Heliyon*, 9(6), Article e17045. <https://doi.org/10.1016/j.heliyon.2023.e17045>
- Volery, T., & Tarabashkina, L. (2021). The impact of organizational support, employee creativity and work centrality on innovative work behavior. *Journal of Business Research*, 129, 295–303. <https://doi.org/10.1016/j.jbusres.2021.02.049>
- Vuong, B. N., Tushar, H., & Hossain, S. F. A. (2022). The effect of social support on job performance through organizational commitment and innovative work behavior: does innovative climate matter? *Asia-Pacific Journal of Business Administration*, 15(5), 832–854. <https://doi.org/10.1108/apjba-06-2021-0256>
- Yang, W., Hao, Q., & Song, H. (2020). Linking supervisor support to innovation implementation behavior via commitment. *Journal of Managerial Psychology*, 35(3), 129–141. <https://doi.org/10.1108/jmp-04-2018-0171>
- Zhang, J., Wang, S., Wang, W., Shan, G., Guo, S., & Li, Y. (2020). Nurses' job insecurity and emotional exhaustion: the mediating effect of presenteeism and the moderating effect of supervisor support. *Frontiers in Psychology*, 11, 2239. <https://doi.org/10.3389/fpsyg.2020.02239>
- Zulfaka, A., & Kassim, S. (2021). Retirement awareness among the working population below 40 in Malaysia. *Journal of Islamic Finance*, 10. <https://doi.org/10.31436/jif.v10i.532>