

GLOBAL RESEARCH TRENDS IN INNOVATIVE WORK BEHAVIOUR: A BIBLIOMETRIC ANALYSIS OF THE KNOWLEDGE STRUCTURE AND RESEARCH EVOLUTION (2000–2026)

Ahmad Muaz Mahzair¹
Ahmad Nizan Mat Noor²
Sabiroh Md Sabri^{3*}

¹ Faculty of Business and Management, Universiti Teknologi MARA Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia (E-mail: muazmahzair@uitm.edu.my)

² Faculty of Business and Management, Universiti Teknologi MARA Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia (E-mail: ahmadnizan@uitm.edu.my)

³ Faculty of Business and Management, Universiti Teknologi MARA Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia (E-mail: sabir707@uitm.edu.my)

*Corresponding author: sabir707@uitm.edu.my

Article history

Received date : 14-6-2026

Revised date : 15-6-2026

Accepted date : 31-8-2026

Published date : 21-9-2026

To cite this document:

Mahzair, A. M., Mat Noor, A. N., & Md Sabri, S. (2026). Global research trends in innovative work behaviour: A bibliometric analysis of the knowledge structure and research evolution (2000–2026). *Journal of Islamic, Social, Economics and Development (JISED)*, 11 (86), 533 – 551.

Abstract: *Innovative Work Behaviour (IWB) has become an important research domain due to its significant role in enhancing organisational innovation, competitiveness, and long-term sustainability. Although research on IWB has expanded considerably over the past two decades, a comprehensive understanding of its intellectual development and global research landscape remains limited. This study aims to examine the evolution, knowledge structure, and research trends of IWB through a bibliometric analysis of Scopus-indexed publications published between 2000 and 2026. Bibliographic data were retrieved from the Scopus database using a structured search strategy, resulting in a final dataset of 1,564 publications after applying the inclusion and exclusion criteria. Descriptive bibliometric indicators were analysed using Microsoft Excel and Harzing's Publish or Perish, while science mapping analyses were conducted using VOSviewer to examine collaboration networks, keyword co-occurrence, and source co-citation patterns. The findings reveal a substantial increase in publication output, particularly after 2020, indicating growing scholarly interest in IWB. Indonesia, Pakistan, India, China, and Malaysia emerged as the leading contributors in publication output, while leadership, transformational leadership, psychological empowerment, knowledge sharing, work engagement, and creativity were identified as the dominant research themes. The study further demonstrates that IWB has evolved into a multidisciplinary research field supported by extensive international collaboration and an increasingly interconnected knowledge base. This study contributes to the literature by providing a comprehensive overview of the evolution and intellectual structure of IWB research while identifying emerging research directions that may guide future studies and organisational innovation practices.*

Keywords: *Innovative Work Behaviour; Bibliometric Analysis; Research Trends; Science Mapping; VOSviewer*

Introduction

Innovation has become a key determinant of organisational competitiveness, adaptability, and long-term sustainability in today's dynamic business environment. As organisations respond to rapid technological advancements, digital transformation, and increasing market uncertainty, employees are increasingly expected to contribute beyond their formal job responsibilities by generating, promoting, and implementing novel ideas that improve organisational processes and performance. Such discretionary behaviours are commonly referred to as Innovative Work Behaviour (IWB), which encompasses the intentional generation, promotion, and implementation of new ideas within a work role, group, or organisation (Janssen, 2000).

Consequently, IWB has attracted growing scholarly attention across multiple disciplines, including Human Resource Management, Organisational Behaviour, Psychology, Innovation Management, and Leadership Studies. Over the past two decades, research on IWB has expanded considerably, examining diverse antecedents such as transformational leadership, psychological empowerment, human resource management practices, knowledge sharing, organisational culture, work engagement, creativity, and digital transformation. While this diversity has enriched the theoretical development of the field, it has also resulted in an increasingly fragmented body of knowledge. As publication output continues to grow, synthesising the expanding literature through conventional reviews becomes increasingly challenging, highlighting the value of bibliometric analysis in systematically examining publication trends, intellectual structures, collaboration networks, and thematic evolution (Ahmi & Mohamad, 2019; Zakaria et al., 2020).

Although several reviews and bibliometric studies have examined IWB, existing research varies considerably in its scope, database coverage, period of analysis, and analytical focus. Earlier bibliometric studies have mapped the IWB knowledge domain using different publication periods and databases, including Web of Science and Scopus (Hassan et al., 2021; Farrukh et al., 2023; Peerzadah et al., 2024). Other bibliometric investigations have concentrated on specific thematic domains, such as the relationship between human resource management practices and IWB (Wider et al., 2025). Consequently, existing studies provide valuable but fragmented perspectives on the development of the field. A broader longitudinal analysis is therefore warranted to integrate the foundational and contemporary development of IWB research within a single analytical framework. By examining Scopus-indexed publications from 2000 to 2026, the present study extends previous bibliometric work by capturing the long-term growth of the field alongside its evolving intellectual structure, global research contributions, collaboration patterns, and emerging thematic directions.

Therefore, this study aims to analyse the global research landscape of Innovative Work Behaviour through a bibliometric analysis of Scopus-indexed publications published between 2000 and 2026. Specifically, the study examines publication trends, identifies the most influential authors, institutions, countries, and source titles, and explores the intellectual structure and thematic evolution of the field through citation, co-authorship, keyword co-occurrence, and co-citation analyses.

To achieve these objectives, the study addresses the following research questions:

- 1) How has the publication output on Innovative Work Behaviour evolved between 2000 and 2026?
- 2) Who are the most influential contributors, institutions, countries, and journals in the field?
- 3) What are the dominant research themes and intellectual structures underlying IWB research?
- 4) What emerging trends and future research directions can be identified from the existing literature?

Literature Review

Innovative Work Behaviour (IWB) has evolved considerably in both conceptualisation and measurement. Early research established IWB as a multidimensional employee behaviour involving the intentional generation, promotion, and implementation of novel ideas within the workplace (Janssen, 2000). Subsequent work further refined its conceptual boundaries and measurement, with De Jong and Den Hartog (2010) developing a widely recognised measure encompassing idea exploration, idea generation, idea championing, and idea implementation. These foundational contributions shifted the understanding of workplace innovation beyond creativity alone by recognising that innovative behaviour involves not only generating ideas but also mobilising support and translating those ideas into practice. A systematic review by AlEsa and Durugbo (2022) further demonstrated the expansion of IWB across diverse theoretical perspectives, methodological approaches, sectors, and organisational contexts.

As the field developed, scholarly attention increasingly shifted from defining and measuring IWB towards identifying the organisational and individual factors that facilitate innovative behaviour. Research has examined a broad range of antecedents, including human resource management practices, organisational climate, knowledge sharing, work engagement, leadership, psychological empowerment, and creative self-efficacy. Leadership has become particularly prominent, with transformational and other supportive leadership approaches increasingly examined as mechanisms through which organisations encourage employees to engage in innovative behaviour. Psychological factors have similarly gained importance because leadership and organisational conditions may foster IWB by strengthening employees' empowerment, motivation, engagement, and confidence in their creative capabilities. Recent systematic evidence confirms the continuing prominence of leadership-related mechanisms in IWB research and highlights the increasing integration of organisational and psychological explanations of employee innovation (AlEsa & Durugbo, 2022; Muadzah & Herachwati, 2024). This development reflects a broader shift from examining isolated determinants towards understanding IWB as the outcome of interacting organisational, leadership, and psychological conditions.

More recently, IWB research has expanded in response to digital transformation, sustainability, and the increasing adoption of artificial intelligence in contemporary workplaces. Within digitally transforming organisations, digital leadership has been associated with employee innovative behaviour through psychological empowerment, illustrating how technological change has extended IWB research towards digitally enabled organisational and psychological mechanisms (Gao & Gao, 2024). Sustainability concerns have similarly broadened the field towards green innovative work behaviour, connecting employee innovation with environmentally responsible practices and organisational sustainability (Mukapit et al., 2024). Artificial intelligence represents a further emerging direction, with evidence showing that AI-enabled job characteristics can influence employees' innovative work behaviour (Verma &

Singh, 2022). Collectively, these developments demonstrate the progression of IWB research from its foundational emphasis on conceptualisation and measurement towards increasingly complex organisational, psychological, technological, and sustainability-oriented perspectives. This expanding research landscape reinforces the need to systematically map the evolution and intellectual structure of IWB research and identify the directions in which the field is developing.

Methodology

This study employed a bibliometric approach to examine the evolution, intellectual structure, and research trends of Innovative Work Behaviour (IWB). Bibliometric analysis is a quantitative review method that systematically evaluates publication productivity, citation performance, collaboration networks, and thematic development using bibliographic metadata (Ahmi & Mohamad, 2019; Donthu et al., 2021; Zakaria et al., 2020). Bibliographic data were retrieved exclusively from the Scopus database due to its extensive coverage of peer-reviewed publications and comprehensive citation indexing, making it one of the most widely used databases for bibliometric research (Zakaria et al., 2020). The database search was conducted on 9 April 2026, and all retrieved records were exported for subsequent analysis.

A structured search strategy was developed using keywords related to Innovative Work Behaviour. The search covered English-language publications indexed in Scopus between 2000 and 2026 to capture the historical development and recent trends of the field. The complete search string is presented in Table 1.

Table 1: Search string used in the selected database

Database	Search String
Scopus	TITLE-ABS-KEY ("innovative work behaviour" OR "innovative work behavior" OR "employee innovative behaviour" OR "employee innovative behavior" OR "individual innovative behaviour" OR "individual innovative behavior") AND PUBYEAR > 1999 AND PUBYEAR < 2027 AND (LIMIT-TO (LANGUAGE, "English"))

The document selection process followed the principles of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure a transparent and systematic screening procedure (Moher et al., 2009; Page et al., 2021). The initial Scopus search yielded 2,556 records. Following the screening and eligibility assessment, 992 records were excluded, comprising 388 records that were irrelevant to the study scope, 326 records from excluded subject areas, 156 records with ineligible document types, 71 articles in press, 26 duplicate records, and 25 non-English publications. After these exclusions, 1,564 publications remained and constituted the final dataset for bibliometric analysis. The inclusion and exclusion criteria applied during the screening process are presented in Table 2, while the overall selection procedure is illustrated in Figure 1.

Table 2: Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Timeline	Publications from 2000 to 2026	Publications before 2000
Document Type	Article, review, and conference paper	Other document types and articles in press
Language	English	Non-English

Subject Area	Business, Management and Accounting; Psychology; Social Sciences	Other subject areas
Relevance to Scope	Publications relevant to Innovative Work Behaviour	Publications irrelevant to the study scope
Duplicate Records	Unique records	Duplicate records

The bibliographic information extracted from the selected publications included authors, publication titles, source titles, publication years, affiliations, countries, author keywords, abstracts, and citation data. Microsoft Excel was used to perform descriptive and frequency analyses, while Harzing's Publish or Perish was employed to generate citation-based indicators. Science mapping and network visualisation analyses were conducted using VOSviewer version 1.6.20, which is widely used for constructing and visualising bibliometric networks, including co-authorship, co-occurrence, and co-citation analyses (Van Eck & Waltman, 2010). The analyses focused on publication trends, citation performance, leading authors, productive institutions, contributing countries, source titles, co-authorship networks, keyword co-occurrence patterns, and source co-citation networks. Collectively, these bibliometric indicators provide a comprehensive overview of the evolution, intellectual structure, and emerging research directions within the field of Innovative Work Behaviour. The overall bibliometric workflow adopted in this study is illustrated in Figure 1.

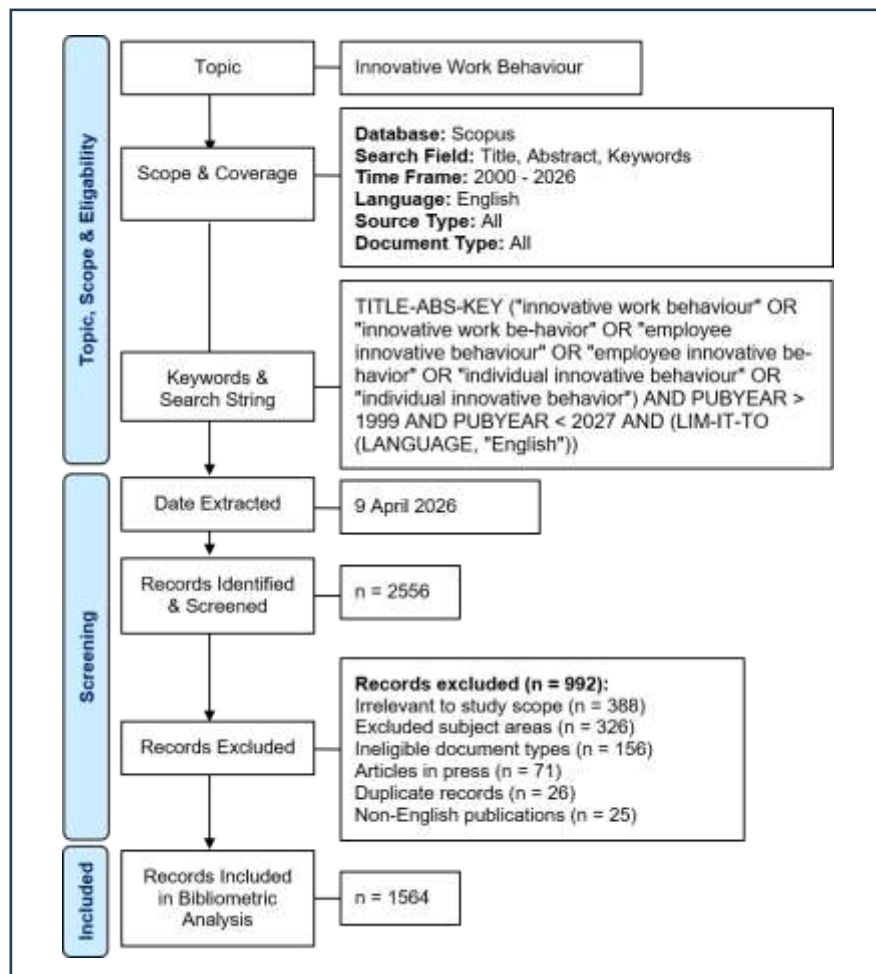


Figure 1: Flow diagram of the search strategy

Results and Findings

This section presents the findings of the bibliometric analysis of Innovative Work Behaviour (IWB) research based on publications indexed in the Scopus database between 2000 and 2026. The analysis provides an overview of the publication landscape by examining publication trends, document characteristics, source titles, authors, institutions, countries, citation performance, and collaboration patterns. In addition, science mapping techniques were employed to identify the knowledge structure of the field through keyword co-occurrence analysis. The findings presented in this section provide the empirical basis for understanding the development and characteristics of IWB research over the study period.

Research Profiles

The research profile provides an overview of the disciplinary distribution of the publications included in the bibliometric dataset. Examining the subject areas of the retrieved publications offers insights into the breadth and diversity of disciplines contributing to Innovative Work Behaviour (IWB) research. This analysis establishes the multidisciplinary nature of the field and provides a foundation for understanding its subsequent research trends, intellectual structure, and thematic development.

Subject Area

Table 3 presents the distribution of publications across subject areas. The findings indicate that Business, Management and Accounting dominate IWB research, followed by Social Sciences and Psychology, confirming that the field is primarily grounded in management and behavioural sciences. Nevertheless, contributions from Computer Science, Engineering, Environmental Science, and Energy demonstrate that IWB has expanded beyond its traditional disciplinary boundaries. This multidisciplinary distribution suggests that employee innovative behaviour is increasingly recognised as a complex organisational phenomenon requiring insights from diverse academic disciplines.

Table 3: Top 10 Subject Area

Subject Area	Total Publications (TP)	Percentage (%)
Business, Management and Accounting	966	61.76%
Social Sciences	505	32.29%
Psychology	243	15.54%
Economics, Econometrics and Finance	187	11.96%
Computer Science	180	11.51%
Decision Sciences	140	8.95%
Engineering	102	6.52%
Environmental Science	99	6.33%
Arts and Humanities	81	5.18%
Energy	64	4.09%

Note: Publications in Scopus may be indexed under more than one subject area; therefore, the total frequency exceeds the total number of publications.

Research Trends

Research trend analysis provides insights into the development and global progression of Innovative Work Behaviour (IWB) research. By examining publication output, geographical distribution, institutional contributions, and active publication sources, this analysis identifies

the major contributors and publication patterns that have shaped the field over time. The findings provide an overview of the growth and global development of IWB research.

Year of Publications

Table 4 presents the annual publication output and citation performance of IWB research between 2000 and 2026. The findings reveal a steady upward trend in publication output over the study period. Between 2000 and 2015, annual publications remained relatively modest, with fewer than 30 publications each year. Publication activity increased noticeably from 2016 and accelerated after 2020, reaching a peak of 301 publications in 2025. At the time of data collection, 85 publications had already been indexed for 2026.

While recent years recorded the highest publication output, publications produced between 2017 and 2022 demonstrated stronger citation impact, with studies published in 2018 and 2019 achieving average citations per publication exceeding 40. Earlier publications also recorded higher average citation values because they had a longer period to accumulate citations. Overall, the findings indicate sustained growth in IWB research and increasing scholarly interest in the field.

Table 4: Year of Publication

Year	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>
2026	85	12	20	0.24	1.67	3	3
2025	301	160	721	2.40	4.51	11	18
2024	268	213	2231	8.32	10.47	22	32
2023	203	185	3346	16.48	18.09	31	45
2022	149	143	4158	27.91	29.08	34	58
2021	124	116	3360	27.10	28.97	33	52
2020	129	118	4600	35.66	38.98	38	64
2019	99	94	4149	41.91	44.14	37	62
2018	48	45	2165	45.10	48.11	24	46
2017	49	46	2917	59.53	63.41	23	49
2016	24	22	1000	41.67	45.45	15	24
2015	19	18	1119	58.89	62.17	15	19
2014	26	26	2490	95.77	95.77	21	26
2013	12	11	1103	91.92	100.27	8	12
2012	9	8	616	68.44	77.00	6	9
2011	8	8	380	47.50	47.50	7	8
2010	3	2	1081	360.33	540.50	2	3
2009	2	1	416	208.00	416.00	1	2
2008	2	2	259	129.50	129.50	2	2
2005	3	2	640	213.33	320.00	2	3
2000	1	1	1957	1957.00	1957.00	1	1
Total	1564						

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; *h*=*h*-index; and *g*=*g*-index.

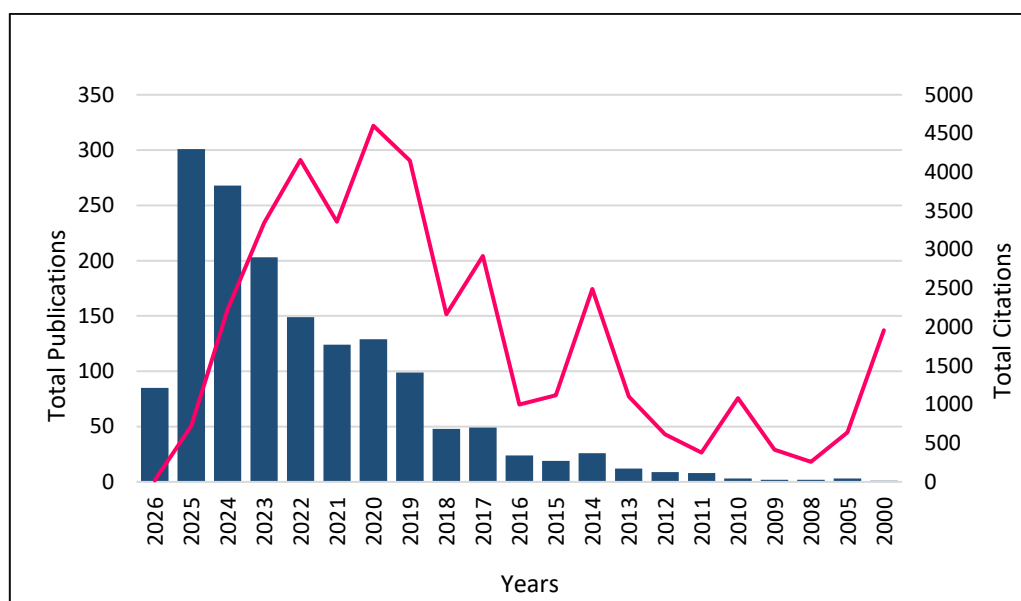


Figure 2. Total Publications and Citations by Year

Table 5 presents the ten most productive countries contributing to IWB research. Indonesia recorded the highest number of publications (205), followed by Pakistan (203), India (162), China (158), and Malaysia (145), indicating that Asian countries have become major contributors to the field. In contrast, although the Netherlands, the United Kingdom, Italy, and the United States produced fewer publications, they demonstrated substantially stronger citation performance. Among the top contributing countries, the Netherlands achieved the highest citation impact, with 7,185 citations and an average of 101.20 citations per publication. The United Kingdom, the United States, Italy, and China also recorded relatively high h-index and g-index values, suggesting that while Asian countries lead in publication output, European countries and the United States continue to exert strong scholarly influence within IWB research.

Table 5: Top 10 Contributing Countries

Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>
Indonesia	205	136	1599	7.80	11.76	24	34
Pakistan	203	177	6750	33.25	38.14	46	76
India	162	117	2951	18.22	25.22	28	51
China	158	134	4908	31.06	36.63	39	66
Malaysia	145	113	2142	14.77	18.96	26	42
Netherlands	71	64	7185	101.20	112.27	33	71
Turkey	71	59	1425	20.07	24.15	19	37
United Kingdom	70	62	4058	57.97	65.45	32	63
Italy	69	60	2571	37.26	42.85	27	50
United States	69	53	2608	37.80	49.21	23	51

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; *h*=h-index; and *g*=g-index.

Most Influential Institutions

Table 6 lists the most influential institutions with at least five publications on IWB. Hazara University (Pakistan) emerged as the most productive institution with 29 publications, followed

by Universiti Sains Malaysia (24), Université de Bordeaux (21), and Università degli Studi di Firenze (20).

Several universities from Asia and Europe also demonstrated consistent research contributions, reflecting the international development of IWB research. In terms of citation impact, Hazara University also recorded the highest total citations (1,962) and a high average of 67.66 citations per publication. KU Leuven, Universiteit Twente, and Università degli Studi di Firenze likewise achieved strong citation performance, indicating that institutional influence is reflected not only by research productivity but also by the scholarly impact of published work.

Table 6: Most influential institutions with minimum of five publications

Affiliation	Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>
Hazara University Pakistan	Pakistan	29	27	1962	67.66	72.67	19	29
Universiti Sains Malaysia	Malaysia	24	18	390	16.25	21.67	11	19
Université de Bordeaux	France	21	19	658	31.33	34.63	12	21
Università degli Studi di Firenze	Italy	20	19	733	36.65	38.58	12	20
Open Universiteit	Netherlands	19	18	956	50.32	53.11	13	19
Universitas Airlangga	Indonesia	19	16	179	9.42	11.19	7	13
Bahria University	Pakistan	19	17	532	28.00	31.29	11	19
Bina Nusantara University	Indonesia	19	11	187	9.84	17.00	7	13
KU Leuven	Belgium	18	17	1115	61.94	65.59	15	18
Laboratoire de Psychologie	France	17	15	548	32.24	36.53	10	17
Universiti Teknologi MARIA	Malaysia	16	10	156	9.75	15.60	5	12
Universiteit Twente	Netherlands	15	13	936	62.40	72.00	11	15
Universität Regensburg	Germany	15	15	705	47.00	47.00	13	15
Univerza v Ljubljani	Slovenia	15	11	710	47.33	64.55	9	15

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; *h*=*h*-index; and *g*=*g*-index.

Most Active Source Titles

Table 7 presents the most active source titles publishing IWB research. Sustainability recorded the highest number of publications (42), followed by the European Journal of Innovation Management (37), Frontiers in Psychology (32), and Creativity and Innovation Management (29). These findings indicate that IWB research is published across journals specialising in innovation management, organisational behaviour, psychology, and sustainability. Although Sustainability published the largest number of articles, the European Journal of Innovation Management demonstrated the strongest journal impact, recording the highest CiteScore (12.3), SJR (1.397), and SNIP (2.011). Meanwhile, Creativity and Innovation Management accumulated the highest total citations (2,896), suggesting that publication volume does not necessarily correspond to scholarly influence.

Table 7: Most Active Source Titles

Source Title	TP	TC	Publisher	Cite Score	SJR 2026	SNIP 2026
Sustainability Switzerland	42	1372	Multidisciplinary Digital Publishing Institute	7.7	0.688	1.113
European Journal of Innovation Management	37	2350	Emerald Publishing	12.3	1.397	2.011
Frontiers in Psychology	32	660	Frontiers Media	6.3	0.872	1.213
Creativity and Innovation Management	29	2896	Wiley	8.3	1.163	1.566
International Journal of Innovation Management	25	346	Imperial College Press	3.2	0.432	0.487
Quality Access to Success	22	87	SRAC (Romanian Society for Quality Assurance)	1.4	0.203	0.377
International Journal of Innovation Science	21	255	Emerald Publishing	7.2	0.691	1.089
Current Psychology	17	454	Springer	5.2	1.024	1.223
Personnel Review	17	1387	Emerald Publishing	9.0	1.366	1.696
Heliyon	15	477	Elsevier	4.1	0.644	1.123
Problems and Perspectives in Management	15	77	LLC	3.3	0.291	0.645
Sage Open	15	293	SAGE Publications	3.6	0.514	0.977

Notes: TP=total number of publications; TC=total citations

Citation Analysis

Citation analysis assesses the scholarly influence and academic impact of publications within a research field. Unlike publication counts, citation-based indicators reflect the extent to which published studies have contributed to knowledge development and influenced subsequent research. This section examines the overall citation performance of Innovative Work Behaviour (IWB) research and identifies the ten most highly cited publications, providing insights into the intellectual influence and foundational studies that have shaped the field.

Citation Metrics

Table 8 summarises the overall citation performance of the IWB literature retrieved from the Scopus database. The dataset comprised 1,564 publications, which accumulated 38,728 citations over the 26-year study period, averaging 1,489.54 citations per year and 24.76 citations per publication. The literature also achieved an h-index of 93 and a g-index of 151, reflecting a substantial body of influential research. Overall, the citation metrics indicate that IWB has developed into a well-established research field with sustained scholarly influence. The high citation counts and citation indices demonstrate that many publications have made significant contributions to the literature and continue to shape subsequent research in human resource management, organisational behaviour, and innovation management.

Table 8: Citations Metrics

Metrics	Data
Papers	1564
Number of Citations	38728
Years	26
Citations per Year	1489.54
Citations per Paper	24.76
Cites_Author	16054.86
Papers_Author	611.55
Authors_Paper	3.14
h_index	93
g_index	151

Top 10 Highly Cited Articles

Table 9 presents the ten most highly cited publications in the field of IWB. Janssen's (2000) seminal article, Job Demands, Perceptions of Effort-Reward Fairness and Innovative Work Behaviour, ranked first with 1,957 citations and an average of 75.27 citations per year, highlighting its enduring influence on the field. This was followed by De Jong and Den Hartog (2010) on measuring innovative work behaviour (1,056 citations) and Shanker et al. (2017), which examined the relationship between organisational climate, innovation, and organisational performance. The highly cited publications reveal several recurring research themes, including leadership, organisational climate, work engagement, knowledge sharing, organisational justice, psychological safety, and human resource management practices. These findings indicate that IWB research has progressively expanded from conceptualising innovative work behaviour to examining the organisational, leadership, and psychological factors that influence employee innovation.

Table 9: Top 10 Highly cited articles

No.	Authors	Title	Year	Cites	Cites per Year
1	O. Janssen	Job demands, perceptions of effort-reward fairness and innovative work behaviour	2000	1957	75.27
2	J. De Jong, D. Den Hartog	Measuring innovative work behaviour	2010	1056	66
3	R. Shanker, R. Bhanugopan, B.I.J.M. van der Heijden, M. Farrell	Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior	2017	456	50.67
4	A. Carmeli, G.M. Spreitzer	Trust, connectivity, and thriving: implications for innovative behaviors at work	2009	416	24.47
5	T. Yidong, L. Xinxin	How Ethical Leadership Influence Employees' Innovative Work Behavior: A Perspective of Intrinsic Motivation	2013	379	29.15
6	B. Afsar, W.A. Umrani	Transformational leadership and innovative work behavior: The role of motivation to learn, task complexity and innovation climate	2020	329	54.83

No.	Authors	Title	Year	Cites	Cites per Year
7	M. Aboramadan	The effect of green HRM on employee green behaviors in higher education: the mediating mechanism of green work engagement	2022	325	81.25
8	N. Ramamoorthy, P.C. Flood, T. Slaterry, R. Sardesai	Determinants of Innovative Work Behaviour: Development and Test of an Integrated Model	2005	324	15.43
9	U.A. Agarwal, S. Datta, S. Blake-Beard, S. Bhargava	Linking LMX, innovative work behaviour and turnover intentions: The mediating role of work engagement	2012	323	23.07
10	M. ÅÆerne, T. Hernaus, A. Dysvik, M. Å kerlavaj	The role of multilevel synergistic interplay among team mastery climate, knowledge hiding, and job characteristics in stimulating innovative work behavior	2017	319	35.44

Keywords Analysis

Keyword analysis identifies the major research topics and thematic focus within a scientific field. Author keywords reflect the concepts and variables most frequently investigated by researchers and provide insights into the dominant themes shaping Innovative Work Behaviour (IWB) research.

Top Keywords

Table 10 presents the twenty most frequently occurring author keywords in the IWB literature. As expected, Innovative Work Behavior (46.16%) and Innovative Work Behaviour (20.78%) were the most frequently used keywords, reflecting the American and British spellings adopted by researchers. Excluding the search terms, Innovation emerged as the most common keyword (11.64%), followed by Work Behavior (8.25%), Leadership (7.93%), Transformational Leadership (7.54%), Knowledge Sharing (6.52%), Work Engagement (6.39%), and Psychological Empowerment (4.28%). Other frequently occurring keywords included Creativity, Knowledge Management, Creative Self-efficacy, and Human Resource Management. The distribution of author keywords indicates that IWB research is primarily centred on organisational, leadership, and psychological factors that influence employee innovation. The prominence of leadership, knowledge sharing, work engagement, and psychological empowerment highlights these constructs as the dominant themes underpinning contemporary IWB research.

Table 10: Top Keywords

Author Keywords	Total Publications (TP)	Percentage (%)
Innovative Work Behavior	722	46.16%
Innovative Work Behaviour	325	20.78%
Innovation	182	11.64%
Work Behavior	129	8.25%
Leadership	124	7.93%
Transformational Leadership	118	7.54%
Human	102	6.52%

Author Keywords	Total Publications (TP)	Percentage (%)
Knowledge Sharing	102	6.52%
Work Engagement	100	6.39%
Article	78	4.99%
Behavioral Research	68	4.35%
Psychological Empowerment	67	4.28%
Male	59	3.77%
Female	56	3.58%
Creativity	54	3.45%
Adult	53	3.39%
Knowledge Management	49	3.13%
Humans	48	3.07%
Creative Self-efficacy	45	2.88%
Human Resource Management	44	2.81%

Science Mapping Analysis

Science mapping analysis visualises the relationships among key components of a research field, providing insights into collaboration networks, thematic connections, and the intellectual structure of literature. Using VOSviewer, this study generated three network visualisations: co-authorship based on countries, keyword co-occurrence based on author keywords, and source co-citation.

Co-authorship Network Based on Countries

Figure 3 illustrates the international collaboration network among countries involved in IWB research. The network reveals extensive collaboration across multiple regions, with China, Pakistan, Malaysia, Indonesia, India, the United States, Germany, Italy, and the Netherlands occupying central positions. Several collaboration clusters are evident, particularly among Asian and European countries, while the United States serves as an important bridge connecting researchers across regions. These findings demonstrate that IWB research is supported by an active international collaboration network.

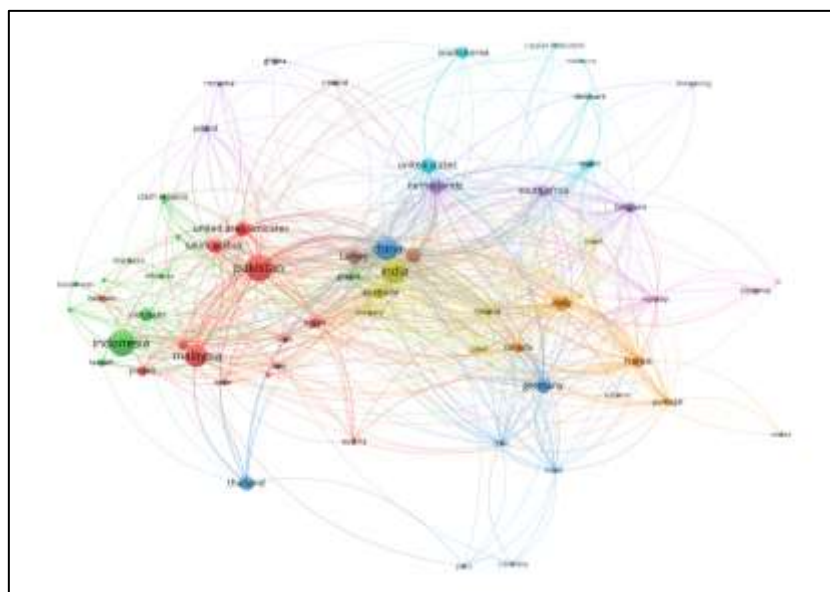


Figure 3: VOSviewer visualisation of a term co-authorship network based on countries

Author Keyword Co-occurrence Network

Figure 4 presents the keyword co-occurrence network based on author keywords. Innovative Work Behavior appears as the largest and most central node, indicating its dominant position within the literature. Closely connected keywords include Leadership, Transformational Leadership, Psychological Empowerment, Knowledge Sharing, Innovation, Work Behavior, Creativity, Creative Self-efficacy, Human Resource Management, and Work Engagement. The network reveals several interconnected thematic clusters, suggesting that contemporary IWB research is primarily focused on the organisational, leadership, and psychological factors influencing employee innovation.

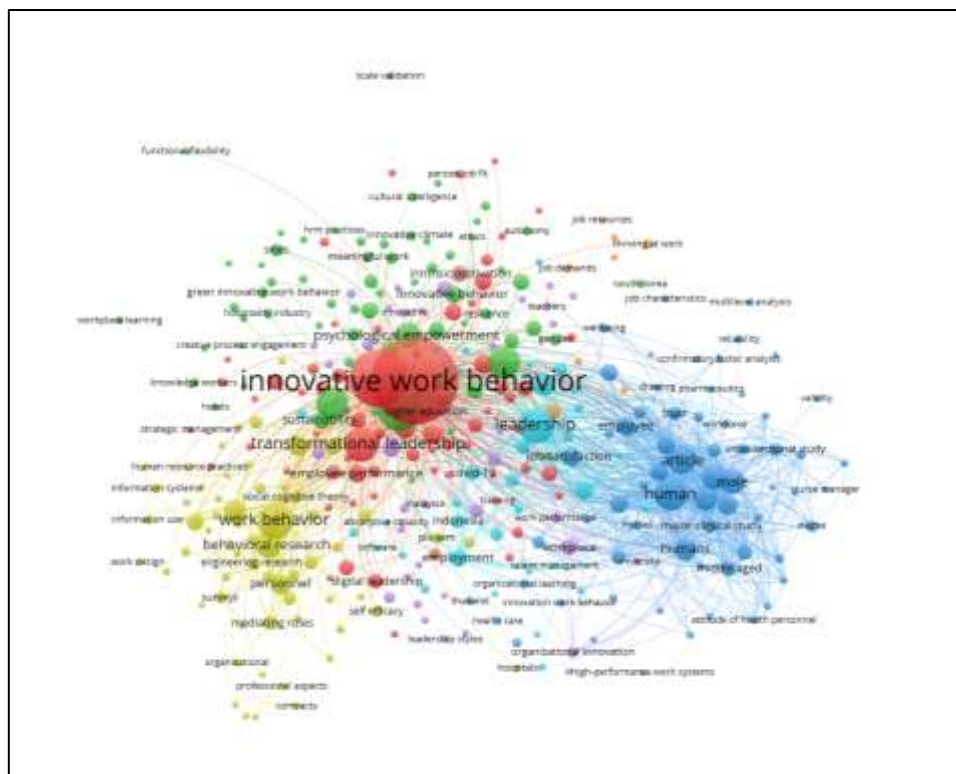


Figure 4: VOSviewer visualisation map of the author keywords

Source Co-citation Network

Figure 5 illustrates the source co-citation network of journals contributing to IWB research. The network reveals several well-defined clusters centred on leading journals, including the Journal of Occupational and Organizational Psychology, European Journal of Innovation Management, Sustainability, Frontiers in Psychology, and Personnel Review. These journals occupy central positions within the network, indicating their prominent role in shaping the intellectual foundation of IWB research. The interconnected citation clusters further suggest that the field draws upon literature from organisational behaviour, human resource management, psychology, innovation management, and management studies.

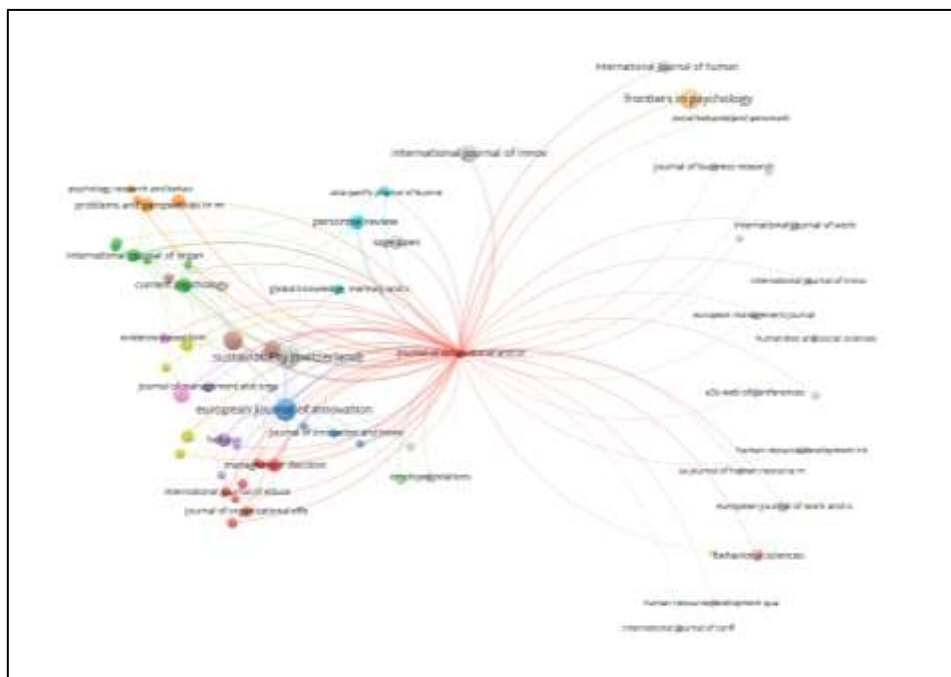


Figure 5: VOSviewer visualisation of a term co-citation network based on sources

Discussion

The findings of this bibliometric analysis provide a comprehensive overview of the evolution, intellectual structure, and global development of Innovative Work Behaviour (IWB) research between 2000 and 2026. By integrating publication trends, citation performance, research productivity, collaboration networks, and science mapping analyses, this study demonstrates how IWB has evolved from a relatively niche topic into an established multidisciplinary research field. The discussion synthesises these findings to highlight the major developments that have shaped the field and identifies potential directions for future research.

The Growth and Maturation of Innovative Work Behaviour Research

One of the most notable findings of this study is the substantial growth in IWB research over the past two decades. Publication output remained relatively modest until 2015 but increased steadily from 2016 and accelerated after 2020, reflecting the growing recognition of employee innovative behaviour as a strategic capability in response to digital transformation, Industry 4.0, and increasingly dynamic business environments (AlEssa & Durugbo, 2022; Muadzah & Herachwati, 2024). This trend suggests that organisations increasingly view employee innovation as a critical driver of competitiveness and organisational sustainability.

The citation analysis further indicates that IWB has matured into a well-established research field. Despite the rapid increase in recent publications, foundational studies such as Janssen (2000) and De Jong and Den Hartog (2010) continue to receive substantial scholarly attention, demonstrating their enduring influence on contemporary IWB research. This combination of sustained citation impact and increasing publication output reflects both the maturity and continued expansion of the field (AlEssa & Durugbo, 2022).

Global Research Landscape and Scholarly Collaboration

The findings demonstrate that IWB research has become increasingly global, with Asian countries, particularly Indonesia, Pakistan, India, China, and Malaysia, leading publication output. This pattern reflects the growing emphasis placed on innovation-driven organisational

development across emerging economies and the increasing recognition of employee innovation as a strategic organisational capability (AlEssa & Durugbo, 2022; Muadzah & Herachwati, 2024).

Although Asian countries dominate publication output, European countries such as the Netherlands, Italy, and the United Kingdom continue to demonstrate stronger citation impact, indicating their sustained intellectual influence within the field. The co-authorship network further reveals active international collaboration among researchers across Asia, Europe, and North America, highlighting the increasingly collaborative nature of IWB research and its contribution to cross-cultural knowledge development.

Intellectual Structure and Thematic Development of IWB Research

The keyword and source co-citation analyses reveal that IWB research is firmly rooted in Human Resource Management, Organisational Behaviour, Psychology, and Innovation Management. Leadership, transformational leadership, psychological empowerment, knowledge sharing, work engagement, creativity, and creative self-efficacy emerged as the dominant research themes, indicating that employee innovation is increasingly understood as the outcome of interactions among organisational practices, leadership behaviours, and individual psychological processes (AlEssa & Durugbo, 2022; Muadzah & Herachwati, 2024).

The findings also demonstrate the evolution of IWB research from conceptualising and measuring innovative work behaviour towards identifying its organisational and behavioural antecedents. More recent studies have expanded the field by incorporating themes such as psychological safety, green human resource management, sustainability, and inclusive leadership. Collectively, these developments illustrate the multidisciplinary and evolving nature of IWB research, which continues to integrate diverse theoretical perspectives to explain employee innovation in contemporary organisations.

Future Research Directions

The findings suggest several opportunities for future research. First, stronger international collaboration involving underrepresented regions such as Africa, South America, and the Middle East would provide a more comprehensive understanding of IWB across diverse cultural and organisational contexts. Comparative cross-country studies may further strengthen the generalisability of existing theories.

Second, future studies should continue examining emerging organisational challenges associated with digital transformation, artificial intelligence, hybrid work arrangements, and sustainable organisational development. Although leadership, psychological empowerment, and knowledge sharing remain dominant research themes, greater attention should be given to digital leadership, human-AI collaboration, algorithmic management, and employee innovation in technology-enabled workplaces (AlEssa & Durugbo, 2022; Muadzah & Herachwati, 2024).

Finally, future research would benefit from adopting more diverse methodological approaches, including longitudinal, multilevel, mixed-method, and cross-cultural comparative designs. Such approaches would provide a deeper understanding of the dynamic processes underlying innovative work behaviour and further strengthen the theoretical and practical contributions of the field.

Conclusion

This study presents a comprehensive bibliometric analysis of Innovative Work Behaviour (IWB) research based on 1,564 Scopus-indexed publications published between 2000 and 2026. By integrating descriptive bibliometric indicators and science mapping techniques, the study provides a systematic overview of the evolution, intellectual structure, and global research landscape of IWB. The findings reveal that IWB has experienced substantial growth over the past two decades, evolving from a relatively specialised research topic into an established and multidisciplinary field. The increasing publication output, strong citation performance, expanding international collaborations, and diverse research themes collectively demonstrate the growing scholarly and practical importance of employee innovative behaviour in contemporary organisations.

The findings further indicate that IWB research is primarily anchored within the disciplines of Business, Management and Accounting, while drawing significant contributions from psychology, organisational behaviour, innovation management, and other related fields. Leadership, transformational leadership, psychological empowerment, work engagement, knowledge sharing, creativity, and human resource management emerged as the dominant research themes, reflecting the shift from conceptualising innovative work behaviour towards understanding the organisational, behavioural, and psychological mechanisms that foster employee innovation. In addition, the science mapping analyses demonstrate that IWB research is supported by extensive international collaboration and an increasingly interconnected knowledge base, highlighting its continued development as a globally relevant research domain.

From a theoretical perspective, this study contributes to the existing body of knowledge by providing a comprehensive synthesis of the evolution and intellectual structure of IWB research over a twenty-six-year period. Unlike traditional literature reviews, the bibliometric approach offers an objective and systematic assessment of publication trends, influential contributors, collaboration networks, and thematic development, thereby enabling researchers to identify the foundational studies and emerging research directions within the field. Practically, the findings provide useful guidance for researchers, academics, and practitioners by identifying influential journals, leading institutions, prolific authors, and key research themes that may inform future studies, collaborative initiatives, and evidence-based organisational practices aimed at promoting employee innovation.

Despite these contributions, this study is subject to several limitations. First, the analysis was limited to publications indexed in the Scopus database, which may have excluded relevant studies indexed in other databases such as Web of Science, Dimensions, or Google Scholar. Second, only English-language publications were included, potentially overlooking valuable research published in other languages. Finally, bibliometric analysis focuses primarily on publication metadata and citation relationships rather than critically evaluating the methodological quality or empirical findings of individual studies. Consequently, the findings should be interpreted within the scope of the selected database and analytical approach.

Future research may extend the present study by incorporating multiple bibliographic databases to improve the comprehensiveness of the dataset and enhance the robustness of bibliometric findings. Further science mapping analyses employing advanced bibliometric techniques, such as bibliographic coupling, thematic evolution, and temporal network analysis, may provide deeper insights into the dynamic development of IWB research. In addition, future studies should continue exploring emerging topics such as artificial intelligence, digital transformation,

hybrid work environments, green human resource management, and sustainable innovation, which are expected to play increasingly important roles in shaping employee innovative behaviour. Such research will contribute to a more comprehensive understanding of how organisations can foster innovation in rapidly evolving technological and organisational contexts.

Acknowledgement

The authors wish to express their sincere appreciation to Universiti Teknologi MARA, Cawangan Perlis, for its support and encouragement throughout the completion of this research.

References

- Ahmi, A., & Mohamad, R. (2019). Bibliometric analysis of global scientific literature on web accessibility. *International Journal of Recent Technology and Engineering*, 7(6), 250–258.
- AlEsa, H. S., & Durugbo, C. M. (2022). Systematic review of innovative work behavior concepts and contributions. *Management Review Quarterly*, 72(4), 1171–1208. <https://doi.org/10.1007/s11301-021-00224-x>
- De Jong, J. P. J., & Den Hartog, D. N. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Farrukh, M., Meng, F., Raza, A., & Wu, Y. (2023). Innovative work behaviour: The what, where, who, how and when. *Personnel Review*, 52(1), 74–98. <https://doi.org/10.1108/PR-11-2020-0854>
- Gao, P., & Gao, Y. (2024). How does digital leadership foster employee innovative behavior: A cognitive–affective processing system perspective. *Behavioral Sciences*, 14(5), 362. <https://doi.org/10.3390/bs14050362>
- Hassan, S., Ghias, W., Saeed, S., Shaukat, O., & Abro, S. (2021). Research domain of innovative work behaviour: A bibliometric analysis of fifteen years research (2005–2020). *Elementary Education Online*, 20(1), 3900–3927.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Mukapit, M., Daud, S. R., & Selamat, M. N. (2024). Bridging innovation and sustainability: A systematic review of innovative work behavior and green practices. *Information Management and Business Review*, 16(4[I]), 293–304. [https://doi.org/10.22610/imbr.v16i4\(I\).3886](https://doi.org/10.22610/imbr.v16i4(I).3886)
- Muadzah, S., & Herachwati, N. (2024). Innovative behavior and leadership: A systematic literature review and future research direction. *MBR (Management and Business Review)*, 8(2), 162–181. <https://doi.org/10.21067/mbr.v8i2.10899>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Peerzadah, S. A., Mufti, S., & Majeed, S. (2024). Mapping the scientific evolution of innovative work behavior: A bibliometric analysis of three decades. *International Journal of Innovation Science*, 16(1), 43–60. <https://doi.org/10.1108/IJIS-08-2022-0154>

- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Verma, S., & Singh, V. (2022). Impact of artificial intelligence-enabled job characteristics and perceived substitution crisis on innovative work behavior of employees from high-tech firms. *Computers in Human Behavior*, 131, 107215. <https://doi.org/10.1016/j.chb.2022.107215>
- Wider, W., Lin, J., & Fauzi, M. A. (2025). Bibliometric insights into HRM and innovative work behavior nexus: Tracing past, present and future developments. *Journal of Organizational Effectiveness: People and Performance*, 12(3), 418–437. <https://doi.org/10.1108/JOEPP-04-2023-0136>
- Zakaria, R., Ahmi, A., Ahmad, A. H., & Othman, Z. (2020). Worldwide melatonin research: A bibliometric analysis of the published literature between 2015 and 2019. *Chronobiology International*, 38(1), 27–37. <https://doi.org/10.1080/07420528.2020.1838534>