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EXAMINING THE TREND OF INNOVATIVE WORK BEHAVIOUR LITERATURE: A BIBLIOMETRIC ANALYSIS

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Abstract:

The concept of innovative work behaviour (IWB) has received attention as a strategy to be competitive for an organisation. Given the intricate nature of the global landscape, the emergence of new risks, and the need to enhance organisational resilience in times of crisis, the significance of IWB becomes pertinent, particularly for the public sector. This paper examines the development and the current trends of IWB research from the perspectives of bibliometric indicators. This study retrieved a total of 1,574 documents from the Scopus database between the years 1963 and 2023. The analysis of this study used several tools – Microsoft Excel, VOSviewer, and Harzing's Publish or Perish. The findings of this study show the increasing trends over the last ten years in various disciplines. Research results indicate that IWB research mostly appears in the subject areas of Business, Management, Accounting, Social Sciences, Psychology, Economics and Finance. This study also reveals that China, the United States, Pakistan, Indonesia, and Malaysia have become the five major countries that have created collaborative IWB research. In light of this, the results of this investigation furnish crucial data for advancing IWB research in the realm of multidisciplinary studies.

Keywords:

Innovative Work Behaviour, Bibliometric Analysis, Knowledge Sharing, Leadership, Human Resource

Introduction

The innovative work behaviour of employees in organisations has become a focal point of interest for many researchers. It is expected that IWB will lead to innovation, which yields positive outcomes for individuals, groups or organisations. An organisation's ability to

innovate dramatically hinges on the innovative work behaviour of its employees, giving it a competitive edge (Mansoor, Farrukh, et al., 2021). In increasingly demanding scenarios, employees take on added responsibilities (Mansoor, Wahab, et al., 2021). Consequently, incentivising employees to practice innovative behaviour is vital rather than exclusively concentrating on routine tasks and established practices (Ven, 1986), which play a crucial role in achieving the organisation's performance objectives.

The themes employed in many studies focusing on IWB encompass individual innovation, individual innovative behaviour, employee innovation behaviour and innovative work behaviour (Srirahayu et al., 2023). This study uses the term innovative work behaviour when referring to employees' innovative activities. According to West and Farr (1990), IWB entails the deliberate introduction and implementation of fresh ideas, processes, products or procedures within a role, group, or organisation to bring significant advantages to an individual, group, organisation or society at large. Meanwhile, Kanter (1988) recognised four different stages of innovative work behaviour: idea creation, looking for support for the idea, idea realisation and spreading the innovation.

This study uses bibliometric analysis techniques to assess previous literature on IWB. It utilises quantitative and statistical approaches to effectively manage substantial amounts of scientific data and provide significant research outcomes (Donthu et al., 2021). This study aims to comprehend the IWB literature more thoroughly, focusing on IWB and its collaborative, worldwide reach. This aspect is essential in aiding researchers in formulating suggestions for future research about IWB. This study addresses the research questions by conducting a bibliometric analysis of scientific publications on innovative work behaviour.

Research Questions

This study focuses on answering the following research questions:

1. How does research on innovative work behaviour progressed over time?
2. Which themes related to innovative work behaviour receive the highest degree of scholarly attention?
3. What collaboration patterns can be observed within the realm of innovative work behaviour?
4. Which literature holds the most significant influence in the field of innovative work behaviour?

Literature Review

In this paper, a bibliometric review is conducted to provide a more in-depth understanding of the trends, historical context, future forecasts, and impactful contributions within the domain of innovative work behaviour. This investigative process involves key trends and research gaps, prominent authors, countries leading in publication rates, widely studied countries, influential journals and articles receiving the highest citations. According to Nobanee et al. (2021), bibliometric analysis is a rigorous methodology to ensure the quality of the data utilised and the generated results. It will also offer current data analysis to ensure dependable findings (Sampaio et al., 2022)

Previous Studies

Numerous studies have been conducted to analyse the evolution of innovative work behaviour from various perspectives. Widmann et al. (2016) reported the findings using a systematic

literature review by reviewing 31 articles published between 1990 and 2015 on learning behaviours and innovative work behaviour within work teams. Another systematic review was performed by Bos-Nehles et al. (2017) based on 27 articles published from 1994 onwards to close the gap concerning the relationship between human resource management and IWB in the employee context. The literature review by Al-Omari et al. (2019) focuses on the antecedents of IWB, including leadership, organisational and characteristics of individuals. Several previous systematic reviews focus on IWB or IWB-related studies.

In 2021, Hassan et al. carried out a study of IWB by utilising bibliometric analysis approaches. The results used the Web of Science (WoS) database of 208 articles from 2005 to 2020, and found that the IWB domain was less investigated and that immature study topics were in sports sciences, health care science services, and anthropology. Yet, the annual published paper on IWB continued its upward trend. This finding was also confirmed by Salam & Senin (2022), who confirmed that researchers have shown a growing interest in the topic of innovative behaviour involving 931 documents extracted from the Scopus database from 1961 to 2019.

On the other hand, Krndzija & Pilav-Velic (2022) conducted a bibliometric study on 683 articles from various journals from the WoS database to explore the patterns of innovative behaviour and Small and Medium Enterprises (SMEs). The study identified pivotal subjects within the SME field, such as innovation capability, entrepreneurship and environmental concerns with SMEs. A study by Peerzadah et al. (2024) recently examined 246 articles on IWB published between 1989 and 2021, employing MS Excel and VoSviewer. The study revealed a substantial number of papers with multiple authors working together and a growing trend of collaborative efforts among institutes in Asia and developed countries.

Many bibliometrics studies have investigated IWB, as indicated in Table 1. Nonetheless, these studies have their own constraints related to their scope and inclusiveness. Expanding the dataset is likely to offer more in-depth insights than previous studies. Moreover, many past studies were primarily descriptive. Hence, this study is conducted to address these limitations and unveil the latest IWB trends.

Table 1: Summary of Previous Bibliometric Analyses On Innovative Work Behaviour

Author	Domain/Search Strategy	Data Source & Scope	Total Document Examined	Bibliometric Attributes Examined
Peerzadah et al. (2024)	“innovative work behavior” or “innovative work behaviour” or “innovative behavior” or “innovative behaviour”	Web of Science (1989 to 2021)	246	Year-wise publications, most-cited papers, most prolific authors, most prolific journals, institution-wise publication, leading countries, citation analysis, co-citation analysis, bibliographic coupling, keyword occurrence analysis/ coward analysis, co-authorship analysis

Author	Domain/Search Strategy	Data Source & Scope	Total Document Examined	Bibliometric Attributes Examined
Salam & Senin (2022)	“innovative behavior”	Scopus (1961 – 2019)	931	Publication analysis, subject areas, language of the research articles, top journals, top countries, best institutions and global linkages, leading authors, analysis of author's keywords
Krndzija & Pilav-Velic (2022)	“innovation”, “behaviour”, and “SMEs”	Web of Science (1994 to 2021)	683	Most productive authors, top journals, publication analysis, co-citation authors, coupling of countries, most cited journals, co-occurrence of terms
Hassan et al. (2021)	“innovative work behavior” or “innovative work behaviour”	Web of Science (2005-2020)	208	Publication trend, publication types and research area, bibliographic coupling of countries, most impactful papers, main journals, keyword co-occurrence

Methodology

This study used a bibliometric analysis methodology and collected all data from the Scopus database between 1961 and 2023 as of 23 October 2023. This study was searched using the Scopus database because Scopus is a globally recognised research platform that enables the discovery, analysis, and sharing of knowledge, including the sciences, social sciences, arts, and humanities (Sudakova et al., 2022). The utilisation of the Scopus database enhances the efficiency and effectiveness of conducting the bibliometric analysis and its inclusion of high-quality publications in the related areas. The Scopus database was employed to identify relevant studies and apply a range of keywords to conduct a comprehensive search.

For the purpose of this study, all documents related to innovative work behaviour were based on the title of the documents. As such, the following query was conducted: (TITLE ("innovative work behavior" OR "innovative work behaviour" OR "innovative behavior" OR "innovative behaviour")) due to British and American spellings. Using the “OR” option, this query produced a total of 1,574 documents. After the screening, no records have been removed. All 1,574 documents were eligible for further analysis. Figure 1 illustrates the flow of the search strategy of this study. To address the research enquiries, data analysis involved using Microsoft Excel for frequency computation, VOSviewer for visualisation and Harzing’s Publish or Perish for assessing publication impact and performance based on selected metrics.

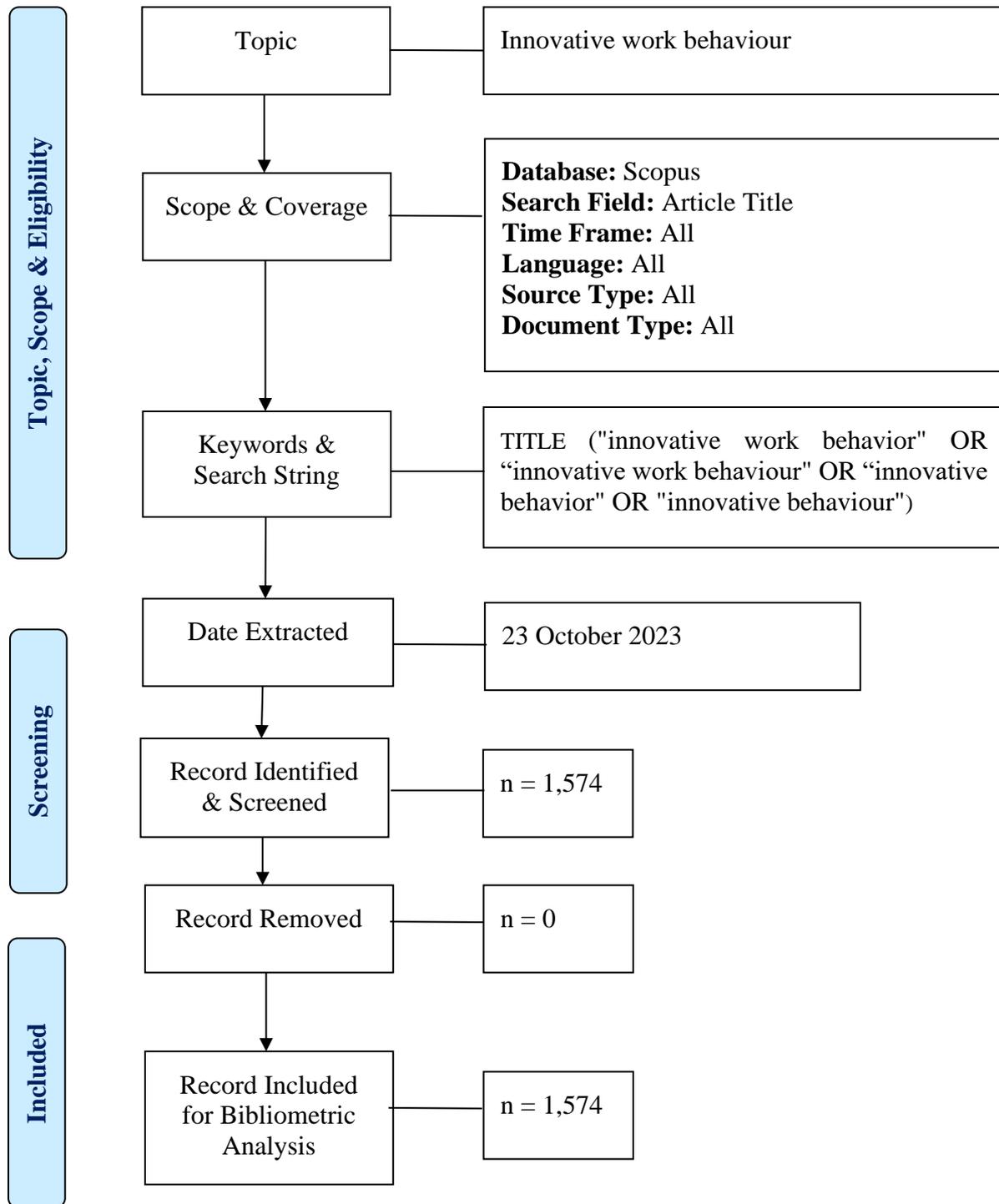


Figure 1: Flow diagram of The Search Strategy (Kushairi & Ahmi, 2021)

Research Findings

Publication by Year

The dataset for this study was extracted from the Scopus database, spanning the years 1961 to 2023. In addressing the research questions, Figure 2 illustrates the yearly progression of publications in the field of IWB research. The graph reflects a relatively slow rate of growth

prior to 2010. Nevertheless, between 2011 and 2023, there was a noticeable upward trend in the number of publications. Notably, 2022 stands out as the year with the highest number of publications count, indicating heightened scholarly interest. This observation aligns with the global impact of the Covid-19 pandemic. The data showcases a continued upward trajectory, emphasising the enduring academic interest in IWB research, as demonstrated by the fourth quarter of 2023 results.

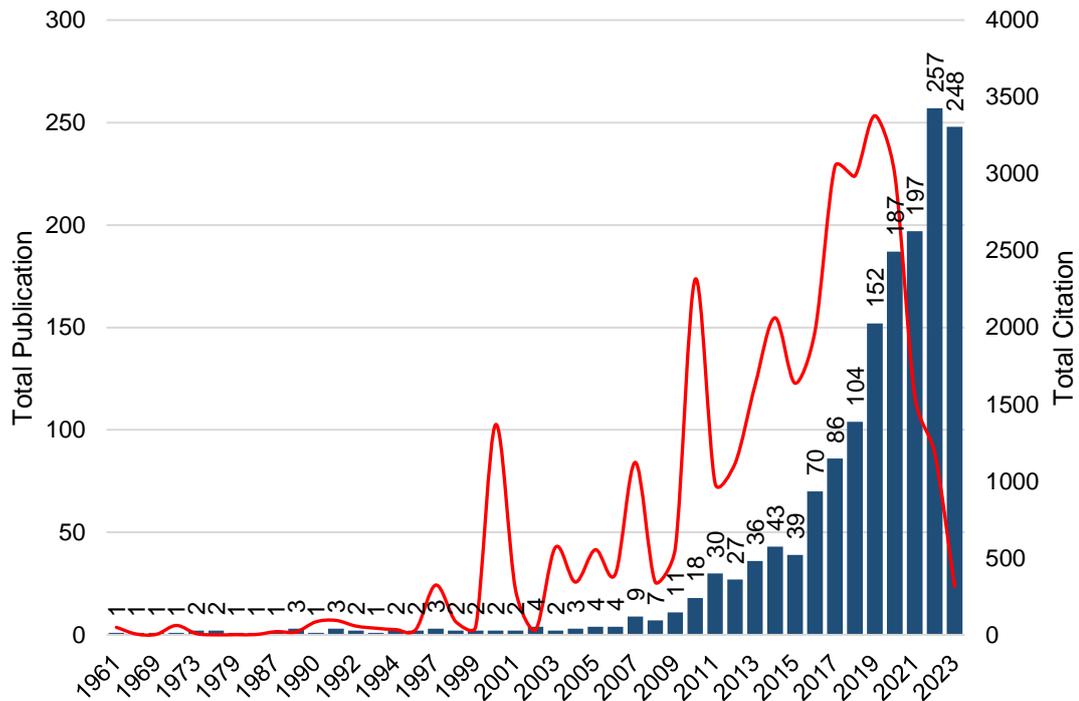


Figure 2: The Progress of Innovative Work Behaviour Research

Source of Document

This study also includes an analysis of the dataset based on document type. According to Table 2, innovative work behaviour documents are primarily in the form of article publications, totalling 1320 (83.86%). They are followed by conference papers at 117 (7.43%), book chapters at 63 (4.00%) and reviews at 39 (2.48%). Additionally, other document categories, including editorials and erratum, each account for 12 (0.76%). The note represents 5 (0.32%), books 3 (0.19%), retracted paper 2 (0.13%), and data paper 1 (0.06%).

Table 2: Document Type of Innovative Work Behaviour

Document Type	Total Publications (TP)	Percentage (%)
Article	1,320	83.86%
Conference Paper	117	7.43%
Book Chapter	63	4.00%
Review	39	2.48%
Editorial	12	0.76%
Erratum	12	0.76%
Note	5	0.32%
Book	3	0.19%

Retracted	2	0.13%
Data Paper	1	0.06%
Total	1574	100.00

Type of Document

This study also aims to categorise publications related to innovative work behaviour research by examining the data based on source document type. As per the findings presented in Table 3, articles emerge as the dominant source, constituting 1,387 documents (88.12%). They are followed by conference proceedings with 106 (6.73%), books with 48 (3.05%), book series with 32 (2.03%) and a single case of an undefined source, which makes up 0.06%.

Table 3: Source Type of Innovative Work Behaviour

Source Type	Total Publications (TP)	Percentage (%)
Journal	1,387	88.12%
Conference Proceeding	106	6.73%
Book	48	3.05%
Book Series	32	2.03%
Undefined	1	0.06%
Total	1574	100.00

Source Titles

Table 4 provides insights into source titles that have published ten or more articles on the topic of innovative work behaviour. Notably, The Frontiers In Psychology leads the way, having published a significant number of articles, totalling 60 (3.81%). This outcome highlights the consistent prominence of the Frontiers In Psychology as the most prolific publisher of literature on innovative work behaviour. In the second position is Sustainability Switzerland, with 42 documents (2.67%), followed by the European Journal Of Innovation Management, which has 40 papers (2.54%).

Table 4: Most Active Source Titles For Innovative Work Behaviour

Source Title	TP	%	TC	NCP
Frontiers In Psychology	60	3.81%	514	45
Sustainability Switzerland	42	2.67%	848	35
European Journal Of Innovation Management	40	2.54%	1659	38
International Journal Of Innovation Management	35	2.22%	443	32
Creativity And Innovation Management	22	1.40%	1791	22
Social Behavior And Personality	20	1.27%	266	15
Personnel Review	19	1.21%	969	19
Leadership And Organization Development Journal	17	1.08%	320	13
Current Psychology	15	0.95%	139	8
International Journal Of Hospitality Management	14	0.89%	501	13
Proceedings Of The Annual Hawaii International Conference On System Sciences	13	0.83%	78	5
Behavioral Sciences	12	0.76%	131	10
Journal Of Creative Behavior	12	0.76%	66	10
Sage Open	12	0.76%	733	12

Source Title	TP	%	TC	NCP
International Journal Of Contemporary Hospitality Management	11	0.70%	485	11
International Journal Of Human Resource Management	11	0.70%	16	3
International Journal Of Innovation Science	11	0.70%	66	10
Journal Of Knowledge Management	11	0.70%	644	11
Quality Access To Success	11	0.70%	371	9
International Journal Of Environmental Research And Public Health	10	0.64%	145	9

Notes: TP=total number of publications; %=percentage; TC=total citations; NCP =number of cited papers

Subject Area

Table 5 outlines the distribution of published documents based on the subject area, demonstrating that research on web accessibility is prevalent across various fields. Within the context of IWB, approximately half of the papers, totalling 910 documents (57.81%), are found in the business, management and accounting domains. Social sciences also contribute significantly, with 423 articles (26.87%). Additionally, the data reveals the presence of IWB research in various other disciplines, including psychology, economics, finance, computer science and engineering. Consequently, IWB offers ample opportunities for exploration in diverse academic domains beyond business, management and accounting.

Table 5: Subject Area of Innovative Work Behaviour

Subject Area	Total Publications (TP)	Percentage (%)
Business, Management and Accounting	910	57.81%
Social Sciences	423	26.87%
Psychology	291	18.49%
Economics, Econometrics and Finance	183	11.63%
Computer Science	148	9.40%
Engineering	132	8.39%
Decision Sciences	109	6.93%
Environmental Science	103	6.54%
Arts and Humanities	73	4.64%
Energy	64	4.07%
Medicine	57	3.62%
Nursing	43	2.73%
Mathematics	35	2.22%
Agricultural and Biological Sciences	30	1.91%
Biochemistry, Genetics and Molecular Biology	25	1.59%
Multidisciplinary	21	1.33%
Neuroscience	17	1.08%
Pharmacology, Toxicology and Pharmaceutics	9	0.57%
Earth and Planetary Sciences	8	0.51%
Physics and Astronomy	7	0.44%
Health Professions	5	0.32%
Chemical Engineering	3	0.19%

Materials Science	2	0.13%
Chemistry	1	0.06%

Keyword Analysis

The keyword network presented in Figure 3 highlights terms that appear at least four times. VOSviewer was utilised in this study to construct a bibliometric network. The investigation involved using 4,111 distinct keywords, but only 164 keywords matched the screening threshold of the software. The resulting map comprises 164 items arranged into five clusters, showcasing 1,300 links and a total link strength 3,394. This visual representation offers a quick overview of various research methods, themes, and areas that have been explored concerning IWB. The terms human, leadership, knowledge sharing, employee, and psychological empowerment are words frequently connected with IWB. Furthermore, words like structural equation modelling, mediating role and moderating effects have been used to develop IWB-related models.

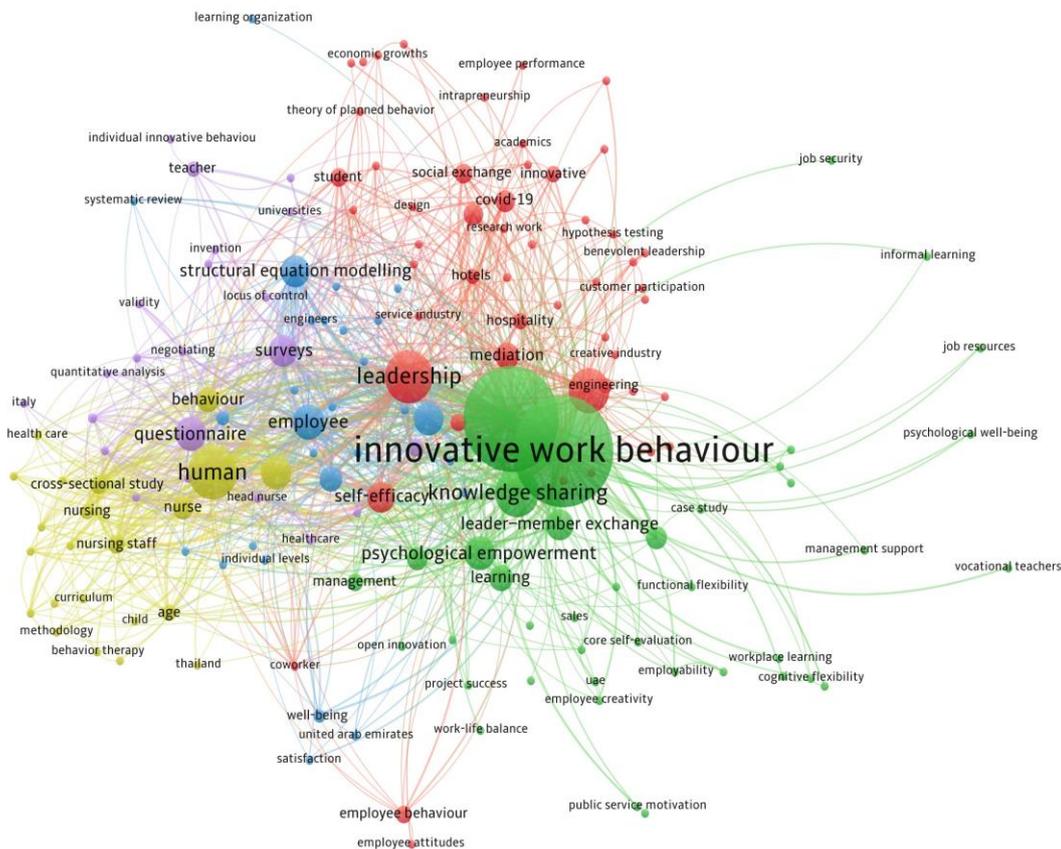


Figure 3: Network Visualisation Of The Keywords

Most Productive Authors

In response to the question of productive authors, Table 6 presents data showing that researchers from Pakistan have been highly influential in the IWB literature studies. Bilal Afsar from Hazara University Pakistan leads the list. This finding confirms the findings of previous studies, such as Peerzadah et al. (2024). They were followed by Adalgisa Battistelli from Laboratoire de Psychologie and Carlo Odoardi from Università degli Studi di Firenze. The

results also draw attention to Eta Wahad of Universiti Tun Hussein Onn Malaysia, who contributed significantly to ten publications. This report indicates the potential for collaboration among researchers from diverse countries and further exploration in this field.

Table 6: Top 10 Productive Authors of Innovative Work Behaviour

Author's Name	Affiliation	Country	TP	%	TC	NCP	PYS
Afsar, Bilal	Hazara University Pakistan	Pakistan	24	1.52	1221	24	2014
Battistelli, Adalgisa	Laboratoire de Psychologie	France	17	1.08	472	17	2013
Odoardi, Carlo	Università degli Studi di Firenze	Italy	15	0.95	416	15	2013
Messmann, Gerhard	Universität Regensburg	Germany	13	0.83	371	13	2011
Bani-Melhem, Shaker Jamal	University of Sharjah	United Arab Emirates	12	0.76	344	12	2018
Montani, Francesco	Alma Mater Studiorum Università di Bologna	Italy	12	0.76	452	12	2013
Mulder, Regina H.	Universität Regensburg	Germany	12	0.76	402	12	2011
Wahab, Eta	Universiti Tun Hussein Onn Malaysia	Malaysia	10	0.64	34	10	2015
Vance, Anthony O.	Virginia Tech, Pamplin College of Business	United States	9	0.57	2	9	2014
Warkentin, Merrill E.	College of Business, Mississi ppi State	United States	9	0.57	2	9	2014

Notes: TP=total number of publications; %=percentage; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; PYS=publication year start

Most Productive Institutions

Table 7 displays the top ten institutions that have significantly contributed to IWB research. The Hazara University Pakistan emerges as the leading institution with 26 documents (1.65%). Particularly intriguing is the presence of two Malaysian universities in this context: Universiti Sains Malaysia, responsible for 25 documents (1.59%) and Universiti Teknologi MARA, with 16 documents (1.02%). The Renmin University of China has 24 publications. This indicates a transformation in the innovation landscape, as emerging nations like Pakistan and China are now gaining international recognition for their innovative contributions. Likewise, innovation was widely associated with advanced nations in the twentieth century. Therefore, it is essential to encourage greater collaboration among universities from different countries to foster more literature on IWB.

Table 7: Most Productive Institutions of Innovative Work Behaviour

Affiliation	Country	Number of documents	Percentage
Hazara University Pakistan	Pakistan	26	1.65%
Universiti Sains Malaysia	Malaysia	25	1.59%
Renmin University of China	China	24	1.52%
Universität Regensburg	Germany	18	1.14%
Universiti Teknologi MARA	Malaysia	16	1.02%
Open Universiteit	Netherlands	16	1.02%
Università degli Studi di Firenze	Italy	15	0.95%
University of Sharjah	United Arab Emirates	15	0.95%
Universiteit Twente	Netherlands	14	0.89%
Swinburne University of Technology	Australia	14	0.89%

Most Productive Countries

In the context of country analysis, it is important to note that the identification of countries is based on the location of the university, not the authors' nationalities. Table 8 presents the top 20 countries actively participating in IWB research and their contributions. China leads the way with 307 publications, accounting for 19.50% of the total. This reflects China's rising interest in applying IWB as a business strategy. The United States follows as the second highest contributor with 137 publications (8.70%), and Pakistan takes the third spot with 127 publications (8.07%). Furthermore, it is worth noting that countries in the Asian region, such as Indonesia and Malaysia, have collectively contributed 109 (6.03%) and 106 (6.73%) publications, respectively. These results point to a growing interest among Asian countries in studying IWB.

Table 8: Top 20 Countries Contributed To The Publications of Innovative Work Behaviour

Country	Number of Document	Percentage
China	307	19.50%
United States	137	8.70%
Pakistan	127	8.07%
Indonesia	109	6.93%
Malaysia	106	6.73%
South Korea	81	5.15%
Australia	74	4.70%
Netherlands	74	4.70%
India	71	4.51%
Germany	67	4.26%
United Kingdom	66	4.19%
Italy	53	3.37%
Thailand	46	2.92%
Turkey	45	2.86%
United Arab Emirates	45	2.86%
Spain	42	2.67%
Taiwan	41	2.60%
Canada	37	2.35%
France	33	2.10%

Country	Number of Document	Percentage
South Africa	32	2.03%

Collaboration Patterns

This research employs network visualisation to illustrate the distribution of IWB research based on the affiliation of participating countries. Figure 4 analyses clustered research among experts from a particular location, which might help justify and inspire future research among scholars. The set threshold for the number of publications per country was established at seven, including 48 out of the 109 countries in this study. Within these 48 countries are eight distinct clusters comprising 257 links and a total link strength 635. The eight clusters were formed: cluster 1: 10 items, cluster 2: 7 items, cluster 3: 7 items, cluster 4: 6 items, cluster 5: 6 items, cluster 6: 5 items, cluster 7: 4 items and cluster 8: 3 items. The results showed that IWB research is scattered across countries. With forty-eight link strengths, Malaysia has strong links with countries such as Bahrain, Egypt, Jordan, Nigeria, Oman, Pakistan, Poland, Saudi Arabia and the United Arab Emirates. This encouraging development facilitates the transfer of knowledge across international boundaries.

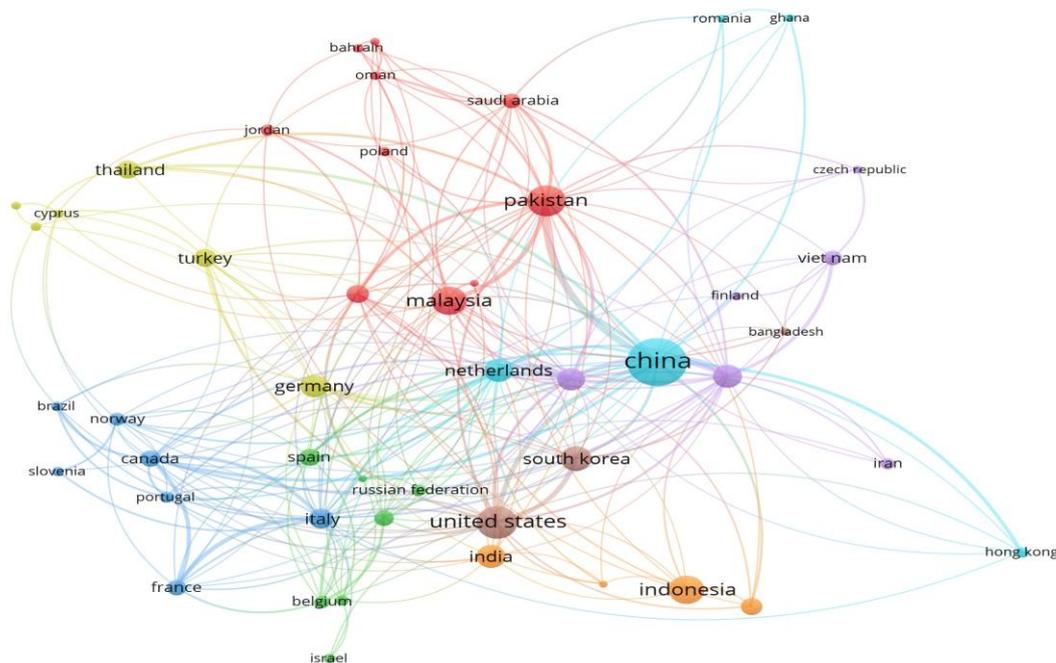


Figure 4: Network Visualisation Map Of The Co-Authorship By Countries

Most Influential Documents

Table 9 provides an overview of the top 20 highly cited articles in IWB based on the frequency of citations. The article authored by O. Janssen (2000) tops the list with a remarkable 1363 citations with an average of 59.26 citations per year. Additionally, articles written by F. Yuan, R.W. Woodman (2010), J. De Jong, D. Den Hartog (2010), J.P.J. De Jong, D.N. Den Hartog (2007) and A.N. Pieterse, D. van Knippenberg, M. Schippers, D. Stam (2010) have attracted substantial attention from researchers in IWB with a total number of citations of more than 500.

Table 9: Top 20 Highly Cited Articles on Innovative Work Behaviour

No.	Authors	Title	Cites	Cites per Year
1	O. Janssen (2000)	Job demands, perceptions of effort-reward fairness and innovative work behaviour	1363	59.26
2	F. Yuan, R.W. Woodman (2010)	Innovative behavior in the workplace: The role of performance and image outcome expectations	937	72.08
3	J. De Jong, D. Den Hartog (2010)	Measuring innovative work behaviour	694	53.38
4	J.P.J. De Jong, D.N. Den Hartog (2007)	How leaders influence employees' innovative behaviour	678	42.38
5	A.N. Pieterse, D. van Knippenberg, M. Schippers, D. Stam (2010)	Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment	544	41.85
6	O. Janssen (2004)	How fairness perceptions make innovative behavior more or less stressful	333	17.53
7	R. Basu, S.G. Green (1997)	Leader-member exchange and transformational leadership: An empirical examination of innovative behaviors in leader-member dyads	322	12.38
8	J. Sundbo, F. Orfila-Sintes, F. Sørensen (2007)	The innovative behaviour of tourism firms-Comparative studies of Denmark and Spain	315	19.69
9	A. Carmeli, G.M. Spreitzer (2009)	Trust, connectivity, and thriving: implications for innovative behaviors at work	303	21.64
10	R. Shanker, R. Bhanugopan, B.I.J.M. van der Heijden, M. Farrell (2017)	Organisational climate for innovation and organisational performance: The mediating effect of innovative work behavior	295	49.17
11	O. Janssen (2003)	Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co-workers	289	14.45
12	T. Yidong, L. Xinxin (2013)	How Ethical Leadership Influence Employees' Innovative Work Behavior: A Perspective of Intrinsic Motivation	286	28.6
13	J. Galende, J.M. De La Fuente (2003)	Internal factors determining a firm's innovative behaviour	281	14.05
14	R.F. Kleysen, C.T. Street (2001)	Toward a multi-dimensional measure of individual innovative behavior	281	12.77

15	O. Janssen (2005)	The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour	273	15.17
16	N. Ramamoorthy, P.C. Flood, T. Slattery, R. Sardesai (2005)	Determinants of innovative work behaviour: development and test of an integrated model	263	14.61
17	U.A. Agarwal, S. Datta, S. Blake-Beard, S. Bhargava (2012)	Linking LMX, innovative work behaviour and turnover intentions: The mediating role of work engagement	252	22.91
18	A. Carmeli, R. Meitar, J. Weisberg (2006)	Self-leadership skills and innovative behavior at work	233	13.71
19	S. Aryee, F.O. Walumbwa, Q. Zhou, C.A. Hartnell (2012)	Transformational Leadership, Innovative Behavior, and Task Performance: Test of Mediation and Moderation Processes	230	20.91
20	M. Černe, T. Hernaus, A. Dysvik, M. Škerlavaj (2017)	The role of multilevel synergistic interplay among team mastery climate, knowledge hiding, and job characteristics in stimulating innovative work behavior	228	38

Discussion and Conclusion

This section revisits the results in accordance with the research questions outlined above. The research pertaining to this subject matter had its inception in 1961, and it has witnessed a progressive increase in studies over the years. The total number of publications in IWB continues its upward trend in 2023, reaching 248 documents as of 23 October 2023. The outcomes of this study reveal a correspondence between the persistent growth in publication trends and the intricacy of business landscapes, such as those affected by a pandemic outbreak.

The results of this study highlight that more than 50% of the documents were published in business, management and accounting. Still, a closer look at keyword distribution shows that IWB studies covered various disciplines. Five main themes are discovered: human, leadership, knowledge sharing, employee and psychological empowerment. This article confirms prior findings from comparable studies on innovative work behaviour in terms of growth and authorship trends. Bilal Afsar stands out as the most influential author, with the most publications and citations. Hazara University Pakistan emerges as the most influential institution. O. Janssen's paper which was published in 2000 is regarded as one of the most significant documents in IWB research.

The findings of this paper offer a substantial contribution to the structured and comprehensive analysis of IWB. The geographic distribution of the literature reveals that China has the most publications, outpacing developed countries such as the United States and the United Kingdom. Developed countries tend to generate the most extensive citations compared to emerging countries like China, Indonesia, and Malaysia. Consequently, expanding IWB research to other developing countries is imperative, given the worldwide influence of innovation. From the

results provided earlier, it is possible to conclude that research on IWB has been conducted on a worldwide scale. The collaboration trends demonstrate inter-country and inter-continent among researchers.

Regardless of the illuminating results, this study has several limitations tied to the database employed. It is essential to underscore that, despite the extensive nature of Scopus, it does not cover all journals, leaving unindexed journals that may have led to the omission of certain publications. Enhancing bibliometric analysis with a more systematic approach and incorporating multiple data sources would yield valuable insight. Moreover, the study results are based exclusively on keywords associated with innovative behaviour or innovative work behaviour and are limited to document titles. This approach was chosen to ensure that only relevant papers are considered while filtering out irrelevant materials. The total number of publications and citations is only accurate when the search was conducted. Despite these constraints, this study makes a valuable contribution by unveiling trends in IWB research across diverse disciplinary fields.

Overall, the results derived from the bibliometric analysis pertaining to IWB emphasise this concept's significance in modern organisations striving for competitiveness and advancement. Moreover, this study serves as a compass, offering direction for future researchers in investigating potential opportunities of IWB in the field of social science.

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