

# A Bibliometric Prospective on Paradoxical Leadership's Impact on Innovative Work Behaviour, Self-Efficacy and Ambidexterity

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## Abstract

Paradoxical leadership emphasises the ability to manage complex tensions and contradictory situations rather than trying to eliminate them. It can encourage employees to think out of the box and contribute innovative ideas. This study presents a bibliometric analysis to map the intellectual structure of the field, identify research trends and highlight gaps for future research studies. The aim of the study is to explore the development of scholarly discourse and emerging research patterns linking paradoxical leadership, self-efficacy, ambidexterity and innovative work behaviour. This study has been conducted through the Bibliometrix package of R software by reviewing articles between 2005 and 2025, sourced from the Scopus database. The findings of the analysis include co-authorship networks, citation analysis and thematic evolution. The study identifies the influential authors, journals, and offering a valuable foundation for future empirical exploration. By employing bibliometric techniques, this study helps in understanding the academic impact of individual researchers, the number of publications and citations, articles, books and journals. The primary contribution of this paper is its systematic, in-depth and unbiased analysis of existing literature, providing researchers and scholars with a valuable foundation and direction for future inquiry within the broader domain of organisational studies and employee behaviour.

**Keywords:** Paradoxical Leadership, Adaptive Leadership, Flexible Leadership, Creative, Innovative, Visionary, Self-Belief, Self-Assurance, Competence, Dexterous, Skilful

## Introduction

“The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time and still retain the ability to function” (Fitzgerald, 1936). In the modern context of organisations, a leader who embraces the contradicting tensions and situations to create Innovative Work Behaviours (IWB) among their employees. “Effective leaders do not eliminate tension; they leverage it to generate energy, learning, and innovation” (Schad, 2016). Paradoxical leadership is characterised by leader behaviours that appear to be competing yet interrelated to meet competing workplace demands to simultaneously and over time (Yan Zhang, 2015). This new style of leadership breaks the traditional management perspective of “choosing one of the two” and instead focuses on “both” seeks unity in contradiction (Chen, 2023).

At the individual level, paradoxical leadership aims to empower employees while maintaining organisational control. By giving employees more autonomy, they feel a sense of ownership and control over their work, leading to increased self-efficacy. High levels of self-efficacy enhance employees' willingness to take initiative, persist through challenges, and contribute to workplace solutions. “Managing paradoxes involves maintaining ongoing tensions rather than seeking resolution, a stance critical for leaders navigating uncertain organisational landscapes” (Eisenhardt, 2000). At the team level, paradoxical leadership helps teams to navigate complex relationship between task demands and member perspectives to produce creative ideas (Ella Miron-Spektor, 2022). This is

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closely linked to IWB, which encompasses the generation, promotion and realisation of novel ideas intended to benefit the organisation (O, 2000). At organisational level, ambidexterity among employees can relate to exploration (innovation, risk-taking) and exploitation (efficiency, refinement) (Sebastian Raisch, 2008) (Tushman, 1996). “Paradoxical leadership thus fits within the broader category of complexity leadership theories, which acknowledge the unpredictable and nonlinear nature of organisational systems” (Marion, 2001). Among the evolving leadership paradigms, Paradoxical leadership has garnered attention and has emerged as a critical area of scholarly inquiry. But only limited studies have systematically explored the interconnectedness among paradoxical leadership, self-efficacy, IWB and ambidexterity.

## Literature Review

Paradoxical leadership in simple terms can be explained as accepting two different or extreme yet interrelated factors and creating an innovative outcome. This has drawn contributions from many different fields but most prominent are philosophy and psychology, where earlier research studies involved studying human behaviour. Much of the early work in paradox theory builds on dialectical thinking from philosophical traditions (Poole, 1989). Contemporary organisational theories also emphasise the role of leadership in harnessing tensions as a source of innovation rather than as threats to stability (Schad, 2016).

The major contribution in the organisational and management context is given by (Ella Miron Spektor, 2011), whose study was conducted on how to adopt paradoxical frames that encourage individuals to recognise and embrace contradictions which increase creativity. (Yan Zhang, 2015) has developed a construct of paradoxical leader behaviour which refers to seemingly competing yet interrelated behaviours. (Mary Uhl-Bien, 2007) has developed a framework for complexity leadership theory, a leadership paradigm that focuses on enabling the learning, creative and adaptive capacity

of complex adaptive systems.. “The more turbulent the environment, the more leadership must shift from control to enabling.” (Lewis, 2000) developed a framework that clarifies the nature of paradoxical tensions, reinforcing cycles, and their management and outlined strategies for identifying and representing paradox, addressing implications for research. These are the foundational papers which provide the basic understanding of how paradoxical leadership style can be studied with other factors such as creativity, exploration and exploitation related to employee’s innovative work outcomes. “Framing tensions as opportunities rather than dilemmas encourages integrative thinking and enhance creativity” (Miron-Spektor, 2018). In innovation literature, paradoxical thinking has been shown to increase cognitive complexity, a key antecedent to creative problem solving (Benner, 2003).

## Methodology

Bibliometric analysis is a popular and rigorous method for exploring and analysing large volumes of scientific data. It enables researchers to unpack the evolutionary nuances of a specific field while shedding light on emerging areas within the field. “Bibliometric analysis provides an evidence-based approach to mapping scientific landscapes, identifying knowledge gaps, and shaping research agendas” (Naveen Donthu, 2021). This study adopts a bibliometric analysis approach which quantitatively maps the intellectual structure, influential contributions, and thematic evolution of a research domain (Aria, 2017). By analysing publication trends, citation networks, co-authorship patterns and keyword co-occurrence, bibliometric methods offer an objective overview of a field’s development and fragmentation. Bibliometrics is defined as “a quantitative method for analysing various elements of publications, including journals, authors, keywords, citations and co-authors (Cater, 2015).

This study followed a structured methodological approach comprising five key stages and are illustrated in Fig. 1 and are further elaborated upon in the subsequent sections.

Steps	Description
1. Determining the search term	Search terms “paradoxical leadership” OR “adaptive leadership” OR “flexible leadership” AND “creative” OR “innovative” OR “visionary” AND “self-belief” OR “self-assurance” OR “competence” AND “dexterous” OR “skilful”
2. Selection of database	Database : Scopus
3. Selection criteria for search	Years: 2000–2025 Document types: Peer-reviewed articles, journal papers, conference papers Language: English
4. Selection of software	Software: Biblioshiny (R package Bibliometrix :)
5. Analysis and results	Performance Analysis: Publication trends, most relevant authors, sources, and documents Science Mapping : Co-occurrence of keywords, thematic evolution, collaboration networks

**Fig. 1: Methodological Scheme for Bibliometric Analysis**

### Definition of Search Terms

The search was conducted using a combination of keywords targeting core variable of interest. The keywords used were “paradoxical leadership” OR “adaptive leadership” OR “flexible leadership” AND “creative” OR “innovative” OR “visionary” AND “self-belief” OR “self-assurance” OR “competence” AND “dexterous” OR “skilful”.

### Selection of Database

The dataset was extracted from the Scopus database, one of the largest and most respected abstract and citation databases for peer-reviewed literature, established by Elsevier in 2004. It is widely used in academia, research institutions, and industry for literature reviews, impact assessment and academic trend analysis. The bibliometric analysis method is used here to examine the publications related to paradoxical leadership. Scopus has broad interdisciplinary coverage and higher inclusion of management and organisational journals compared to Web of Science or PubMed (Mongeon, 2016).

### Selection Criteria

The analysis covered a 25-year period (2000-2025), and a total of 78 documents were retained for analysis. The document chosen included peer-reviewed journal articles, Review articles, Conference papers/proceedings, and Research papers.

### Selection of Software

The data was imported into Biblioshiny, the web-based interface of the Bibliometrix R package. Biblioshiny simplifies the process of analysing and visualising scientific literature data by providing a web interface, making it accessible for researchers to use without extensive coding experience. It allows a wide range of bibliometric analysis such as co-citation, co-authorship, co-word analysis, visualisations of network graphs and trends in a field. The use of Bibliometrix is consistent with best practices in recent bibliometric studies focused on management domains (Aria, 2017; Donthu, 2021).

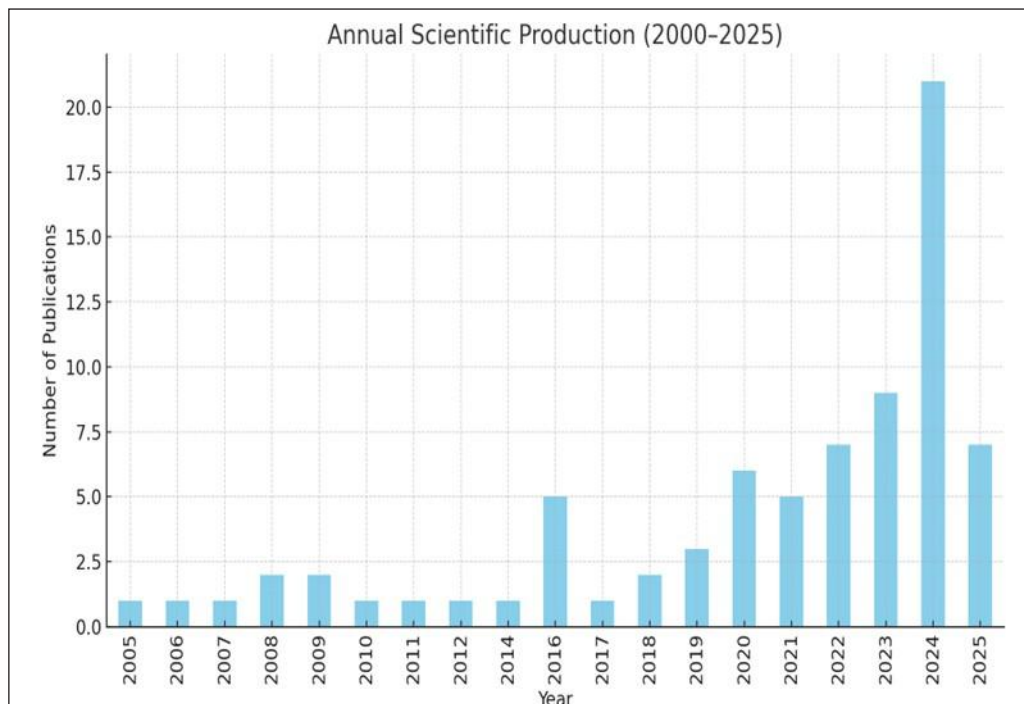
## Data Analysis

The data analysis was carried out through performance analysis which examined the evolution of scholarly output over time and identified key contributors, influential authors, and most frequently cited journals relevant to the study's thematic scope. Science mapping was conducted to explore the intellectual landscape of the bibliometric visualisations. It included analyses of keywords, co-occurrence, and collaboration among authors. This approach facilitated a structured and focused understanding of emerging patterns, dominant discourse, and theoretical frameworks of interconnected research domains.

## Findings and Results

### Descriptive Analysis

The bibliometric analysis was focused mainly on the articles related to paradoxical leadership or adaptive leadership that impact self-efficacy, IWB, and ambidexterity. The annual scientific production revealed a gradual growth in publication from the year 2000 to 2015, then a sudden movement has been seen after the year 2016 which signifies the scholarly interest in this field (Fig. 2). There is a sharp increase during the year 2020–2024, reflecting the growing trend in research on leadership styles and patterns.

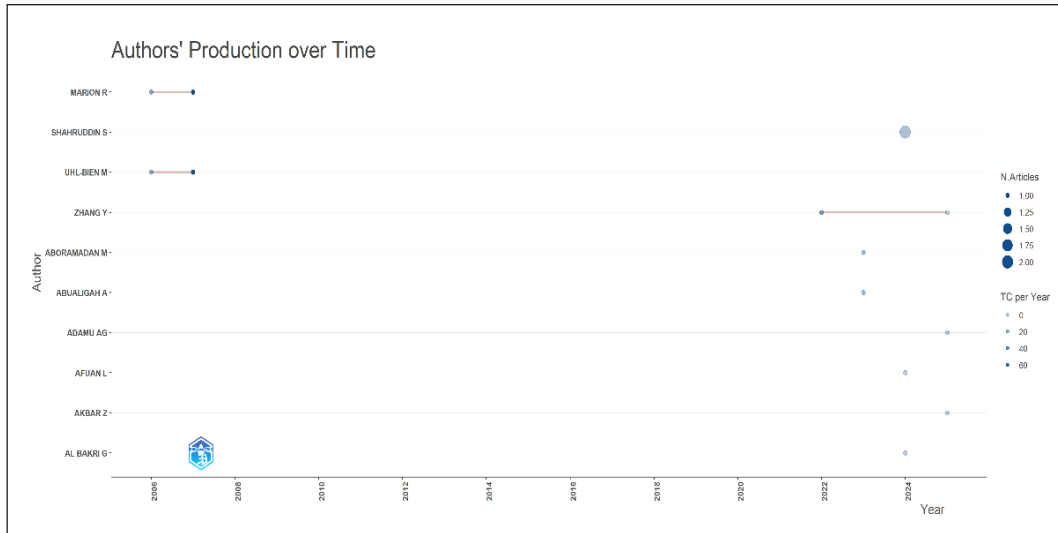


**Fig. 2: Annual Scientific Production**

### Author's Production Over Time

This bibliometric analysis study helps in examining author's production of research journals or papers over a period, it involves tracking authors' publication and their impact by analysing citations. Through this author's influence and significance of their work can be assessed. Researchers can gain insight into the evolution of research areas and emerging trends. Fig. 3 visualises the academic productivity of authors over a

time frame from 2005 to 2025. High productivity can be seen for (Shahrudin, 2024) during the years 2022 to 2024. (Uhl-Bien, 2007) and (Ella Miron Spektor, 2011) have produced journals in the year 2008 to 2011 which are being referenced and cited by many authors. (Yan Zhang, 2015) has a consistent range of publications between 2022 and 2024. During the year 2022 to 2024, many other authors have also produced journal articles which can be seen as emerging topics among authors in this research field.



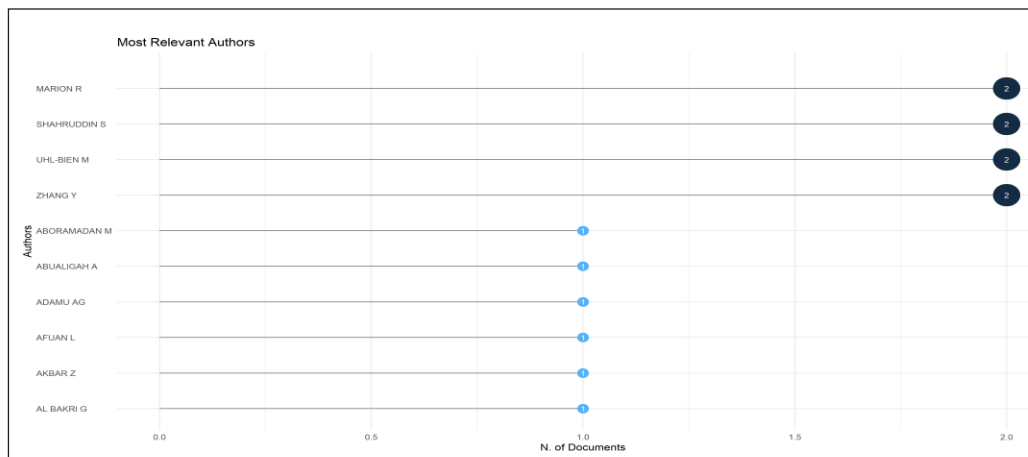
**Fig. 3: Author's Productivity Over Time**

### Author and Citation Analysis

Citation analysis remains one of the most widely employed methods in bibliometrics. Though the study of co-citation relationships, it is possible to track how frequently two authors or documents are cited together. This form of analysis provides insight into the intellectual structure of a research field and is instrumental in identifying clusters of related ideas, authors, or publications. When specific authors or documents begin to appear more frequently together in citations suggests growing recognition of conceptual relatedness or mutual influence.

### Most Influential Authors

The bibliometric analysis identified several key contributors who have significantly shaped the discourse around paradoxical leadership, self-efficacy and innovative work behaviour. The most influential authors, as shown in Fig. 4, are Miron S, and Uhl Bien who have authored many books, research papers and journals showcasing different leadership styles, paradoxical leadership and their relationship with IWB and creativity of employees. Their work can be considered as pioneering in this field and mostly referenced by many authors. Shahrudin S and Zhang Y can be seen as prominent authors in the study of paradoxes in the recent times and being cited by many authors.



**Fig. 4: Most Influential Authors**

### Most Cited Documents and Journals

Most cited documents and journals help in understanding the key works in a particular field, existing literature landscape and emerging future research areas. Table 1 presents the top ten documents and journals with most citations globally. The top three most cited documents

from the authors (Uhl-Bien, 2007; Lewis, 2014; Lichtenstein, 2006) can be considered as foundation papers to explore the concept of adaptive leadership style and how it can impact the creativity and IWB of employees across different industries. These journals were globally cited among various author which indicates the influence and impact of the authors in other fields.

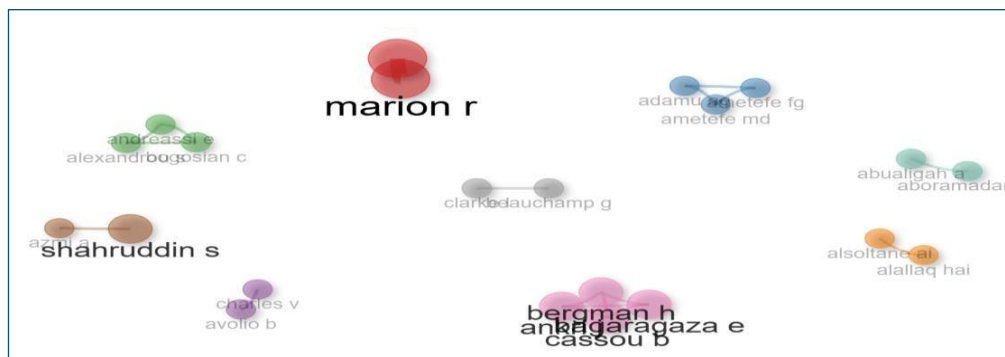
**Table 1: Most Globally Cited Documents and Journals**

Author(s) & Year	Source	Global Citations
Uhl-Bien M., 2007	Leadership Quarterly	1333
Lewis M. W., 2014	California Management Review	284
Lichtenstein B. B., 2006	E:CO Emergence: Complex Organisations	257
Shao Y., 2019	Organisational Behaviour and Human Decision Processes	140
Ali A., 2020	Journal of Organisational Behaviour	124
Zhang M. J., 2022	Academy of Management Journal	96
Busola Oluwafemi T., 2020	Journal of Business Research	70
Li Q., 2018	Frontiers in Psychology	59
Devi N. C., 2024	Journal of Knowledge Management	33
De Stampa M., 2010	International Journal of Integrated Care	29

### Collaboration Analysis

Scientific collaboration not only enhances research quality but also shapes the evolution of emerging technologies” (Wagner, 2005). Fig. 5 illustrates the collaboration patterns among authors working on similar research topics. This provides insights into the theoretical implication of collaboration, thematic clusters and author networks. It

also reveals the most influential authors and co-citation patterns among authors.” Social structures show how authors or institutions relate to others in the field of scientific research. Through co-authorship networks, groups of regular authors and influential authors can be determined (Aria, 2017). “The most common kind of social structure is co-authorship network” (Peters & H., 1991).



**Fig. 5: Collaboration Network**

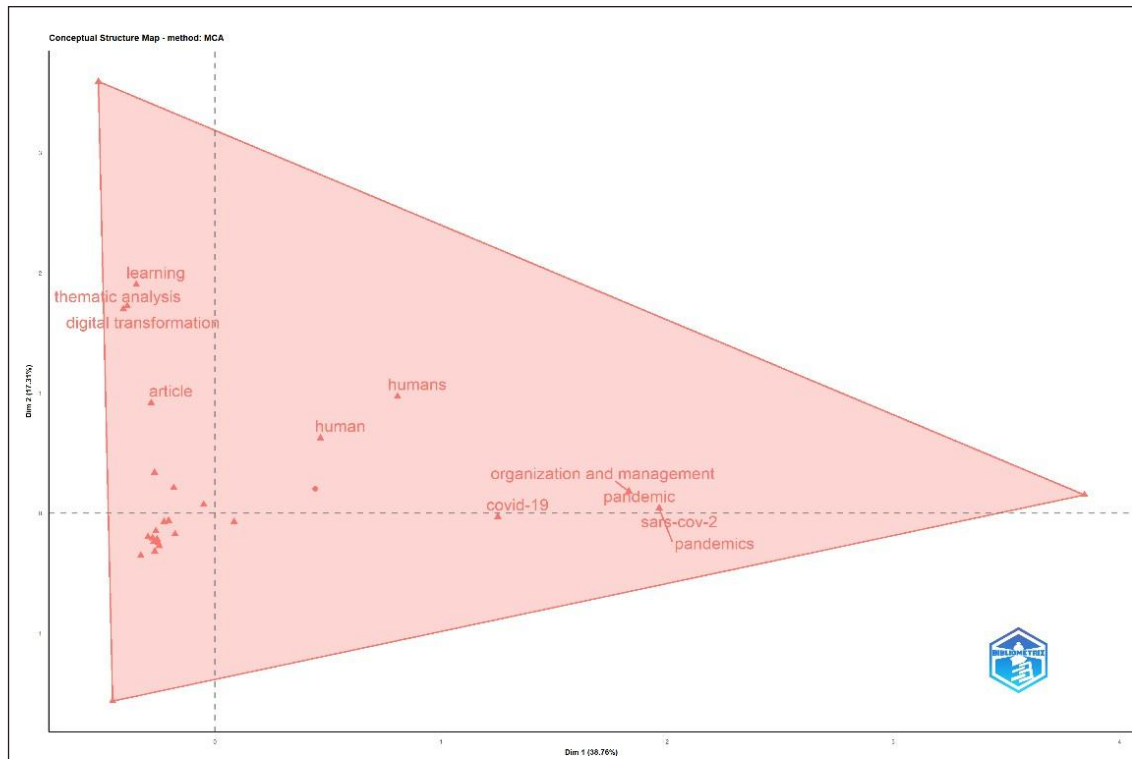
### Factorial Analysis

Factorial analysis is a statistical technique which helps to identify the main themes, relationships, conceptual

structure within a body of literature to know emerging trends. This method reduces large datasets into a few principal dimensions, enabling researchers to detect latent patterns and co-word structures (Aria, 2017).

It analyses the co-occurrence of keywords, and titles to identify clusters of related research topics. It identifies key factors by pinpointing most important underlying dimensions or themes. It also helps in understanding research trends and how conceptual structure of a field changes over time. Fig. 6 visualises the thematic relationships and intellectual structure done through

bibliometric analysis. It signifies that maximum number of research papers explore the impact of pandemic on the organisation and management whereas the keyword showing “humans” explain the general usage of this word in many research papers. Keywords such as “learning”, “thematic analysis” and “digital transformation” are the new emerging research topics or areas.



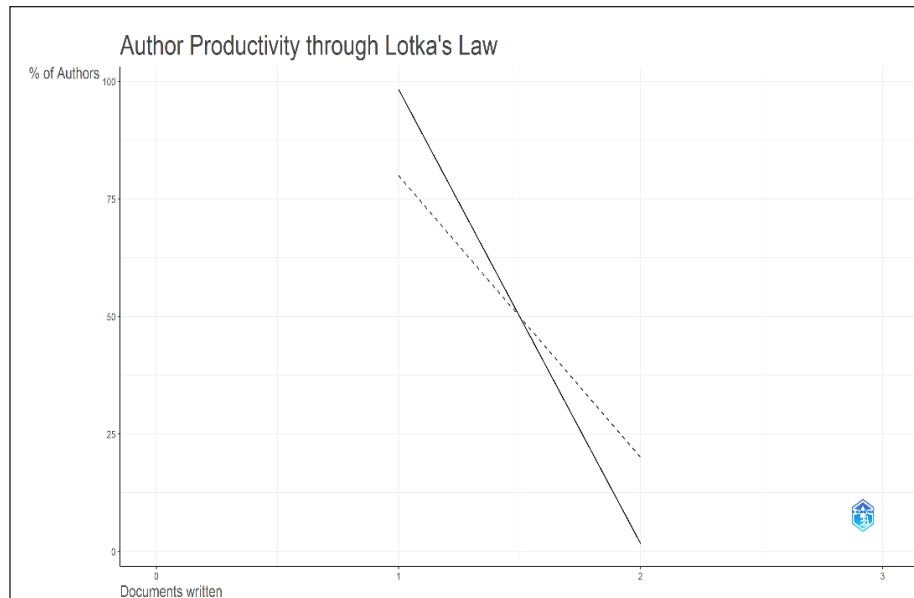
**Fig. 6: Factorial Map**

### Lotka’s Law

The bibliometric analysis of Lotka’s Law of author productivity is a basic principle which helps in determining the frequency distribution of scientific productivity of authors. It identifies highly productive authors within a research field and assesses the distribution of research output across contributors. This law suggests that a disproportionately large number of publications stem from a relatively small group of authors. It’s a power law distribution where it states that number of authors who publish a certain number

of papers decreases rapidly as the number of papers increase.

Fig. 7 illustrates the same phenomenon where the solid line in graph represents the number of papers published and the dotted line represents the expected number of papers published according to Lotka’s formula. There is a steep initial drop, indicating that majority of authors have published only one document and rapid decline in the line states that only few authors have contributed two or more articles. The alignment of these indicates how closely the data matches Lotka’s prediction.



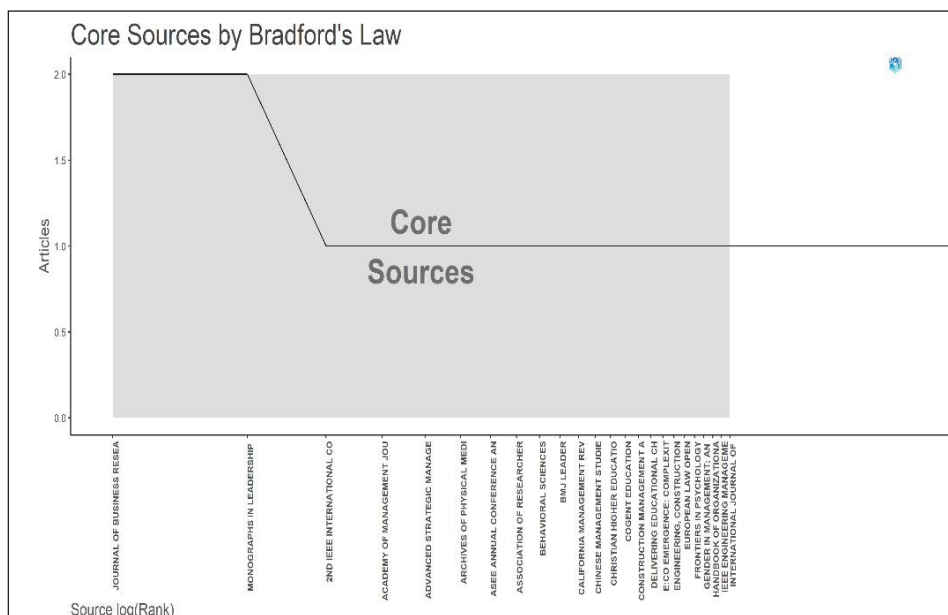
**Fig. 7: Lotka's Law**

**Bradford's Law**

Bradford's Law identifies key journals in a specific field and helps researchers focus their literature searches on core journals. The law divides the results into zones based on number of articles published in relevant journals. Each zone contains a similar number of articles as the core zone, which consists of the most productive journals in the subject area. "If scientific journals are arranged in order of decreasing productivity on a given subject, they

can be divided into nucleus and several succeeding zones containing the same number of articles but more journals."

Fig. 8 illustrates the core zone which is the first zone and has maximum number of articles produced related to leadership in organisation and management field (Bradford, 1934). They are Academy of Business Research, Monographs in Leadership and 2<sup>nd</sup> IEEE International Conference. The second zone indicates that the articles produced by these journals are very few and from different research fields.

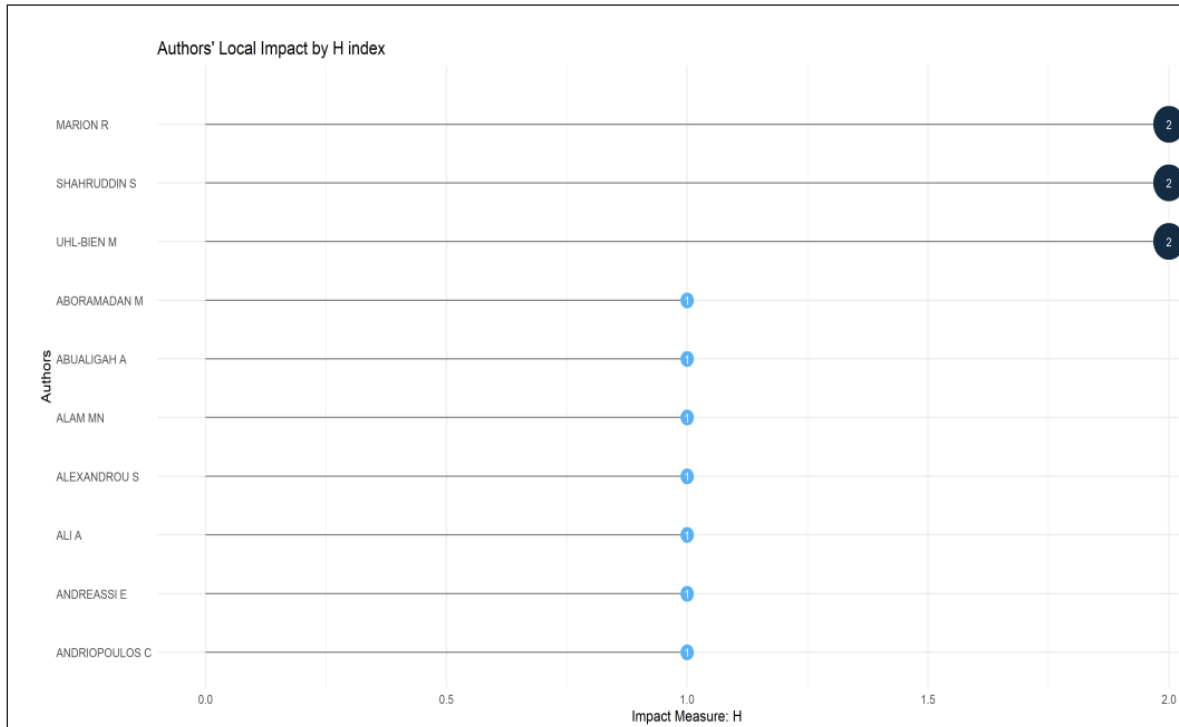


**Fig. 8: Core Sources by Bradford's Law**

### Author Impact Metrics H-Index

The H-index in bibliometric analysis is a method to evaluate the impact and productivity of a researcher. It combines both quantity (number of publications) and quality (number of citations) of a researcher's work. It reflects overall influence and productivity of the researcher. The H-index is calculated by ranking the

number of citations an author has received. It helps quantify the impact and influence of authors in the same field. Fig. 9 illustrates the H-index of authors where it indicates the scientific productivity of research papers and number of citations of authors' publication. Authors such as Uhl-bien, S and Marion, S demonstrate a high value of H-index, indicating consistent influence across multiple high-impact publications.

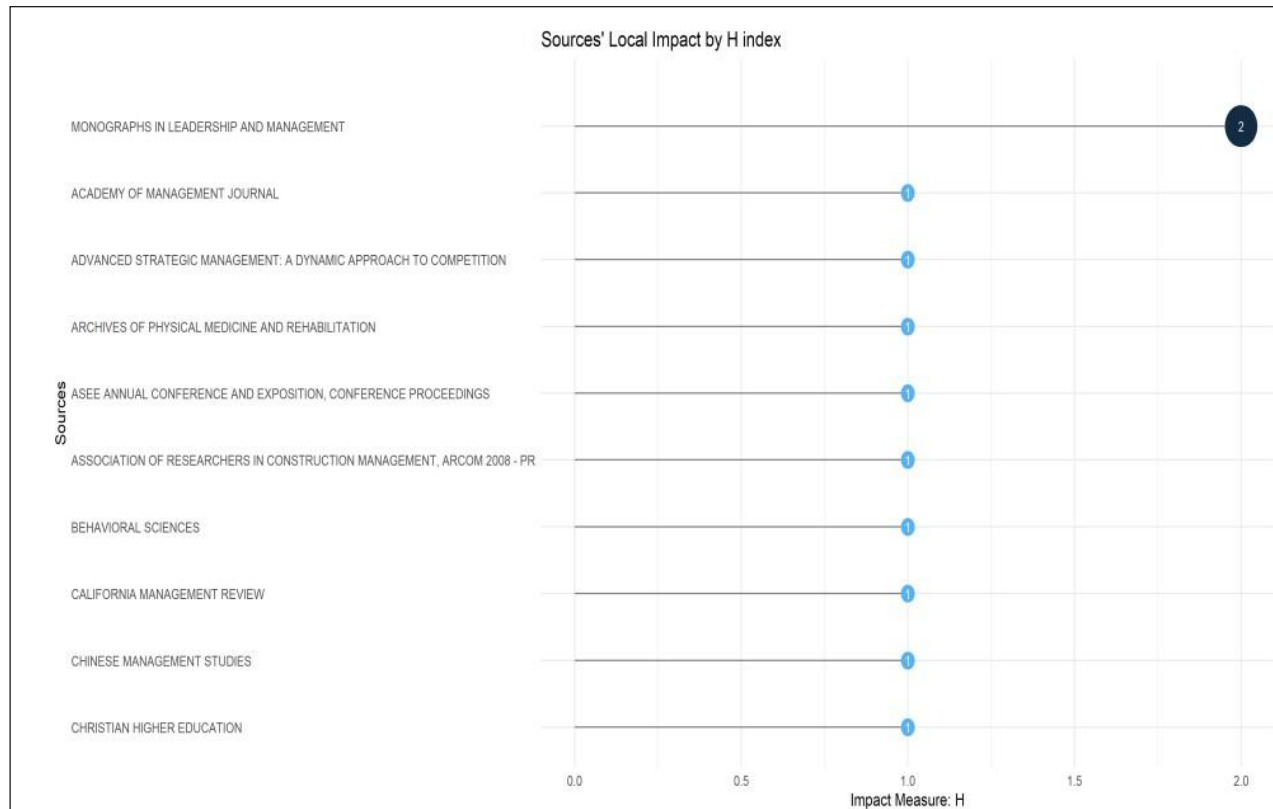


**Fig. 9: H-Index of Authors**

### Source Impact Metrics H-Index

The H-index of sources indicates the impact and productivity of the source. It provides a way to quantify the overall impact of a source, considering both the number of publications and the frequency of citations. Fig. 10 highlights the most impactful source

is Monographs in Leadership and Management, which can be considered as core platforms for research in paradoxical leadership and innovation. It indicates that other sources have contributed or linked to research in paradoxical leadership from across varied industries not only restricted to organisation or management context.



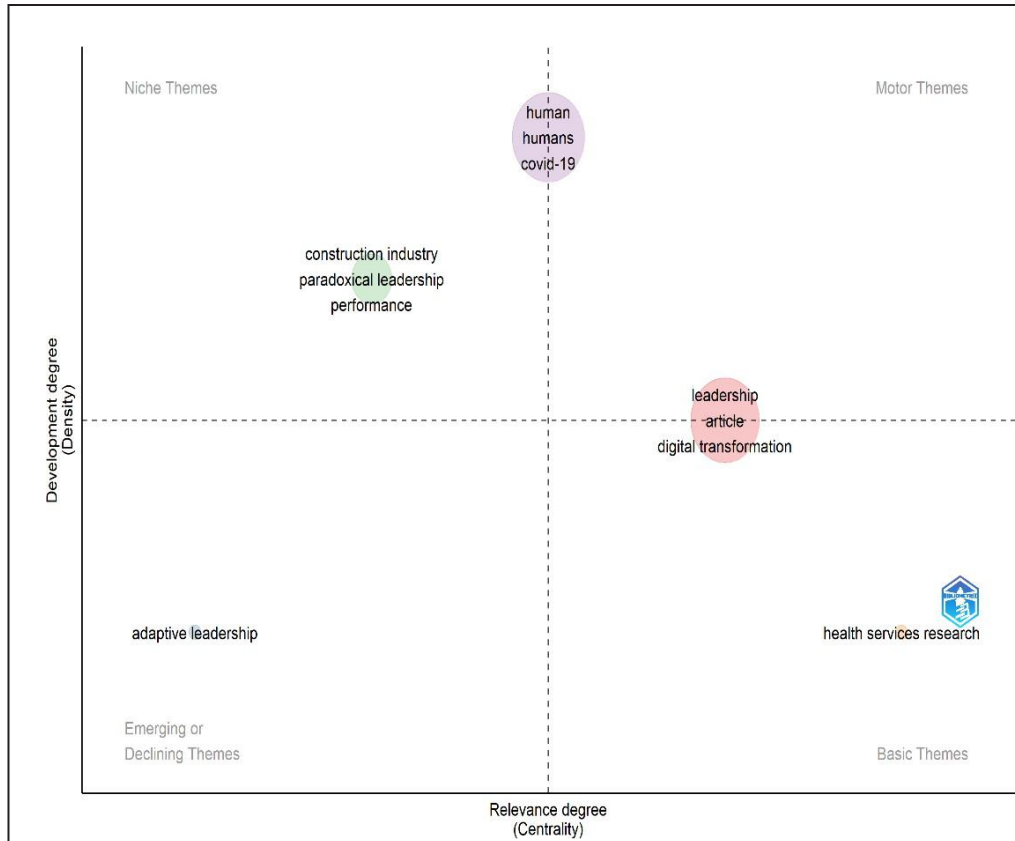
**Fig. 10: H-Index of Sources**

## Thematic Analysis

Thematic analysis is a visual representation that depicts the relationship between centrality, which shows the high volume of work in a particular research field, and density, which reflects the importance of a particular research field of different research themes. Each bubble symbolises a network cluster which consist of keywords that fall within the cluster, with those having higher occurrence values. The size of the bubble corresponds to the frequency of keywords in the cluster.

Fig. 11 can be explained through the four quadrants of thematic map as –

- *Motor Theme* – It showcases that maximum research has been done related to humans, COVID-19 and leadership.
- *Basic Theme* – It depicts that leadership, and digital transformation forms the foundation basis for many research areas such as health service research.
- *Niche Theme* – It shows that paradoxical leadership and its impact on performance are relatively new research areas where only few research has been done.
- *Emerging/Decline Theme* – It shows that not much research has been done related to adaptive leadership.



**Fig. 11: Thematic Map**

## Keyword Analysis

### Tree Map

The Tree Map offers a visual summary of how keywords are distributed and their relative frequency across various publications in the field of paradoxical leadership and related topics. Significantly, the largest sections are filled with keywords such as “leadership,” “humans,” “self-efficacy,” “creativity,” and “innovation,” highlighting their importance in academic discussions. The size and density of these sections imply that researchers frequently

focus their studies on human-centred leadership outcomes, especially concerning individual abilities (self-efficacy) and team-level results (innovation and ambidexterity).

The prominent appearance of the keyword “humans” across different countries further suggests a global academic agreement on the importance of human behaviour as a key mediating factor in organisational leadership research. Interestingly, the country-specific mapping within the Tree Map identifies Malaysia, the United States, China, and Australia as significant contributors to the literature, indicating a wide geographical spread (Fig. 12).

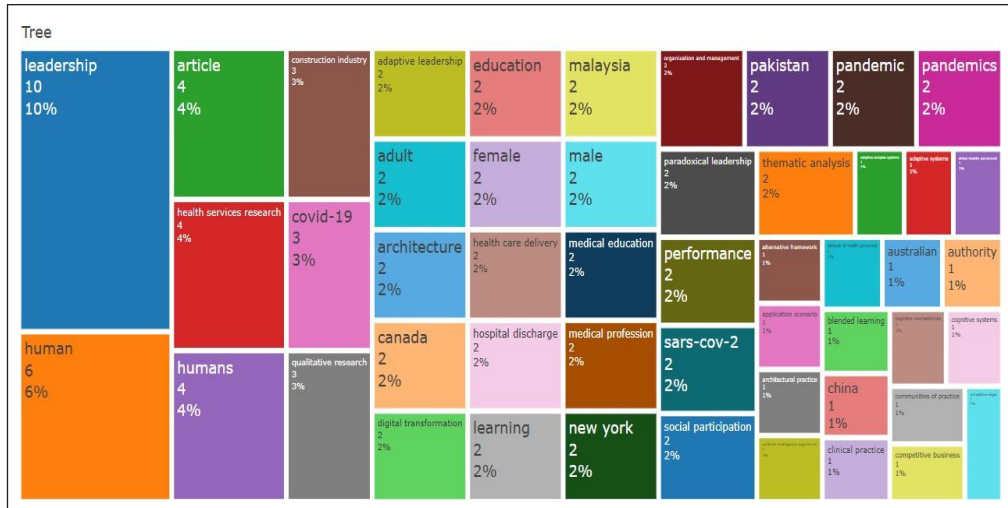


Fig. 12: Tree Map

**Trend Topics**

The Trend Topics graph provides a visual depiction of how research interests have evolved over time by examining the timing and frequency of keyword appearances. Between 2005 and 2015, keywords such as “leadership,” “qualitative research,” and “organisational behaviour” were prevalent, indicating a traditional emphasis on conceptual frameworks and exploratory studies. However, starting in 2019, there is a noticeable increase in the use of terms such as “digital transformation,” “COVID-19,” “adaptive leadership,” and “self-efficacy,” reflecting a significant shift towards addressing more practical and contemporary challenges in organisational contexts.

The growing interest in “ambidexterity” after 2020 underscores a heightened academic focus on dual capabilities—balancing exploration with exploitation. The simultaneous occurrence of this term with “strategic agility” and “employee innovation” points to an integrative research path that connects individual abilities with organisational performance. Furthermore, the rise of “remote work,” “hybrid leadership,” and “psychological safety”—though not yet dominant—may signal emerging research themes gaining traction, particularly in post-pandemic management literature. This indicates that the field is adapting to both theoretical complexity and real-world disruptions (Fig. 13).

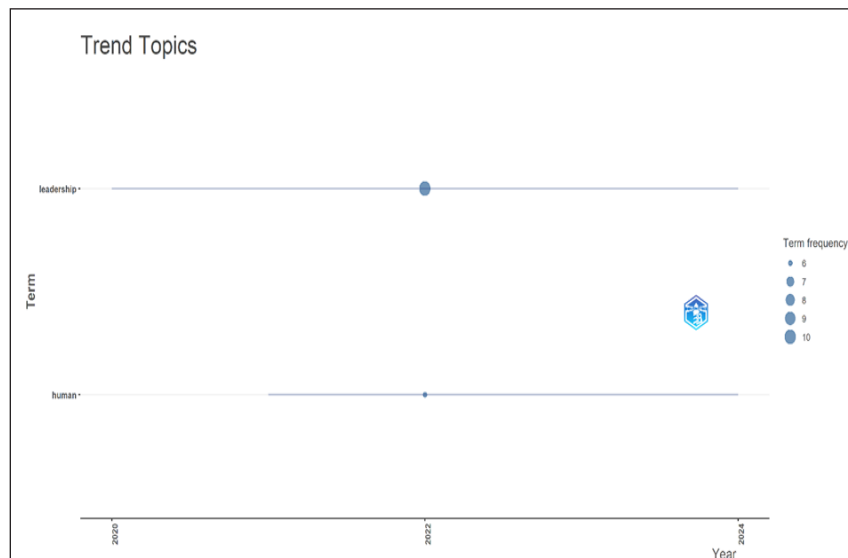


Fig. 13: Trend Topics

## Word Cloud

The word cloud visualisation effectively illustrates the most common keywords found in the bibliometric dataset. Keywords such as “leadership,” “humans,” “innovation,” “creativity,” and “digital transformation” underscore the importance of human-focused and adaptable leadership models in organisational research. These prevalent terms indicate a rising academic interest in exploring how leadership practices impact innovation at both individual and group levels.

The frequent appearance of “self-efficacy” and “ambidexterity” in the cloud points to a developing theoretical alignment and consistent with studies linking

paradoxical leadership to psychological empowerment and employee adaptability in complex work environments (Fig. 14).

Furthermore, keywords such as “COVID-19,” “digital,” and “transformation” suggest a recent shift in research emphasis. The pandemic has hastened the investigation into leadership resilience and adaptability during crises, further affirming the significance of paradoxical leadership in unstable settings. These themes resonate with newer research areas that connect paradoxical thinking with crisis management and strategic agility. Additionally, some less prominent but noteworthy keywords—such as “complexity,” “strategic agility,” “team creativity,” and “organisational learning”—represent niche but expanding subfields.



**Fig. 14:** Word Cloud

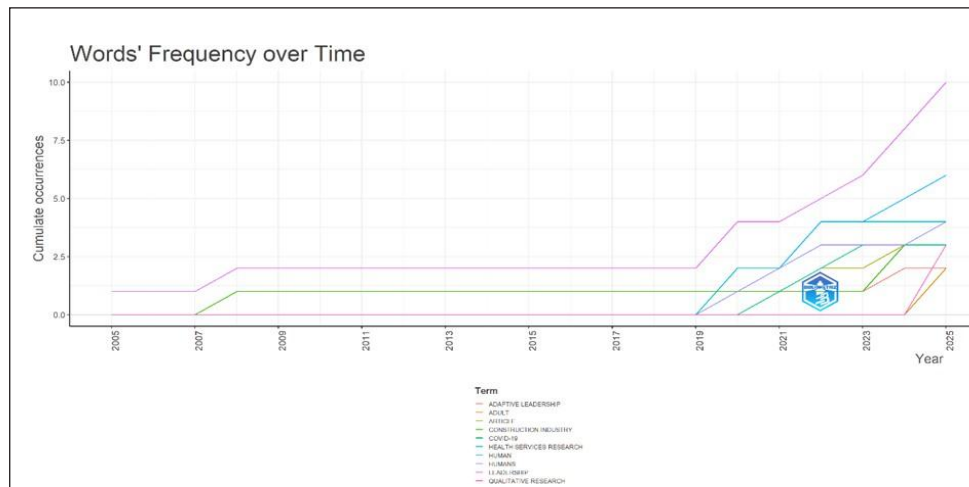
## Words Frequency Over Time

By analysing at how often specific keywords appear across different time frames, one can discern how academic focus has shifted in response to evolving organisational environments, global crises, and new managerial challenges. From 2005 to 2015, prevalent keywords such as “leadership,” “qualitative research,” and “organisational behaviour” highlight a strong emphasis on foundational theories and exploratory methods. This

era was mainly about conceptualising leadership styles and understanding behavioural frameworks. Beginning in 2016, there is a noticeable rise in the use of terms such as “self-efficacy,” “ambidexterity,” “creativity,” and “employee innovation.” This reflects a growing interest in exploring individual and group-level psychological factors that affect performance in paradoxical contexts. The concept of ambidexterity—referring to the ability to balance exploration and exploitation—became more prominent due to increasing organisational complexity

and the need for dual strategic capabilities. Keywords such as “COVID-19,” “digital transformation,” “remote work,” and “adaptive leadership” surged in frequency, indicating a shift towards resilience, technological adaptability, and leading through uncertainty. In recent years (2022–2025), the heightened use of “strategic agility,” “psychological safety,” “complex systems,” and

“learning” suggests that scholars are not only reacting to disruption but are also proactively theorising about long-term adaptability. The emergence of these keywords points to a paradigm shift towards future-readiness and organisational learning as strategic competencies, with paradoxical leadership at the heart of this transformation (Fig. 15).



**Fig. 15: Words Frequency Over Time**

## Conclusion and Discussion

The bibliometric analysis provides a quantitative and comprehensive summary of research trends on paradoxical leadership. It offers valuable information about the kind of research done in the domain of organisational behaviour and human resource management. With the help of bibliometric tools, it has been analysed that paradoxical leadership is an emerging research area and particularly a new field which has the potential to be explored more in relation to human behaviour.

The descriptive analysis provides insight about the amount of research papers, journals and books were published during the time frame between 2000 and 2025. Author and citation analysis highlights the most influential authors and their foundational contributions, and how much their research journals were referenced by other authors in various fields. Through factorial and thematic analysis, it can be inferred upon the key research area where mostly research was done and new

emerging topics and niche area which can be explored. The keywords analysis gives a clear understanding of most used keywords such as leadership and humans and trending topics of over a period 2005–2025. This offers a deep understanding of the evolving intellectual structure in leadership and innovation-related research domains.

Despite being relatively new, paradoxical leadership is emerging as an interdisciplinary research topic that traverses organisational theory, innovation studies, and psychology, according to this bibliometric analysis. A mature area with growing theoretical rigour is reflected in the bibliometric visualisations, which indicate a shift from conceptual to empirical studies. Additionally, the development of keyword trends and thematic mapping signals a paradigm shift: leadership research is becoming more focused on comprehending the mental and emotional processes that enable teams and leaders to succeed in paradoxical environments rather than just outcomes such as innovation. This suggests that in unstable and complicated situations, leadership philosophies that foster dynamic tensions and creative frictions have a bright future.

## Limitation and Future Implications

Though the bibliometric analysis provides a comprehensive overview of the intellectual and thematic evolution of the research field, there are few limitations which could have impacted the results. "Relying on a single database may bias results, as coverage varies across disciplines and geographies" (Mongeon, 2016). The database selected for this bibliometric analysis was only one which is Scopus database, combining with other databases such as Web of Science or Google Scholar which would have made the study more impactful. The results included broad view of the research papers, journal articles and books mostly about the paradoxical leadership and different leadership style, it lacks data related to factors such as self-efficacy, ambidexterity and innovative work behaviours. This study was mainly focused on niche keywords such as paradoxical leadership, self-efficacy and ambidexterity, there is possibility of losing out other factors such as strategic agility, competing work demands and ambiguity which can be combined for future bibliometric analysis.

"Effective leaders of the future will be those who embrace contradictions and harness tensions to fuel creativity and innovation" (Lewis, 2014). Future research can explore the influence of managers upon his employees related to factors such as autonomy and control. At the organisational level, the study can be done based on self-efficacy, ambidexterity and their involvement in deriving creative team outcomes. "Organisations must be consistently ambidextrous-capable of exploiting current capabilities while exploring future opportunities" (Tushman, 1996).

Future studies could also investigate how modern organisations can help their employees to adapt flexible leadership style and changes it can bring to employees work performance and agility. As digital transformation and AI-driven decision-making become more widespread, future research could explore the intersection of paradoxical leadership with digital leadership skills, particularly in handling technological uncertainty, managing remote teams, and fostering data-driven innovation.

Current research predominantly offers cross-sectional insights. Longitudinal bibliometric and empirical studies

could explore whether paradoxical leadership results in sustained ambidexterity and adaptability over time, especially during organisational changes such as mergers, crises, or restructuring. Managing contradictions also presents ethical challenges. Future research could investigate how paradoxical leaders navigate ethical dilemmas, uphold integrity, and build trust without compromising innovation or autonomy.

## References

- Aria, M., & Cuccurullo, C. (2017). Bibliometric: A R-Tool for comprehensive science mapping analysis. *Journal of Infometrics*, 959-975.
- Benner, M. J. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. *Academy of Management Review*, 28(2), 238-256.
- Bradford, S. (1934). Sources of information on specific subjects. *Engineering*, 85-86.
- Cater, I. Z. (2015). Bibliometric methods in management and organizations. *Organizational Research Methods*, 429-472.
- Chen, X. A. (2023). A review of paradoxical leadership research. *Journal of Human Resource and Sustainability Studies*, 871-886.
- Eisenhardt, K. (2000). Paradox and strategic decision making in fast-changing organisations. *Academy of Management Review*, 25(4), 753-775.
- Miron Spektor, E., Gino, F., & Argote, L. (2011). Paradoxical frames and creative sparks: Enhancing individual creativity through conflict and integration. *Organizational Behaviour and Human Decision Processes*, 229-240.
- Miron Spektor, E., Emich, K. J., Argote, L., & Smith, W. K. (2022). Conceiving opposites together: Cultivating paradoxical frames and epistemic motivation fosters team creativity. *Organizational Behavior and Human Decision Processes*, 171(5).
- Fitzgerald, F. S. (1936). *The Crack-Up: A desolately frank document from one for whom the salt of life has lost its savor by F. Scott Fitzgerald* (pp. 41-42). Chicago, Illinois: Esquire.
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4).
- Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility.

- California Management Review*, 56(3), 58-77. <https://doi.org/10.1525/cmr.2014.56.3.58>
- Marion, R., & Uhl-Bein, M. (2001). Leadership in complex organizations. *The Leadership Quarterly*, 389-418.
- Uhl-Bein, M., Marion, R., & Mckelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 298-318.
- Miron-Spektor, E. I. (2018). Micro foundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal*, 26-45.
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, 106(1), 213-228.
- 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(C), 285-296.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organisational Psychology*, 287-302.
- Peters, H. P. F., & Raan, T. V. (1991). Structuring scientific activities by co-author analysis - An exercise on a university-faculty level. *Scientometrics*, 20(1), 235-255.
- Poole, M. S., & Ven, A. H. V. D. (1989). Using paradox to build management and organization theories. *Academy of Management Review*, 14(4), 562-578.
- Schad, J., Lewis, M., Raisch, S., & Smith, W. K. (2016). Paradox research in management science: Looking back to move forward. *Academy of Management Annals*, 10(1), 5-64.
- Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management*, 375-409.
- Shahrudin, S. H. (2024). Navigating paradoxes of identity and leadership in the age of digital transformation of construction industry: Architects, experiences and perceptions. *Construction Management and Economics*, 42(7), 591-609.
- Smith, W. K., & Lewis, M. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381-403.
- Tushman, M. L., & O'Reilly, C. A. (1996). The ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38, 8-30.
- Uhl-Bien, M. M. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 298-318.
- Wagner, C., & Leydesdorff, L. (2005). Network structure, self-organization and the growth of international collaboration in science. *Research Policy*, 34(10), 1608-1618.
- Zhang, A. Y., Waldman, D., Han, Y., & Li, X. (2015). Paradoxical leader behaviors in people management: Antecedents and consequences. *Academy of Management Journal*, 58(2), 538-566.