

ANALYSING TRENDS AND PATTERNS IN RETRENCHMENT RESEARCH: A BIBLIOMETRIC APPROACH

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Abstract: In today's highly competitive business market, the optimization of operational efficiency and expense reduction is crucial for firms to maintain profitability and ensure long-term sustainability. A popular corporate strategy for achieving such goals is retrenchment, which involves shrinking or reorganizing organizational activities. The significance of conducting a bibliometric study on retrenchment lies in its ability to offer valuable insights to scholars, policymakers, and stakeholders interested in retrenchment and implementation and how it impacts employees and organisations. The review further identifies trends and patterns in retrenchment, highlighting significant works, and presenting a comprehensive understanding of it as a corporate strategy. To evaluate the research on labour retrenchment, a document search was conducted using article titles and keywords, analysing published documents and their citations. The data on publications were obtained from the Scopus database for this study. The VOS viewer tool was utilized to visualize the data derived from Scopus, while Harzing's Publish or Perish programme (Windows GUI Edition) was employed to analyse the citations and performance indicators of the publications. The findings reveal a total of 79 documents published by 177 writers between 1982 and 2023. There is evidence that the sum of publications on retrenchment has been steadily snowballing over time necessitating attention. The study observed a global interest in retrenchment research, with contributions from various countries and across multiple subject areas. The study also examined the top 26 most cited publications on retrenchment, showing variations in citation numbers and rates over time. Keyword co-occurrence network analysis identified significant groupings in retrenchment research. These clusters offer a comprehensive view of retrenchment research which adequately covers a range of themes, including the healthcare industry in the United States, the intersection of retrenchment and healthcare, the psychological effects, economic factors, and ethical implications.

Keywords: labour retrenchment, cost reduction, organisational efficiency, downsizing, lay-off, bibliometric analysis.

JEL Classification: J63, M12, M51, M54.

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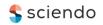
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1. Introduction

Retrenchment, according to Coffie and Yeboah (2018), involves the organized and planned reduction of an organization's staff or assets to streamline operations and cut costs. It is commonly seen as a response to various internal and external factors, such as economic downturns, declining market demand, technological advancements, or changes in industry dynamics (De Witte, 1999). Examples of retrenchment include layoffs, early retirement programs, divestitures, or the termination of unproductive business divisions (Alnahedh & Alrashdan, 2021).

Although retrenchment can provide short-term benefits to businesses by enabling more efficient resource utilization, its effects on the workforce, organizational culture, and overall performance are significant (Guthrie, Spell, & Nyamori, 2002). Employee morale can be negatively affected, and the workload on existing employees may increase, leading to the loss of valuable knowledge and skills (Rogers & Shook, 1986). Furthermore, retrenchment can have a detrimental influence on the perception of the company by stakeholders such as consumers, investors, and suppliers, leading to a loss of market share and brand reputation (Appelbaum, Bailey, Berg, & Kalleberg, 2000).

Minimizing the negative implications of retrenchment is critical to considering or characterizing any retrenchment effort as a success. Some tactics that have been implemented may lead to firms prioritizing open and authentic interaction with employees during the retrenchment process (Graaf et al., 2019). Skills retention and knowledge transfer are also important in minimizing the negative repercussions of layoff. Organizations adopt measures such as knowledge transfer programs, mentorship, or cross-training efforts to reduce the loss of key information and experience (Sitlington, 2008). Regarding ethical issues, organizations must handle retrenchment with compassion and justice, treating employees with respect and giving necessary support throughout the transition phase (De Witte, 1999). While retrenchment may be regarded as a short-term remedy to inefficiencies, its long-term efficacy is dependent on several criteria. The example of IBM in the 1990s is a remarkable example of a successful retrenchment approach (Mills, 1996). One critical factor is the organization's capacity to reallocate resources wisely and react to changing market conditions. Successful retrenchment initiatives are backed by a clear strategy for growth and diversification, ensuring that cost-cutting measures are not damaging to the organization's and retrenched employees' prospects (Rico et al., 2021; Lim et al., 2013).

The implications of retrenchment, or layoff, can have far-reaching consequences for a variety of stakeholders, including survivors (those who continue to work), retrenched employees, their families, and society as a whole.

Retrenchment can result in greater burden for survivors, causing stress and decreasing job satisfaction, as well as instilling fear and job insecurity, leading in worse morale and productivity. Survivor guilt may exacerbate mental discomfort and strained professional relationships (Dibua, Idemobi, & Okoli, 2018; Nyaberi & Kiriago, 2013; Brockner et al., 2004; Allen et al., 2001).

Similarly, retrenchment causes financial hardship for both retrenched employees and their families, resulting in stress, broken relationships, and a lower quality of life. The emotional toll extends to family members, causing anxiety and uncertainty and necessitating lifestyle changes that may impair access to critical resources such as education and healthcare (Chandra, 2014; Chandra, 2010; Kurebwa, 2011; Gribble, 2009; Weller 2007, McCourt, 2001). Furthermore, individuals frequently face career setbacks, such as difficulties obtaining new employment, retraining requirements, and potential effects on long-term career prospects and self-esteem.

Retrenchment can also have serious economic effects for society, such as reduced consumer spending, lower tax revenues, and increased dependency on government assistance (Ekanem & Umemezia, 2018; Ogbechie, 2015; Chandra, 2014). It can also contribute to social discontent, political instability, and long-term consequences such as diminished trust in employers, restricted job mobility, and economic inequality.

Rather than relying solely on retrenchment, operational processes may be reviewed, inefficiencies found, supplier contracts renegotiated, and lean management practices applied to reduce inefficiencies and resource redundancies (Lim et al., 2013).







2. Literature Review

Organizations have commonly employed retrenchment, particularly during times of recession or restructuring (Coffie & Yeboah, 2018). Various academics have defined retrenchment exercises as a tactic or component of operational organization, rather than a reaction to economic insecurity (Hofer, 1980; Schendel & Patton, 1976). Scholars have defined and understood retrenchment in ways that no other social phenomenon has (Coffie & Yeboah, 2018). Some scholars use the term "retrenchment" to characterize typical corporate responses to imminent economic insecurity (D'Aveni, 1989; Bibeault, 1982; Hardy, 1986).

Many other interpretations of retrenchment have been proposed (Coffie & Yeboah, 2018; Standing & Tokman, 1991). For instance, words such as declining, downsizing, downshifting, inclining up, lay-off, lessening in work power, re-arranging, re-building, re-designing, reduction, rescaling, resizing, rightsizing, scaling back, streamlining and many other terms are used to describe retrenchment (Coffie & Yeboah, 2018; Cameron, 1994).

The retrenchment literature has intriguing findings, with some research confirming the resource efficiency (Cascio, 1993), organisational effectiveness (Sitlington, 2008) and cost reduction measures (Ngoc Su et al., 2021) and others emphasizing potential negative repercussions such as leading to loss of skills (Mujtaba & Senathip, 2020) and unemployment (Appleton et al., 2002). In synthesizing several viewpoints on retrenchment, Byrnes (1984) evaluated the influence of staff reduction on organizational performance and discovered that downsizing can contribute to short-term cost reductions. According to the study, cost savings may be achieved by reducing labour expenses such as pay, benefits, and administrative costs associated with maintaining a bigger staff (Phillips, 2003). Similarly, Guthrie, Spell, and Nyamori (2002) investigated the consequences of downsizing in Australian firms. According to the data, downsizing activities were successful in reducing costs. The study emphasized that reducing the sum of workers can result in lower labour costs and improved financial performance (Robbins & Pearce II, 1993).

The literature on retrenchment in relation to its effects is complex. Some studies support the idea that downsizing can result in short-term goals like efficient resource utilization and cost reductions, while others emphasize potential negative implications and the failure to generate long-term effectiveness and efficiency. When analysing the impact of retrenchment, it is critical to evaluate the unique context, execution, and potential long-term consequences. The scientific community has devoted some attention to retrenchment difficulties in recent years. The following are some of the key literary axes of the retrenchment literature: Menacho-Román, Ouriach & Arribas, 2022; Vujnovic & Foster, 2022; Oware & Donkor, 2022; Verdier & Lapeyre, 2021; Chen & Chen, 2021; Bentley, Kehoe & Chung, 2021; Meis, Haines & Anderson, 2021; Malikov, Demirbag, Kuvandikov & Manson, 2021; Ratnasingam et al., 2020 among others. Several scientific papers, including Zatzick and Iverson (2006), Krishnan, Hitt, and Park (2007), Corona (1992), Hechanova-Alampay and Beehr (2001), Wayhan and Werner (2000), Tourish et al. (2004), Wagar (1998), Chen & Chen (2021), and Mellahi & Wilkinson (2010), have made significant contributions to this research area.

However, a check of the Scopus database indicated that no researcher has examined labour retrenchment from a bibliometric standpoint. Despite substantial study on the subject, there is nothing on "downsizing labour or retrenchment of labour or lay-off or workforce reduction or labour reduction" using bibliometric analysis.

Bibliometric analysis is ideal for demonstrating the structure and activity, volume, and growth of research in certain disciplines (Donthu et al., 2021). A quantitative use of bibliometric data is referred to as a bibliometric approach (Alam, 2021; Pritchard, 1969). It examines a large number of published research papers using a statistical technique to find patterns and citations (Paul & Criado, 2020). Significantly, for future research planning and financing, this method further separates major research issues and active researchers, nations, and institutions (Sweileh, 2020). Scholars use this approach for a variety of purposes, including identifying developing patterns in publications and their performance, collaboration trends, and research aspects, and scout the academic structure of a certain topic in the existing literature.

The use of bibliometric analysis in social science studies have grown exponentially in recent years (Bretas & Alon, 2021; Donthu et al., 2021; Durieux & Gevenois, 2010). The creation, accessibility, and availability of tools





like VOS viewer, Publish or Perish, and published databases (like Scopus) are indicators of the popularity of bibliometric analysis. Furthermore, information science has replaced commercial research, and bibliometric analysis in scientific advancement is quickly expanding in this sector (Donthu et al., 2021). The use of the bibliometric approach in social science research indicates how well it can be utilized to handle huge amounts of scientific data in order to create high-impact research (Donthu et al., 2021).

In this vein, the principal goal of this academic exercise is to use bibliometric analysis to investigate the research activities of labour retrenchment and offer significant insights of the research environment in this field. The analysis of labour retrenchment research efforts will allow academics to identify current research paths so to speculate on future research proposals. Furthermore, it will allow scholars to expand on the breadth of previous research efforts and subjects on labour retrenchment.

3. Methods

The Scopus Database was used in the data search for the study. The Scopus database has been well accepted by the scientific community since it provides comprehensive coverage and is simple to use (Guz & Rushchitsky, 2009; Miguel et al., 2011; Navaneetha & Mohan, 2023; Perdima et al., 2022). The Scopus online catalogue was used for the investigation since it has the largest database, the most well-known research publications, and VOS viewer compatibility for visualization analysis. The evaluation considers author performance, research subjects, productivity, and output performance. Bota-Avram (2023) defines performance analysis as "the examination of how elements of scholarly research have affected a specific field of study." This technique is consistent with the reputation of bibliometric research for naturally descriptive analyses (Donthu et al., 2021). Figure 1 illustrates the details of extracting the needed information for this bibliometric analysis. The extraction date; publication period; input terms for the search – which were limited to titles and keywords; and language option – English, have been indicated.

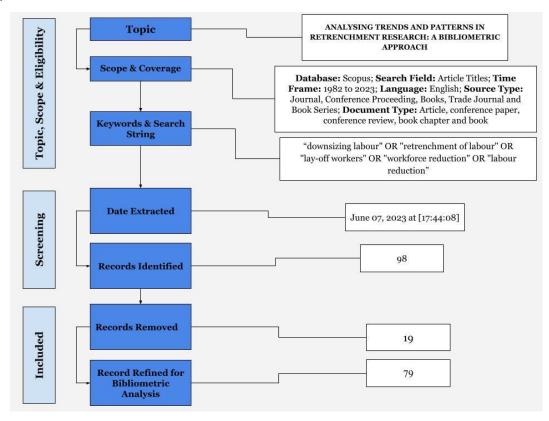


Figure 1. Data Extraction Process

Source: adapted from Zakaria et al. (2020).





In this study, a total of seventy-nine publications were collected from the Scopus database. The data extracted from Scopus was then visualized using the VOS viewer tool in relation to the co-occurrence analysis. Additionally, the performance metrics and citations of the publications were analysed using Harzing's Publish or Perish software. To represent the data on annual publication trends, country-related publications and subject areas graphically, Microsoft Excel (version 2304) was used.

4. Results and Discussion

4.1. Performance Analysis

The performance analysis looks into how academic research parts contribute to a certain subject (Cobo & Herrera, 2011). This study, is intrinsically descriptive (Donthu et al., 2021). It is a standard review method for demonstrating the performance of numerous research elements (Donthu et al., 2021; Durieux & Gevenois, 2010). In performance analysis, numerous metrics exist; however, the most popular measurements are the sum of publications and citations per research constituent or year. The publication is thought to be useful, and citation metrics have an influence. Furthermore, citations per document and the h-index link both publications and citations to assessing research success (Durieux & Gevenois, 2010).

Number of contributing authors (NCA)

Productivity per active years of publication (PAY)

Table 1. Publication Performance Metrics Analysis

Source: compiled by the authors.

Table 1 shows the publications on labour retrenchment performance. The findings reveal a total of 79 documents published between 1982 and 2023. Among the 177 writers that participated, 31 were solo authors and 146 coauthored on the articles. A total of 988 citations obtained by published papers result in an annual average of 24.1 citations, with 16 in the h-index and 30 in the g-index. As a result, the labour retrenchment field acknowledged research productivity (TP/citation years) by an average of 1.92 documents per year, with barely 1 author ((NCA/TP)/TP = 0.03) publishing 1 article.

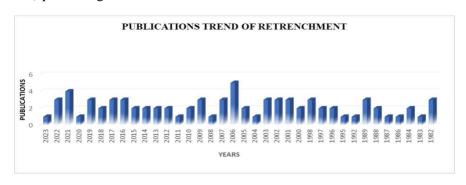


Figure 2. Annual Production of Publications (1982-2023)

Source: developed by the authors.





Figure 2 depicts the annual production and trend of research articles on labour retrenchment. The quantity of retrenchment-related publications fluctuates from year to year. Some years have more publications (for example, 2021 with 4 publications, 2006 with 5 publications), while others have less (for example, 2011 with 1 publication, 2020 with 1 publication). However, the sum of publications on retrenchment has been steadily snowballing over time. The cyclic patterns in retrenchment research illustrated in Figure 2, where there is a noticeable publication surge every 5-6 years, can be explained by a combination of several factors and dynamics in the field of academic research.

Retrenchment research may be influenced by economic or social factors, such as economic downturns, recessions, or changes in labour markets. Researchers may be more inclined to investigate issues related to retrenchment during times of economic instability, leading to cyclic patterns that align with economic cycles. The number of publications appears to have peaked in 2021 with four publications, which could be related to the COVID-19 pandemic and its impact on the global economy (Ogbechie, 2015; Ke et al., 2022; Husin et al., 2022). There was a noticeable increase in the number of publications during the early 2000s, which could be related to the dot-com bubble and its aftermath (Ke et al., 2022; Husin et al., 2022). The number of publications appears to have decreased during the mid-2000s, which could be related to the global financial crisis of 2008 (Ke et al., 2022; Ahmed, Kakkar & Sharma, 2016). Also, there was a slight increase in the number of publications during the late 2010s, which could be related to the economic instability caused by political events such as Brexit and the US-China trade war (Ogbechie, 2015; Husin et al., 2022).

Another significant factor contributing to the cyclic patterns in academic research can be attributed to the availability of research funding. Funding agencies, both public and private, often allocate resources periodically. Researchers might experience a surge in research activity when new funding cycles begin or when existing grants are set to expire. These funding cycles can lead to peaks in research productivity at regular intervals, such as every 5-6 years (Recio-Saucedo et al., 2022; Scholten et al., 2021; Jacob & Lefgren; 2011).

Also, the academic community operates on a tenure and promotion system, where researchers are often required to demonstrate their scholarly contributions at certain intervals to advance in their careers. This can create incentives for academics to publish more frequently, leading to cyclic patterns in research output (Győrffy et al., 2020; Smedsrød, B., & Longva, 2020).

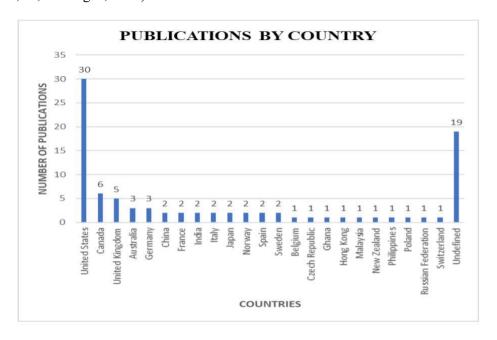


Figure 3. Publications by Country

Source: developed by the authors.





Figure 3 of the study demonstrates the international scope and interest in retrenchment research from various countries. A large part of the publications is from the United States (30), followed by Canada (6 publications) and the United Kingdom (5 publications). The significant contributions these nations have made to academics and research are widely recognised. Australia, Germany, China, France, India, Italy, Japan, Norway, Spain, and Sweden are some nations that have at least two publications, demonstrating some level of interest in retrenchment research. Other nations indicated in Figure 3 have just a single document to their name. However, it is important to note that 19 publications are classified as "Undefined," which may be an indication that the actual number of publications per country may be more. The publication numbers for different countries vary for several reasons. Countries with strong investments in research and development are likely to produce more publications (Lancho-Barrantes, Ceballos-Cancino& Cantu-Ortiz, 2021). The availability of funding, research institutions, and resources for researchers can significantly impact publication numbers (Tonta, Y., & Akbulut, 2020). The United States, Canada, the United Kingdom, and Germany are among the top countries in research and development spending. Also, countries with a robust research culture and a high number of universities and research institutions tend to have higher publication rates. Developed countries often have more established research ecosystems, including universities, think tanks, and research centres. This can result in more research being conducted and subsequently published. The United States, the United Kingdom, and Canada have a high number of universities and research institutions (Kwiek, 2021). The number of layoffs and discharges in the United States has been decreasing in recent years, reaching record lows in 2021 (Penn & Nezamis, 2022). This can partly be attributed to the fact that the Worker Adjustment and Retraining Notification Act (WARN) protects workers, their families, and communities by requiring employers with 100 or more employees to provide at least 60 days' notice in advance of covered plant closings and mass layoffs. However, mass layoffs and plant closings meet the criteria of the WARN Act, as the criteria are complex. A McKinsey survey of 2,000 U.S. companies found that from 2008 to 2011, 65% of these companies resorted to layoffs - becomes a common practice for companies facing financial difficulties (Sucher & Gupta, 2018). Exploring alternatives to layoffs and establishing a clear methodology for workforce change to minimize harm may be a factor in the dominance of publications on retrenchment-related issues in the United States of America (Sucher & Gupta, 2018). Retrenchment issues are different in Canada. The Canada Labour Code outlines requirements for the termination of employees. There are different requirements for individual terminations and group terminations. Employers must provide employees with a statement of benefits at the time of termination of employment, which details their vacation benefits, wages, severance pay, and any other benefits and pay arising from their employment. Employers may request that the Minister of Labour waive certain requirements if it would be unduly prejudicial to the interests of affected employees or the employer (Service Canada, 2023). Temporary layoffs are allowed in Canada, but there are specific requirements that must be met (Mastoras & Wong, 2022). The labour and employment laws are quite different from the European Union's regulations in the UK. UK labour laws prohibit at-will employment, meaning that employees cannot be dismissed for any reason without notice. Employers must provide written notice to employees they decide to terminate, except in cases of gross misconduct. Employers are not required to pay severance (Stemke, 2023).





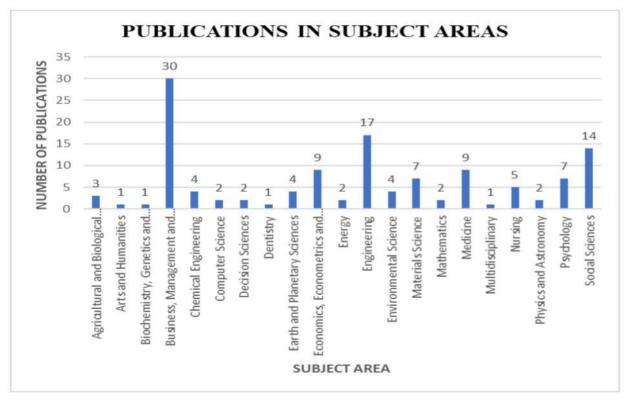


Figure 4. Publications in subject areas

Source: developed by the authors.

According to the data, retrenchment is a topic that is discussed in a variety of subject areas. With 30 papers, the field of business, management, and accounting has the most research publications overall, indicating the importance of this field in comprehending the topic. With 17 articles each, engineering, social sciences, economics, econometrics, and finance are some of the other notable fields.

The variation in the number of publications across subject areas is primarily due to the relevance of retrenchment to each field. Fields like Business, Management, Economics, and Social Sciences have a direct connection to workforce and organizational dynamics, leading to a higher number of publications. On the other hand, fields like Arts and Humanities or Dentistry have less direct relevance, resulting in fewer publications.

It is noteworthy that research on retrenchment spans interdisciplinary areas, including environmental science and materials science, demonstrating the variety of viewpoints and methodologies used in the discipline. The existence of publications in industries, such as the arts and humanities, dentistry, and nursing, further demonstrates that retrenchment is being considered from various professional perspectives. This analysis highlights the multidisciplinary nature of retrenchment research, indicating its relevance and application in various fields beyond the traditional business and management domains.

4.2 Citation Analysis

Citation analysis is a key tool for scientific mapping that assumes citations replication intellectual contributions and influence research frontiers (Faraji et al., 2022; Appio, Cesaroni, & Di Minin, 2014). This methodology measures the number of citations received by published articles to determine their influence (Mukherjee et al., 2022). As a result, it allows for the identification of the most significant and useful papers in a research topic. As a result, it is possible to gain insights regarding that constituent's intellectual processes (Donthu et al., 2021).





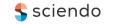


Table 2. Publication with at least 14 Citations

	1	T
C.D. Zatzick, R.D. Iverson		
H.A. Krishnan, M.A. Hitt, D. Park		
R. Hechanova-Alampay, T.A. Beehr		
V.B. Wayhan, S. Werner		
D. Tourish, E. Hobman, P. Bordia		
CC.B. Chen, MH. Chen		
A.R. Reichert, H. Tauchmann		
D.A. Matsa, A.R. Miller		
P. Biella, N. Tommasi, A, A. Galimberti		
RL. DeWitt, L.K. Trevino, K.A. Mollica		
J. Ratnasingam, L.Y. Yi, A.A.A. Azim,, M.N.Z.M. Amin		
A. Getahun Asfaw, CC. Chang		
J. Kammeyer-Mueller, H. Liao		
T. Säd, JY.L. Louarn, M. Tremblay		
Z. Zhang, P.H. Heinemann		
J.O. Brunner, J.F. Bard, J.M. Köhler		
D. Goodman, P.E. French		

Source: compiled by the authors.

Table 2 illustrates the top 26 significant documents in the field of retrenchment. Based on the rank, author(s) of the publication, sum of citations, and citations per year; the publication by C.D. Zatzick and R.D. Iverson holds the maximum number of citations with 147, resulting in an average of 8.65 citations per year. H.A. Krishnan, M.A. Hitt, and D. Park has 104 citations, averaging 6.5 citations per year and D. Grigg's publication has 79 citations, resulting in an average of 2.55 citations per year. Also, the publication by R. Hechanova-Alampay and T.A. Beehr has 59 citations, averaging 2.68 citations per year while V.B. Wayhan and S. Werner's publication also has 59 citations, averaging 2.57 citations per year.

The rest of the data follows a similar pattern, where the sum of citations and citations per year varies for each publication. Some publications have a higher number of citations, indicating greater impact and recognition within the field of retrenchment research. On the other hand, some publications have relatively lower citation counts, suggesting they may have had a more limited impact.

4.3 Co-Occurrence analysis

Co-occurrence analysis is a method for investigating the real content of the material and maps the relevant literature based on keyword connections shared by research publications (Mukherjee et al., 2022; Cobo & Herrera, 2011, Tijssen and Van Raan, 1994). The co-occurrence analysis determines which terms appear often in a group. It displays conceptual or semantic groups of numerous themes that research elements are interested in (Mukherjee et al., 2022; Donthu et al., 2021; Cobo & Herrera, 2011).







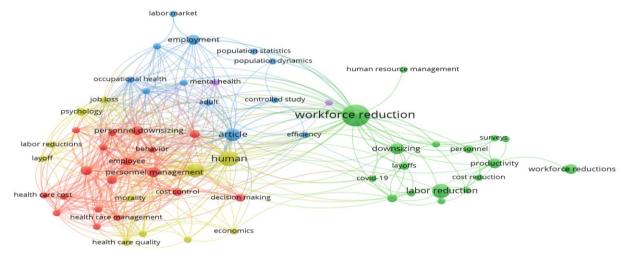


Figure 5. VOS viewer visualization (minimum no. of co-occurrences = 2)

Source: developed by the authors.

Figure 5 depicts five clusters reflecting the main study streams in the area of scientific articles examined. As a result, the largest (red) cluster has 18 terms. This cluster concentrated on several facets of the retreat. The keywords included cost reduction, downsizing, COVID-19, human resource management, financial performance, investment, job security, layoffs, productivity, sustainable development, technology, and more. The red cluster encompassed a wide range of themes, such as the financial implications of retrenchment, the influence of the pandemic, the role of HR management, and the relationship between retrenchment and job security, productivity, and sustainable development. The inclusion of these keywords provided insights into the multifaceted nature of retrenchment and aimed to shed light on its dynamics and potential strategies for effective implementation.

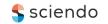
Another resulting cluster (green) comprised 13 keywords, including words like; behaviour, personnel downsizing, decision making, employee, health care cost, health care management, hospital personnel, health care organization, leadership, manpower, nursing, organizational innovation, and the United States. This cluster suggests a thematic focus on the impact of retrenchment, particularly in the healthcare industry within the United States. The cluster likely examines aspects such as employee behaviour, decision-making processes, and the effects on healthcare costs, management, and personnel. It may also explore leadership practices, organizational innovation, and the experiences of employees, especially those in nursing roles. The cluster provides elucidation into the key themes and interests within the field of retrenchment in relation to healthcare and the United States.

Similarly, another cluster (blue) revealed 10 keywords related to the intersection of retrenchment and healthcare. These keywords include economics, health care policy, health care quality, job loss, labour reduction, layoff, morality, personnel management, psychology, and quality of health care. The cluster suggests a comprehensive exploration of retrenchment's impact on healthcare, encompassing economic aspects, policy considerations, healthcare quality, job loss, labour reduction, ethical implications, personnel management strategies, psychological effects, and the overall quality of care. Analysing the co-occurrence of these keywords offers valuable understanding into the interconnectedness of these factors and their significance for healthcare organizations, professionals, and patients affected by retrenchment.

The using of VOS viewer for keyword co-occurrence network analysis resulted in two other clusters. Cluster 4 (yellow) focuses on the individual-level effects of retrenchment, with keywords related to employment, labour market dynamics, mental health, and occupational health. This cluster investigates how losing a job affects people's well-being, working conditions, and job security. Contrarily, Cluster 5 (purple) is focused on research methodology and the effects of layoffs at the population level. It contains phrases like "article," "controlled study," "cost control," and "population statistics," indicating that the author is interested in researching the economic







ramifications of retrenchment as well as its wider social effects. These clusters reflect many study disciplines with an interest in retrenchment and provide information on both the personal and societal aspects of retrenchment.

5. Conclusion

Retrenchments in the labour force are a complicated problem with broad ramifications. Discovering the trends and research efforts in labour retrenchment is the main goal of this academic review. According to the results of the current investigation, 79 documents have been published in the topic of retrenchment research overall since 1982. These publications' influence is evidenced by the 988 citations they have earned, with an average of 24.1 citations each year. With an average of 1.92 documents published year and a moderate level of collaboration seen, author collaboration is obvious.

This study also included a list of articles on retrenchment year by year. The data analysis reveals numerous interesting patterns. However, it was noted that there was a broad geographic representation and a global interest in retrenchment research, with contributions from numerous nations. The analysis also highlighted the wide coverage of retrenchment research across various subject areas. The interdisciplinary nature of retrenchment research was evident with its presence in fields like Environmental Science and Materials Science, while other areas like Arts and Humanities, Dentistry, and Nursing also contribute to the diverse perspectives on the topic. A list of the top 26 most cited publications on retrenchment was also analysed which revealed variations in the number of citations and citations per year for each publication.

Finally, the keyword co-occurrence network analysis identified significant groupings in retrenchment research. The clusters covered various aspects of retrenchment, the healthcare industry in the United States, the intersection of retrenchment and healthcare, considering economic factors, psychological effects, and ethical implications, among others. These clusters provide a comprehensive view of retrenchment research, encompassing diverse dimensions such as financial, healthcare, individual-level, and population-level perspectives.

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Conflicts of Interest: Not applicable.

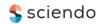
Data Availability Statement: The publication data used in this review was extracted from the Scopus database https://www.scopus.com; and is assessed by following the data extraction process.

Informed Consent Statement: Not applicable.

References

- 1. Ahmed, A. I., Kakkar, G., & Sharma, K. D. (2016). A review on effects and challenges of staff retrenchment on organizational performance of commercial banks. *International Journal for Innovative Research in Multidisciplinary Field*, 2(12), 05-13. [Link]
- 2. Alam, S. S., Chowdhury, M. A. M., & Razak, D. B. A. (2021). Research evolution in labour retrenchment: a bibliometric analysis. *Future Business Journal*, 7, 1-19. [CrossRef]
- 3. Allen, T. D., Freeman, D. M., Russell, J. E., Reizenstein, R. C., & Rentz, J. O. (2001). Survivor reactions to organizational downsizing: Does time ease the pain? *Journal of Occupational and Organizational psychology*, 74(2), 145-164. Available at: [Link]
- 4. Alnahedh, M., & Alrashdan, A. (2021). To downsize or not to downsize: when and how does corporate downsizing create long-term value? *Management Research Review*, 44(11), 1539-1564. [CrossRef]
- 5. Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage: Why high-performance work systems pay off.* Cornell University Press. Available at: [Link]
- 6. Appio, F. P., Cesaroni, F., & Di Minin, A. (2014). Visualizing the structure and bridges of the intellectual property management and strategy literature: a document co-citation analysis. *Scientometrics*, *101*, 623-661. [CrossRef]

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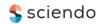
- 7. Appleton, S., Knight, J., Song, L., & Xia, Q. (2002). Labor retrenchment in China: Determinants and consequences. *China Economic Review*, *13*(2-3), 252-275. https://doi.org/10.1016/S1043-951X(02)00067-6 [CrossRef]
- 8. Bentley, F. S., Kehoe, R. R., & Chung, H. (2021). Investing for keeps: Firms' prepandemic investments in human capital decreased workforce reductions associated with COVID-19 financial pressures. *Journal of Applied Psychology*, 106(12), 1785-1804. [CrossRef]
- 9. Bibeault, D. G. (1982). *Corporate Turnaround: How Managers Turn Losers Into Winners*. New York: mcGraw-Hill. Available at: [Link]
- 10.Bota-Avram, C. (2023). Bibliometrics Performance Analysis. In Science Mapping of Digital Transformation in Business. Springer, Cham. [CrossRef]
- 11.Bretas, V. P. G., & Alon, I. (2021). Franchising research on emerging markets: Bibliometric and content analyses. *Journal of Business Research*, 133, 51–65. [CrossRef]
- 12.Brockner, J., Spreitzer, G., Mishra, A., Hochwarter, W., Pepper, L., & Weinberg, J. (2004). Perceived control as an antidote to the negative effects of layoffs on survivors' organizational commitment and job performance. *Administrative Science Quarterly*, 49(1), 76-100. [CrossRef]
- 13. Byrnes, J. F. (1984). Costing human resources: the financial impact of behavior in organizations. *Academy of Management Review*, 9(2). [CrossRef]
- 14. Cascio, W. F. (1993). Downsizing: What do we know? What have we learned? *Academy of Management Perspectives*, 7(1), 95-104. [CrossRef]
- 15. Chandra, D. (2010). Social Outcomes of Closure and Retrenchment of Workers. Drishtikon: *A Management Journal*, 2(1). [Link]
- 16. Chandra, D. (2014). A Study on Socio-economic Impact of Retrenchment on Workers—with Special Reference to Allahabad. *Management and Labour Studies*, 39(2), 229-248. [CrossRef]
- 17. Chen, C. C., & Chen, M. H. (2021). Well-being and career change intention: COVID-19's impact on unemployed and furloughed hospitality workers. *International Journal of Contemporary Hospitality Management*, 33(8), 2500-2520. [CrossRef]
- 18.Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: A practical application to the Fuzzy Sets Theory field. *Journal of Informetrics*, 5(1), 146-166. [CrossRef]
- 19. Coffie, R. B., & Yeboah, E. H. (2018). Does the social and human capital of retrenched bankers matter in their reemployment? *Journal of Human Resource Management*, 21(1), 14-27. Available at: [Link]
- 20. Corona, G. (1992). D. Grigg" The Transformation of Agriculture in the West" (Book Review). *Journal of European Economic History*, 21(1), 190. Available at: [Link]
- 21.D'Aveni, R. A: (1989). The aftermath of organisational decline: A longitudinal study of the strategic and managerial characteristics of declining firms. *Academy of Management*, 32(3), 577-605. [CrossRef]
- 22. Dibua, E. C., Idemobi, E. I., & Okoli, I. M. (2018). Effect of retrenchment on employees' service delivery: a study of ten districts of Enugu Electricity Distribution Company (EEDC) in southeast Nigeria. *European Scientific Journal*, 14(13), 121-133. [CrossRef]
- 23.Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. (2021). How to conduct a bibliometric analysis: An overview and guidelines? *Journal of Business Research, Elsevier, 133*, 285–296. [CrossRef]
- 24. Durieux, V., & Gevenois, P. A. (2010). Bibliometric indicators: Quality measurements of scientific publication. *Radiology*, 255(2), 342–351. [CrossRef]
- 25. Ekanem, E. D., & Umemezia, E. (2018). Retrenchment In Nigeria And Its Socio-Economic Effects. *Nigerian Journal of Management Sciences*, 6(2), 295-302. Available at: [Link]
- 26. Faraji, O., Asiaei, K., Rezaee, Z., Bontis, N., & Dolatzarei, E. (2022). Mapping the conceptual structure of intellectual capital research: A co-word analysis. *Journal of Innovation & Knowledge*, 7(3), 100202. [CrossRef]
- 27. Graaf, G., Hengeveld-Bidmon, E., Carnochan, S., Salomone, M., & Austin, M. J. (2019). Change communication in public sector cutback management. *Public Organization Review*, 19, 453-472. [CrossRef]





- 28. Gribble, L.C. (2009). Identifying the psychological constructs underpinning the effects of retrenchment', *Australasian Journal of Business and Social Inquiry*, 7(2), 36-52. Available at: [Link]
- 29. Guthrie, J. P., Spell, C. S., & Nyamori, R. O. (2002). Correlates and consequences of high involvement work practices: the role of competitive strategy. *International journal of human resource management*, 13(1), 183-197. [CrossRef]
- 30.Guz, A. N., & Rushchitsky, J. J. (2009). Scopus: A system for the evaluation of scientific journals. *International Applied Mechanics*, 45(4), 351–362. [CrossRef]
- 31. Győrffy, B., Csuka, G., Herman, P., & Török, Á. (2020). Is there a golden age in publication activity? An analysis of age-related scholarly performance across all scientific disciplines. *Scientometrics*, *124*, 1081-1097. [CrossRef]
- 32. Hardy, C. (1986). Strategies for retrenchment: Reconciling individual and organisational needs. *Canadian Journal of Administrative Sciences*, 3(2), 275-289. [CrossRef]
- 33.Hechanova-Alampay, R., & Beehr, T. A. (2001). Empowerment, span of control, and safety performance in work teams after workforce reduction. *Journal of Occupational Health Psychology*, 6(4), 275–282. [CrossRef]
- 34. Hofer, C. W. (1980). Turnaround strategies. *Journal of Business Strategy*, 1(1), 19-31. [CrossRef]
- 35. Husin, N. A., Ahmad, A., Ghazali, A. S. M., & Azim, Z. A. Z. (2022). Impact of Retrenchment on Employees' Well-being, Economy, and Social Exclusion during Covid-19. [Link]
- 36.Jacob, B. A., & Lefgren, L. (2011). The impact of research grant funding on scientific productivity. *Journal of Public Economics*, 95(9-10), 1168-1177. [CrossRef]
- 37.Ke, G. N., Grajfoner, D., Carter, S., DeLima, N., Khairudin, R., Lau, W. Y., ... & Lee, S. C. (2022). Psychological well-being and employability of retrenched workforce during COVID-19: A qualitative study exploring the mitigations for post-pandemic recovery phase. *Frontiers in Public Health*, 10, 907797. [CrossRef]
- 38. Krishnan, H. A., Hitt, M. A., & Park, D. (2007). Acquisition premiums, subsequent workforce reductions and post-acquisition performance. *Journal of management studies*, 44(5), 709-732. [CrossRef]
- 39. Kurebwa, J. (2011). Organisational downsizing and its impact on leavers and survivors: The case of the Reserve Bank of Zimbabwe. *Journal of emerging trends in economics and management sciences*, 2(4), 264-269. Available at: [Link]
- 40.Kwiek, M. (2021). The prestige economy of higher education journals: A quantitative approach. *Higher Education*, 81(3), 493-519. [CrossRef]
- 41.Lancho-Barrantes, B. S., Ceballos-Cancino, H. G., & Cantu-Ortiz, F. J. (2021). Comparing the efficiency of countries to assimilate and apply research investment. *Quality & Quantity*, 55(4), 1347-1369. [CrossRef]
- 42.Lim, D. S., Celly, N., Morse, E. A., & Rowe, W. G. (2013). Rethinking the effectiveness of asset and cost retrenchment: The contingency effects of a firm's rent creation mechanism. *Strategic Management Journal*, 34(1), 42-61. [CrossRef]
- 43.Malikov, K., Demirbag, M., Kuvandikov, A., & Manson, S. (2021). Workforce reductions and post-merger operating performance: The role of corporate governance. *Journal of Business Research*, 122, 109-120. [CrossRef]
- 44.Mastoras, J., & Wong, C. (2022, July 26). *Temporary layoffs: What employers need to know*. Global Law Firm. Norton Rose Fulbright. [Link]
- 45.McCourt, W. (2001). Towards a Strategic Model of Employment Reform in Developing Countries: Explaining and Remedying Experience to Data. *International Journal of Human Management*, 12(1), 56-75. [CrossRef]
- 46.Meis, P. J., Haines, D. W., & Anderson, S. Case Study—50% Labor Reduction, 30% Time Savings, and No Damages, No Delays, No Change Orders—No Kidding! Application of 3D Subsurface Utility Engineering per ASCE 38 Standard for Puget Sound Energy's SR-510 Gas Pipeline Project. In Pipelines 2021 (pp. 58-67). [CrossRef]
- 47.Mellahi, K., & Wilkinson, A. (2010). Slash and burn or nip and tuck? Downsizing, innovation and human resources. *The International Journal of Human Resource Management*, 21(13), 2291-2305. [CrossRef]
- 48. Menacho-Román, M., Ouriach, S., & Arribas, I. (2022). Consolidation of quality control material improves patient safety and supports sustainability. *Journal of Laboratory Medicine*, 46(6), 377-381. [CrossRef]

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SocioEconomic Challenges, Volume 7, Issue 4, 2023 ISSN (print) – 2520-6621, ISSN (online) – 2520-6214



- 49.Miguel, S., Chinchilla-Rodriguez, Z., & de Moya-Anegón, F. (2011). Open access and Scopus: A new approach to scientific visibility from the standpoint of access. *Journal of the American Society for Information Science and Technology*, 62(6), 1130–1145. [CrossRef]
- 50.Mills, D. Q. (1996). The decline and rise of IBM. *Sloan Management Review*, *37*(4), 78-83. Available at: [Link]
- 51. Mujtaba, B. G., & Senathip, T. (2020). Layoffs and downsizing implications for the leadership role of human resources. *Journal of Service Science and Management*, 13(02), 209. Available at: [Link]
- 52.Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, 148, 101-115. [CrossRef]
- 53. Navaneetha, K., & Mohan, P. (2023). Bibliometric and Visualization Analysis On Financial Technology Using Scopus Database. *Scandinavian Journal of Information Systems*, *35*(1), 961–975. [CrossRef]
- 54.Ngoc Su, D., Luc Tra, D., Thi Huynh, H. M., Nguyen, H. H. T., & O'Mahony, B. (2021). Enhancing resilience in the Covid-19 crisis: lessons from human resource management practices in Vietnam. *Current Issues in Tourism*, 24(22), 3189-3205. [CrossRef]
- 55. Nyaberi, D. N., & Kiriago, A. N. (2013). Effects of retrenchment on the morale and job security of surviving employees of Telkom Kenya Limited. *International journal of academic research in business and social sciences*, 3(9), 16. [CrossRef]
- 56.Ogbechie, R. (2015). An Exploration into the Socio-Economic Effects of Retrenchment: Evidence from Nigeria. *Journal of Economics and Sustainable development*, *6*(18), 224-356. Available at: [Link]
- 57. Oware, K. M., & Donkor, F. (2022). Does the Practice of Employee Volunteerism Affect Workforce Reduction and Defective Product Issues? Evidence from India. *Public Organization Review*, 1-15. [CrossRef]
- 58.Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4), 101717. [CrossRef]
- 59.Penn, R., & Nezamis, E. (2022). Job openings and quits reach record highs in 2021, and layoffs and discharges fall to record lows. *Monthly Labor Review*. [CrossRef]
- 60. Perdima, F. E., Kristiawan, M., Sofyan, D., Abdullah, N. M., & Nurhuda. (2022). Literature of the management of physical education base on scopus database: A bibliometric review. *Journal Sport Area*, 7(3), 474–484. [CrossRef]
- 61. Phillips, E. H. (2003). Continental Retreats Tax burden, empty seats taking toll on airline's balance sheet. *Aviation Week & Space Technology*, *158*(12). Available at: [Link]
- 62. Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of documentation*, 25, 348. [CrossRef]
- 63. Ratnasingam, J., Lee, Y. Y., Azim, A. A. A., Halis, R., Liat, L. C., Khoo, A., ... & Amin, M. N. Z. M. (2020). Assessing the awareness and readiness of the Malaysian furniture industry for Industry 4.0. *Bioresources*, 15(3), 4866-4885. Available at: [Link]
- 64.Recio-Saucedo, A., Crane, K., Meadmore, K., Fackrell, K., Church, H., Fraser, S., & Blatch-Jones, A. (2022). What works for peer review and decision-making in research funding: a realist synthesis. *Research integrity and peer review*, 7(2), 1-28. [CrossRef]
- 65. Rico, M., Pandit, N. R., & Puig, F. (2021). SME insolvency, bankruptcy, and survival: An examination of retrenchment strategies. *Small Business Economics*, 57, 111-126. [CrossRef]
- 66.Robbins, D. K., & Pearce II, J. A. (1993). Entrepreneurial retrenchment among small manufacturing firms. *Journal of business venturing*, 8(4), 301-318. [CrossRef]
- 67. Rogers, F. G., & Shook, R. L. (1986). The IBM Way: Insights into the World's Most Successful Marketing Organization. Harper & Row.
- 68. Scholten, W., Franssen, T. P., van Drooge, L., de Rijcke, S., & Hessels, L. K. (2021). Funding for few, anticipation among all: Effects of excellence funding on academic research groups. *Science and Public Policy*, 48(2), 265-275. [CrossRef]
- 69. Service Canada. (2023, August 7). Termination, layoff or dismissal. Canada.ca. [Link]
- 70. Sitlington, H. (2008). *Impact of downsizing, restructuring and knowledge sharing on retention of knowledge in organisations: Implications for organisational effectiveness* (Doctoral dissertation, Curtin University). Available at: [Link]





- 71. Smedsrød, B., & Longva, L. (2020). The costly prestige ranking of scholarly journals. *Ravnetrykk*, (39), 60-66. [CrossRef]
- 72. Standing, G., & Tokman, V. (1991). *Towards Social Adjustment: Labour-Market Issues in Structural Adjustment*. Geneva: International Labour Organisation. Available at: [Link]
- 73. Stemke, C. (2023, June 1). 10 things employers need to know about UK labour and employment laws. *Rippling*. [Link]
- 74. Sucher, S. J., & Gupta, S. (2018). Layoffs that don't break your company better approaches to workforce transitions. *Harvard Business Review*, 96(3), 122-129. [Link]
- 75. Sweileh, W. M. (2020). Bibliometric analysis of peer-reviewed literature on climate change and human health with an emphasis on infectious diseases. *Globalization and health*, *16*(1), 1-17. [CrossRef]
- 76. Tijssen, R. J., & Van Raan, A. F. (1994). Mapping changes in science and technology: Bibliometric co-occurrence analysis of the R&D literature. *Evaluation Review*, 18(1), 98-115. [CrossRef]
- 77. Tonta, Y., & Akbulut, M. (2020). Does monetary support increase citation impact of scholarly papers? *Scientometrics*, 125(2), 1617-1641. [CrossRef]
- 78. Tourish, D., Paulsen, N., Hobman, E., & Bordia, P. (2004). The downsides of downsizing: Communication processes information needs in the aftermath of a workforce reduction strategy. *Management Communication Quarterly*, 17(4), 485-516. [CrossRef]
- 79. Verdier, M. A., & Lapeyre, J. B. (2021). The myth of workforce reduction efficiency: The performativity of accounting language. *Critical Perspectives on Accounting*, 102380. [CrossRef]
- 80. Vujnovic, M., & Foster, J. E. (2022). Bringing the FUD to Thin the Ranks. *In Higher Education and Disaster Capitalism in the Age of COVID-19* (pp. 57-104). Cham: Springer International Publishing. Available at: [Link]
- 81. Wagar, T. H. (1998). Exploring the consequences of workforce reduction. *Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences de L'Administration*, 15(4), 300-309. [CrossRef]
- 82. Wayhan, V. B., & Werner, S. (2000). The impact of workforce reductions on financial performance: A longitudinal perspective. *Journal of Management*, 26(2), 341-363. [CrossRef]
- 83. Weller, S. A. (2007). *The Other Side of Precariousness: The Cost of Job Loss. Working Paper*. Victoria University, Melbourne, Australia. Available at: [Link]
- 84. Witte, H. D. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of work and Organizational psychology*, 8(2), 155-177. [CrossRef]
- 85. Zakaria, R., Ahmi, A., Ahmad, A. H., Othman, Z., Azman, K. F., Ab Aziz, C. B., ... & Shafin, N. (2021). Visualising and mapping a decade of literature on honey research: a bibliometric analysis from 2011 to 2020. *Journal of Apicultural Research*, 60(3), 359-368. [CrossRef]
- 86.Zatzick, C. D., & Iverson, R. D. (2006). High-involvement management and workforce reduction: competitive advantage or disadvantage? *Academy of management Journal*, 49(5), 999-1015. [CrossRef]