

Navigating the Shift from Work-Life Balance to Work-Life Integration in Remote Work: A Bibliometric Analysis

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Abstract. This study employs a bibliometric analysis to explore the shift from work-life balance to work-life integration in the context of remote work. Using data from the Scopus database, we analyze 152 articles and apply the VOSviewer software to examine co-authorship, co-citation, and keyword co-occurrence networks. The analysis reveals six distinct research clusters focusing on themes such as work-family conflict, productivity, gender and mental health, job satisfaction, employee performance, and leadership. The findings highlight the increasing importance of work-life integration in remote work settings and the need for organizations to develop strategies that support employees in managing the boundaries between work and personal life. This study contributes to the understanding of the evolving nature of work-life balance in the era of remote work and provides valuable insights for researchers and practitioners navigating this shift.

Keywords: Gender, Job Satisfaction, Employee Engagement, Work-Family Conflict, and Work-Life Balance

1. Introduction

Remote work has seen a significant increase in recent years. The global COVID-19 pandemic has pushed the transition to more adaptable work environments. Many companies have recently implemented permanent work-from-home policies for their employees, realizing the advantages of remote work for both individual employees and the overall operation of the business (Sull et al., 2020). As a result, it is critical to understand the effects of telecommuting and how it affects employees' work-life balance. Work-life balance (WLB) has received a lot of attention and has become a major concern for working-class families (Gragnano et al., 2020). The concept of striking a healthy balance between one's personal and professional lives has received a lot of attention and respect in the field of management studies. The notion of work-life balance has piqued scholars' interest and encouraging them to examine many elements of it. This includes its definition, tactics for achieving it, impacts, and the development of organizational policies to promote its implementation (Khoury, M. M., 2021). There has been little research into visual bibliometrics, which has sparked little interest among scholars (Feeney & Stritch, 2017; Dixit et al., 2023). Similarly, there has been a severe absence of research in the field of remote work-life balance, with little to no emphasis paid to this issue. Bibliometric studies have shown effectiveness in variety of sectors, including entrepreneurship (Forliano et al., 2021), operations management (Ellegaard & Wallin, 2015), management, and innovation (Rötzel, 2018). These studies help researchers find and investigate different routes of study within these disciplines. The objective of this research is to provide a comprehensive examination of the evolution of work-life balance. The importance of meeting the needs of families and individuals within organizational settings cannot be overstated. Employers must establish a positive environment that can adapt to the changing dynamics of both work and personal life (Beckel & Fisher, 2022). The term "work-life balance" refers to the objective of spending less time on work-related duties in order to prioritize and devote more time to non-work areas of life, such as family commitments (Lupu, 2021). Work-life balance can be used to align an organization's strategic policy with current trends (Shouman et al., 2022). The prominent presence of women, the growing number of elderly people working in the economy, workers with chronic health conditions, unmarried workers, and couples without children have all served as motivators for research into work-life balance (Gragnano et al., 2020).

The observed tendency emphasizes the importance of maintaining a harmonious work-life balance. As a result of recent advances in both professional and personal realms, there is a growing need to reconsider the concept of work-life balance (Haeger & Lingham, 2014; Tahir, 2022). Currently, the concept of work-life balance has garnered a lot of attention as a critical aspect for individual and organizational success. Empirical research consistently revealed that having a healthy work-life balance benefits both individuals and companies (Wong et al., 2021; Zhenjing et al., 2022).

As a result, it is critical for researchers and practitioners to gather and synthesize existing knowledge about work-life balance and remote employment. In light of the aforementioned problems, this study proposes that the following research inquiries, known as research questions (RQs), be investigated: the operations of various firms, as well as the most notable study on remote work-life balance undertaken between 2020 and 2022. Refer to Figure 1.

Research Question 1: What are the primary themes and patterns in the literature regarding work-life balance and work-life integration in the context of remote work? Analysing the extent of country and publication collaboration, the identities of contributing authors, and the cooperative network of documents pertaining to the topics of work-life balance and remote work to explain its importance.

Research Question 2: How to establish an effective structure capable of efficiently managing the demand for remote work among individuals and organizations? Identify the most pertinent publication institutions, explore their collaborative networks, and examine the highly cited publications associated with this field.

Research Question 3: To what extent does co-word analysis shed light on the interrelationships among keywords pertaining to work-life balance and remote work?

Research Question 4: What are the most recent developments and emerging patterns in the realm of research topics pertaining to work-life balance and remote work?

An initial inquiry was carried out using the widely recognized academic search engine, Google Scholar, using the precise terms "Work-life balance" and "Remote work." The search was conducted in May 2023. The search yielded a significant quantity of scholarly publications, totaling more than 13,600 relevant findings. Continuing scholarly efforts are being carried out in the field, which require additional examination. Considering the statement mentioned earlier, it is important to highlight that a thorough analysis of the academic literature on work-life balance in 2020 shows a noticeable change in focus towards remote work and the blending of work and personal life (Colavizza et al., 2020; Dehghanbanadaki et al., 2020; Nasab, 2020).

Thus, it is evident that the current knowledge on the study of remote work and its influence on work-life balance is still in its early stages. Therefore, it is crucial to carry out a thorough inquiry in the fields of well-being, mental health, and related disciplines (Gallacher and Hossain, 2020). This project aims to undertake a thorough bibliometric analysis of research conducted on the subjects of work-life balance and remote work from 2020 to 2023. The bibliometric analysis of studies on remote work and work-life balance has received significant attention in numerous scholarly works. However, this work conducts a thorough analysis to identify and tackle specific deficiencies in the current research. This study does a thorough bibliometric investigation of the work-life balance phenomena. This study seeks to expand the current evaluation by doing an analysis that integrates remote work. This research uses a broad database to conduct a bibliometric assessment of several social science settings. Many studies on work-life balance have not sufficiently considered the interaction between different scientific fields and the use of outmoded bibliometric methods (Yegros-Yegros et al., 2015). The present study employs a range of sophisticated bibliometric techniques, including analysis of keyword occurrence data, descriptive analysis, text mining, network analysis, and cluster analysis. The study findings are enhanced in terms of comprehensiveness and depth through the utilization of a blend of novel and classic approaches.

2. Literature Review

Prior to doing the bibliometric study, remote work and work-life balance are defined, and then the literature on related topics is evaluated. We offer the criteria for classifying remote work life balance-induced events as "work life integration," and we utilise complex adaptive systems theory to describe a method that organisations might employ to manage the problems and opportunities posed by the same experiences.

2.1. Work Life Balance

The phenomenon of work-life balance has been observed to have a significant impact on various stakeholders, including women, men, families, and organisations (Shouman et al., 2022). The significance of work-life balance (WLB) has been widely recognised among individuals of various demographics, including both genders, parents and non-parents, as well as singles and couples (Chung & Van Der Lippe, 2018; Filippi et al., 2022). The growing awareness regarding the necessity of achieving a harmonious equilibrium between one's professional commitments and personal life is of utmost significance for enhancing both individual and organisational efficacy (Nwachukwu et al., 2021). The comprehension of the work-life balance concept may appear straightforward; however, there exists a lack of consensus among scholars regarding the most appropriate terminology to employ. Some researchers opt to use the term work-life integration instead (Lupu, 2021). There has been ongoing scholarly discourse regarding the interpretation of the term "balance," leading to further perplexity within the domain (Vicinanza et al., 2022; Shouman et al., 2022). According to certain

scholars, the concept of balance is understood as the equitable allocation of time, energy, and dedication between one's professional and personal responsibilities (Kozlowski & Ilgen, 2006; Wong et al., 2021; Weerarathna et al., 2022). According to various perspectives, it has been suggested that the concept of balance is contingent upon an individual's unique set of circumstances (Davidson, 1991; Sitkin et al., 1994; Fiet, 2001; Glenn, 2021). According to the proponents of subjectivism, it is argued that greater emphasis should be placed on the subjective perception of individuals regarding their circumstances (Addis & Holbrook, 2001).

According to Grzywacz and Butler (2007), the idea of work-life balance refers to the efficient management of the various demands and obligations related to one's paid employment while also taking into account other significant aspects of life, such as familial obligations, community engagement, volunteer work, personal leisure activities, self-improvement endeavours, and the allocation of free time. With regard to one's responsibility to one's family and at job, this is about the level of contentment that person feels. The idea of work-life balance, according to academic discourse, refers to the situation in which a person shows a dedication to both professional commitments and personal responsibilities outside of work. The idea of work-life balance (WLB) can be characterised as the alignment or "fit" between the numerous roles an individual assumes in their work-related obligations and their personal lives, according to the conclusions of the reference (Tahir, 2022).

Previous studies have revealed that implementing flexible work schedules provides a number of advantages for both firms and employees. The promotion of work-life balance, which is essential for people to successfully manage their personal and professional duties, is one standout benefit (Kasbuntoro, 2020). Because employees can modify their working hours to better meet their requirements and preferences, flexible work schedules have also been found to lower job pressure (Kasbuntoro, 2020). The implementation of flexible work arrangements has also been associated with lower employee turnover rates. This is due to the fact that workers now have more autonomy and influence over their working conditions, which increases job satisfaction and organisational commitment (Ray & Pana-Cryan, 2021). Additionally, it has been discovered that implementing flexible work schedules increases employee engagement since people feel more empowered and motivated when they have the freedom to balance their personal and professional life (Weideman & Hofmeyr, 2020).

Working conditions and the nature of employment relationships have undergone significant changes recently (Kelliher et al., 2018). Kasbuntoro (2020) described that the observed transformations encompass an increase in the utilisation of zero-hours contracts and self-employment, as well as a decline in full-time, permanent employment characterised by standard working hours under a sole employer. The concept of work-life balance is a crucial aspect that empowers individuals to effectively manage their personal lives by establishing and maintaining harmonious conditions.

According to previous studies (Ray & Pana-Cryan, 2021; Tahir, 2022), it has been observed that organisations often exhibit a tendency to hire a smaller number of women who have children. This can be attributed to the fact that these organisations prioritise work-related commitments over family responsibilities.

2.2. Remote Work

"Remote work" refers to work done outside of conventional business hours and places. Some self-employed professionals, artists, writers, and artisans work from home and set their own hours, although the majority of employees work 9 to 5 at a fixed location (Olson, 1983; Salmi, 1997). The opportunity to work from home was first intended to make things easier for employees. Olson (M. H.) categorized remote work into four categories in 1983. These include Satellite Work Centers, Neighborhood Work Centers, Flexible Work Arrangements, and Work from Home. Employees choose to work from home on their own and were pleased with the decision. However, due to the COVID-19 epidemic, every organization has had to work from home to stay up with the ever-

changing globe. Most respondents found it easier to work from home with a computer and an internet connection (Wong et al., 2021; Weerathna et al., 2022). People who worked from home were concerned that the so-called "facility" of working from home would become a "hinderance" for many of them. The employees did not enjoy the internet discussions. They were experiencing a variety of obstacles, including technical difficulties, communication difficulties, digital exhaustion, an inability to connect emotionally, and more. Many research have indicated that people perceive working from home as both positive and negative (Duffy, 2022; Aziz, 2021). Some were pleased because they regarded it as an opportunity to spend more time with family and undertake fun activities. Others, on the other hand, were stressed out by the forced transition; workers felt isolated and down on their luck in their social lives, and it was difficult to reconcile work and personal life (Duffy, 2022). With such a wide range of responses from employees, it is difficult to draw any conclusions. So, we need to figure out what has changed the way we work and what will continue to do so.

3. Research Methodology

The scientific data used in this analysis came from the Elsevier Scopus database. Elsevier created this database in 2004. It now has over 77.8 million records (since 1969), including over 23,000 peer-reviewed journals, 294 trade publications, over 852 book series, and over 120,000 scientific events from throughout the world. So, it's easy to see that Scopus gives one of the most complete pictures of the state of study around the world right now. Scopus's users can take advantage of a number of features that speed up bibliometric analysis. For example, multicriteria filters allow the global sample to be split up by things like journal name, type of document, year of publication, authors' names, affiliations, number of citations, etc (Elsevier, 2004).

3.1. Search String and Search Criteria Limits

The current study employs a bibliometric approach, utilizing VOSviewer software, to offer a thorough review of the available research on the subject of work-life balance. VOSviewer is a software application that provides a diverse array of analytical data related to many facets of academic study. The aforementioned facts encompass information pertaining to countries, prominent writers, organisations, leading journals, and references relevant to the subject matter of work-life balance. The Scopus record identifies 4094 articles and excluded 2356 articles through automation tools like language: english, document type: article, source type: journal, and publication stage: final. Further 1738 articles have been screened based on relevance to the study and covering scope of the study 538 articles have been assessed. Finally, 152 articles have been reviewed, which were sourced from the Scopus database (Figure 1).

The study's findings enable the identification of prospective future trends and research opportunities. The objective of this paper is to present a thorough examination of the topic of work-life balance and remote employment, encompassing its core concepts and principles. Furthermore, it presents an innovative paradigm for performing visual research in the field, thus addressing the current disparity between studies on distant work-life balance and bibliometric analysis.

The current paper is organised in the subsequent manner: This section will present a brief of the current theoretical framework and scholarly literature concerning remote work and its impact on work-life balance. The approach utilised in the current investigation is explicated in Section 3 of this scholarly paper. The fourth section of the research report offers a thorough exposition of the findings obtained from the bibliometric analysis carried out in this investigation. Section 5 provides conclusions and prospects for future research.

3.2. Descriptive Analysis

The following section provides a comprehensive overview of the results obtained from the bibliometric analysis conducted. Before that, it offers descriptive analysis conducted using Scopus. Table 1 provides a comprehensive breakdown of the number and proportion of articles, book chapters, and conference papers published from 2001 to 2023. The research on remote-work-life balance has

seen a significant increase from 2020 to 2022 due to the widespread implementation of remote working by many organisations. This trend is evident in Figure 2.

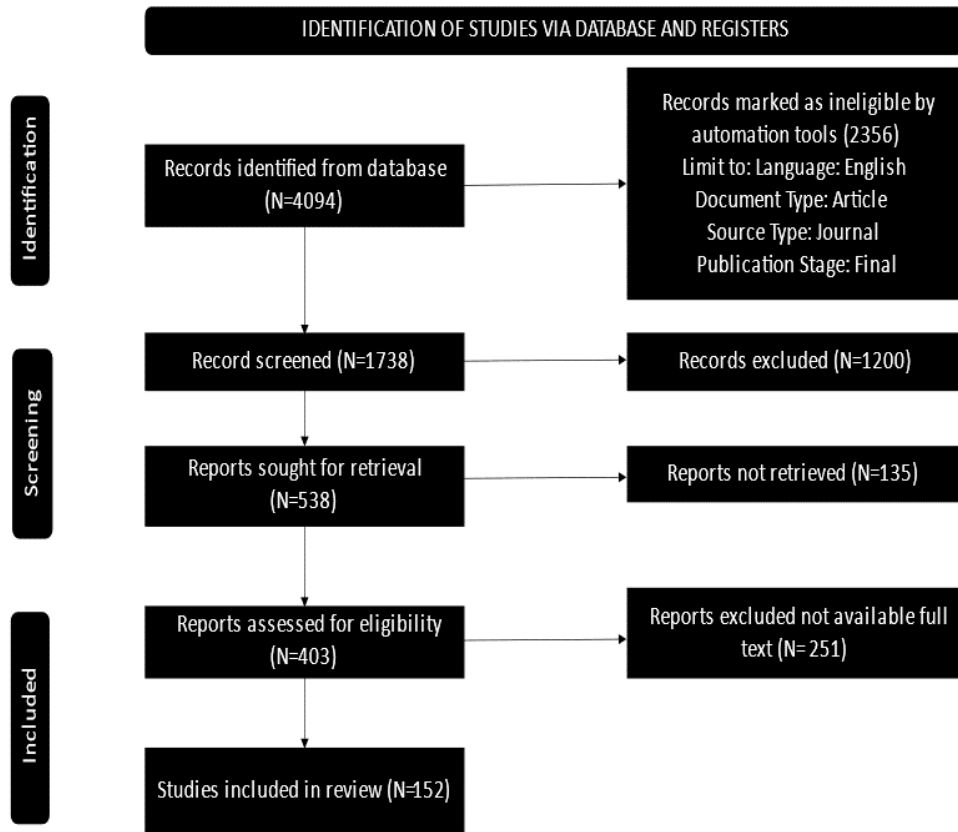


Figure 1 Research schema for the bibliometric analysis data determination

Documents by year

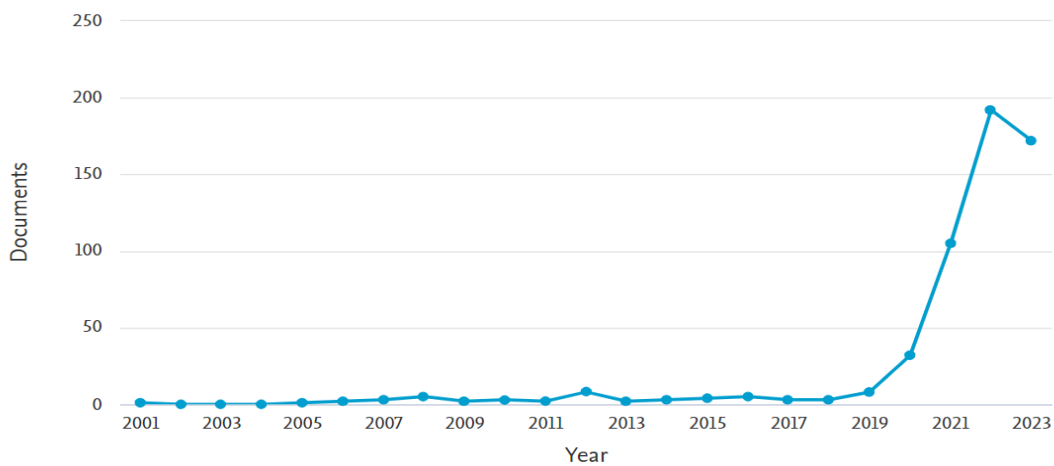


Figure 2 Document published since 2001 to July 2023

<u>Document type</u>	<u>Documents</u>	<u>Proportion</u>

Document type	Documents	Proportion
Article	479	86.2%
Book Chapter	50	9.0%
Conference Paper	27	4.9%
	556	100%

Table 1 Type of retrieved documents

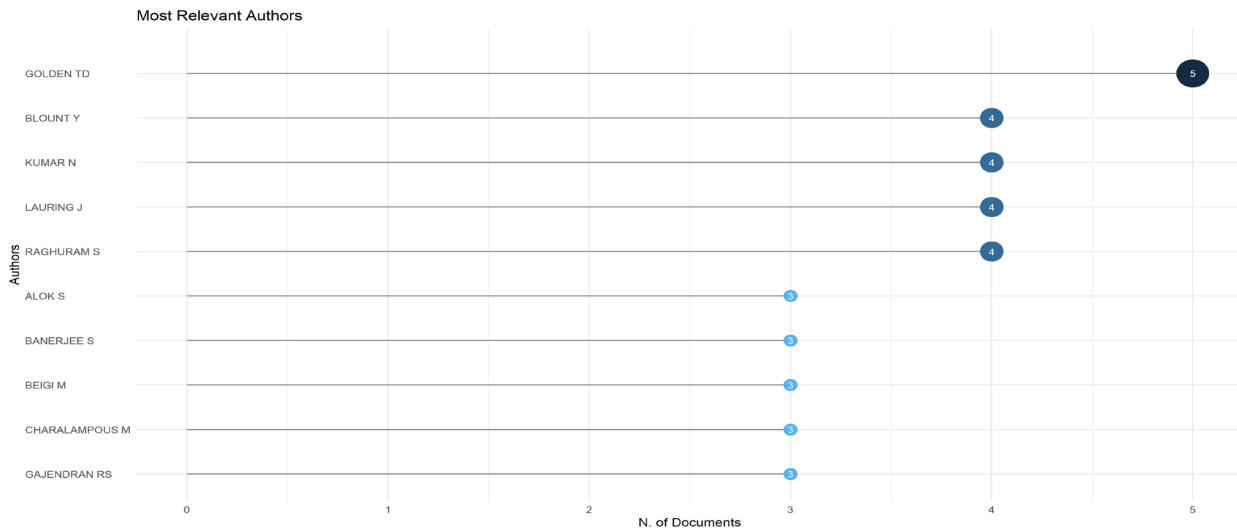


Figure 3 Most relevant authors

The Sustainability Switzerland reported highest publication on the remote work- integration theme in the year 2022. Figure 2 describes the document per year published by various journal sources indexed in Scopus. However, it also reported downfall in the number of publications but International Journal of Manpower and Information Technology and People stated the increasing trend in the area. Figure 3 shows the most relevant authors name and contributed documents and figure 4 shows documents per year by source.

Documents per year by source

Compare the document counts for up to 10 sources.

[Compare sources and view CiteScore, SJR, and SNIP data](#)

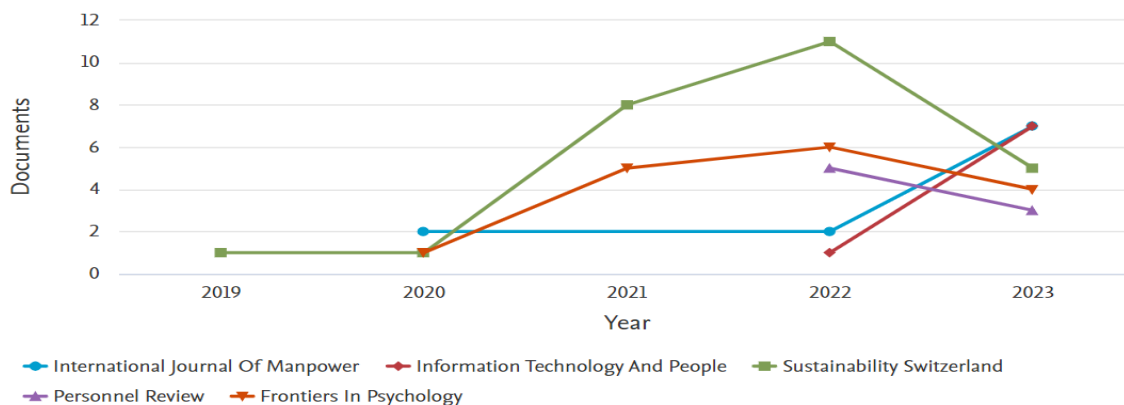


Figure 4 Documents per year by Source

Figure 5 depicts countries with co-authorship. At one threshold, 83 countries possessed at least one document, but at the five thresholds, the number drops to 35. At one level, 83 countries meet the requirement, but at five thresholds, only 35 countries do. There were 65 connections. There were 14

clusters among the related elements. The first cluster included seven items, whereas the last contained only two. Some of the goods are international and cross-continental in nature. Figure 4 also shows that American, English, and Indian institutions are significant and well-connected through the network.

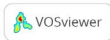
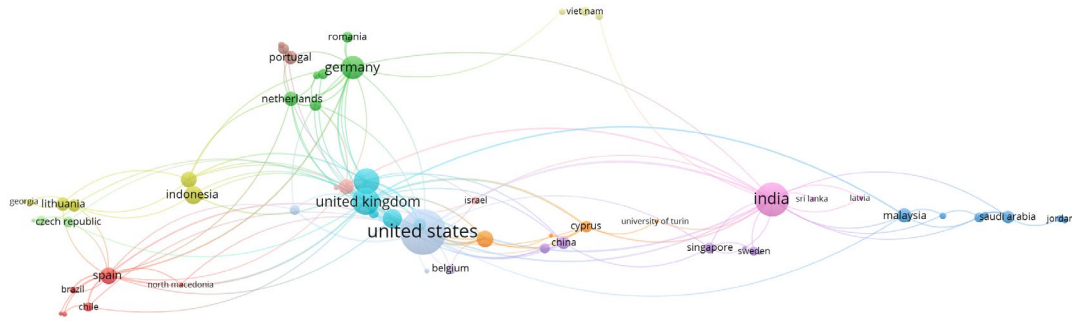


Figure 5 Co-authorship countries

The table reported sources having citations more than 100. 22 sources were having citations more than 100 and Journal of Applied Psychology had 1185 citations with 3 research studies.

ID	SOURCE	DOCUMENTS	CITATIONS
1	Journal of Applied Psychology	3	1185
2	Psychological Science in The Public Interest	1	619
3	Applied Psychology	3	476
4	European Journal of Work and Organizational Psychology	3	308
5	Sustainability (Switzerland)	26	296
6	New Technology, Work and Employment	5	207
7	Gender in Management	3	202
8	Human Relations	2	188
9	Community, Work and Family	5	162
10	Organization Science	1	159
11	Academy of Management Annals	1	157
12	Journal of Management	2	157
13	Policy Design and Practice	1	153
14	European Societies	1	142
15	International Journal of Public Sector Management	1	142
16	Journal Of Family and Economic Issues	2	141
17	Gender, Work and Organization	5	138
18	Personnel Psychology	1	135
19	Journal of Business Research	7	124
20	Communication Monographs	1	111
21	Grey Journal	1	107
22	International Journal of Manpower	11	107

Table 2 Source, Document and Citations

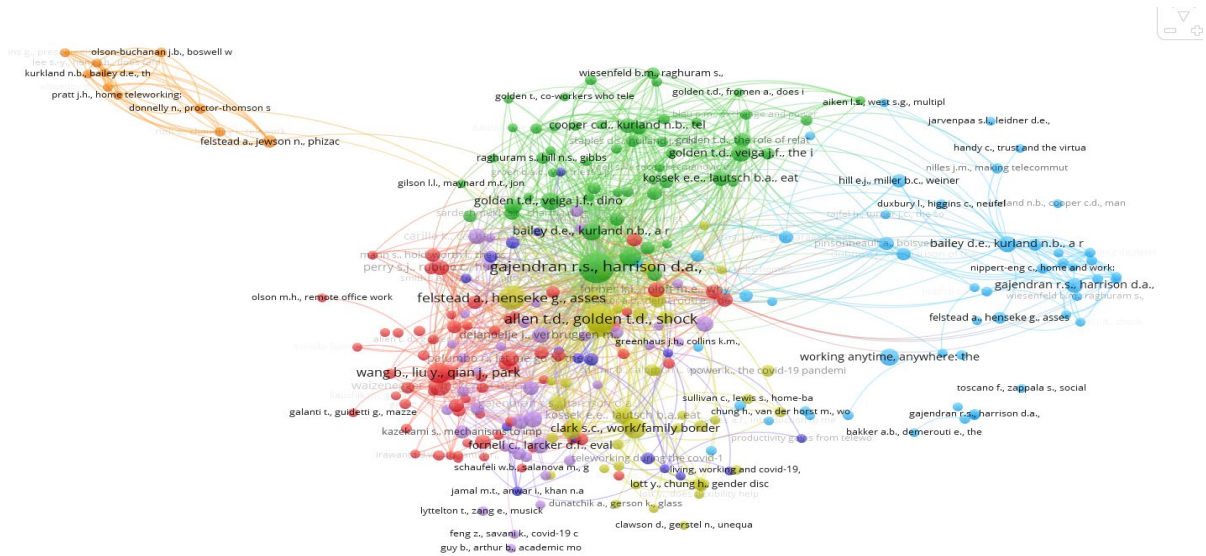


Figure 6 Reference and co-citation network

The visual representation (Figure 5) is a network visualization produced using VOSviewer, a widely utilized tool for constructing bibliometric maps. This map illustrates the cooperative connections across various countries in the realm of work-life balance and work-life integration research, particularly in the context of remote employment. Each node in the graph represents a specific country, and the size of the node corresponds to the amount of research output produced by that country. The lines (or edges) connecting the nodes symbolize collaborative endeavors, such as co-authorships, among scholars from distinct nations. The thickness of these lines corresponds to the intensity or frequency of the cooperation. The United States and the United Kingdom are the most prominent nodes, signifying that these countries have the biggest volume of research output in this sector. India is considered an important node in the field, indicating a substantial contribution to the literature. Additional noteworthy nations encompass Germany, Australia, as well as diverse European and Asian countries.

The presence of thick lines between the United States and the United Kingdom signifies a robust and highly cooperative relationship. The United States and the United Kingdom are connected to several countries, including India, Germany, and Australia, through thinner lines, which suggests intermediate degrees of collaboration. The thinnest lines represent countries that have infrequent collaborative interactions. A cluster comprises countries such as the United States, the United Kingdom, and Germany.

India and its cooperating partners form another cluster. Additional clusters are observable surrounding minor nodes that symbolize different nations. The United States, the United Kingdom, and India are prominent centers of study and collaboration in the area of work-life balance and integration in remote employment. The map displays a worldwide network of research, highlighting the international significance of this topic and the presence of substantial research collaborations across borders.

Figure 6 reported co-citations for reference (unit of analysis) generated using VOSviewer, most likely depicting a network of co-authorship or citation in the area of work-life balance and work-life integration in remote work. Every node in the system represents either an author. The node's size generally corresponds to the amount of publications or citations, with larger nodes indicating people or works that are more prominent or productive. The lines linking the nodes symbolize collaborative

endeavors, such as co-authorships or citation connections between the works. The thickness of these lines corresponds to the level of collaboration or the frequency of citations.

The nodes are categorized by color to create clusters. Each cluster denotes a cohort of writers or works that are intimately connected through co-authorship or citations. Distinct hues represent distinct clusters, which can suggest thematic or topical categorizations within the research domain. Nodes located at the core of the network, particularly those that are larger, signify authors or papers that are central or highly connected. Authors such as "Felstead A" and "Golden T.D." are prominently featured, suggesting their substantial impact on the field.

The discrete clusters indicate groups of scholars or articles that often reference each other or work together. For example, the green cluster may symbolize a particular area of research concentration within the wider field, whereas the red cluster signifies another. Nodes located in the periphery identify authors or articles with few connections, suggesting specialized or new areas of research. The image illustrates the many patterns of collaboration and the interconnectedness between different scholars or groups. Identifies prominent researchers or influential articles that act as central nodes within the network. Emphasizes the presence of specific thematic domains within the study of work-life balance and work-life integration in remote work. In summary, this network visualization offers a thorough perspective of the collaborative environment in the research field, highlighting important contributors, their connections, and the range of topics covered in the literature.

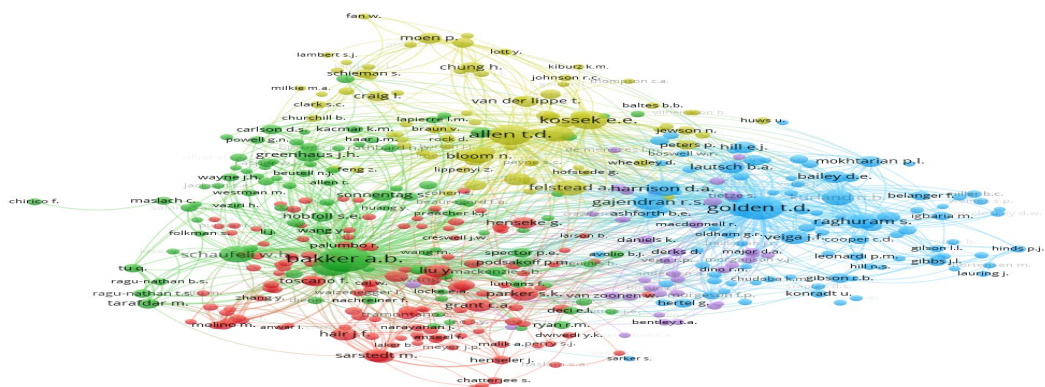


Figure 7 Author and co-citation relationship

Figure 7 shows network, illustrating the connections among authors in the domain of work-life balance and work-life integration in remote work. Every node symbolizes a distinct author. The node's size is determined by the author's prominence, which is usually measured by the quantity of publications or citations. The lines linking the nodes symbolize the connections between authors who have collaborated on a project, demonstrating their co-authorship affiliations. The thickness of these lines corresponds to the intensity or frequency of these collaborations.

The nodes are categorized into clusters, where each cluster is assigned a certain color to indicate a group of authors that interact regularly or share thematic connections. Various colors represent separate study groups or subject topics within the wider field. Green Cluster: Comprises authors such as "Bakker A.B.", signifying a notable concentration of research activity. The Red Cluster is a notable group of authors who are highly interrelated, indicating a strong and unified research group. Yellow and Blue Clusters: These clusters also showcase prominent research groups, including authors such as "Allen T.D." and "Golden T.D.", which signify distinct thematic or collaborative areas of interest.

3.3. Understanding the Visualisation:

The presence of larger and centrally positioned nodes, such as "Bakker A.B." and "Allen T.D.", indicates that these authors are important contributors who have engaged in several partnerships. The network has dense connections inside clusters, suggesting robust collaboration within groups, while inter-cluster linkages demonstrate partnerships across different themes. Peripheral nodes refer to writers who have fewer connections, suggesting that they either specialize in specific study areas or are relatively new contributors to the field. Clusters with high-density areas suggest the presence of robust collaborative networks. Key authors who are identified as core nodes are very likely to have significant influence in the field. They often serve as hubs for the distribution and cooperation of knowledge.

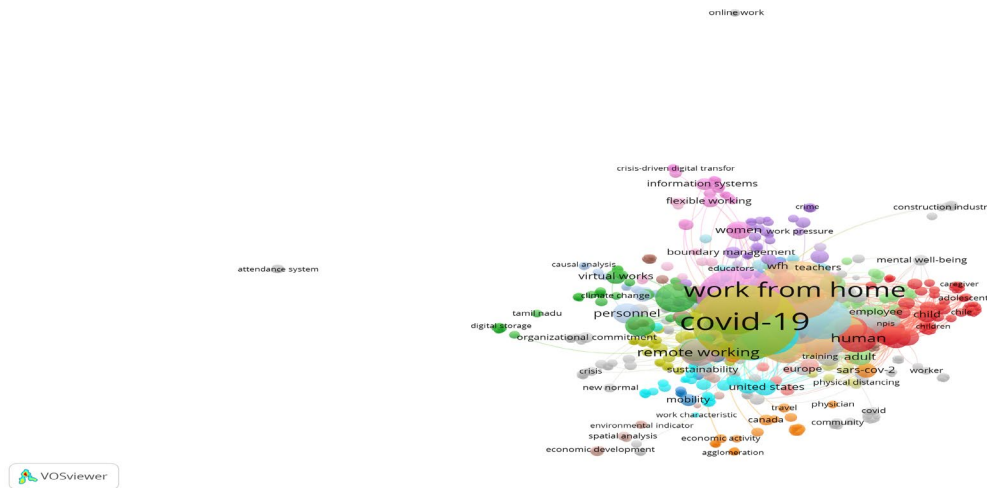


Figure 8 Keyword and occurrence

The table below indicates the author’s keywords occurrences and total link strength of remote work and work life balance. This shows that the search strings the study employed is on point as the key force behind the remote work i.e., covid 10 is on top the list with 169 frequency and 711 total link strengths. Remote work has 119 occurrence and work life balance has 48 occurrence and 512 and 212 link strength respectively. Apart from the topic words “remote work” and “work-life balance”, the most emerging word is “job satisfaction”, followed by “productivity”, and “well-being”. Further, Table 5 shows the composition of remote-work-life balance and the direction of different research perspectives on the same.

	KEYWORDS	OCOURANCE	LINK STRENGTH
Cluster 1	working conditions	16	80
	employee	5	66
	gender	20	64
	work-family conflict	15	64
	human resource management	16	61
	employment	16	58
	personnel	14	44
	management	7	42
	communication	6	37
	europa	5	32
	women	11	28

	labor market	5	25
	spatiotemporal analysis	5	25
	well being	6	24
	work design	6	20
Cluster 2	productivity	30	160
	epidemic	13	75
	united states	9	75
	australia	9	55
	work engagement	14	51
	stress	12	42
	information and communication technology	7	42
	technology	9	38
	public health	5	36
	survey	5	31
	workers'	5	23
	higher education	8	22
	technostress	8	20
Cluster 3	human	27	299
	humans	22	264
	female	12	191
	article	15	190
	male	12	179
	adult	10	156
	mental health	16	134
	epidemiology	10	134
	wellbeing	17	99
	child	7	97
	psychology	8	76
	virtual work	29	73
	child parent relation	5	68
	parenting	5	42
Cluster 4	job satisfaction	37	144
	well-being	26	82
	job stress	8	44
	life satisfaction	9	36
	flexible work arrangements	8	29
	emotional exhaustion	6	24
	india	6	20
Cluster 5	questionnaire	6	84
	job performance	8	62
	work performance	6	47
	burnout	7	39
	social isolation	5	34
	workload	5	34

	distributed work	7	27
	job demands	6	24
Cluster 6	workplace	25	165
	work environment	7	67
	perception	9	54
	leadership	8	52
	flexible work	6	30
	sustainability	6	26
	questionnaire survey	6	22
	employees	7	20

Table 3 Keyword and Strength Link (above 20 link strength reported)

The research showed that when all keywords were included at a single threshold level, there were 1,000 items and 30 clusters. Specifically, item 1 included 30 things, whereas item 4 contained only four. However, when the criterion was set to 5, the number of objects climbed to 102, with six clusters. Keyword co-occurrence analysis is a text mining technology that determines the relationship between keywords. The application makes it easier to implement large amounts of unstructured content, hence overcoming the issues of data mining. Text mining algorithms can be used to extract keywords from text documents and analyze and organize them. This entails looking for commonalities (co-occurrences) and anomalies in textual data (Kostoff et al. 2001).

The study uses VOSviewer to extract keywords. The co-occurrence network comprises of 2,117 terms divided into six groups. To guarantee a clear representation, only keywords appearing at least five times in the corpus are used. The notions of work from home, teleworking, home working, remote work, work-life balance, and COVID-19 were present in all clusters and serve as the core of our subject. As a result, we omitted them when analyzing their association with other parameters.

Figure 8 depicts a visual depiction in which the points represent keywords and the size represents their frequency of recurrence. In this phase of the study, we focus solely on all six clusters. Table 3 summarizes the statistics for the six clusters, including the frequency and overall connection strength of the chosen phrases.

First cluster in Table 3, which consists of 15 items indicated in red, focuses on the issue of "Managing work-family conflict during remote work life" within the designated area. This cluster investigates the link between work-family conflict and variables such as gender, well-being, working circumstances, and communication. Meenakshi et al. (2013) found that gender has a substantial impact on work-life balance management and communication. Researchers such as Adisa et al. (2022), Becker et al. (2022), and Pennington et al. (2022) have presented strong evidence for the importance of gender, wellbeing, and communication. This cluster also examines structural aspects of work, such as working conditions, human resource management, and gender issues. It also explains how to maintain a healthy work-life balance, effectively manage staff, and facilitate communication. The information is specifically suited for the European market.

Cluster 1- Red	working conditions, employee, gender work-family conflict, human resource management, employment, personnel management, communication, Europe, women, labor market	Managing work family conflict during remote work life
Cluster 2- Green	Productivity, epidemic, united states, Australia, work engagement, stress, information and communication technology, technology, public health	Impact on productivity of remote-work life balance
Cluster 3- Blue	Humans, female, article, male, adult, mental	Role of gender and mental

cluster focuses on job satisfaction, overall health, stress, and work-life balance. It also examines flexible work arrangements and emotional fatigue, with a focus on India.

The co-occurrence of keywords generates a fifth cluster of eight purple-colored keywords. The primary focus is on measuring employee performance and how to maintain it while working remotely and balancing personal responsibilities. This cluster contains phrases like "burnout," "social isolation," "workload," "distributed work," and "job demands," as well as two terms connected to working from home: "remote working" and "WFH." Women's productivity and job satisfaction were greatly damaged by the pandemic due to the gender gap and the burden of unpaid work (Haeger & Lingham, 2014; Feng and Savani, 2020). This cluster focuses on assessing workplace performance, coping with burnout, overcoming social isolation, and controlling workload. It also addresses the concept of distributed work and the requirements of various job categories.

The sixth cluster, symbolized by the color sky blue, examines the relationship between perception, leadership, and work-life balance in the context of remote employment. It is distinguished by eight keywords that summarize its core subjects in the field of social science. This conversation focuses on the issues that employees confront in the workplace during the pandemic. These obstacles include concerns about the work atmosphere, flexible employment options, and sustainability. Furthermore, the importance of leadership and how it effects the perception and management of work-life integration are discussed. This cluster examines the total work environment, including leadership and how people view it. It includes aspects of adaptive employment and environmental sensitivity.

4. Discussion

The primary goal of this study was to look into how working from home affects maintaining a healthy work-life balance throughout the epidemic. The dynamic between work and personal life has shifted considerably. Instead of focusing on work-life balance, people are now prioritizing integration. This transformation has had a wide-ranging impact on both corporations and employees. The analysis was carried out using the bibliometric approaches described in this paper, notably VOSviewer. The analysis found that the United States had the most publications, with 128 papers. This concludes Research Question 1. It was also determined that the United States had the most partnerships of any of the countries analyzed. When it comes to collaboration on publications, the United States is the most important subnetwork, contributing 45 publications. Blount Y., from Deakin Business School in Melbourne, Australia, has written the most articles for this network, with four, while the other authors have each written two. The study by Gajendran R.S. and Harrison D.A. (2007) had a substantial impact on this network, as indicated by its 1,122 citations.

The systematic literature review outlines clear remote work regulations as well as the necessary technology and assistance to promote effective communication, cooperation, and performance management, ensuring a balanced approach to well-being and continuous improvement while adhering to legal obligations. The investigation found that the Faculty of Economics at Universitas Negeri Jakarta in Indonesia has the most linkages, with 125 strong links across 11 papers. This concludes Research Question 2. The United States partnered with authors from several schools, all of whom were well-known in their respective fields. Switzerland has 68 publications in this subject. Furthermore, Gajendran R.S. and Harrison D.A. (2007)'s work was highly cited. The study's findings show that the authors addressed these issues by creating a theoretical framework and conducting a meta-analysis of 46 natural setting-based research investigations. The investigations involved a total of 12,883 employees. According to the data, telecommuting or working from home had a slight but usually positive impact on immediate outcomes such as increased autonomy and fewer conflict between work and family. It is critical to emphasize that working from home has no negative impact on the quality of interactions at work. Researchers discovered that working from home boosts job happiness, success, turnover intentions, and role stress.

Researchers used text mining, co-word analysis, and the bibliometric tool VOSviewer to analyze Research Question 3. As a consequence, six separate groups emerged, each of which was connected with working from home and juggling work and family life. These areas included work-family conflict, gender, mental health, life happiness, employee performance, perception, and leadership. As more people work from home, the line between job and personal life blurs, potentially leading to family problems. As a result, the work-life balance must be altered. This transformation has also resulted in the concept of combining work and personal life, as Kirchner et al. (2021) address. Setting strict boundaries and routines is critical for individuals who want to balance business and family life while working from home.

When people first started working from home, businesses were unsure how effective they would be individually and collectively (Cluster 2). Finding a good work-life balance can increase productivity by creating a flexible work environment that reduces the stress of commuting and allows employees to determine their own hours. However, it is important to highlight that combining work and personal life too closely may lead to burnout and a subsequent decrease in productivity.

Vargo et al. (2021) also explored how gender and mental health differences between men and women affect how effectively people maintain work-life balance when working from home (Cluster 3). Gender roles in work and home life have a substantial impact on people's health and happiness. Greater caregiving responsibilities can have a negative impact on mental health, especially for women. Men, on the other hand, may struggle to accept the fact that working from home blurs the line between job and personal life. These findings emphasize the significance of creating support structures and solutions to address the numerous challenges that people of different genders face when working from home.

Cluster 4 discusses the issue of achieving work-life balance while working from home. Working from home has been shown to lower people's happiness with their overall work-life balance. This is because working from home can make people feel lonely, and it can be tough to mentally disengage from work-related activities. As a result, remote workers must make an effort to form virtual social bonds. To preserve work-life balance, it is also vital to draw clear lines between work and leisure time.

The fifth cluster focuses on ways to improve employee performance while preserving a healthy work-life balance. Finding a healthy work-life balance can help employees perform at their best by allowing them to work from home, reducing stress and the need to travel (Hernandez, Y. A. T. 2020). To achieve this balance, individuals must have strong time management and communication skills in order to finish jobs on time and meet expectations.

Cluster 6 discusses leadership and how people view things when juggling work and life at home. Establishing effective leadership in the context of remote work demands a thorough understanding of various viewpoints on work-life balance (Shirmohammadi et al., 2022). This understanding is essential for creating a virtual space that is both welcoming and functional.

5. Conclusion and Limitations

The bibliometric analysis undertaken in this study provides a thorough review of the available literature on remote work and work-life balance. The findings indicate six separate research clusters, each with a focus on unique issues linked to the problems and potential of work-life integration in distant work environments. The study emphasizes the growing importance of work-life integration as businesses and individuals navigate the transition to remote employment. The findings of this study have significant consequences for scholars and practitioners. For researchers, the identified clusters and themes serve as a road map for future studies, identifying prospective topics for more exploration and collaboration. The study also emphasizes the importance of more interdisciplinary research that bridges gaps between fields such as psychology, management, and technology.

For practitioners, the findings underline the importance of developing methods and policies that help employees achieve work-life integration in remote work situations. This could include creating flexible work arrangements, providing tools for mental health and well-being, and cultivating a culture that appreciates and respects the separation of work and personal life. Future research could broaden the breadth of the analysis by incorporating additional databases and investigating new methodological approaches. In conclusion, this bibliometric analysis provides a timely and comprehensive overview of the research landscape on remote work and work-life balance. As organizations and individuals continue to navigate the challenges and opportunities associated with remote work, it is crucial to develop a deeper understanding of the factors that contribute to work-life integration. By building on the insights provided by this study, researchers and practitioners can work towards creating remote work environments that foster well-being, productivity, and success.

The current study demonstrates clear limitations when conducting a theoretical analysis. The potential for aspiring young researchers lies in the areas of focus and areas that have not been thoroughly investigated in remote work and work-life balance. The literature review suggests that future research should broaden its scope and strengthen its findings by including additional data from relevant scholarly databases such as WOS Google Scholar, PubMed, and EBSCOhost (Tseng et al., 2021). The sample obtained from the Scopus database, although comprehensive, may not be exhaustive. This means that the dataset may not include all relevant information. Additionally, there is a possibility of bias in the dataset due to the selection procedures used.

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