

A Systematic Review of Hybrid Workers' Performance and Well-Being Outcomes: A VOSviewer- Based Bibliometrics Study

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Abstract

Hybrid workplace is the new norm. This makes it relevant to explore the impact on well-being of employees affected by various factors and employee performance in remote or in a hybrid work settings post covid-19. Employee have to maintain performance standard and create work life balance which require organisation support. In this paper we aim to review the recent papers from 2019 to 2023 on employee performance, well-being in hybrid and remote workplaces and to observe if the policy implementation can enhance the employee performance. This paper is an endeavour to gain insights by applying bibliometric analysis and Systematic literature review. The application of bibliometric analysis represent a relatively nascent development that has garnered substantial attention within the domain of business research in recent years, as it elucidates the evolution and emergent trends in the field while demonstrating its capacity to administer substantial datasets obtained from repositories including Scopus and the web of science, thereby yielding significant research impact. The finding derived from the executed investigation unveiled an aggregate of 500 publication, of which 344 disseminated articles underwent rigorous bibliometric evaluation . From the perspective of Systematic reviews, highly cited papers from 2019 to 2023 in various domains were selected and analysed in this article. In the research results, increase in studies from 2 (2019) to 129 (2023) the initial phase involves quantitative analysis , which offers a comprehensive assessment of performance , well-being and hybrid work, utilizing tables, graphs and maps to emphasize the primary performance metrics related to article production and citation ,categorised into three clusters encompassing 53 keywords. The Subsequent phases entailed as systematic review of the most frequently cited articles organised in descending order to identify the predominant themes examined in the aftermath of the COVID-19 pandemic.

Keywords: Performance, Well-being, Remote work, Hybrid work, Bibliometrics, SLR, Systematic literature review, Covid-19

1. Introduction

Covid-19 pandemic has caused disruption in the economy and its impact can be seen in the way the organization work. The paradigm shifts in working culture can be seen across the world which has forced companies to re-conceptualize and restructure their workplaces and adapt to changing work model. Employee can work fully offsite, fully online, and split time with flexible work in hybrid work model. The hybrid work arrangements provide employees a greater level control and flexibility in location of work and timings of performing tasks, which provide potential of improvements in flexibility, autonomy, and work–life balance.

According to Gartner Survey conducted in November 2022, location-centric hybrid-work models struggle, and Human-centric, flexible work design is most successful. Same has been proven again by McKinsey survey in July 2023. According to a survey conducted by Economic Times, it has been indicated that over 90% of organization's in India have resumed office operations, either fully or partially, despite ongoing discussions regarding the effectiveness of various work arrangements – namely, remote work, hybrid models, or traditional office settings. By August 2022, a mere 9 % of India's corporate sector was involved in entirely remote work, making a substantial drop from the 38 % noted in January, as indicated by the HR solutions company Aon. This trend persists even considering a distinct inclination among employees towards remote work. The survey further revealed that an impending return to the office environment has precipitated a surge in employee turnover. The attrition rate for organization that have announced a return to the workplace in the forthcoming months reached 29 % in August, compared to 19 % for those persisting with virtual operation and those functioning under a hybrid model.

During the COVID-19 pandemic, substantial body of research focused on understanding the impact of the crisis on employees and their performance and well-being. The investigation of the impact on employee performance and well-being in a hybrid work model through a bibliometrics analysis approach and systematic review of highly cited research papers is very essential in exploring the dynamics, with implications of emerging work arrangement. For this research 500 documents found from 2013 to 2023 with Title, Abstract & Keyword "performance" OR "well-being" AND "remote work" OR "Hybrid work" on Scopus. For bibliometrics study further documents reduced to 344 numbers by adding criteria English documents, Journal only and timeline between 2019 and 2023 which is more significant to analyze research paper during and post COVID -19 pandemic. Further for Systematic review all open access documents 344 available to download and having high citation has been selected for literature review.

This research aims to systematically evaluate existing literature using bibliometric study to analyse and uncover the various predominant themes, prominent authors, reputable sources, and the highest frequently referenced influential publications within this domain. Furthermore, it aims to delineate the foundational knowledge and illuminate the various factors that enhance employee performance and well-being in a hybrid work environment.

The findings of the study reveal a growth in the number of publications from 2 in 2019 to 129 publications in 2023. Secondly, our objective is to emphasis on the areas of investigation on research and review papers from the onset of the Covid-19 pandemic. The aim is to utilize a bibliometric study and analysis as a methodology that gives change in trends, with a quantifiable evaluation present in the current corpus of literature and highlights significant research topics.

This study is organized in following sections where Section 1 elaborating the aims and study inquiries (RQ) as mentioned in Table 1. The Section 2 covers the comprehensive literature review using bibliometric analysis and tried to assess the methodologies employed with a focus on the research design and search procedure used to identify the literature and data collection. Section 3 explains the bibliometric analysis using science mapping and performance analysis and systematic literature review of highly cited paper Section 4 explains the findings related to keyword cluster analysis and present state of research standing out as most impactful studies published by authors in journals. In Section 5, where key research themes extracted, categorized and brief insights on themes for the time is provided to understand the existing need for research proposition for future research. This section aims to analyze and group publications based on future trends in work, employee performance and well-being. Finally, the research paper is followed by a future scope of study and conclusion.

Literature Review

2. Methodology/Approach

2.1 Data Source

Scopus covers 240 disciplines, more than 7000 publishers, 1.8+billion references cited dating back to 1970 (91+mn records , 17.6+mn profiles of authors and 94.8+ thousands affiliation profiles) shows numbers that power Scopus content and data. It evaluates the confidence in research with rich variety of metrics like SNIP, SJR, PlumX, h-index and CiteScore. (Source: Scopus Website). It provides more coverage of approximately 20% than WOS (Web of Science) and simultaneously references are extensively allowed (Falagas et al., 2008). Scopus database has been utilised to identify most impactful papers, authors based on high citations. Scopus databases were searched from 2013 to 2023. The timeline between 2019 and 2023 for review process became the basis to analyze research paper during and post COVID -19 pandemic. There were 500 articles in the field of study with 147 high citations.

2.2 Research Method

Pritchard in 1969 has coined the term called Bibliometric analysis which can be applied in studies in all areas to perform quantitative application of written communication (Gokhale et al., 2020). Bibliometrics, the study of bibliographic data which includes publications, citations and other related information. It uses mathematical and statistical methods to explore and analyse large volumes of scientific data to quantitatively analyse literature to identify patterns and future trends in articles and performance of journals, patterns in collaborations, constituents. To minimise possible subjectivity, this method follows a holistic approach than traditional method of literature review to provide better insights.

Bibliometric analysis is a useful tool for understanding evolution of specific field and uses different techniques and procedure, like analysis of citations, co-citations and bibliographical coupling. This analysis can further be extended and be used in relation to systematic literature review and meta-analysis of the study area to identify gaps in the research to investigate novel ideas.

This bibliometric analysis is novel in many aspects like First, it is the only study which applied the performance and science mapping technique to perform bibliometric analysis in the given area of research. Second, it is the only study to perform systematic literature review of top 10 highly cited systematic review papers and third, it is the only study to provide highlights of top most recent globally cited papers in the datasets.

Table 1: Research Questions, Objective and Motivation of study

	Research Question	Objective	Motivation
RQ1	Which are the leading journals and authors in the literature on Hybrid/remote work, well-being, and performance and which are articles are highly cited?	To identify the leading, impactful Journals, articles, and authors	To provide an improved understanding of the study area.
RQ2	What are the key areas that remain investigated and contribution of countries the most to the scientific production and mostly used words in the literature for further research on remote/hybrid work, well-being and performance?	To elucidate the subjects that are of paramount interest to research scholars	To ascertain the specific areas that scientific inquiry is concentrating upon.
RQ3	What are bibliographical charts, graphical and tabular representation of the Scopus papers data of theoretical, cognitive, societal framework and informational foundation for the remote/hybrid work, well-being, and performance in different fields of study?	To conduct a detailed investigation and present its review in summarized manner.	To expedite the understanding of the present condition of research areas in remote/hybrid work, well-being, and performance
RQ4	What is the essential scholarly research pertaining to Hybrid/Remote, well-being and performance from an inductive analytical perspective, along with their applications and the outcomes achieved?	To investigate leading themes, approaches used, their applications and outcomes achieved.	To assist intellectual community in enhancing their endeavors.

The first techniques of performance analysis is conducted examines the contribution and impact using publication and citation related metrics using Scopus Journal across various disciplines. The number of citation criteria used for identifying most influential authors and journals articles and its citations.

In second technique, Science mapping approach examine the relationship between research constituents in the emerging research field of hybrid work with the help of analysis of citation, co-citation, co-word, co-authorship and bibliographical coupling.

Enrichment techniques are also applied in bibliometric studies to understand the outcome of the studies which includes network metrics, clustering, visualisation techniques like Bibliometrix R, Bibexcel, Gephi, Pajek, UCINET and VOS viewer. The objective evaluation relies on performance analysis technique and subjective evaluation depends on Thematic analysis to interpretation the bibliometric analysis. (Donthu, Kumar, & Pattnaik, 2020)

This research mainly uses network visualisation software analysis tool VOS viewer to analyse papers highly cited in the research area of study and identifies the Main countries and regions , Top Institutions, Journals and articles in latest 10 years.

For this research, Scopus database was searched from 2013 to 2023. Articles were identified using the Title, Abstracts, and keywords: "performance" OR "well-being" AND "remote work" OR "Hybrid work". The initial search resulted in 500 articles. For bibliometrics study further documents were refined and numbers of studies were reduced to 344 articles by adding criteria English language documents, Journal only and timeline between 2019 and 2023 for review process. The result after applying filter shows that there are more than 100 studies done in business, management and accounting, social sciences followed by 73 studies medicines, psychology, computer science, environmental science, economics, engineering. These studies were found to be more significant and became the basis to analyses research paper during and post COVID -19 pandemic for the first performance analysis technique. The above database profile is presented in Table 3.

Co-word analysis was used to identify clusters of keywords used by the authors in the mentioned period of research. Content analysis has been performed using the objectives, methodology, results, future research course and implications of the research papers to identify the future scope of research. Hybrid work is an emerging area of research and effort has been made to minimize the subjectivity and research biasness. Extended research was conducted to identify research themes with in- depth analysis.

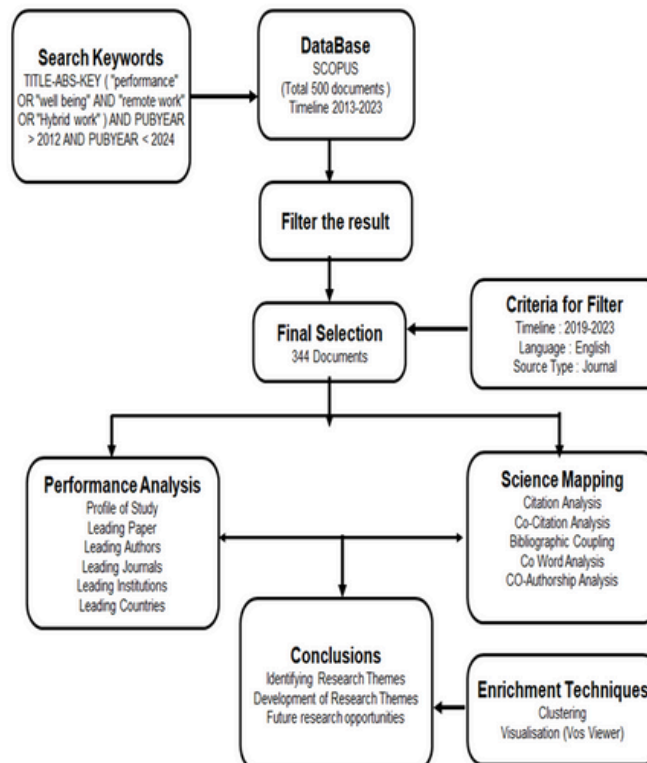
Research articles were analyzed to investigate the future scope of research and gaps in the research domain of employee performance, well-being, and hybrid work.

To address the research questions, several published research articles were identified. Figure-1 covers the research design. Data acquisition carried to determine the datasets of articles to draw relevant conclusion from the retrieved literature related to hybrid work/remote, well-being and performance.

A sample of 344 research articles published in various journals has been screened from 15 diverse countries and diverse institutions which includes research authors like Wang B., Liu Y, Qian J., Parker S.K. (2021) who had published Scopus articles in journals like Applied Psychology, European Journal of Work and Organizational Psychology. It has been observed that the researchers across the world are sensing, adapting and open to understand contemporary issues like the implication of remote/hybrid work model on performance and different types of Well-being of employee. Findings and results suggested the evolving nature of the field and is in its nascent stage and shows how research authors of diverse background have contributed to the field.

To conduct second analysis, research articles were arranged in according to number of citation criteria in descending order. Inclusion criteria was applied and data cleaning process was conducted and articles were selected based on relevance.

Figure 1: Research Method for bibliometrics studies



Source: Author's own creation

Table 2: *Keyword search in the Database -Documents retrieved*

Source of Data	Keyword Search Query	Documents
Scopus	TITLE-ABS-KEY ("performance" OR "well being" AND "remote work" OR "Hybridwork") AND PUBYEAR > 2012 AND PUBYEAR < 2024 AND PUBYEAR > 2018 AND PUBYEAR < 2024 AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j"))	344

Source: Author's own creation

3. Bibliometrics Analysis

3.1 Scholarly impact and publication timeline distribution

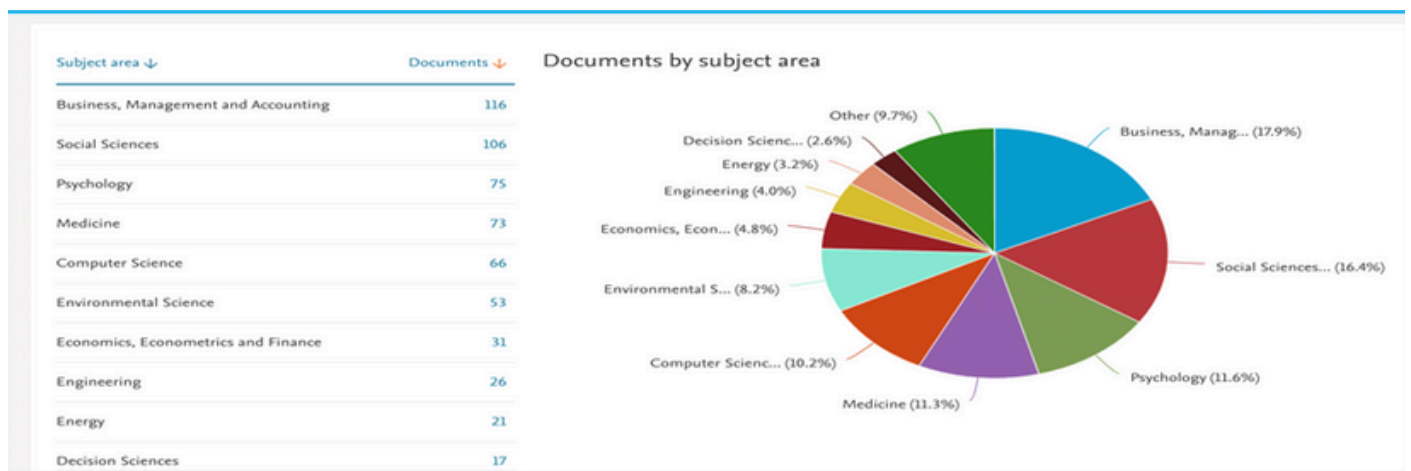
In the month of September 2023, 145 highly cited papers were present in the field of Business, Management & accounting with 116 documents, social science with 106 documents psychology, medicine, computer science etc. as per Scopus database shown in Figure 2. The aggregate citations produced by these scholarly articles in the Scopus reached 3581 (retrieved on September 25, 2023), and the average citations is 716.2 shown in Figure 3 Year wise Citation Overview. Within this context, the fraction of articles disseminated in the preceding two years (2022-2023) documented for 88%. It indicates that the research in Business, Management & accounting, social science etc. discipline as per Scopus database has experienced swift advancement. Recent investigative findings are increasingly inclined to draw attention.

Table 3: Summary (Descriptive) statistics of Performance Metrics Database

Total number of articles published	344
Publications in 2020	1785
Publications in 2021	4807
Publications in 2022	155
Count of early access publications	1246
Total Journals involved	1134
Countries contributing	123
Total Authors contributing	17070
Mean citation count (Average)	5.88
Single-Author publication count	1515
Collaborative authors index	2.43

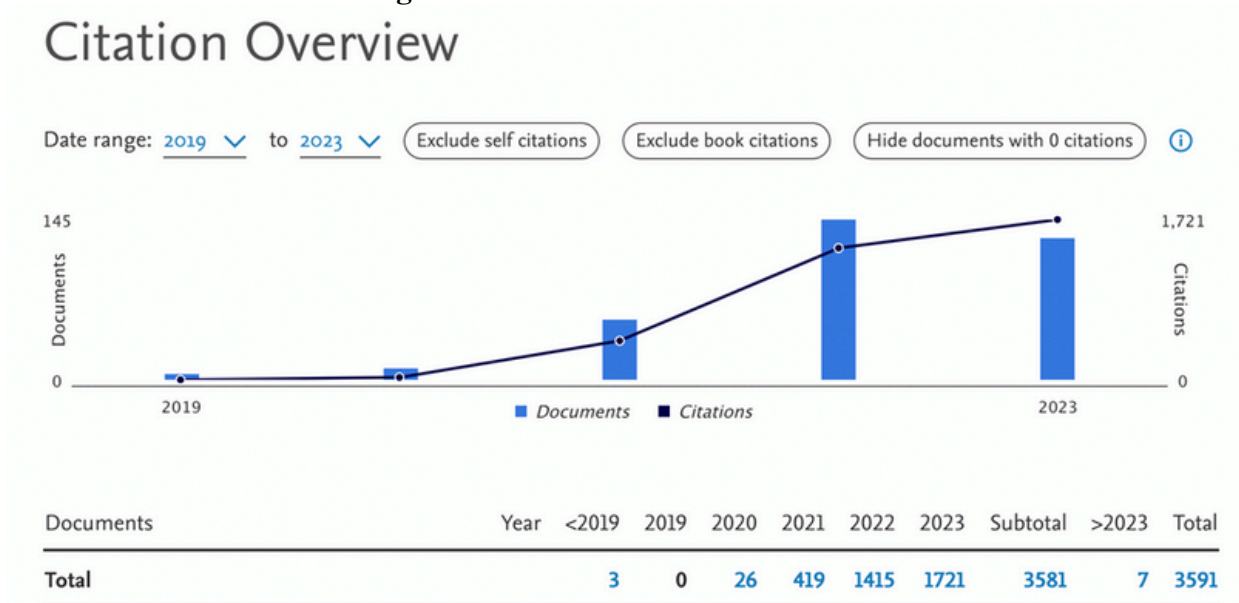
Source: Author’s own creation

Figure 2: Leading Field of research by documents by subject area studies



Source: Author’s own creation

Figure 3: Year wise Citation Overview

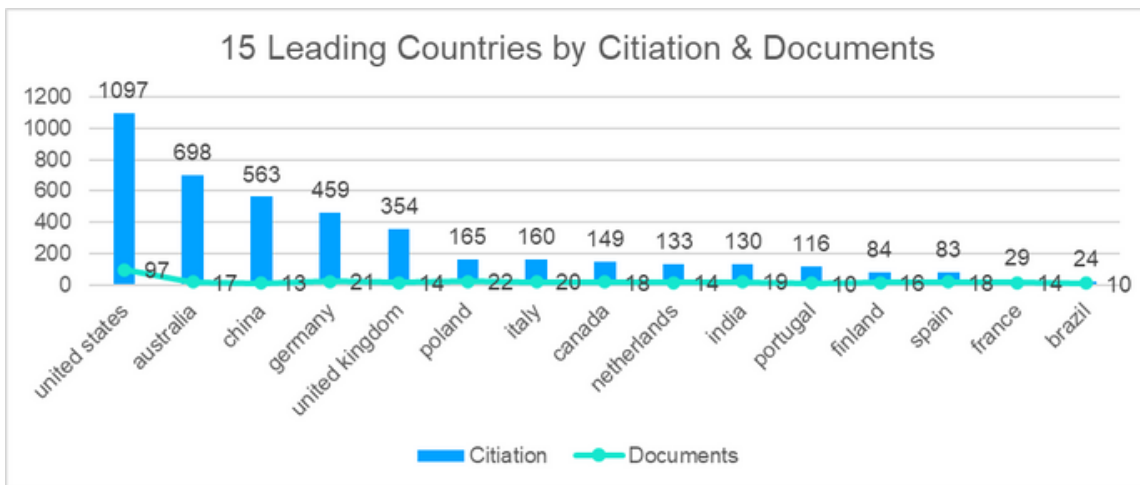


Source: Author’s own creation

3.2 Leading Countries/ Regions by Citations

The above mentioned 344 papers belong to 70 countries/regions. In Figure 4 United States placed highest with 1097 frequently cited papers, representing 26% globally. Leading 15 countries are placed highest by frequently cited papers as represented in Table 4. Frequently cited papers are from United States (1097) is significantly surpassing other countries.

Figure 4: Publications for each year of 15 Leading Countries by citation and documents



Source: Author’s own creation

Table 4: Leading 15 countries based on citation count of papers

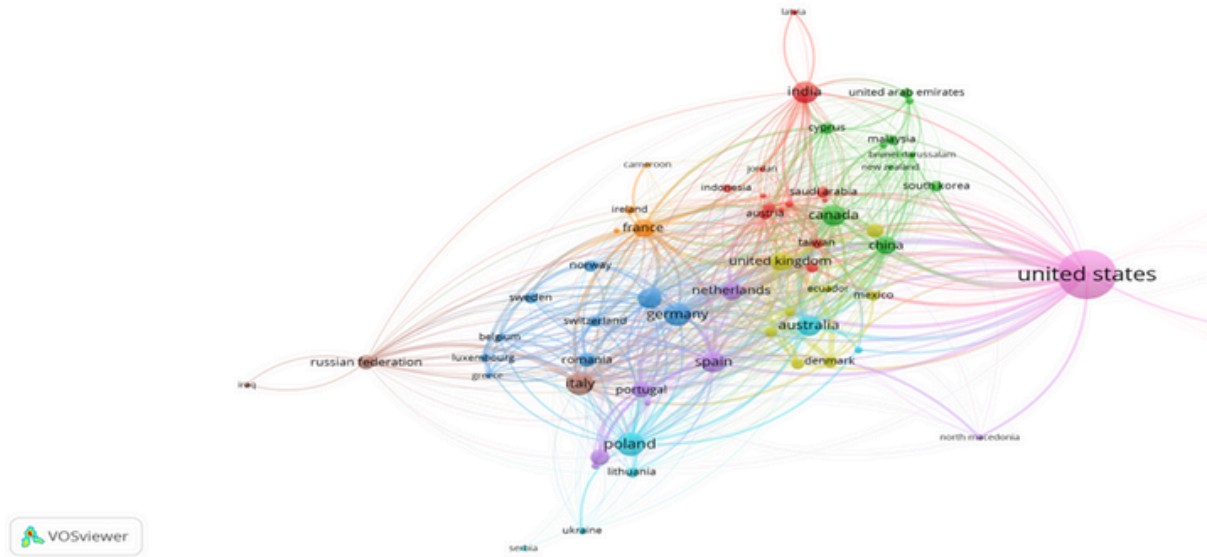
Countries	Citation	%	Documents	%
United States	1097	26%	97	28%
Australia	698	16%	17	5%
China	563	13%	13	4%
Germany	459	11%	21	6%
United Kingdom	354	8%	14	4%
Poland	165	4%	22	6%
Italy	160	4%	20	6%
Canada	149	4%	18	5%
Netherlands	133	3%	14	4%
India	130	3%	19	6%
Portugal	116	3%	10	3%
Finland	84	2%	16	5%
Spain	83	2%	18	5%
France	29	1%	14	4%
Brazil	24	1%	10	3%

Source: Author's own creation

3.3 International Co-operation

The International Cooperation of at least one paper in the area of Business, Management & accounting, social science etc. as per Scopus database presented in Figure 5. 71 countries including authors with research and publication participated as per Scopus database. The biggest nodes shows the no. of publications and thickness of lines shows the collaborations among authors highlighting the strength.

Figure 5: *International Co-operation network of cited papers*



Source: Author's own creation

3.4 Distribution of Institutions

Worldwide 1700 institutions published highly cited papers. The Top_15 institutions and countries in terms of Total Citation is represented in Table 5. Top 15 institutions, 4 institutions are from United States, followed by 2 institutions from China, UK, Germany and one from Cyprus.

Table 5: Top 15 Institution & Country (in terms of Total citations)

Sl no.	Organization	Country	Citations
1	Beijing Normal University, Beijing, 100875, China	China	505
2	Curtin University, Perth, 6000, WA, Australia	Australia	505
3	Shanghai University, Shanghai, China	China	505
4	Department Of Psychology, University Of Georgia, Athens	United States	238
5	Centre For Advances In Behavioural Science (Cabs), Coventry University, Coventry	United Kingdom	233
6	Cyprus Institute Of Marketing, Nicosia, Cyprus	Cyprus	233
7	School Of Psychological, Social And Behavioural Science, Coventry University	United Kingdom	233
8	Healthier Workforce Center, University Of Iowa	United States	169
9	Human Resources, Washington University, St. Louis	United States	169
10	Washington University, School of Medicine St. Louis	United States	169
11	Collaborative Research Center Sfb 884 University Of Mannheim	Germany	156
12	School of Social Sciences SFB 884 University Of Mannheim	Germany	156
13	Department of Business Studies Kinnaird College, Lahore	Pakistan	150
14	School of Business And Management Sciences, Istanbul Medipol University	Turkey	150
15	School of Management And Business, Universidad Del Rosario, Bogotá	Colombia	150

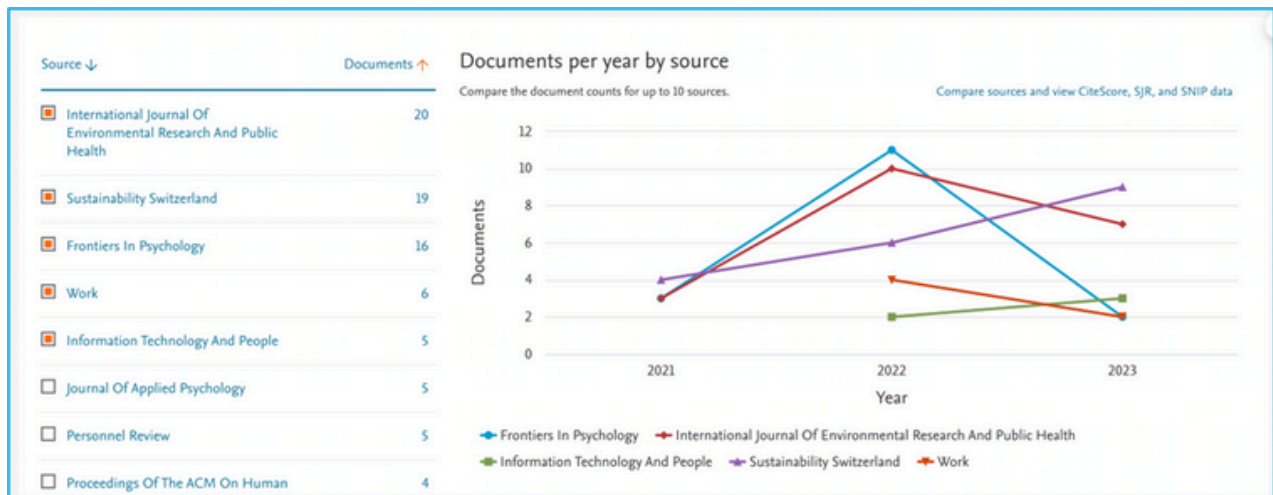
Source: Author's own creation

3.5 Distribution of Journals

Top Journals with the most papers

Figure 6 shows the leading Journal with most documents/Papers published in International journal of environmental Research and Public Health (20) followed by sustainability Switzerland (19), Frontiers in Psychology (16), Work (6) and Information technology and People (5). The leading journal is Frontiers in Psychology in year wise comparison followed by Information technology and People, Sustainability and Work. Frontiers of psychology has been leading in year 2022 but now stands on 3rd position. Publications have raised in 2022 in Work Journal and declined in 2023, also , publication have increased in IT and people Journal post Covid-19

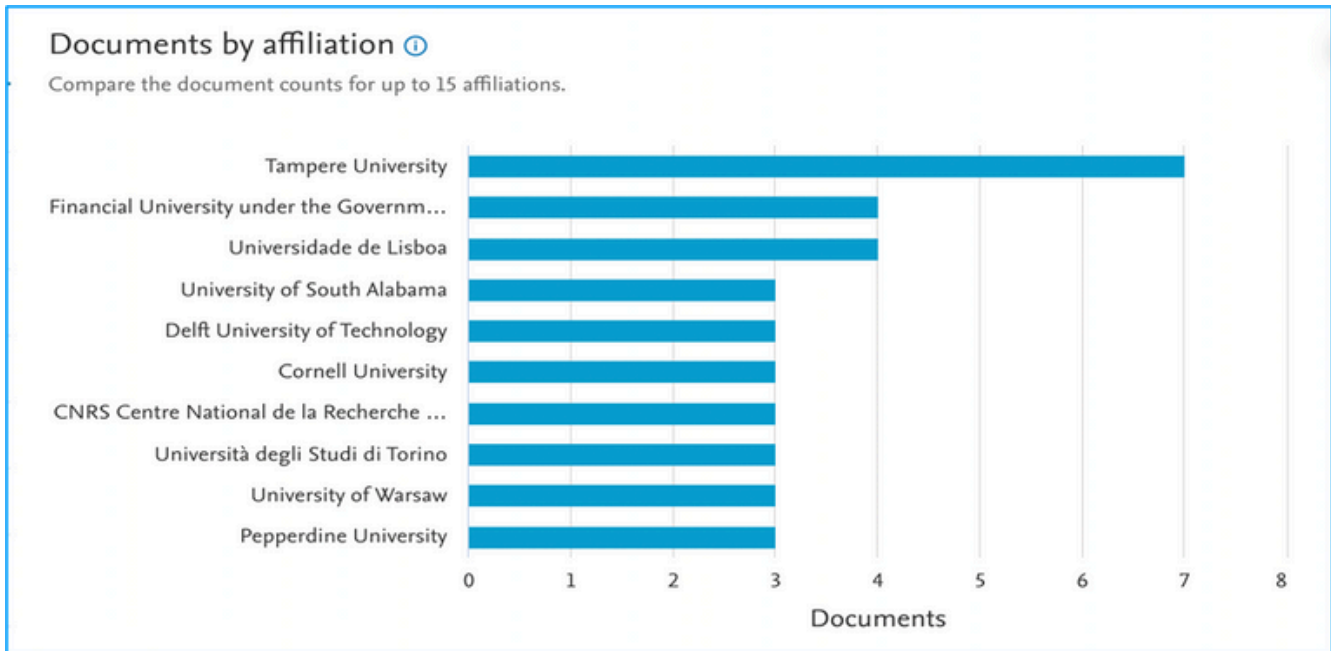
Figure 6: Top Journals with the most papers



Source: Author's own creation

Figure 7 shows top 10 Institute by Documents by affiliations the leading institute with most documents by affiliations is Tampere University (7 documents), followed by Financial University (4 documents), University of Lisboa (4 documents). Top 15 institutions were selected for purpose of study.

Figure 7: Top 10 Institute by Documents by affiliations



Source: Author's own creation

4. Scientific Mapping

4.1 Citation Analysis- Top 10 highly cited documents

Table 6: Top 10 highly cited documents shows highly cited documents with citations 505 by total link strength of 45.

Table 6: Top 10 highly cited documents

Id	Document	Citations	Total Link Strength
71	Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021)	505	45
13	Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019)	233	19
57	Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020)	169	0
15	Möhring, K., Naumann, E., Reifenscheid, M., Wenz, A., Rettig, T., Krieger, U., Friedel, S., Finkel, M., Cornesse, C., & Blom, A. G. (2021)	156	3

82	Contreras, F., Baykal, E., & Abid, G. (2020)	150	10
38	Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2021)	146	3
35	Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021)	142	1
56	Shockley, K. M., Gabriel, A. S., Robertson, D., Rosen, C. C., Chawla, N., Ganster, M. L., & Ezerins, M. E. (2021)	96	3
66	Tavares, F., Santos, E., Diogo, A., & Ratten, V. (2020)	77	9
46	Russo, D., Hanel, P. H. P., Altnickel, S., & Van Berkel, N. (2021)	67	1

Source: Author's own creation

Table 7: Top Authors shows the leading authors in the field of research. Wang b paper is highly cited paper as per citations of 505.

Table 7:Top Authors

Id	Author	Documents	Citations
319	Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021)	1	505
65	Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019)	1	233
97	Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G., Kannampallil, T., & Gray, D. L. (2020)	1	169
214	Möhring, K., Naumann, E., Reifenscheid, M., Wenz, A., Rettig, T., Krieger, U., Friedel, S., Finkel, M., Cornesse, C., & Blom, A. G. (2021)	1	156
75	Contreras, F., Baykal, E., & Abid, G. (2020)	1	150
31	Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2021)	1	146
277	Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021)	1	142
278	Shockley, K. M., Gabriel, A. S., Robertson, D., Rosen, C. C., Chawla, N., Ganster, M. L., & Ezerins, M. E. (2021)	1	96
298	Tavares, F., Santos, E., Diogo, A., & Ratten, V. (2020)	1	77
46	Russo, D., Hanel, P. H. P., Altnickel, S., & Van Berkel, N. (2021)	67	1

Source: Author's own creation

4.2 Bibliographic/Citation Coupling Analysis

Bibliographic coupling refers to a situation when two research study articles share one or more references and cite the same third study document. It shows how two research is related.

Figure 8: *Bibliographic Coupling Analysis*



Source: Author’s own creation

4.3 Co-Author Analysis

Co-citation happens when two research studies receive same citation from the third document and shows association. Author co-citation analysis (ACA) shows how authors and experts connects ideas between published research studies. In Co-authorship is the most effective method out of various methods available among the various bibliographic methods. The co-author has many applications, and many researchers have used them in their research studies. (Porter et al.) Co-Authors make a significant contribution to the work reported.

Figure 9: *Co-Author Analysis*



Source: Author’s own creation

Table 8: *Clustering of Keywords in cited publications*

Cluster Numbers	Keywords
Cluster 1 (27 Items)	Covid-19, employee, engagement, epidemic, human resource management, hybrid work, job performance, job satisfaction, leadership, organisation, performance, personnel, productivity, remote work, remote working, telecommuting, telework, teleworking, well-being, wellbeing, work-engagement, work from home, work-life balance, worker, working conditions, working from home, workplace
Cluster 2 (15 Items)	adult, article, controlled study, coronavirus disease 2019, epidemiology, female, gender, human, humans, male, pandemic, pandemics, questionnaire, Sars cov-2, surveys and questionnaire
Cluster 3 (11 Items)	anxiety, burnout, covid-19 pandemic, human experiment, job stress, mental health, occupational health, perception, psychology, stress, work environment

5. Results

5.1 Main documents in the data sets

Table 9 displays the most globally cited documents that have the highest citation counts in research. The individuals recognised as authors of the records with highest citation count were Wang et al. (2021), with 505 citations published article “Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective” in Applied Psychology journal and, in second place, A systematic review paper “Systematically reviewing remote e-workers’ well-being at work: a multidimensional approach” by Charalampous et al. (2019), with 233 citations published in the Journal “European Journal of Work and Organizational Psychology”. In third place was Evanoff et al. (2020), with 169 citations published paper on “Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers” in Journal of Medical Internet Research. A manuscript rich in citation significantly impacts the scholars who advances in the field of study been investigated.

This paper explores hybrid work's impact on performance, well-being, and work-life balance, offering a comprehensive review through systematic literature review (SLR) and bibliometric analysis. It maps academic contributions, highlighting research gaps, emerging themes, and theoretical frameworks. Distinguishing itself from recent empirical studies, it provides a meta-perspective on the broader implications of hybrid work.

Complementary studies, such as Wang et al. (2021) highlight virtual characteristics for effective remote working and the challenge of individual differences affect remote work, Charalampous et al. (2019) focus on the effects of remote work on employee well-being, while Evanoff et al. (2020) survey gives policy solution to balance the pandemic impact on health care and other workers, P Lunde L.K. et al. (2022) examines telework and health-related outcomes into six outcome categories. Additional research by Ferrara et al. (2022) investigates how remote work shapes the self-perception of well-being and performance pre covid and Gualano et al. (2023) investigates TERRA, Telework related stress effect on well-being and work-life balance during the pandemic.

Table 9: *The Most Cited documents Globally in the Datasets*

Sl no.	Authors(s) and year	Title	Source	Total Citations	Highlight	Year
1	Wang, B., et al., 2021	“Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective”	<i>Applied Psychology</i>	505	This paper highlights the virtual characteristics and individual differences affect remote work challenges.	2021
2	Charalampous, M., et al., 2019	“Systematically reviewing remote e-workers’ well-being at work: multidimensional approach”	<i>European Journal of Work and Organizational Psychology</i>	233	The review identified relationship between remote work and five dimension of well-being and highlights the positive and negative effects like social, professional isolation and perceived threats in professional ladder in remote work.	2019
3	Evanoff, B. A., et al., 2020	“Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers”	<i>Journal of Medical Internet Research</i>	169	This survey report gives policy solution to address mental health and addiction needs to balance the impact of covid-19 in all sectors.	2020
4	Möhring, K., et al., 2021	“E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go”	<i>Frontiers in Psychology</i>	150	This panel data study concludes effect on the satisfaction with work and family of individuals and change in labour market situation in Germany during lockdown period differences.	2021

Sl no.	Authors(s) and year	Title	Source	Total Citations	Highlight	Year
5	Contreras, F., et al., 2020	“E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go”	<i>Frontiers in Psychology</i>	150	This study investigates the challenges of teleworking and opportunities through effective leadership in virtual environment to increase organizational performance by improving employee well-being in healthy work environment.	2020
6	Bartsch, S., et al., 2021	“Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic”	<i>Journal of Service Management</i>	146	The first empirical study focus on how task and relation oriented leadership moderates at individual and team level, behavioural and affective work tensions that affects service employees' work performance in virtual work environment during pandemic crises.	2021
7	Shockley, K. M., et al., 2021	“Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children”	<i>Journal of Applied Psychology</i>	142	The author focus on Alternating days egalitarian framework is emerging prevalent strategy that safeguards the well-being of the dual earner spouses while enabling each to sustain adequate job performance.	2021

Source: Author’s own creation

Table 10: Summary of Systematic literature reviews of Highly cited systematic reviews papers

Sl. No.	Authors	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
1	Charalampous, M., et al., 2019	“Systematically reviewing remote e-workers’ well-being at work: a multidimensional approach”	Journal Article Reviewed	1975-2017	The study aims to systematically review literature on how remote e-working within knowledge workers is associated with the five dimensions of well-being at work: affective, cognitive, social, professional and psychosomatic.	Findings shows that after analysing different aspects of 63 studies, it has been established that emotional condition of remote employees significantly influences their social interactions and professional engagements. And author also highlights isolation on social and professional level and employee perceive threats career advancement opportunities in remote work negatively effects employee.	SLR Quantitative , qualitative, Mixed - Methodology in 63 studies	It has been found that there is a need to study about the cognitive a functioning and psychosomatic conditions of the employees. This paper provides a theoretical ground of research for practitioners to manage attitudes of workers and implement policies.
2	Lunde, L.-K., et al., 2022	“The relationship between telework from home and employee health: A systematic review”	Peer-reviewed articles	January 2010 to February 2021	To objective is to assess the evidence on the association between the telework from home (TWFH) and employee health related outcomes	Findings shows that 28- outcomes into 6 outcome categories comprising general health pain, stress, well-being, exhaustion & burnout, and overall life satisfaction, leisure and evidence categorised as low or very low quality.	SLR PRISMA Quantitative study to Check risk of bias evaluated by Newcastle-Ottawa Scale and evidence collected by GRADE approach to evaluate 14 studies based on relevance with 22,919 participants reported 28 outcomes.	The study points out that there is a lack of studies on important health outcomes and TWFH and highlights the need to determine relationship and implement TWFH in future.

Sl. No.	Authors	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
3	Ferrara, B., et al., 2022	“Investigating The Role of Remote Working On Employees’ Performance And Well-Being: An Evidence-Based Systematic Review”	Review	2010 to 2021	The aim is to describe the how remote work shaped employee perception of self, workplace and its impact on well-being and performance before Covid.	The study reported organisational characteristics to be the factor for mixed consequences and heterogeneous picture of working remotely and its effect on employee well-being and productivity .	SLR using PRISMA 20 peer-reviewed papers	There is a need to identify change in employee perception about workplace and its impact on physical and mental health in Work life balance & on managers during and post Covid. Longitudinal studies to monitor long-term effects of training.
4	Gualan o, M.R., et al., 2023	“TElewoRk-RelAted Stress (TERRA), Psychological and Physical Strain of Working From Home During the COVID-19 Pandemic: A Systematic Review”	Review	Decemb er 2019- August 2021	This study aims to investigate how Telework-Related Stress (TERRA) defined as physical and mental stress caused by ICT/telework affect daily life, their well-being and work life balance during Covid-19 pandemic of workers.	Findings shows high techno stress level of remote workers in 78.9% of studies comprising of female and older workers and 63.2% studies investigated psychological and 10.5% focus on physical well-being and three studies investigated both well-being.	Systematic Reviews and Meta-Analysis using PRISMA statement Qualitative study 19 articles (10,012 Participants) out of 518 articles	There is a need to prevent techno - stress and to provide right equipment to ensure physical health and need to address focus on total health of workers through prevention strategies from occupational health point of view. Meta-analysis is not possible due to high heterogeneity of the studies

Sl. No.	Authors	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
5	Sivaret Hinamoto, R., et al., 2021	“Reimagining Future by redesigning Talent Strategy In the Age Of Distraction and Disruption”	Article				not a systematic review study	
6	De Araújo Vitória, B., et al., 2022	“The work-family interface and The COVID-19 pandemic: A systematic review”	Article				not relevant	
7	Urien, B., 2023	“Teleworkability, Preferences for Telework, and Well-Being: A Systematic Review”	Review	2012-2022	To study the impact of telework ability and employees’ preference for telework on well-being through telework intensity and to study the relationship between these variables.	Findings shows telework exerts both positive and negative effects and some studies shows no significant relationship between place and emotional disorders. Well-being indicators e.g. work life balance, job satisfaction, productivity or organisation commitment has a positive effect on telework and well-being. Negative effects of telework include social isolation, company identity loss, loss of work meaning or lack of market oriented activities.	Systematic review 48 studies	Paper highlights in future meta-analysis can be performed to create quantitative links between preferences for telework, hybrid work, and different forms of well-being. There is a need to define general hybrid work framework model.

Sl. No.	Author s	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
8	Leo-Ramírez, A., et al., 2023	“Learning Activities with Plants and Technology: A Systematic Literature Review”	Review	January 2000 to October 2021	To study the role of plants in moderating designing of workspaces and providing well-being and use of technology, in plant-related learning activities.	Findings shows learning of kind of plants used and technologies supported can naturalise the indoor learning space and promote environmental awareness.	Systematic Literature review 14 studies	The studies reviewed are not well connected studies to the environment education or the SDGs.
9	Bahamondes-Rosado, M.E., et al., 2023	“Technostress at work during the COVID-19 lockdown phase (2020–2021): A systematic review of the literature”	Review	2020-2021	The main aim of the research is to find how technostress affect people’s work during Covid-19 and evidence of impact at global level, to determine the main technostressors and to provide a framework to guide actions by organisation.	The results found techno -fatigue to be the main factor and technostress has a direct effect on remote work. Techno invasion and techno overload were also identified as the main technostressors. The result shows negative effect on occupational health and reduced productivity levels.	SLR (PRISMA), Qualitative study 24 studies	Impacts of technostress have been neglected in the previous systematic studies. So there is a need to determine measures to address the psychosocial impacts of technostress at work and to manage technostress in organisations where remote work has been more prominent.

Sl. No.	Author s	Systematic Literature Review Papers	Source	Period	Objective	Findings	Methodology	Gaps
10	Villadiego L.K.H., et al., 2022	“Systematic literature review: Mental health promotion in organizations during the pandemic by COVID-19”	Review	2020-2022	To conduct a systematic literature review to identify the strategies and programmes implemented by different organisations to reduce the repercussions of covid-19 pandemic on mental health and to promote mental health of collaborators in health and education sector. Few studies showed psychological, psychosocial impact, and burnout.	Organisations restructured, reorganised and managed organisational change by implementing positive and resilient organisation model with early psychological intervention teams, adaptive leadership and implemented a corporate policy that encouraged independent work. Implementation of therapeutic resources. Employee feels sense of belongingness and well-being resulting in higher level of performance and engaged employees.	SLR of 17 research and review articles in different continents with only two SLR articles on healthcare workers and professionals. Qualitative and Quantitative studies.	Need for further research and dissemination of strategies in different organisation sectors, size and type of organisations, functions to evaluate the impact on mental health for post pandemic period.

Source: Author's own creation

Table 10 shows some summarised systematic literature reviews (SLR) of highly cited systematic reviews on Hybrid Work, Well-being and Performance. The analysis depicts that recently there has been a rapid growth in the number of documents due to circumstances like the Covid-19 pandemic and teleworking/remote working, which implies that technological innovation in organisations has greater prominence. The evolution articles from 2013 to 2023 been analysed which clearly shows growth in articles post covid-19. After applying research criteria, papers are analysed from 2019 to 2023. The reason of growth is due to the development of research in specific content in Hybrid Work, Well-being and Performance and more sectors involved. There were only 2 highly cited SLR by authors Charalampous et al. (2019) with 233 citations and second by Lunde et al. (2022), with 38 citations. Therefore, an effort has been made to review all systematic literatures done but not highly cited and excluded as was not relevant. It was found that out of 344 documents selected for study, 2 were literature reviews and 5 were only reviews of papers. Of all the reviews it was found that not a single systematic literature review covers the study post-covid on Hybrid Work, Well-being and Performance. This study covers 6 systematic reviews from 344 papers which are synthesized to identify the themes which were not highly cited. Other 2 Literature reviews and 5 reviews were not considered for study. 2 studies were excluded as were not relevant. Top 10 highly cited Paper were synthesized to identify the trends, issues, challenges and opportunities. There is only one paper highlights the organization strategies to provide solution.

5.2 Research propositions for future studies

Table 10 includes all Systematic literature reviews for the given period highlighting the gaps and future scope of studies. No systematic review paper existed in Scopus database for covid period on the research area. The papers on systematic literature reviews and review papers for the given period are pre- covid which can be synthesized, and comparative analysis can be conducted with during and post-covid years. Systematic reviews will help to highlight the gaps and further future scope of studies. New research articles which are cited less are more relevant to the area of research which can be critically studied to identify more variables in relation to Hybrid work model with the help of the clusters provided in the study and themes can be created for more detailed study on above themes to identify more gaps and variables of study. In future, research can be conducted on a sample population to study the impact in Hybrid work model on employee's well-being and performance. And also, researchers can strengthen, share research results and pay more attention around the works to produce high quality academic results and promote further developments in Hybrid work model and well-being and its impact on performance. Charalampous et al. (2019) emphasize the need to study cognitive functioning and psychosomatic conditions of employees. Lund et al. (2022) highlight the lack of studies on important health outcomes and call for determining relationships and implementing telework-from-home strategies. Ferrara et al. (2022) advocate for longitudinal studies to assess and monitor the long-term effects of training in the post-pandemic era. Gualano et al. (2023) underlines the importance of prevention strategies in occupational health. Urien (2023) examines existing studies and suggests the development of a hybrid framework model. Leo-Ramírez et al. (2023) note the absence of studies addressing sustainable goals (SDGs). Bahamondes-Rosado et al. (2023) identify the need to address the psychosocial impact of technostress in remote work.

Lastly, Hernández Villadiego et al. (2022) identify strategies and stress the importance of disseminating approaches to evaluate the post-pandemic effect of psychological, and psychosocial issues and burnout.

6. Implications

The paper has organizational, academic, and individual and government policy implication and aims to explore emerging trends regarding impact of hybrid work environment. Managers require new strategies and re planning on several fronts. Reforms to be carried out at economic, social, and technological levels. This paper highlights that the above area of research is of great relevance and have implication on organizations, an area of study in relation to its dimensions by academicians having impact on individuals and for formulating policies for government and aims to explore emerging trends regarding impact of hybrid work environment. Organizations need to identify coping strategies and re-planning for employees dealing with stress, anxiety, burnout, mental health, and isolation etc. There is a need for empirical study to explore the perception of employees to identify their perceptions of well-being and perceived performance.

7. Conclusion

The article explores the high level of output in field of Business, management and accounting, social sciences with more than 100 papers. The leading countries are United States, Australia, China, Germany, and UK. US have the highest number of total citations in Applied Psychology journal. Most of the highly cited papers are dominated by international cooperation, and the proportion of international cooperation exceeds 50%. The paper uses bibliometric and systematic literature review (SLR) techniques to evaluate the impact of hybrid and remote work on employee performance and well-being post-COVID-19. Analyzing 344 publications (2019–2023) uncovers key trends and influential works, focusing on themes like flexibility, mental health, and organizational strategies. Its findings highlight the evolving nature of hybrid work research and identify gaps for future exploration, such as the long-term effects on health and performance. This literature contributes to understanding network capacity enhancement by providing a framework for managing hybrid work environments, emphasizing productivity, collaboration, and well-being within organizational networks. This paper contributes uniquely by consolidating trends, identifying influential studies, and analyzing hybrid work from a high-level theoretical standpoint. It provides a distinct academic contribution, emphasizing the interplay of organizational strategy and individual well-being in hybrid work environments. Unlike specific empirical studies that analyze granular data or propose practical solutions, this work lays the groundwork for future research by bridging theoretical and practical insights into hybrid work dynamics.

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