

WORK-LIFE BALANCE IN MOBILE WORKING ERA: A BIBLIOMETRIC ANALYSIS

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INFO ARTIKEL	ABSTRACT
Diterima 23 Maret 2022 Direvisi 27 April 2022 Disetujui 23 Mei 2022 Keywords: Bibliometric Analysis; Mobile Working; Work-Life Balance	Information and communication technology (ICT) has an important role in economic development throughout the world. One of the choices of new methods that involve technology to complete a job remotely is mobile working. The application of mobile working provides many benefits for workers and companies. One of the benefits of implementing mobile working is improving work-life balance. Work-life balance is an individual's ability, regardless of gender, to balance work and family obligations. Research related to work-life balance in the era of mobile working is still lacking, especially in the Asian region. In addition, the main keyword that dominates the work-life balance is still the work environment. In the mobile working era, work-life balance was investigated using bibliometric methods to provide an appropriate reference for further research. Objective this research aims to provide a comprehensive bibliometric literature study on work-life balance in the mobile working era. The articles in this study were obtained from the Scopus database, a total of 47 articles related to work-life balance in the mobile working era in 2020-2022. Researchers use VOSviewer software to help conduct co-authorship, co-occurrence, and citation analysis.

Introduction

Information and communication technology (ICT) has an important role in economic development throughout the world (Behera & Sahoo, 2021). Technological developments trigger the emergence of the consolidation of remote work and encourage the adoption of remote work in many organizations (Choi, 2021). (Rodríguez-Modroño & López-Igual, 2021) revealed that more work can be done and monitored with the help of mobile information and communication technologies (ICTs).

Mobile working is one of the choices of new methods that involve technology to complete a job remotely (Fawziah & Irwansyah, 2020). Mobile working is working using technology for the benefit of a company by permitting all concerned employees to access various data without requiring

employees to come to the office (Ye, 2012). Furthermore, Ye (2012) wrote that the benefits of implementing mobile working are that it can increase employee productivity, ensure a balance between personal life and work, and companies can reduce fixed expenses.

Irawanto et al (2021) stated that mobile working can be a means to improve one's work-life balance because using mobile working can provide more time with family. Work-life balance refers to the ability of each individual, regardless of gender, to balance work and family (Hjálmsdóttir & Bjarnadóttir, 2021). The concept of a work-life balance was initiated because of the belief that work life and personal life can provide perfection in life (Irawanto et al., 2021a). The absence of an imbalance between work and personal life will result in low productivity

and a decrease in one's performance for an organization (Cohen & Liani, 2009)

This study focuses on the work-life balance of employees in the mobile working era. Usage mobile working more and more applied all over the world (Buomprisco et al., 2021). (Buomprisco et al., 2021) revealed an increase in the number of workers who mobile working in America as much as 102% or about 3.7 million employees from 2005-to 2014. in Indonesia according to Dhyoti Rororasmi Basuki, Head of Public Relations Intel Indonesia at the event intel Telecommuting Media Experience (2013) revealed that as many as 34% of employees do their work on a mobile basis.

This study aims to provide a broad overview of work-life balance in the current rise of mobile working due to technological developments during the period 2020-2022 using bibliometric analysis techniques with the specific aim of identifying the influence, popular keywords, Who is the most researcher, as well as the top publications of the research topic. The results of this study

are expected to assist decision-makers regarding the implementation of mobile working to improve workers' life balance. This research is also expected to provide input for further research.

Method

This study uses bibliometric research to provide the latest research and research trends on specific topics such as several articles, geography, journal and distribution topics, prolific authors and institutions, academic collections, and article citations (Yu et al., 2016). In addition, during the analysis process, the researcher used the VOSviewer software to view co-authors, co-occurrence, and citations. VOSviewer is used to visualize the bibliometric network (Churiyah, 2022). VOSviewer can also be used used to visualize similarities between different objects (van Eck & Waltman, 2010). This study uses a five-step method derived from the results (Fahimnia et al., 2015) and (Tranfield et al., 2003) as shown in Figure 1 below.

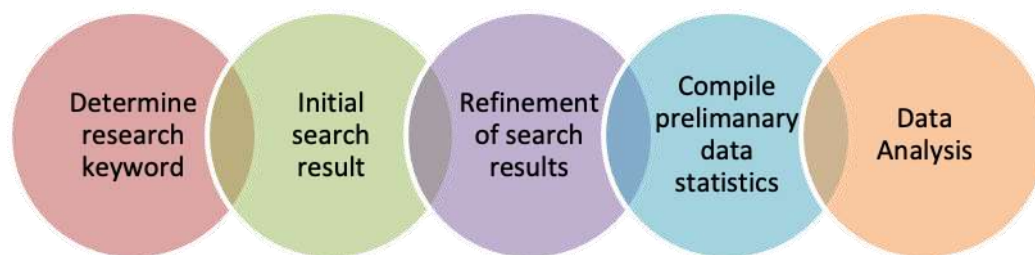


Figure 1

Five stages in a bibliometric study

Source: (Fahimnia et al., 2015) and (Tranfield et al., 2003)

1. Determine Search Keywords

The researcher used the keywords "work-life balance" OR "wlb" OR "work environment" OR "work and organization" OR "work/life discourse reflecting" OR "mobile working". The search was conducted in March 2022 on the Scopus database.

2. Initial Search Results

Researchers conducted research for "Journal" and "proceedings" that only included "Title Words" and "2020-2022". From the search results, a total of 47 items were found. The results are compiled in CSV format and contain other required information such as title,

affiliation, summary, keywords, researcher name, references, and more.

3. Refinement of Search Results

Articles required by title are retrieved and indexed by Scopus to select only articles from "Journals" and "Proceedings". In addition, for proper enhancement, the metadata for all articles is further processed into an Excel file, saved as a CSV file, and used for further data analysis

4. Compile Preliminary Data Statistics

The data that has been obtained will be stored in the CSV format. As an initial step, the components of journal articles and the completeness of articles such as year of publication, volume, number, pages, etc. are checked and if there are incomplete articles, the researcher will complete them.

5. Data Analysis

Bibliometric analysis was performed to visualize the research network using VOSviewer software. VOSviewer is software designed to efficiently handle data acquisition by providing a variety of interesting analyses, visualizations, and

surveys (van Eck & Waltman, 2010). VOSviewer can also make publication attribution, author attribution, and journal attribution based on co-citing, keyword attribution, and co-network (Hudha et al., 2020).

Results and Discussion

This research was conducted to analyze the literature related to the keywords "work-life balance" OR "wlb" OR "work environment" OR "work and organization" OR "work/life discourse reflecting" OR "mobile working". and Scopus indexed proceedings for the period 2020 – 2022. There are 3 aspects analyzed, among others, co-authorship, co-accuracy, and citations. bibliometric analysis was performed using the VOSviewer software. In presenting the co-authorship, co-occurrence, and citation data, the researcher uses the minimum occurrence limit 1. Use VOSviewer to visualize the similarities between different objects (van Eck & Waltman, 2010). The description of the results of the analysis that has been carried out can be seen in the explanation below.

1. Research result

a. Co-Authorship

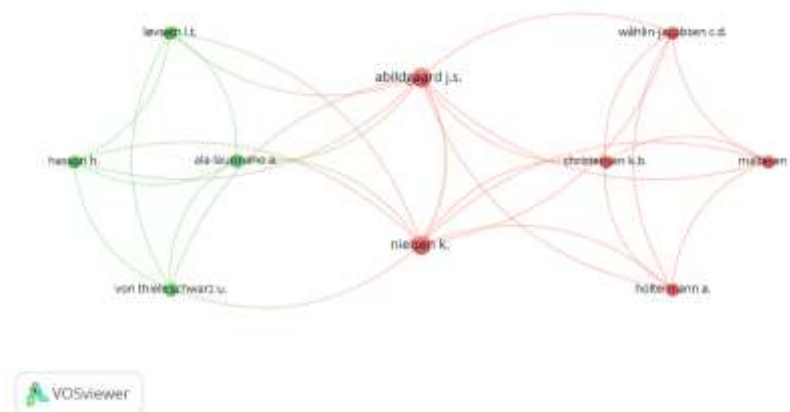


Figure 2
Associated Co-Authorship (Author Name)

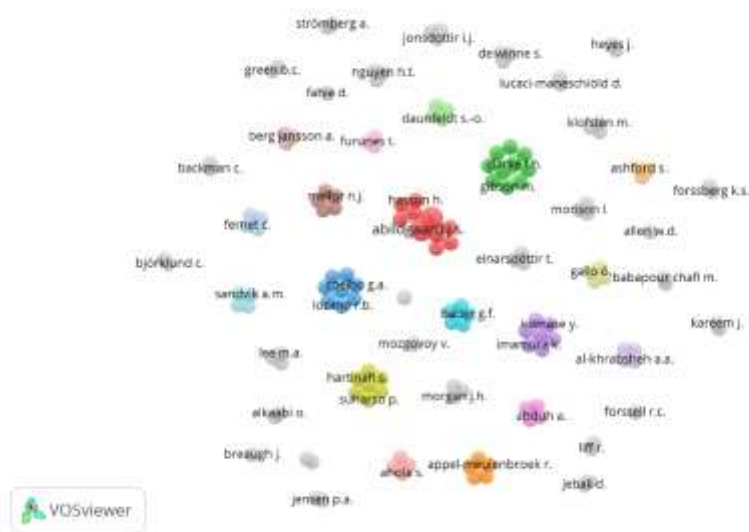


Figure 3
Co-Authorship (Author Name)

According to Figure 2, it can be seen that there are 2 clusters of authors on the topic that the researcher takes related to work-life balance in the mobile working era. From Figure 2.1, it can also be seen that the authors have a connected network. In other words, the authors have a relationship with each other when conducting research, where the authors who have

the red network have the largest network. Meanwhile, from Figure 2.2, it is presented by authors who conducted research on work-life balance in the mobile working era but did not have a network/connection with other writers. Where this can occur there are no limitations in the field of research.

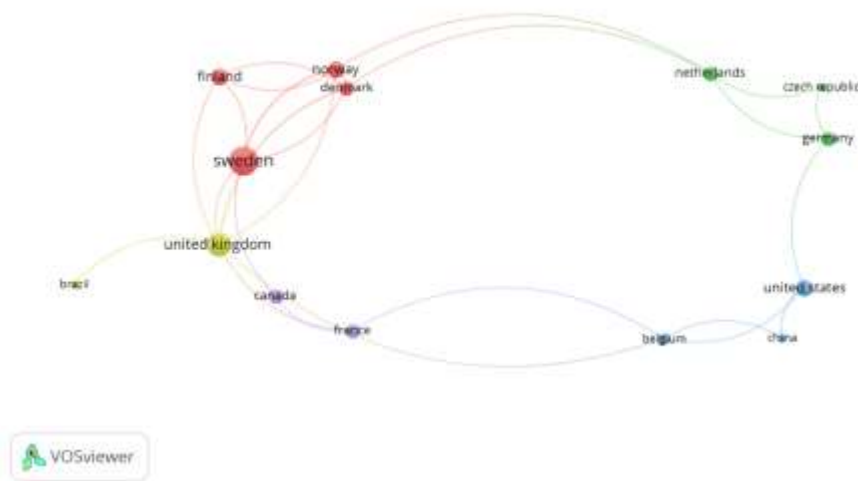


Figure 4
Associated Co-Authorship (Author Country)

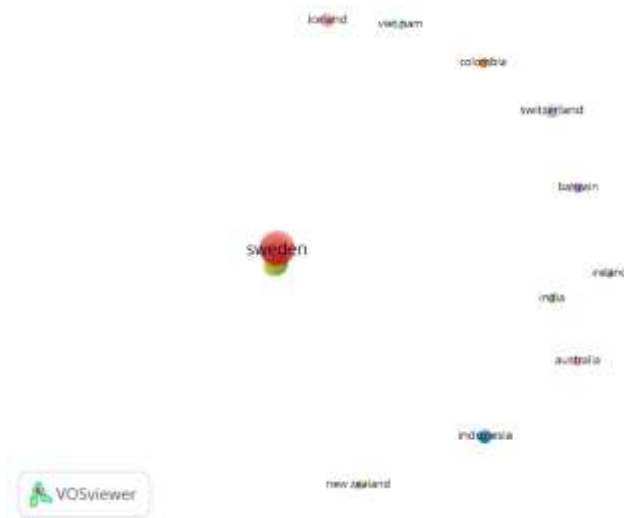


Figure 5
Co-Authorship (Author Country)

Based on Figure 4 and looking at Figure 1, it can be seen that there are at least 5 clusters of countries with 10 authors who are related in writing on topics related to work-life balance and mobile working. These clusters include:

- 1) Cluster 1: United Kingdom and Brazil
- 2) Cluster 2: Finland, Sweden, Norway, and Denmark
- 3) Cluster 3: Netherlands, Germany, and the Czech Republic
- 4) Cluster 4: United States, China, and Belgium
- 5) Cluster 5: Canada and France

From these clusters, it can be seen that research related to work-life balance in the era of mobile working which is related is still being carried out in many European countries, one

of which is Sweden. This is in line with the commuter benefits article (2019) which says that Sweden has a high work-life balance index where workers can spend about 15 hours/day of free time. Furthermore, it can be seen that The only Asian region country that has a connection on this topic in China. Meanwhile, based on Figure 3.2, it can be seen that there are several other countries conducting research related to work-life balance in the era of mobile working but they are not related to each other. In total there are 11 countries and only 3 of them are part of Asian countries, namely Indonesia, Vietnam, and India.

b. Co-Accurrence

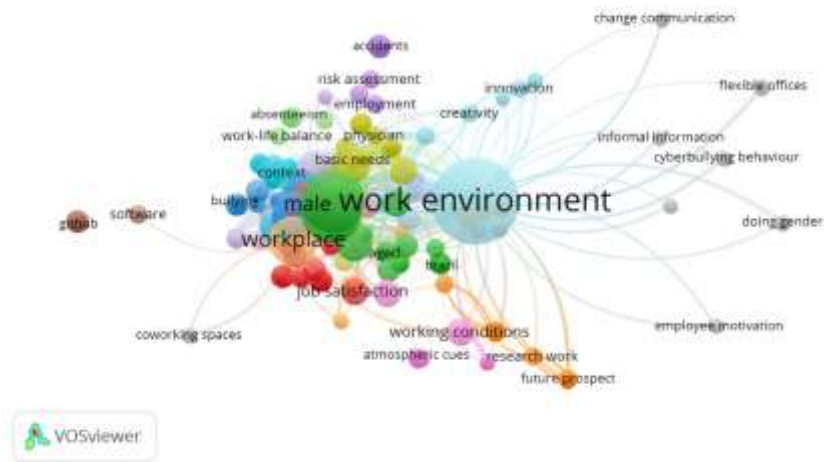


Figure 6
Co-Occurrence (Keywords)

Research related to work-life balance in mobile working has very diverse keywords and is dominated by the keyword work environment according to Figure 4. This can be input for further researchers to raise more topics related to work-life balance. The number of keywords related to work-life balance is also

related to the many factors that support the achievement of work-life balance for employees. (Poulose, 2014) mentions that there are at least 3 main factors in work-life balance, individual factors, organizational factors, and social factors such as partner and family support.

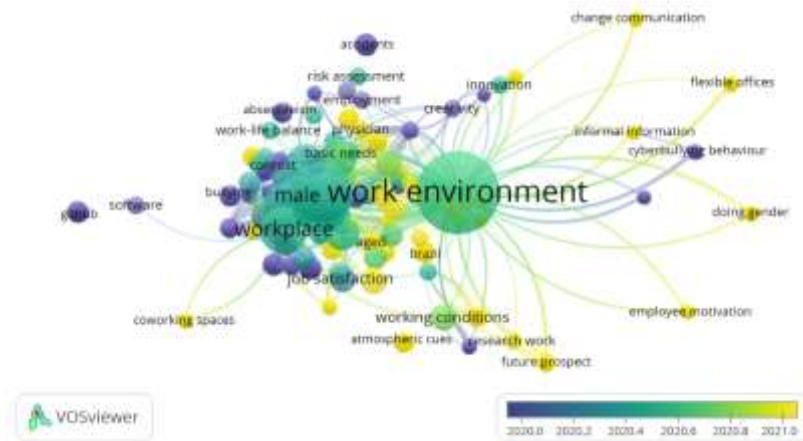


Figure 7
Overlay Visualization Metadata Co-Occurrence (Keywords)

According to Figure 7, it can be seen that many yellow clusters appear every year, this shows that there is a

development of keywords and is the latest research. The bluer the keyword, the longer the research. The

existence of a pandemic has also prompted many keyword developments that have occurred because the work environment has changed from having mobile working during a pandemic to limiting social interaction. This finding is expected to be a reference in further research to raise topics related to work-life balance in the era of mobile working as an impact of technological developments.

c. Citation

Analysis of the most citations used in work-life balance research in the mobile working era to find out

which articles have the greatest influence on the development of research in this field. Of the top 10 Cited, as previously explained, many come from European and American countries. This shows that there is very little research related to work-life balance in the era of mobile working in Asia. This can be input for further researchers to take a theme that can provide deeper knowledge regarding work-life balance in the global working era. The top 10 cited can be seen in Table 1 below.

Table 1
Top 10 Cited Articles

No	Publication Year	Author	Title	Journal	Cites	Publisher
1	2020	Hartinah	<i>Teacher's performance management: The role of principal's leadership, work environment, and motivation in Tegal City, Indonesia</i>	Management Science Letters	66	Growing Science
2	2020(b)	Abildgaard	Forms of participation: The development and application of a conceptual model of participation in work environment interventions	Economic and Industrial Democracy	22	SAGE Publications Ltd
3	2020	De stobbeleir	Shifting focus: Antecedents and outcomes of proactive feedback-seeking from peers	Human Relations	12	SAGE Publications Ltd
4	2021	Marescaux	Co-worker	Human	9	SAGE

No	Publication Year	Author	Title	Journal	Cites	Publisher
		e	reactions to ideals through the lens of social comparison: The role of fairness and emotions	Relations		Publications Ltd
5	2020(a)	Abildgaard	'Same, but different: A mixed-methods realist evaluation of a cluster-randomized controlled participatory organizational intervention	Human Relations	7	SAGE Publications Ltd
6	2020	Fahie d		International Journal of Workplace Health Management	7	Emerald Group Holdings Ltd.
7	2021	ggerald	20 years of Nordic hospitality research: a review and future research agenda	Scandinavian Journal of Hospitality and Tourism	7	Routledge
8	2021	Breaugh j	Too Stressed To Be Engaged? The Role of Basic Needs Satisfaction in Understanding Work Stress and Public Sector Engagement	Public Personnel Management	6	SAGE Publications Inc.
9	2020	Smith ni	Examining the factors influencing organizational creativity in professional sports organizations	Sports Management Review	6	Elsevier Ltd
10	2020	Alkaabi o	Relationships among authentic leadership, manager	Leadership in Health Services	6	Emerald Group Holdings Ltd.

No	Publication Year	Author	Title	Journal	Cites	Publisher
			incivility, and trust in the manager			

Based on table 1, it is known that of the top 10 articles cited, (Hartinah et al., 2020) were ranked first with a total of 66 citations. Hartinah's research aims to determine the effect of leadership, work environment, and motivation on improving the performance of certified private vocational high school teachers in Tegal City. The second most cited citation is an article written by Abildgaard (2020) published in the journal Economic and Industrial Democracy. Research conducted by abildgaard (2020) presents a conceptual model that can be used in the work environment and its application according to the

protocol of the eight participation interventions to explain each intervention according to its participation. Until March 2022, research conducted by Abildgaard (2020) has been cited 22 times.

The third most citations are articles written by De stobbeleir (2020) published by the journal Human Relations. This study was conducted to find out whether there is an interdependence of tasks and psychological security affecting seeking feedback from co-workers in a team and to find out whether this will affect supervisor evaluation and team creativity. De stobbeleir's research (2020) has so far been cited 12 times.



Figure 8
Visualization Metadata Citation

In Figure 8 it can be seen that the largest cluster is the Hartinah cluster (2020) which is then followed by abildgaard js (2020b). these

researchers are people who are interested in studying related to the application of work lift balance in the mobile working era even though most

of these studies are more inclined to know about the work environment.

2. Research Discussion

This study discusses related to work-life balance in the era of mobile working which is still relatively few found, especially in Asian countries. Based on this research, most of the discussions related to work-life balance are in European and American countries. This is driven by technological improvements that are developing rapidly in these regions compared to most Asian countries. In general, rapid technological developments and reaching most areas of the world encourage the use of mobile working as one of the working concepts used (Irawanto et al., 2021b). In addition to implementing mobile working, it can encourage a work-life balance for employees, mobile working also has many benefits for the company (Buomprisco et al., 2021). In addition, in terms of keywords for work-life balance in the era of mobile working, there are many variations. Where this can be caused by many factors that must be examined in the work-life balance. According to (Poulose, 2014). There are at least 3 main factors, namely individual factors, organizational factors, and social factors. From the keywords, it can also be seen that there are still a few researchers who use work-life balance as a keyword. So further researchers need to conduct research that focuses on work-life balance in the era of mobile working.

Reviewing the importance of work-life balance, it is also necessary for several countries to collaborate to produce the best research results. Especially for countries in Asia where the link between research can be said to be still very little. So far, most of the collaborations carried out in research that report on work-life balance in the era of mobile working are still mostly

from European countries, one of which is Sweden. This is in line with the commuter benefits article (2019) which says that Sweden has a high work-life balance index where workers can spend about 15 hours/day of free time.

This bibliometric analysis provides an overview of the highest number of citations which is the biggest contributor to research related to work-life balance in the era of mobile working. So far, the most cited research is research conducted by Hartinah (2020), followed by the second and second position, namely research conducted by Abildgaard (2020) and De Stobbeleir (2020).

Conclusion

This research was conducted using the bibliometric analysis method on 47 published articles from Scopus indexed journals and proceedings over 3 years, from 2020-2022. The keywords used in this study are "work-life balance" OR "wlb" OR "work environment" OR "work and organization" OR "work/life discourse reflecting" OR "mobile working".

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