Research Article

A Bibliometric Analysis of Psychological Contract Literature: Current Status, Advancements and Future Research Trends

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ABSTRACT

In the current competitive and dynamic environment, employees' psychological contract (PC) is an important psychological factor through which organizations can achieve competitive advantage. Numerous studies have shown that PC is a significant predictor of various organizational outcomes. Despite of the increasing attention in exploring the PC aspects among academicians, review articles and thorough analysis have been limited. The present study fills in this gap by identifying and assessing the research progress of PC literature. Using 1333 journal articles from the Elsevier Scopus database published within the year 1973 to 2019, a bibliometric analysis was employed to assess the patterns of global PC studies based on the total number of articles published, co-authorship analysis amongst affiliated countries and authors, and co-occurrence of author keywords. The results revealed that the number of publications increased every year, subsequently cumulative total publications also steadily increases till the present time. The current research findings show that researchers from the United States, United Kingdom, Australia, and China contributed about 61% of worldwide publications, leading the other 64 countries. Moreover, four of the world's top 100 universities were among the most prolific universities in each of the top ten countries selected for the analysis. By providing a comprehensive overview of the research studies in the field of the PC, this study highlights the insights and directions for the future researchers, practitioners, academicians, and scholars in business, management, social sciences, and psychology fields.

Keywords: *Psychological Contract, Bibliometric Analysis, Publications, Co-authorship Analysis, Author Keywords Co-Occurrence*

1. INTRODUCTION

In the year 1960, the concept of psychological contract (PC) emerged in the literature. However, significant developments regarding the concept of PC occurred in late 1980-1990, mainly focusing on Rousseau research work (Freese & Schalk, 2008). This concept remains productive, specifically in the employee relations area. According to the Rousseau and Tijoriwala (1998), the concept of PC refers to "an individual's belief in mutual obligations between that person and another party such as an employer (either a firm or another person)" (p. 679). Most researchers cited the literature on PC related to either of the two central themes, namely PC content and PC evaluation (Kutaula, Gillani, & Budhwar, 2019). Nevertheless, some alternative approaches include a feature based approach and a process approach (D. M. Rousseau, Hansen, & Tomprou, 2018).

The scope of the research on the concept of PC has been expanding since the 1980s. The scope has expanded from for-profit organizations to non-profit organizations (Li & Xu, 2020). The PC study's purpose further expands company's employees' scope to students, patients, clients, and other groups. Furthermore, PC research content extends from employees' conduct to the causes, nature, and effects of the formation of PCs (Li & Xu, 2020). This is the reason PC research is continuously developing and progressing. Moreover, literature has shown that PC is positively and significantly related to many employee outcomes, i.e., employee task performance (Park, Kim, & Song, 2015), employee job satisfaction (Birtch, Chiang, & Van Esch, 2016), employee commitment (Solinger, Hofmans, Bal, & Jansen, 2016), organizational citizenship behavior (Kiazad, Kraimer, & Seibert, 2019) and work engagement (Soares & Mosquera, 2019). Simultaneously, the attitudes of young employees towards life are gradually being liberalized, and employee loyalty is declining, creating

problems for organizations (Li & Xu, 2020). Scholars are therefore interested in finding out how to enhance the psychological agreement between the employees and the organizations.

Despite the growing interest in the PC studies there have been few studies dedicated to assessing and analysing research trends on the PC from a global perspective. For instance, systematic literature review of PC theory (Kutaula, Gillani, & Budhwar, 2020), systematic review on PC and volunteering (Hoye & Kappelides, 2020), and bibliometric analysis on the PC (Li & Xu, 2020), but these research studies are restricted to limited areas. Previous studies on a systematic literature review (Kutaula, Gillani, & Budhwar, 2020), a systematic review on PC and volunteering (Hoye & Kappelides, 2020), and bibliometric analyses on the PC (Li & Xu, 2020), focus on specific concepts that revolve around certain predefined parameters. In contrast, Li and Xu (2020) were limited to the web of science, and the bibliometric study analysis of Li & Xu (2020) was limited to 2000 to 2018. It used citation space for bibliometric analysis. The present study has considered PC data since its first year of publication in Scopus from 1973 to 2019 and used VOSviewer for bibliometric analysis. Therefore, the current bibliometric study will make an addition to the existing body of knowledge on PC by demonstrating a wide range of statistical analyses and critically examining the trends and scope of the field of PC since 1973, the year of the first article on PC indexed in the Elsevier Scopus database. Thus, using Elsevier Scopus database is an effort to bring more topics that may not be included in the Web of Science and may not be highlighted by previous review studies on PC Kutaula, Gillani, & Budhwar (2020), Hoye and Kappelides (2020) and (Li & Xu, 2020). Moreover, the Scopus database is the correct choice for bibliometric analysis as it is regarded as the, most extensive, and accurate data provider database (Franceschini, Maisano, & Mastrogiacomo, 2016).

The current study objectives are as follows: i)To assess the patterns of global PC research in the journal articles; ii) To identify the contribution of the top researchers, the most productive academic institutions and the leading countries in advancing the research area on the concept of the PC world-wide; (iii) To draw attention to commonly used terms and the research topics in the field of PC; (iv) To determine dominating countries in the field of PC research; and (v) To bring forth valuable insight on possible collaborations and future research directions. This research study will be useful as it highlights the insights and directions for the future researchers, policymakers, academicians, and scholars in related business, management, social sciences, and psychology fields.

2. MATERIAL AND METHODS

The present study has used a bibliometric analysis technique to investigate the importance of PC in academic research. The bibliometric analysis is an atomistic approach to view the worldwide research trends in a specified area depending on the database outputs on academic literature (Khudzari et al., 2018). It is a comprehensive investigation of a particular variable from different viewpoints by underlining its development path (Fellnhofer, 2019). In addition, the present study used Elsevier Scopus database to collect data, as it is considered as the largest citation and abstract database, and also regarded as an accurate data provider, and is more accurate than Web of Science (WoS) (Franceschini et al., 2016). In addition, Scopus is regarded as a well-known alternative to WoS, and it is used in many international university rankings, including the Times Higher Education ranking (Harzing and Alakangas, 2016). Accordingly, the use of Scopus database does not require any additional justification (Harzing and Alakangas, 2016). Therefore, these characteristics make Scopus database the right choice for the bibliometric analysis of a study variable.

2.1. SEARCH STRATEGY

The search of data was conducted between December 15, 2020 to December 28, 2020 using Elsevier Scopus database. The fundamental theme in the present study was research articles containing "psychological contract*" in their title and abstract. The present research provides a comprehensive overview of the publication trends of the studies on psychological contract from year 1973 to 2019. The query string used for the present study was: TITLE-ABS ("psychological contract*" AND (EXCLUDE (PUBYEAR, 2021) OR EXCLUDE (PUBYEAR, 2020)) AND (LIMIT-TO (DOCTYPE," ar")) AND (LIMIT-TO (SRCTYPE,"j"). This mentioned string resulted in 1373 documents. In the next step, to avoid review articles from the current analysis, more phrases were added in the query string, to make sure that there were no review studies in the current analysis.

This brings about 184 articles that were irrelevant to our study. These 184 articles include, meta-analysis and review articles. After reading these 184 articles, 40 articles were identified as review articles. Further, the present study excluded these 40 review articles from the query string in order to make sure that there were no review articles included in the present analysis. In order to avoid these 40 articles from the next search results, EIDs of the 40 identified review articles were excluded from the main search string. Therefore 1333 total number of articles were used in the current analysis. Figure 1 shows the data collection process for the present study, whereas the detailed search string is available in Appendix-A.
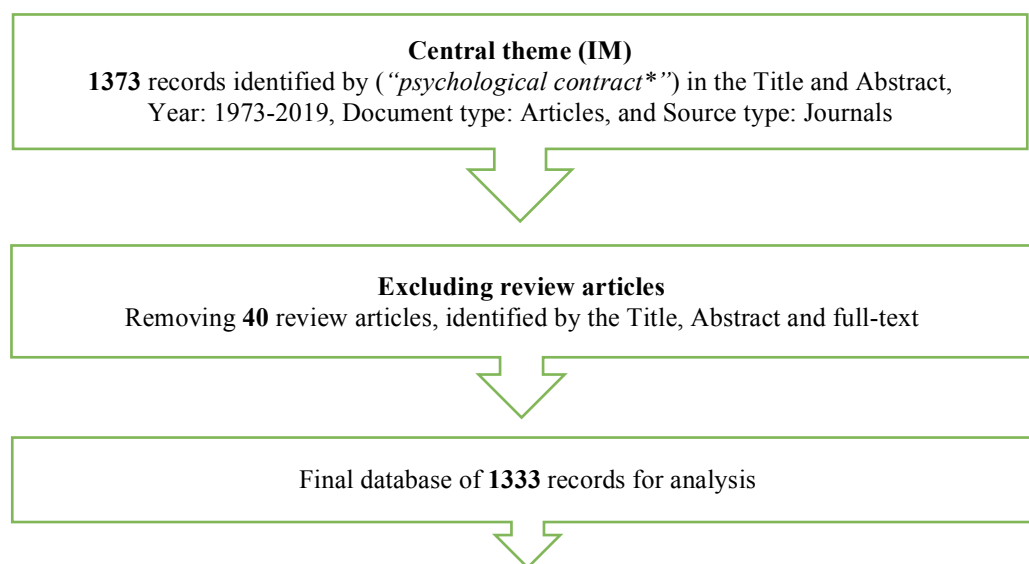
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│                        Central theme (IM)                              │
│  1373 records identified by ("psychological contract*") in the Title   │
│        and Abstract,                                                   │
│     Year: 1973-2019, Document type: Articles, and Source type: Journals│
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│                     Excluding review articles                          │
│   Removing 40 review articles, identified by the Title, Abstract and   │
│        full-text                                                       │
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│           Final database of 1333 records for analysis                  │
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Figure 1: Flow chart of data collection process of research articles

2.2 BIBLIOMETRIC MAPS

The details of all authors, their keywords, and data of their affiliated countries from 1333 articles was inserted into the software VOSviewer (version 1.6.13) to create and visualize bibliometric maps. Maps created by using VOSviewer contain items. In the current study, the items are the objects of interest, namely the author keywords or countries. Between the pair of items, there can be a link, relation, or connection between two items. Each association link was shown in a positive number or digit. The highest number of the link represents the more robust relationship. For co-authorship analysis, the link strength showed between two affiliated countries shows the number of publications. In contrast, the total link strength shows the total links of this particular country has co-authored with other countries. Likewise, for co-occurrence analysis, the link strength between author keywords shows the number of publications in which two keywords occur together.

2.2.1 Analysis of Co-authorship

In the analysis of co-authorship, the strength of the relationship between countries indicates the number of publications co-authored by two related countries in the case of a co-authorship study, while the total strength of a country's co-authorship links with other countries is indicated by the overall strength of the link. In the case of co-occurrence analysis, the strength of the correlation between author keywords indicates the total number of publications, where two keywords appear together. However, a detailed information can be found in the user manual on the features of VOSviewer (Taşkın & Akça, 2016). Furthermore, for this study's co-authorship analysis, 68 countries were added. Analysis of these affiliated countries was classified into five distinct continents/clusters, i.e., Asia, Europe, America, Africa, and Oceania.

2.2.2 Analysis of co-occurrence

For author's keywords co-occurrence analysis, 124 keywords from 1333 research articles were included. Before adding the author keywords to the VOSviewer, all identical and similar phrases were examined manually. For instance, psychological contract and psychological contracts were considered as psychological contract and organizational citizenship behavior, organizational citizenship behaviors and organizational citizenship behavior were considered as organizational citizenship behavior, and replaced accordingly. In the current study, small English alphabet "n" referring to "number of occurrences"

3. RESULTS OF THE STUDY

3.1   ANALYSIS OF PUBLICATIONS

Findings of the present bibliometric analysis shows that 1333 research articles were published on PC during the year 1973 to 2019, as shown in Figure 2. From Figure 2, it can be seen from the graph that until 1994, not many publications were found on the PC. However, after 1994, there is an increasing trend in the total number of publications per year, and it has remained on an upward trend. The graph shows that by the end of 2000, publications in this area have crossed the limit of 100 publications. About 76.4% of articles were published after the year 2008. Nevertheless, among these 1333 published articles, only 275 articles are available with open access. Khudzari et al. (2018) opined that open access journals have a maximum number of citations.
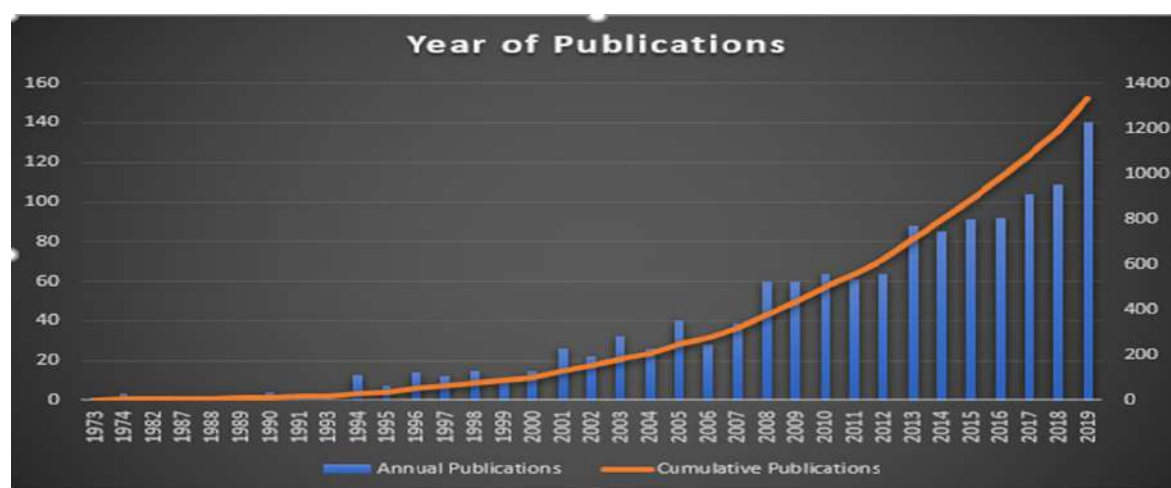

Figure 2: Annual and Cumulative Publications from the Year 1973 to 2019

3.1.1   Analysis of Publications by Subject Area

Psychological contract research is not confined to any specific field, all research areas that include social sciences, business, biological sciences, environmental sciences, agricultural research, and engineering have considered studies. The Scopus database has characterized these 1333 articles into 24 subject areas. There are extensive PC research areas, and many research groups worldwide are actively working in these areas. PC analysis on subject areas exhibited that business, management, and accounting concerns focus on PC studies. This is shown by the total number of publications classified in the following subject areas: Business, Management and Accounting (946 articles), Social Sciences (405 articles), Psychology (403 articles), Economics, Econometrics and Finance (99 articles), Arts and Humanities (88 articles), Decision Sciences (80 articles), Medicine (65 articles), Computer Science (51 articles), Engineering (38 articles), Nursing (24 articles), Environmental Science (19 articles), Mathematics (14 articles), Multidisciplinary (09 articles), Agricultural and Biological Sciences (08 articles), Biochemistry, Genetics and Molecular Biology (07 articles), Energy (05 articles), Health Professions (05 articles), Materials Science (04 articles), Pharmacology, Toxicology and Pharmaceutics (04 articles), Chemical Engineering (02 articles), Earth and Planetary Sciences (02 articles), Neuroscience (02 articles), Chemistry (01 articles) and Veterinary (01 article). The subject area

analysis of PC studies showed that it is indeed a multidisciplinary area. Figure 3 shows the analysis of PC publications by subject area.
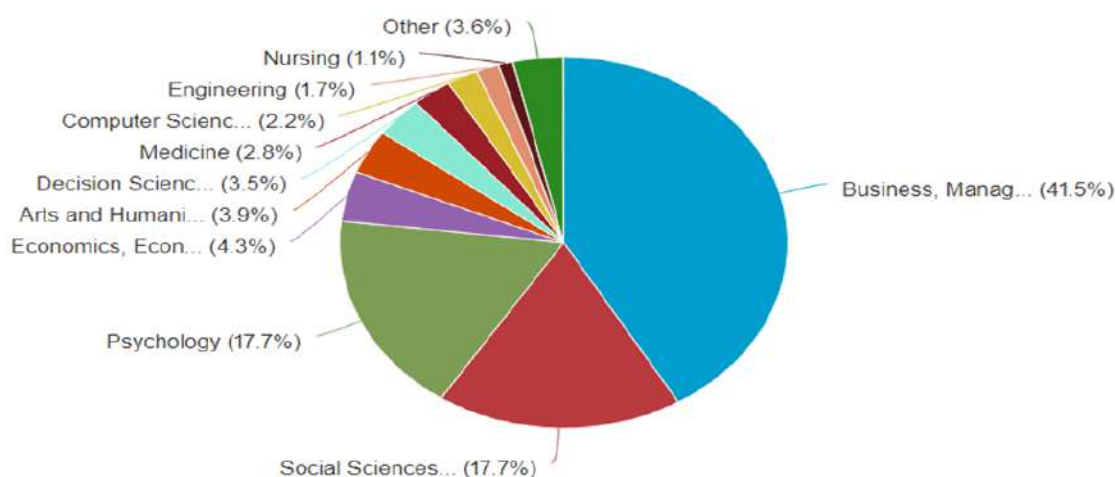
Documents by subject area

Figure 3: Analysis of Psychological Contract Publications by Subject Area

3.1.2   Analysis of Publications by Languages

In the present bibliometric analysis on PC, it was also found that research articles were available in various languages. The bibliometric analysis results of the present study show that all publications were written in 10 languages. About 97.52 % of the total publications were in the English language, followed by 1.5% in Spanish, 0.52% in German, 0.30 % in Chinese, Dutch, French, Portuguese, and 0.22 % in Turkish, 0.07% in Italian Lithuanian. It is essential to mention here that all abstracts were published in the English language even the whole paper is published in any other language, which may enhance the Scopus database's scope.

3.2   ANALYSIS OF JOURNALS

For journal analysis, 03 famous publishers maintained five top productive journals of the current research study, as shown in Table 1. These publishers are Taylor & Francis, Emerald and Wiley Blackwell. Amongst these Taylor & Francis, was on the top for publishing most productive journal. Second top journal publisher was Emerald and third by Wiley Blackwell. Rest of the two journals were published again by Emerald. International Journal of Human Resource Management was the top journal in the present study and has produced 5.32% of total research articles. The number of research publications and the overall ratio of publications of remaining four journals is as follows; Journal of Managerial Psychology (2.85%), Journal of Organizational Behavior (2.77%), Personnel Review (2.25%) and Employee Relations (2.17%). The bibliometric analysis results of the present study show that Journal of Organizational Behavior had the maximum number of citations (7382). Also, one of its publication had maximum CiteScore that is 1112. The bibliometric analysis result of the present study of citation score 2019 shows that two journals of our study had CiteScore of 3.0 and more. Journal of Organizational Behavior had the highest CiteScore 9.7 and Personnel Review had the lowest CiteScore 3.0. It has been observed that International Journal of Human Resource Management was ranked first due to its highest number of total publications. Still, it has a CiteScore below the CiteScore of Journal of Organizational Behavior, which shows the journal is not frequently cited, this may be because of open access and restricted access journals.

Table 1: Top Cited Journals of Psychological Contract

Rank	Journal	Total Publications (%)	Number of Citations	Cite Score 2019	The most cited article	Times cited	Publisher
1	International Journa Human Resou Management	5.32%	1409	5.5	Causes and consequences of psychological contracts among knowledge workers in the high technology and financial services industries	100	Taylor & Francis
2	Journal of Managerial Psychology	2.85%	1068	3.9	Learning orientation, organizational commitment and talent retention across generations: A study of European managers	125	Emerald
3	Journal of Organizational Behavior	2.77%	7382	9.7	Violating the psychological contract: Not the exception but the norm	1112	Wiley-Blackwell
4	Personnel Review	2.25%	488	3.0	Linking justice, trust and innovative work behavior to work engagement	90	Emerald
5	Employee Relations	2.17%	549	3.1	The impact of psychological contract violation on employee attitudes and behavior	60	Emerald

3.3 ANALYSIS OF PSYCHOLOGICAL CONTRACT RESEARCH BY COUNTRIES, INSTITUTIONS AND INTERNATIONAL COLLABORATIONS

The Table 2 illustrates the leading countries producing research articles on the concept of PC world-wide. From the year 1973 till 2019, about 53.8% of research publications were created by the USA, Germany and Australia as shown in Table 2. These mentioned countries played a significant role in advancing the research area of the PC. Moreover, Table 2 shows that the top ten countries have produced 88.4% of the total publications from 1973 to 2019 on PC.

Table 2: Leading countries producing research articles on the concept of psychological contract globally

| Rank	Country	Total Publications	Single Country Percentage	The most productive Academic Institution	Total publication per institution	QS Global World Ranking 2021
1	USA	375	69.3	Carnegie Mellon University	16	51
2	UK	210	68.5	London School of Economics and Political Science	14	49
3	Australia	133	63.9	The Australian National University	23	31
4	China	96	51.0	Renmin University of China	8	581-590
5	Canada	74	39.1	University of Calgary	10	246
6	Netherland	72	47.2	Tilburg University	34	368
7	Belgium	65	50.7	KU Leuven	21	45
8	India	58	84.4	National Institute of Industrial Engineering	11	QS ranking not available
9	Taiwan	54	81.4	National Sun Yat-Sen University Taiwan	7	416
10	Germany	42	57.1	Universität Leipzig	5	483

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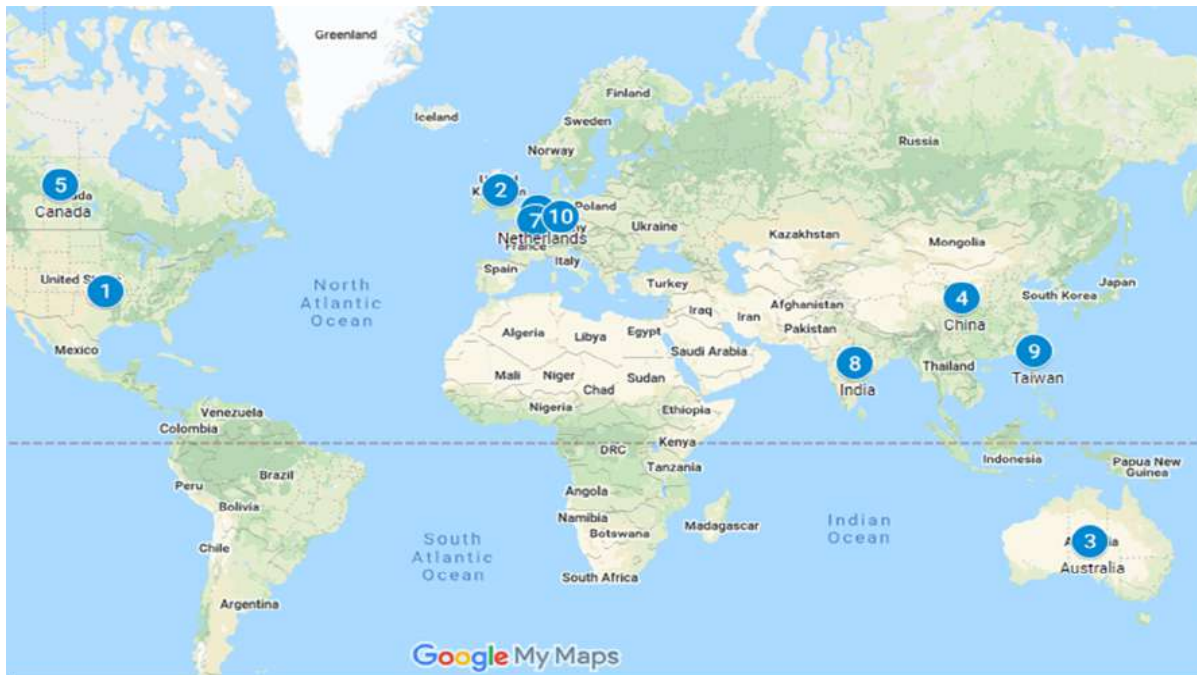
Figure 4: Leading countries producing research articles on the concept of psychological contract globally

Table 2 shows an overview of country-wise publications in which only India (84.4%), Taiwan (81.4 %), and USA (69.3%) had produced over 2/3 single country publications amongst the other 10 top countries of the current analysis. It shows that India, Taiwan, and the USA have substantial links/collaborations. However, Canada had the minimum percentage of 39.1% of which 29 out of 74 research publications were affiliated with 17 countries. As the last column of Table 2 has shown the Q.S. Global World Ranking 2021 of the most productive academic institution of the top 10 ranked countries producing PC papers from the year 1973-2019. Table 2 shows that as per Q.S. Global World Ranking 2021, The Australian National University, Australia has ranked at 31st best university.
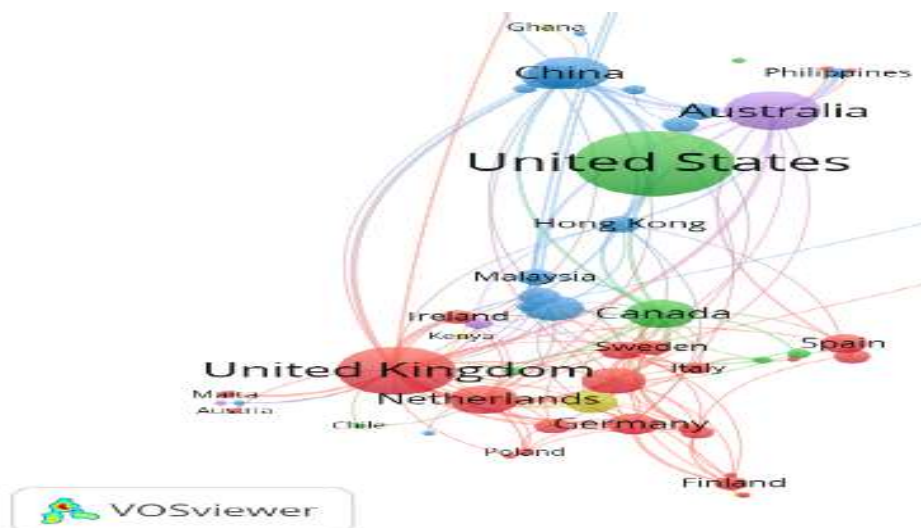

Figure 5: Bibliometric map of co-authorship in network visualization mode.

The results of the categorization of the countries as per region is shown in Figure 5. The countries in the current analysis are categorized into five regions that include Europe, America, Asia, Africa, and Oceania. According to the present analysis, 25 countries belong to Europe, 9 belongs to America, 24 from Asia, 07 from Africa, and three belongs to Oceania. When two countries or territories are located close to each other on the map, it shows that these two countries have a stronger relationship and affiliation between them. This is also shown by a thicker line connecting them. Figure 5 shows that Europe is at the top with the maximum number of countries. Co-authorship analysis of PC shows that the USA has zero affiliation with other countries and has 373 times of co-authorships. UK has maximum affiliations with 33 countries including 210 co-authorships. While Australia

has 14 links and 133 times co-authorships. China has 15 links, including 95 times co-authorships. Our co-authorship analysis has also shown that some 57% of countries have co-authored their research work with less than 10 countries. However, international collaborations can be boosted by increasing the number of visiting faculty/researchers in a particular institution, a variety of research partnerships and large research funding by the government funding institutes or other autonomous bodies.

3.4   ANALYSIS OF AUTHORS

As can be seen from the Table 3, top 10 authors in a PC research studies have affiliation with eight countries. Two authors belong to the United States, and two authors are from Australia, and one author each from South Africa, the United Kingdom, Belgium, Portugal, India, and the Netherlands. The publications of these authors ranged between the year 1989-2014. M.J.D René Schalk from South Africa is the top author, as shown in Table 3. He has published 25 research papers from the year 2003, with 672 total citations and h-index 23. Table 3 shows that Simon Lloyd D Restubog and Denise M. Rousseau are the second leading authors. Both authors have 23 total publications each, with 1002 and 5781 total citations and h-index 35 and 60. Simon Lloyd D Restubog's first-year publication was in year 2008, and his current affiliation is with The University of Queensland Business School, Australia. Whereas Denise M. Rousseau first-year publication was in year 1989 and his current affiliation is Carnegie Mellon University, United States.

Table 3: Top 10 Authors in the field of Psychological Contract

Rank	Author	Scopus Author ID	Year of 1st Publication	Total publication	h-index	Total citation	Current affiliation	Country
1	M.J.D René Schalk	6602621707	2003	25	23	672	North-West University	Potchefstroom, South Africa
2	Simon Lloyd D Restubog	13905925700	2008	23	35	1002	The University of Queensland Business School	Brisbane, Australia
3	Denise M. Rousseau	7201862402	1989	23	60	5781	Carnegie Mellon University	Pittsburgh, United States
4	P. Matthijs Bal	23468566700	2008	18	23	785	University of Lincoln	Lincoln, United Kingdom
5	Prashant Bordia	7003566658	2008	17	40	819	ANU College of Business & Economics	Canberra, Australia
6	William H Turnley	6701400328	1999	13	31	1721	Kansas State University	Manhattan, United States
7	Tim Vantilborgh	49864814100	2014	13	13	174	Vrije Universiteit Brussel	Brussels, Belgium
8	Maria José Chambel	6507178503	2006	12	19	132	Universidade de Lisboa	Lisbon, Portugal
9	Upasna A Agarwal	57200846387	2014	11	11	156	National Institute of Industrial Engineering	Mumbai, India
10	Paul G W Jansen	7202566278	2008	10	25	468	Vrije Universiteit Amsterdam	Amsterdam, Netherlands

3.4.1   ANALYSIS OF AUTHOR KEYWORDS

In terms of keyword analysis, 79.9 % of the articles were with author keywords. Also, while uploading the information to VOSviewer, this study takes five as a minimum number of keyword appearances (Van Eck & Waltman, 2013); therefore, the database identified 135 keywords for the 2476 keywords. These 135 keywords have 891 links with each other, while the total link strength reaches 1717. Then we re-labelled the identical/similar words, including phrases and created map of 124 authors keywords in VOSviewer, same as the

previous step we fixed threshold to 5 as a minimum number of appearances or occurrences. These 124 keywords have 762 links with each other, while total link strength reaches 1715.
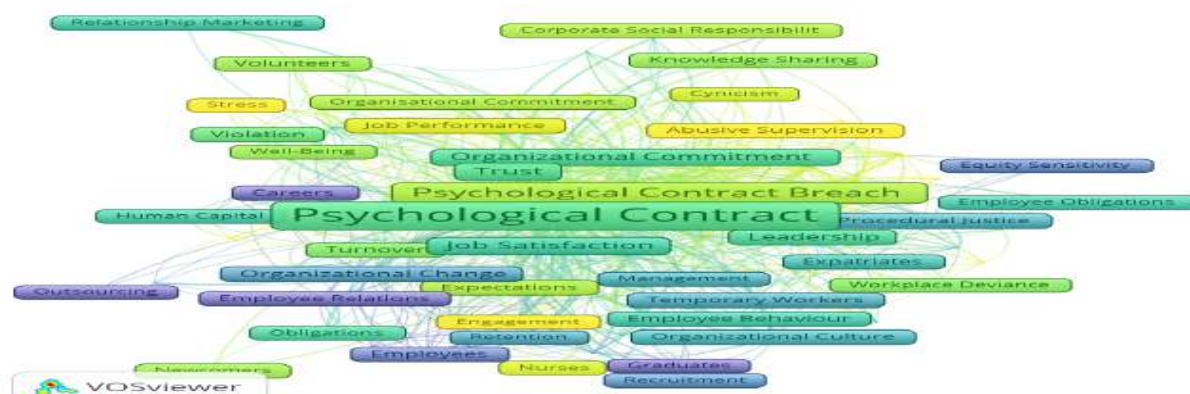

Figure 6: Authors keywords and co-occurrences (n=5) in overlay visualization mode

It can be seen from the Figure 6 that the term "Psychological Contract" has 572 co-occurrences and 700 links to other keywords. Psychological contract breach is the most frequently encountered keyword with 149 co-occurrences and 230 links, followed by organizational commitment with 47 co-occurrences and 92 links to other keywords. It has been observed that the concept of 'psychological contract' had co-occurrence with theoretical keywords such as organizational, job satisfaction, and human resource practices. Moreover, it has been noticed that some of the terms like psychological contract breach (149 occurrences), psychological contract violation (53 occurrences), were closed concepts of the PC. The concept of 'psychological contract breach' seems to be a new philosophy aimed to manage the psychological contract. The bibliometric analysis result of the present study shows that the term 'psychological contract breach' has 149 occurrences and 230 total link strength to other keywords.

As shown in Figure 6, the overlay visualization mode, which is shown in different colours. The overlay visualization mode was selected to view the keywords, link strength, the total number of occurrences and average publication year. For instance, the yellow colour represents the variables with the average publication year 2016 while purple colour represents the variables average publication year 2008. Furthermore, the yellow colour scheme also shows that variables with infrequent occurrences. For example, employee engagement (n=8), abusive supervision (n=10), organizational cynicism (n=5), counterproductive work behavior (n=6), workplace bullying (n=7), work engagement (n=18), psychological contract fulfilment (n=36), job insecurity (n=17), talent management (n=11), performance (n=10), engagement (n=8), stress (n=9), and collectivism (n=5).

4. CONCLUSION

This bibliometric analysis provides a detailed overview of the publication trends of the studies on PC from year 1973 to 2019 from the global perspective. By providing a detailed overview of the articles published in the field of PC, this study highlights the insights and directions for the future researchers. The present study underlines the important topic 'psychological contract' and its research trends which may be valuable for scholars and professionals. It is also anticipated, that the annual publications may continue to increase in the future. Moreover, this study highlights the different gaps in the existing literature on PC and suggests different paths for future studies in the current research area.

Findings of the study show that maximal research publications have been identified by academic institutes from the United States, United Kingdom, Australia and China. The identified academic institutes could be a platform for future researchers, that will help them to boost their collaborations or linkages in the mentioned research area. This analysis shows that the benefits of international connections or partnerships are not only limited to the sharing of expertise, exchange of knowledge and the expansion of the network, but it is also a useful approach for the ranking of institutions. As, the present study also signify that four of the world's top 100 universities

were amongst the most productive universities in the ten leading countries selected for analysis on PC research. The current study also discussed the trend of the publications with both renowned and overlooked keywords.

Since the current study is the generic one and has used PC as the primary term for analysis, but from the results, it has been observed that considerable articles have been published on the terms "psychological contract breach" and "psychological contract violation". But less number of studies were conducted on "psychological contract fulfilment". Since the knowledge world is developing, some of the critical concepts currently dominating the field can now be replaced in the future with more important keywords.

4.1 LIMITATIONS

Despite the efforts and time required to conduct this bibliometric analysis, the present study has some limitations. At the first stage, the study was only confined to "psychological contract*" to abstract and titles. Some studies, however, may not refer to the PC within the scope of the search. Moreover, this study is limited to the Scopus database as it is considered to be the most comprehensive citation and abstract database of peer-reviewed articles. Therefore, all the publications on PC may not cover the finding of the search string used in this study. However, a comparison of the outputs from several databases could be made by future researchers. Secondly, co-occurrence analysis of the author's keywords consisted of 76% of the study's publications. In some journals, information on the keywords of the author was not available. So, this study analysis is restricted to these author's keywords.

4.2   FUTURE DIRECTIONS

The present study's bibliometric analysis result has included research on breach of the psychological contract, psychological contract violation and psychological contract fulfilment, relational psychological contract, and transactional psychological contract available on Scopus database. Future researchers may restrict their search string to PC with its "relational psychological contract" dimension, "transactional psychological contract", "balanced psychological contract", and "transitional psychological contract" for a more comprehensive analysis of the variable since the current study was a generic study attempting to study all the terms relating to the main primary variable in the subject area listed in the Scopus database.

Acknowledgements

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APPENDIX

The query/search string run on December 15-16, 2020 by using Elsevier Scopus Database

Serial	Search Purpose	Search String	No. of Articles
1	Articles main search	TITLE-ABS ("psychological* contract*")	1966 (15/12/2020)
2	Excluded 2019-2020 articles from main search	TITLE-ABS ("psychological contract*") AND (EXCLUDE (PUBYEAR, 2021) OR EXCLUDE (PUBYEAR, 2020))	1793 (15/12/2020)
3	Limited to research articles published in Journals only (from main search)	TITLE-ABS ("psychological contract*") AND (EXCLUDE (PUBYEAR, 2021) OR EXCLUDE (PUBYEAR, 2020)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SRCTYPE, "j"))	1373 (15/12/2020)
4	Identify review Articles (26)	TITLE-ABS ("psychological contract*") AND (TITLE ("recent" OR progress OR review OR critical OR revisit OR advance OR development OR highlight OR perspective OR prospect OR trends OR bibliometric OR scientometric) OR (ABS (progress OR review OR bibliometric OR scientometric))) AND (LIMIT-TO (SRCTYPE , "j")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (EXCLUDE (PUBYEAR , 2021) OR	184 (40 yes) remaining no (15/12/2020)

		EXCLUDE (PUBYEAR , 2020))	
5	Removed all review articles from main search	TITLE-ABS ("psychological contract*") AND NOT EID (2-s2.0-84986037740 OR 2-s2.0-0032014779 OR 2-s2.0-84986169798 OR 2-s2.0-0036392039 OR 2-s2.0-84986078089 OR 2-s2.0-20444458711 OR 2-s2.0-34547574556 OR 2-s2.0-32644443833 OR 2-s2.0-33750450862 OR 2-s2.0-34248372895 OR 2-s2.0-34547234187 OR 2-s2.0-33947511523 OR 2-s2.0-84992929496 OR 2-s2.0-37549050141 OR 2-s2.0-39149098484 OR 2-s2.0-58449120439 OR 2-s2.0-68649101438 OR 2-s2.0-61849169017 OR 2-s2.0-77953157361 OR 2-s2.0-77955421365 OR 2-s2.0-80053038708 OR 2-s2.0-84888988799 OR 2-s2.0-79961173123 OR 2-s2.0-84860515143 OR 2-s2.0-84876072108 OR 2-s2.0-84893872009 OR 2-s2.0-84911192919 OR 2-s2.0-84903627703 OR 2-s2.0-84894227351 OR 2-s2.0-84925944534 OR 2-s2.0-84919839315 OR 2-s2.0-84923260325 OR 2-s2.0-85019645597 OR 2-s2.0-85029897123 OR 2-s2.0-85042559551 OR 2-s2.0-84992051086 OR 2-s2.0-85052019557 OR 2-s2.0-85046787610 OR 2-s2.0-85049524770 OR 2-s2.0-85075753154) AND (LIMIT-TO (SRCTYPE , "j")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (EXCLUDE (PUBYEAR , 2021) OR EXCLUDE (PUBYEAR , 2020))	1373-40=1333

1333

(16/12/2020) |