

# TWENTY YEARS OF EMPLOYEE LOYALTY RESEARCH: TRENDS AND WAY FORWARD

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## ABSTRACT

*This paper analyses the bibliometric data on employee loyalty since 2002 to 2019. For so doing, the study identifies the most productive countries, universities, authors, journals, and the most prolific publications in employee loyalty. In addition, the study uses VOS viewer software to visualize the mapping based on co-citation, Bibliographic Coupling (BC), and Co-Occurrence (CC). The main contribution of the study is that it provides an overview of the trends and trajectories of employee loyalty, which may help the researchers and the practitioners to understand the trend and future research directions.*

**Keywords:** Employee Loyalty; Bibliometric Analysis; Co-Citation, Bibliographic Coupling; Co-Occurrence.

## INTRODUCTION

Numerous modes of trend identification for making content available for the public including reviewal of literature, meta-analysis as well as reference-based analysis. For probing the tendency for workforce loyalty in the academic-research, bibliographic and reference-based method is used in the current research. Bibliometrics is an area of study that revolves around exploring the past and issued background knowledge empirically (Broadus 1987). In the greater spectrum of research, the study types based on bibliometrics have appeared regular for instance, managerial, accounts, entrepreneurial as well as economics based studies. In previous cases, various types of matters have been investigated comprising most commonly issued topics of research in specific journals (Imran Ahmed et al., 2021; Wu et al., 2021) highly utilized research articles for giving citations (Ritter, 2015), eminent and prominent research investigators (Heyduk & Fenigstein, 1984; Üsdiken & Pasadeos, 1995), article polishers (Bonner et al., 2006) as well as academic institutions (Cancino et al., 2017).

Such as, previous researcher carried a probe which was bibliometric-based research to identify greater number of matters regarding hugely cited studies, prominent article publishing

journals, highly prevalent research areas, highly concerned research novelties as well as academic research institutions (Fagerberg et al., 2012).

In the same manner, other authors have carried out research following bibliometric scanning to highlight the origin of knowledge transfer based publication (Gao et al., 2021; Gu et al., 2021). Many other surveyors have done study based on all over the country at bigger level for innovation-based examination (Farrukh et al., 2021; Farrukh, Raza, Meng & Wu, 2020). Moreover, they have been following the common-shared goals for the determination of studies based on innovations. As well as, their examinations have been prominent to cover the innovation based investigation analysis throughout the major and prominent states ranging from the year 1989 to the year 2013. A pathway which was determined by the previous researchers have been adopted in the current research by signifying workers loyalty study, that has been unable to capture a significant heed in the area of research Apart from this, current research has wider prism of investigation, with the purpose of exploring extremely productive regions, institutions, article publishers, as well as researchers of EL by considering varied bibliometric indices.

Firstly, the analysis from the year 2002 to 2019 has been presented in the study relating to the common tendency for the article publications as well as citations. On the second number, the current research has highlighted analysis for the regions that have major figures of journals as well as citations worldwide. Thirdly, those academic institutions are enumerated which have are high-yielding for this area of research. Fourthly, prominent journals have been recognized. Fifthly, all-encompassing researchers have been pinpointed considering the fact that how much publications as well as citations they hold in the EL investigation area specifically. The on-going research has focused on bibliometric and citation-based examination for exploring the association amongst journals, regional states and researchers. Last but not the least, future examination avenues are suggested by the researcher for the field of EL after the terse review of the background studies.

The instrumental offerings of the ongoing study are that, it has presented a comprehensive analysis regarding the major states, academic institutions, researchers, publishers; hugely utilized studies for citations as well as further avenues for the future are advised for EL study. The editors of the numerous journals will be benefitting from the current analysis by getting themselves enabled for the comprehending forthcoming research possibilities. Furthermore, the students will be able to pinpoint the countries as well as academic institutions in pursuant of the further investigations. Over and above, policymakers would be reaping the fruits of this research by knowing about the major regions for the EL surveys for their survey-based tasks and effective interactions for the further breakthroughs in this area. Most significantly, this study opens new doors of research as well as sheds light on innovative researches. Further, major journals and extremely cited studies are recognized by the research.

The remaining part of the study has following structure such as, methodology is presented after introduction, then findings and analysis is given and consequently, further research avenues as well as concluding remarks are catered.

## METHODS

For the years ranging from 2000 to 2018, this paper has aimed to explore the innovative research by carrying out bibliometric based analysis. When a specific field of research is faced by changes then these are identified by interpreting those changes and this process is called bibliometric based analysis. This process also includes ascertaining the trends of publications and probing the special tendency of publication with regards to the distinct research fields (Farrukh, Meng, & Raza, 2020; Imran Ahmed et al., 2021) Hence, the findings help the professional bodies on the grounds based on practicality, effectiveness, fruitfulness and time bound as they ought to be

engrossed in evaluating these research areas (Farrukh, Meng, Wu, et al., 2020). Covering another benefit of the study, it is said that the study would be assisting in the field of specific investigation quantitatively (Farrukh, Shahzad, Meng, Wu, et al., 2020). The database named as Scopus has been utilized for the data generation and gathering papers concerned data which are innovation based as well as issued in journals from period starting from 2000 and ending at 2018. The purpose of the current database selection is that it is one of the most popular, commonly utilized and greatly reliable sources for the papers and previous researches. Various keywords has been adopted while searching for the papers such as, innovation-based research or entrepreneurship-based articles. Various filters have also been used to ease the search for the papers by hunting for the keywords that may be available in the topics of the papers or abstracts. The number of papers has been totalled around 1420. For the final confirmation and to ensure the availability of concerned keywords in the papers, the investigator has gone through all the articles. Ultimately, total of 27 articles and papers have been determined as irrelevant because of the fact that they did not have the concerned keywords hence, those papers were excluded from the research. Then, 1393 articles and papers have been catered in carrying the research. Next, the papers have been categorized on the following criteria:

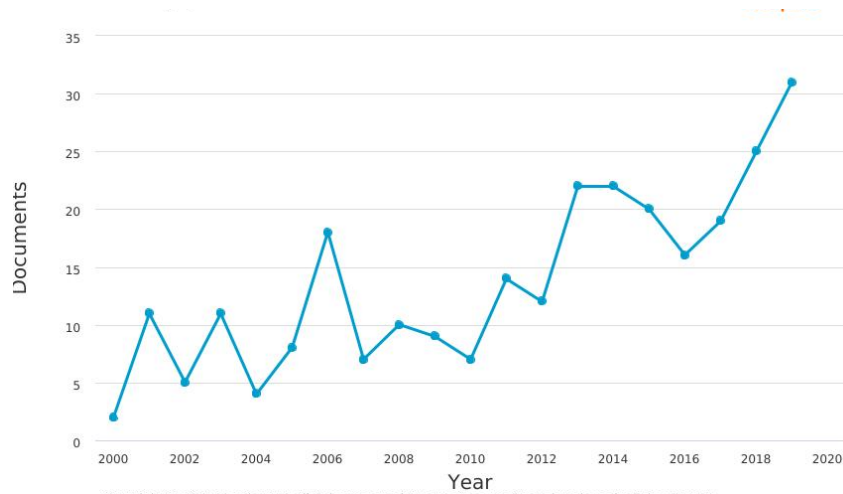
- Journals with greater number of publications
- Date based publication
- Greatly used papers in citations
- Highly productive researchers
- Highly prolific regions as well as institutions
- Co-research based system analysis
- Co-research system analysis within the country
- Keywords based co-occurrences system analysis.

For the above enlisted purposes the software enumerated as VOS Viewer 1.6.9 has been applied in the research. It is an instrumental tool helpful in drawing network information based figures and is free as well. Moreover, the figures are also explored through thus software.

## RESULTS

### Publication Trend

The papers which were issued publically in the journals during 2000 to 2018 have been numbered in the figure 1. The tendency has been confirmed through the figure that study on the innovation based researches have taken surge in some the current years. It is also shown that amid 2000 to the year 2004, few researches have been taken place. But an amazing proliferation has been seen from 2005 to the year 2012. The digits of articles increased up to 84. Additionally, it is observed that during the previous 6 years there has been huge number of publication. Amid the period from 2012 to the period 2017, papers have faced greater scales of issued papers ranging up to 256. Consequently, it is implied that all the researchers and investigators have been showing attention towards the particular area of study currently.



**FIGURE 1**  
**TREND OF PUBLICATIONS**

<b>Year</b>	<b>No of Papers</b>	<b>No. of Citations</b>
2019	31	568
2018	25	330
2017	19	363
2016	16	305
2015	20	241
2014	22	240
2013	22	219
2012	12	182
2011	14	136
2010	7	113
2009	9	120
2008	10	74
2007	7	55
2006	18	65
2005	8	46
2004	4	26
2003	11	12
2002	5	3
2001	11	0
2000	2	0
<b>Total</b>	<b>273</b>	<b>3098</b>

**Leading countries in Elresearch**

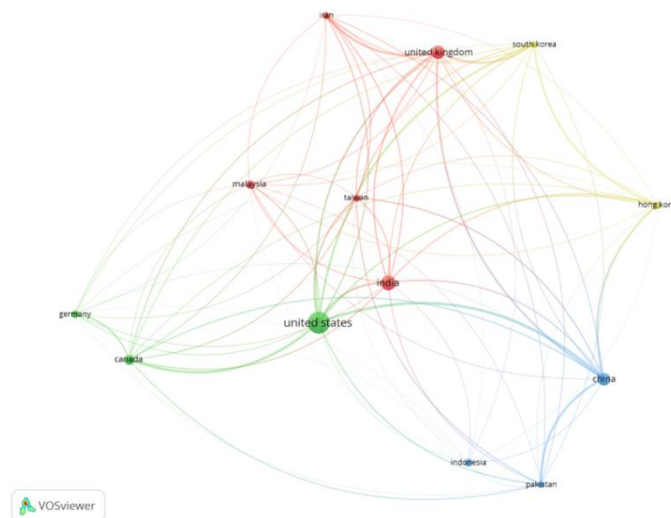
The current study has adopted the papers which are associated with their researchers from the 104 various regions. As per the table 2, all the concerned countries and regions are enlisted and mentioned. The data of the author and the paper is related to the same country in the first article. US

have come first on the chart carrying 237 articles. Next on the chart are the countries such as, Spain, Malaysian region, Britain as well as country named as Germany. It is vital to focus that up to 725 articles are belonging to the 6 regions that are topping the chart.

**Table 2**  
**THE MOST PRODUCTIVE COUNTRIES**

Rank	Country	Total Publications
1	United States	61
2	India	26
3	United Kingdom	21
4	China	20
5	Canada	12
6	Malaysia	9
7	Germany	8
8	Indonesia	7
9	Hong Kong	6
10	Iran	6
11	Taiwan	6
12	Pakistan	5
13	South Korea	5

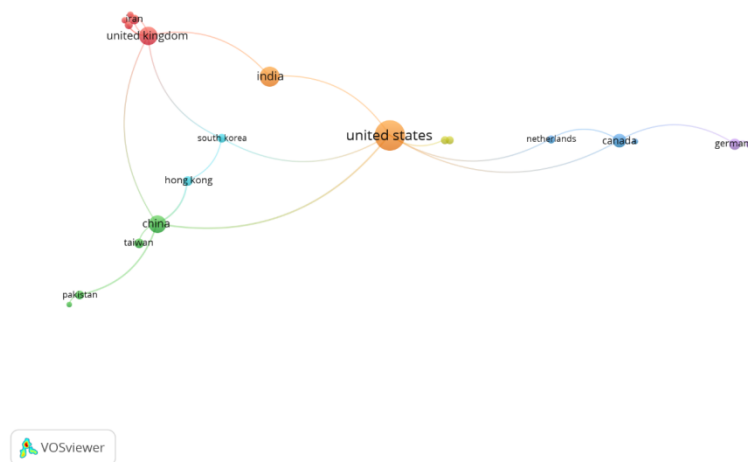
Then the findings of the coupling are depicted through the figure 2. All the countries are encircled, the bigger the circle, higher the endowment by them in the research. As per the table 2, the high yielding region is United States of America. Hence, the importance of bibliometric coupling is evident and it is further pursued by India as well as UK. Moreover, it is also important to analyse the networking amongst the authors of variant regions. To assist this purpose, further analysis is catered to answer the query.



**FIGURE 2**  
**BC OF COUNTRIES**

Figure 2 represents the results of the bibliometric coupling; each circle represents a country, and the size of the circle represents the contribution, the bigger the size, the more the contribution. The USA is the most productive country (table 2). It is obvious it would have the most significant bibliometric coupling with other countries. Followed by the India and UK.

Next, co-authorship amongst various regions has been demonstrated in figure 3. It helps to analyse the size of publications and networks amongst countries through the co-research based analysis. Therefore, significant colours have been shaded to identify the regions with co-authorship in the mentioned figure. The regions are connected through the co-authorship such as, US with variant regions, Britain with Chinese region and Ireland, Germany with France and Canada. Moreover, Malaysia, India, KSA, Israel as well as Thai region maintain better networks in this regard. The researchers of Hong Kong, Netherlands, Norway, Spanish region and Japanese regions are interconnected with one another. For the particular findings, at least 5 papers of a region as well as first 15 regions along major interconnections have been used as basis



**FIGURE 3**  
**CO-AUTHORSHIP AMONG COUNTRIES**

### The Most Productive Universities

On the basis of the innovation and entrepreneurial based investigations, the following institutions are the major ones that have higher number of publications such as, Seville University of Spain with 29 articles is topping the list. As per the table 3, the universities that have worked upon the papers greater than 15 are Putra University of Malaysia, Universidad da Beira Interior, Business school Emlyon, Utara University of Malaysia as well as National University of Distance Education.

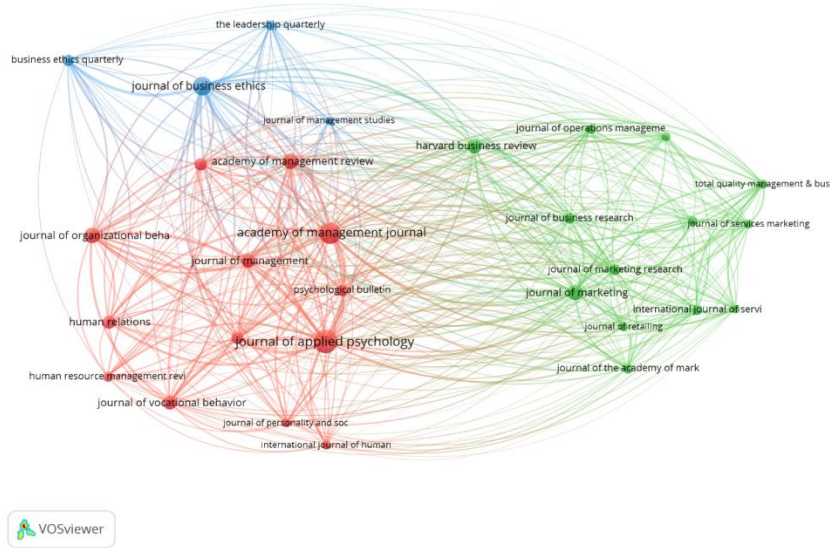
<b>Rank</b>	<b>Name of Institute</b>	<b>No. of Documents</b>	<b>Citations</b>
1	Multimedia University	3	8
2	Manchester Metropolitan University	3	45
3	Sejong University	3	40
4	University of Belgrade	3	16
5	Academy of Maritime Education and Training	3	0

### Leading Journals

As per the aim of the research, table 4 has highlighted the major journals which have published the research pieces at higher rates in the area of EL study than variant of other journals comparatively. Therefore, the major and dominant journals are presented in the table 4 which are 10 in total. The highest publishing have been performed by “Human Resource Management International Digest” carrying 62 in numbers, then comes “International Journal Of Human Resource Management” carrying 32 amidst the period of 2000 up to 2019. As EL considers all the workers of the various institutions for variant disciplines of research, so, it is obvious for the papers to be published in HR specific journals.

<b>Rank</b>	<b>Title</b>	<b>NP</b>
1	Journal Of Business Ethics	5
2	Employee Relations	4
3	Total Quality Management And Business Excellence	4
4	Indian Journal Of Public Health Research And Development	3
5	International Journal Of Applied Business And Economic Research	3
6	International Journal Of Human Resource Management	3
7	Journal Of The International Academy For Case Studies	3
8	Mediterranean Journal Of Social Sciences	3
9	Personnel Review	3
10	Physician Executive	3

It is quite important point of the bibliometric analysis is that when two distinct articles are co-cited by another paper. Three distinct shades have been used to highlight the co-cited journals in the mentioned figure such as, red shade is depicting co-citation and so on and so forth.



**FIGURE 4**  
**CO-CITATION OF THE TOP 30 JOURNALS**

**The Most Productive Authors in EL**

Owing to the aim of determining high-yielding researchers in the research of EL, findings are evident in table 5. Bakker, A.B. comes first in the chart carrying 39 published articles and papers then comes Shuck, B. As well as Albrecht, S.L. carrying 28 and 13 publications respectively.

<b>Table 5</b>	
<b>THE MOST PRODUCTIVE AUTHORS IN EL</b>	
Al Qudah	2
Austin	2
Bawa	2
Čudanov	2
Dwivedi	2
Dwivedi	2
Fabiano	2
Gong	2
Hornstein	2
Indvik	2
Ineson	2
Jermsttiparsert	2
Johnson	2
Kirchner	2
Krishnaveni	2
Lee	2
Poongavanam	2



Safari	2
Shahin	2
Sigmar	2
Storrs	2
Subramani	2
Vijay Anand	2
Yang	2

### The Most Cited Publication

The frequently cited papers and articles are also tool to determine the performance and appraise the journals as well as researchers. Therefore, highly used papers are depicted here in terms of greater citations. Hence, Scopus database is adopted as a source of data. The word EL was put in the search bar of the prestigious database and searched as per the intended keywords. Moreover, all the relevant papers have been accessed through this technique and picked the papers that contained the keywords in the topic, abstract or in the keywords of the articles. Then the papers carrying citations above 200 have been picked up by the researcher.

<b>Authors</b>	<b>Title</b>	<b>Year</b>	<b>Source title</b>	<b>Cited by</b>
Yee R.W.Y., Yeung A.C.L., Edwin Cheng T.C.	An empirical study of employee loyalty, service quality and firm performance in the service industry	2010	International Journal of Production Economics	164
Davis-Blake A., Broschak J.P., George E.	Happy together? How using nonstandard workers affects exit, voice, and loyalty among standard employees	2003	Academy of Management Journal	164
Jun M., Cai S., Shin H.	TQM practice in maquiladora: Antecedents of employee satisfaction and loyalty	2006	Journal of Operations Management	147
Niehoff B.P., Truitt M.R., Moorman R.H., Daugherty R.B., Blakely G., Fuller J.	The Influence of Empowerment and Job Enrichment on Employee Loyalty in a Downsizing Environment	2001	Group and Organization Management	110
Roehling P.V., Roehling M.V., Moen P.	The relationship between work-life policies and practices and employee loyalty: A life course perspective	2001	Journal of Family and Economic Issues	110
Graci S., Dodds R.	Why go green? The business case for environmental commitment in the Canadian hotel industry	2008	Anatolia	103
McNeese-Smith D.K., Crook M.	Nursing values and a changing nurse workforce: Values, age, and job stages	2003	Journal of Nursing Administration	91
Matzler K., Renzl B.	The relationship between interpersonal trust, employee satisfaction, and employee loyalty	2006	Total Quality Management and Business Excellence	89
Leung A.S.M.	Matching ethical work climate to in-role and extra-role behaviors in a collectivist work setting	2008	Journal of Business Ethics	69

Silvestro R.	Dispelling the modern myth: Employee satisfaction and loyalty drive service profitability	2002	International Journal of Operations and Production Management	68
Brammer S., He H., Mellahi K.	Corporate Social Responsibility, Employee Organizational Identification, and Creative Effort: The Moderating Impact of Corporate Ability	2015	Group and Organization Management	66
Klehe U.-C., Zikic J., Van Vianen A.E.M., De Pater I.E.	Career adaptability, turnover and loyalty during organizational downsizing	2011	Journal of Vocational Behavior	66
Antoncic J.A., Antoncic B.	Employee satisfaction, intrapreneurship and firm growth: A model	2011	Industrial Management and Data Systems	65
Johnson P.R., Indvik J.	Rudeness at work: Impulse over restraint	2001	Public Personnel Management	65
Martensen A., Grønholdt L.	Using employee satisfaction measurement to improve people management: An adaptation of Kano's quality types	2001	Total Quality Management	64
Shamir R.	Mind the gap: The commodification of corporate social responsibility	2005	Symbolic Interaction	60
De Vos A., Meganck A.	What HR managers do versus what employees value: Exploring both parties' views on retention management from a psychological contract perspective	2009	Personnel Review	58
Zhu Q., Hang Y., Liu J., Lai K.-H.	How is employee perception of organizational efforts in corporate social responsibility related to their satisfaction and loyalty towards developing harmonious society in Chinese enterprises?	2014	Corporate Social Responsibility and Environmental Management	54
Turkyilmaz A., Akman G., Ozkan C., Pastuszak Z.	Empirical study of public sector employee loyalty and satisfaction	2011	Industrial Management and Data Systems	54
Chang C.C., Chiu C.M., Chen C.A.	The effect of TQM practices on employee satisfaction and loyalty in government	2010	Total Quality Management and Business Excellence	54
Suliman A., Kathairi M.A.	Organizational justice, commitment and performance in developing countries: The case of the UAE	2013	Employee Relations	51

Business-unit-level relationship between employee satisfaction, employee loyalty, and business outcomes: A meta-analysis by Harter, J.K., Schmidt, F.L., Hayes, T.L published in 2002, got the most citation 1665. This publication aimed to draw insights from diverse literature to develop a perspective of employee loyalty. This publication focusses on employee satisfaction and EL impact on business outcome.

Next, the hallmark in EL research is: “Antecedents and consequences of employee loyalty” by the most cited authors Saks, A.M. This publication. Authors endeavoured to generalize the EL construct on cross-national research. They have defined integrated different dimensions and the antecedents and consequences of EL.

## The Keyword

The aim of the current study is to recognize the widely utilized keywords among various publications and Co-occurrence analysis is adopted to achieve this target. It also assists in identifying the most favourite research topics and trends of the authors. The software VOS Viewer helps in the regard for constructing images by showing the relevance of keywords and explaining their difference (Laudano et al., 2018). The terms would be relevant when their differences are lower. Moreover, co-occurrence techniques are adopted in this regard (Van Eck et al., 2010). The majorly adopted keywords are depicted in the table IV with huge items. The keyword particularly entrepreneurial intention appeared in greater number of times with the digit of 563. Major other keywords have also been appeared in the data collection while searching and those were also related to the same keywords. For instance, start-up intention and intentions based on self-employment etc. In the sum, 710 keywords have been shown after the analysis in the data collection out of the total figure of 1393. Further, this data is shown in the figure 9 particularly. As, shown 1362 keywords have been there in data collection and for mapping purpose 230 keys have been employed. Their occurrence frequency is also above in the collection. All the keywords have been attached by using numerous strings in the image by showing the fact about their appearance among other articles.

## CONCLUSION

The study aims such as; probing research tendency and recognizing the research tasks are pursued through bibliometric strategy. Hence, a momentous data is extracted through the analysis amid set period of time to understand the origin and yield of the research. An explanation based on Bibliometrics analysis for the EL study area through the data collection provided by the Scopus. The current study has set targets to identify the research papers in numbers, impact of researchers, academic institutions and regions that make publication in the field of EL principle. Nevertheless, the targets of the research are met through all-inclusive analysis. As per the findings of the study, the scales of productivity in terms of publications have been hiking upwards tremendously by the time. Meanwhile citations have also been increasing upward that has depicted the major welcome towards the field of EL. In terms of researchers, universities and regions the authors, “Bakker, A.B” and “Shuck, B” have been identified as major productive researcher as they have made publication 39 as well as 28 respectively. Then highly productive institutions are also deducted through the findings such “Erasmus University” and “Louisville University”. Moreover, the countries like USA, India as well as UK have been recognized as most diverse regions in the area of EL study as well as they are amongst toppers in the list. Then, “Human Resource Management International Digest” and “International Journal of Human Resource Management” are the journals which have huge number of articles and publication in the area of EL.

There are some limitations related to the study as well. For instance, Scopus database have been utilized to extract citation-based information and already prevalent hurdles are transmitted in the current study. Moreover, data about researcher’s annexation always has possibility of changing, meaning that various annexations may be attached to the similar researcher. Contrarily, the study findings have majorly revealed the EL study hallmarks that might be changed by the time. Nonetheless, upcoming tendencies in this field of study must be known through appropriate updates. In spite of the research limitations, new fashions and tendencies of EL study have been

pinpointed via Bibliometrics analysis. It is beneficial for the upcoming researchers, policymakers, journals and common public as well.

In the sums and substances, with the greater scale of publication as well as citation it is tough to do a quantitative analysis in the field of EL study. There may be reason of differentiating attributes of the study area. The study has endeavoured to render a brief overview of the particular study. After the region based analysis it is implied that the countries which do not speak English may make publications in variant languages and resultantly, these papers are not made the part of Scopus data collection (Collazo-Reyes, 2014). Hence, those papers and articles are not deemed for citations and references. That might lead to difference in the findings of the study. But, the information rendered by the Scopus is considered significant for the sampling purposes and analysis.

## REFERENCES

- Bonner, S.E., Hesford, J.W., Van der Stede, W.A., & Young, S.M. (2006). The most influential journals in academic accounting. *Accounting, Organizations and Society*, 31(7), 663–685.
- Cancino, C.A., Merigó, J.M., & Coronado, F.C. (2017). A bibliometric analysis of leading universities in innovation research. *Journal of Innovation & Knowledge*, 2(3), 106–124.
- Fagerberg, J., Fosaas, M., Sappasert, K., Landström, H., Harirchi, G., & Åström, F. (2012). Entrepreneurship: Exploring the knowledge base. *Research Policy*, 41(7), 1154–1181.
- Farrukh, M., Meng, F., & Raza, A. (2020). Twenty-seven years of sustainable development journal: A bibliometric analysis. *Sustainable Development*, 28(6), 1725–1737.
- Farrukh, M., Meng, F., Wu, Y., & Nawaz, K. (2020). Twenty-eight years of business strategy and the environment research: A bibliometric analysis. *Business Strategy and the Environment*, 29(6), 2572–2582.
- Farrukh, M., Raza, A., Javed, S., & Lee, J. W.C. (2021). Twenty years of green innovation research: trends and way forward. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3).
- Farrukh, M., Raza, A., Meng, F., & Wu, Y. (2020). CMS at 13: A retrospective of the journey. *Chinese Management Studies*, 1–29.
- Farrukh, M., Shahzad, I.A., Meng, F., Wu, Y., & Raza, A. (2020). Three decades of research in the technology analysis & strategic management: a bibliometrics analysis. *Technology Analysis & Strategic Management*, 0(0), 1–17.
- Gao, P., Meng, F., Mata, M.N., Martins, J.M., Iqbal, S., ... & Farrukh, M. (2021). Trends and future research in electronic marketing: A bibliometric analysis of twenty years. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), 1667–1679.
- Gu, Z., Meng, F., & Farrukh, M. (2021). Mapping the research on knowledge transfer: A scientometrics approach. *IEEE Access*, 9, 34647–34659.
- Heyduk, R.G., & Fenigstein, A. (1984). Influential works and authors in psychology: A survey of eminent psychologists. *American Psychologist*, 39(5), 556.
- Imran Ahmed, S., Farrukh, M., Yihua, W., & Trunk, N. (2021). Human systems management: A retrospective of 40 years. *Human Systems Management*, 41(1), 15–30.
- Üsdiken, B., & Pasadeos, Y. (1995). Organizational analysis in North America and Europe: A comparison of co-citation networks. *Organization Studies*, 16(3), 503–526.
- Wu, Y., Farrukh, M., Raza, A., Meng, F., & Alam, I. (2021). Framing the evolution of the corporate social responsibility and environmental management journal. *Corporate Social Responsibility and Environmental Management*, 28(4), 1397-1411.