

# Employee Turnover: A Bibliometrics Analysis from 2000 to 2021

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## Abstract

This research paper aims to review the existing literature on employee turnover and shows the present scenario of research in this area. The Bibliometric approach was used to analyze 2360 documents on employee turnover from 2000 to 2021 from the Scopus database. This paper picks out the most productive journals and major research themes on employee turnover. This quantitative method of analysis of data was based upon citations and keywords. Therefore, the researchers can gain useful insight into the current situation in this area. This research paper provides an updated review on the rapidly growing area with the help of bibliometric analysis which may be helpful to the management to know the latest trends to form strategies to resolve the growing issue of employee turnover.

**Objective:** One of the quantitative analytical method i.e. bibliometric approach is applied to explore the development of research on the topic of employee turnover. This paper also evaluates the current status of research work done on employee turnover with a visualization analysis of journal articles.

**Methods:** Research work done on employee turnover that was published from 2000 to 2021 was retrieved from Scopus database and then the extracted record was analysed in terms of years of publication, country, journal, authors and organizational affiliations. VosViewer program was used to show the visualized trends in the area of research.

**Results:** After the analysis of 1103 articles it can be concluded that there has been a continuous increase in the number of articles published over the last 20 years. United States is the most producing country in this field and India is no far behind and working progressively in this field of research.

**Conclusion:** This study on employee turnover using bibliometric analysis reveals about the current trends in the field of employee turnover as well as the potential future hotspots of research in this field.

**Keywords:** Bibliometric analysis, Employee turnover, VOSviewer.

## Introduction

Employee turnover has been a topic of research for more than 50 years resulting in the development of turnover theories. A precis of most of the important and influential theories has been shown here (James C. Ryan 2020). The systematic control of turnover among employees is a vital issue for any organization. Service quality is highly impacted when the employees with high productivity leave the organization (Mardanov et al, 2008). The lifeblood of any organization is its human resources. There are several reasons as to why the employees leave the organizations varying from personal reasons to organizational reasons. There is no standard reason as to why do employees leave the organization (Ongori H. 2007). Employee turnover is the movement of employees from one firm, job, or occupation to another (Abassi et al. 2000). "Turnover" is the rate or ratio of a total number of employees leaving the organization during a particular time over the average total of all the employees in the organization (Price 1977). Therefore, employee turnover is the whole process of hiring, training of the employees starting from vacant position to replacement, and training of the newly appointed employees (Ongori H. 2007). In service-intensive industries such as health care, where the employees directly impact the quality of patient care the situation of employee turnover is highly challenging (Zuberi & Ptashnick, 2011). Whenever an employee leaves the organization it accounts for a non-value-added expense to the budget of the organization including the cost of recruiting, hiring, training, and extending organizational productivity. The replacement employees are generally slower and also require additional training (Laddha, Singh, Gabbad, & Gidwani, 2012). A review of the literature identifies the dominant characters that are relevant to the problem of employee turnover. The majority of researches carried to understand the employee turnover process is mainly focused upon the study of voluntary rather than involuntary turnover (Park and Shaw 2013). According to (Hancock et al., 2013) there is a negative impact of voluntary turnover on the organization as compared to involuntary turnover. (Allen and Griffeth, 1999) suggests there is a positive relationship between the job performance

of an individual and employee turnover. Till today there has been seen a consistency in the findings to the topic of employee turnover which may be due to the diversity of employees which are included by the researchers in their research (Ongori H. 2007). There are various reasons why people leave the organisation, some of the factors related to employee turnover includes job stress, lack of commitment, job dissatisfaction, lack of information on how the job is to be performed, performance evaluation methods, job pressure and role ambiguity etc are some of the job related factors that leads to people leaving the organization (Tor et al., 1997).

## Bibliometric Analysis

Bibliometric analysis is a process to evaluate and forecast the current situation and ongoing trends in research using statistical and other methods of measurements (Yu et al. 2017, 2018). So, bibliometric can be used in the field of employee turnover to disclose its trends. Bibliometric is defined as a set of tools used for analysing the published data in terms of text and information associated with author, affiliation, co-citation, citations and keywords used (Norton, 2001). Bibliometric analysis as a method of evaluation helps to find the relation and impact the technology has on authors effectiveness and tracks the level of activity in the field of research over a period of time (Polaco, 1995).

## Vosviewer

VOSviewer is a computer program which is developed for constructing and viewing bibliometric maps. Vosviewer is available free of cost to the research community. This program is used for construction of maps of authors and journals which is based upon co-citation data, keywords based upon co-occurrence data

## Method

### I. Collection of data:

The study uses data published from the Scopus database. Scopus database, on one hand, offers limited search in some areas than other databases but on the other hand, it offers publications with scholarly quality that is found missing from many of the open sources of publications like google

scholar (Harzing and Alakangas, 2016). Scopus database is a highly recognized index having a wide range of peer-reviewed publications that makes available reliable data. A search was made in the title, abstract, and keywords of the published data ranging from 2000 to 2021. Data were filtered to include only Journals in the subject area of Business, Management, and Accounting. All the documents published during the given time frame were segregated and assessed systematically based on country, journals, area of research, authors, language, and organizational affiliations. Moreover, the number of times keywords extracted from the article was also analyzed and was then included in network analysis of employee turnover. All the data was downloaded from Scopus and then imported into VOSviewer (Centre for Science and Technology Studies, Leiden University, Leiden, Netherlands). VOSviewer is commonly used for analyzing the relationship among authors, countries, and the commonly used terms in the article.

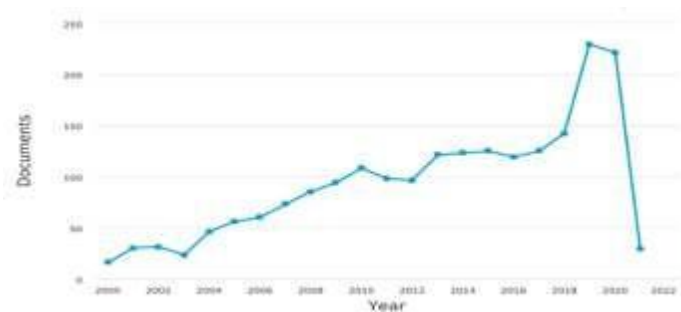


Figure 1: Number of documents published from 2000 to 2021

Year	Total	%age (N=1103)	Year	Total	%age (N=1103)
2000	9	0.81	2011	64	5.80
2001	14	1.26	2012	45	4.07
2002	14	1.26	2013	69	6.25
2003	15	1.35	2014	58	5.25
2004	32	2.90	2015	52	4.71
2005	32	2.90	2016	64	5.80
2006	34	3.08	2017	73	6.61
2007	49	4.44	2018	80	7.25
2008	46	4.17	2019	113	10.24
2009	55	4.98	2020	110	9.97
2010	62	5.62	2021	13	1.17

Search in Scopus database with article title, abstract and key words (2360) documents.

Data filter by time period (2034)documents

Filter by subject area Business, Management and Accounting (1213) documents.

Filter by Journal Publications (1103) documents.

## II. Analysis of Data:

### I. Based on the number of documents per year

A total of 2360 documents were found on the topic of employee turnover and after applying the filters the documents related to the study came out to be 1103. The table shows that there has been a maximum number of documents (10.24%) in the year 2019 followed by the year 2020 (9.97%). The trend has been on an increasing mode since the year 2000 except a downfall in the year 2003, 2011, 2012 and 2016. Since the year 2016, there has been seen a lot of research on employee turnover.

### II. Based on Authors

Employee turnover has been a topic of search with many authors and researchers. Tews, M.J with a total of 11 documents comprising around 1 % of the total research work done followed by Allen, D.G. (0.81%). Hom, P.W., Malik, A., Pollitt, D. and Restubog, SLD with an overall contribution of 0.45% each on the topic of employee turnover.

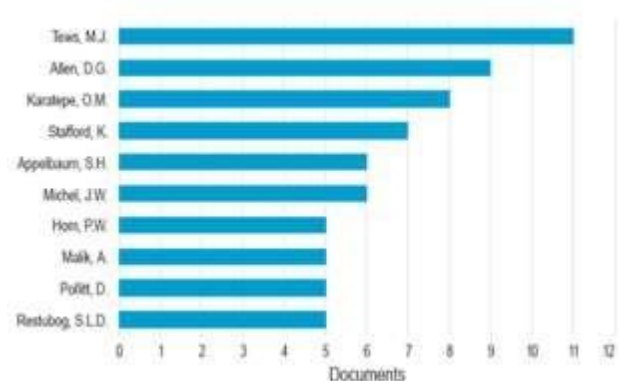


Figure 2: Top 10 authors with publications

Author Name	Number of publications (n=1103)
Tews, M.J.	11(0.99%)
Allen, D.G.	9(0.81%)
Karatepe, O.M.	8(0.72%)
Stafford, K.	7(0.63%)
Appelbaum, S.H.	6(0.54%)
Michel, J.W.	6(0.54%)
Hom, P.W.	5(0.45%)
Malik, A.	5(0.45%)
Pollitt, D.	5(0.45%)
Restubog, S.L.D.	5(0.45%)

### III. Based on most productive countries/territories

The following table shows the most active/productive research territory/country in the field of employee turnover. The United States of America is the most active country in the field of employee turnover with 405 publications accounting for 36% of total research work done on the topic of employee turnover. It is followed by Australia with a total of 80 publications and India ranked third with a publication count of 82(7.43%) documents.

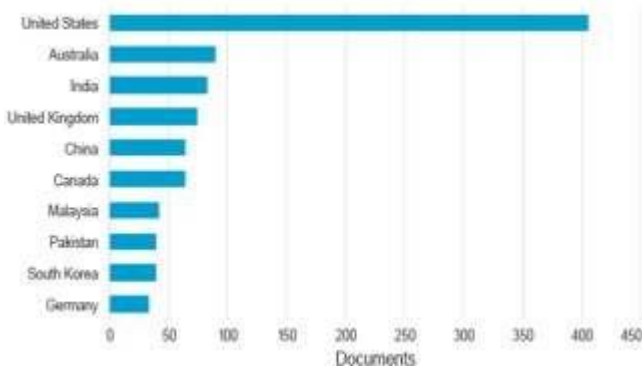


Figure 3: Top 10 countries

Country	Number of publications (n=1103)
United States	405(36.71%)
Australia	80(8.15%)
India	82(7.43%)
United Kingdom	76(6.89%)
China	70(6.34%)
Canada	70(6.34%)
Malaysia	35(3.17%)
Pakistan	32(2.90%)
South Korea	32(2.90%)
Germany	27(2.44%)

### IV. Based on Affiliations

The following figure depicts the number of affiliations/documents per institute. The University of Central Florida ranked first with a total of 18 (1.63%) publications followed by The University of Memphis with a total count of 16 (14.38%) documents. Pennsylvania State University ranking third with a total count of 14(12.58%) documents.

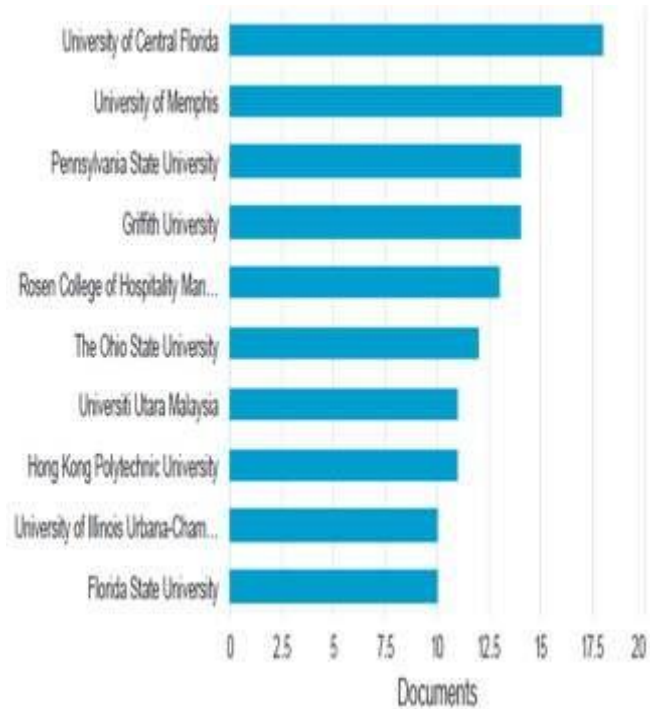


Figure 4: Top Universities and number of documents per university

Name Of University	Number of Publications (n=1103)
University of Central Florida	18(1.63%)
University of Memphis	16(1.45%)
Pennsylvania State University	14(1.26%)
Griffith University	14(1.26%)
Rosen College of Hospitality Management	13(1.17%)
The Ohio State University	12(1.08%)
Universiti Utara Malaysia	11(0.99%)
Hong Kong Polytechnic University	11(0.99%)
University of Illinois Urbana-Champaign	10(0.90%)
Florida State University	10(0.90%)



**V. Based on Publications**

Employee turnover is a comprehensive topic of research. Its research strength is multi-disciplinary. The following table shows the most productive journals in the field of Business, Management, and Accounting. The graph shows documents per year by source and compares the document counts for up to 10 sources. International Journal of Human Resource Management ranked first and is followed by Human Resource Management International Digest and Personnel Review. Journal of Management Psychology ranked the lowest with a smaller number of counts as compared with the other journals.

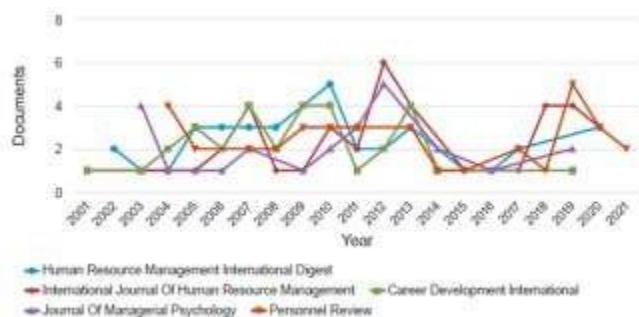


Figure 5: Top 5 publications and number of documents published each year

**VI. Network analysis of Keyword Co-occurrence**

This part of the research studies and analyses the keywords co-occurrence network map. Co-occurrences of keywords show the research hotspots in the discipline field, Keyword's co-occurrence can effectively reflect the research hotspots in the discipline fields (Huang et al., 2016) The network of keywords Co-occurrence is constructed using VOSviewer software. The network analysis of keywords results in the formation of nodes, the size of the nodes so formed depicts the weight of the nodes, the bigger the node the larger the weight. Relation between the nodes is represented by the distance between the nodes. The shorter the distance, the stronger the relation, and the line drawn between two words shows that the keywords have appeared together. The thickness of the line between the nodes represents the frequency of co-occurrence of the keywords (Liang et al., 2017). Nodes belonging to the same cluster are represented by the same color. VOSviewer divided the keywords of employee turnover into clusters. The keyword with the highest frequency is "employee

turnover". Other keywords that have high frequency include "turnover", "turnover intentions" "retention" and "leadership". The frequency of co-occurrence of a keyword represents the link strength. This link strength is used as the quantitative index to show the relationship between two nodes (Pinto, M. Pulgarín, A, Escalona, M.I 2014). The keyword network analysis consists of 1000 words grouped into 32 clusters and 11437 links and a total link strength of 13860.

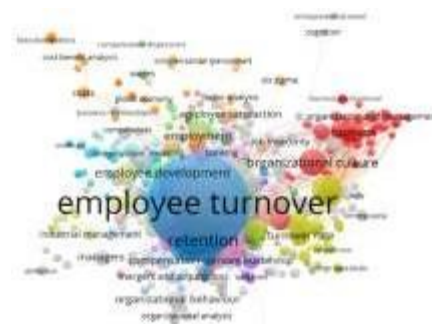


Figure 7: Keywords Co-occurrence network

**VII. Network analysis of country co-authorship**

Generally, it becomes very difficult for an individual to carry out research related to any subject without any collaboration. So, there are many projects which require collaborations and Co-authorship for carrying out the research. Therefore, Co-authorship analysis is content of importance in carrying out bibliometric analysis to assess the current or present state of research in a specific field. This part of the study presents the country co-authorship analysis. This co-authorship analysis was made with the help of Vosviewer software. The country co-authorship analysis shows the degree or level of communication between the countries and the countries which are highly influential in this field of research. Influential countries are represented by large nodes. The presence of many colors in the map depicts diversification and direction of research. Influential countries in the figure are represented by the big nodes. There exists a link between different nodes depicting the cooperation among different countries and institutes. The distance and thickness of the nodes depict the level of cooperation between the countries. As seen in the figure the research



## Limitations

The bibliometric analysis used in this study to analyse the content available on employee turnover provides information that can be useful to researchers and practitioners, however, many limitations of this study can be indicated. Such as, the top 5 journals shown here don't represent the entire body of employee turnover so, future studies can select a larger number and different journals, also conference proceedings and books from various areas. Extending and limiting the time frame would also strengthen the results obtained. Future studies on employee turnover can also investigate and analyse authorship of the article including the impact that the author has on the discipline and investigate about the results of the implications of articles in each topic and theories that has been used and applied in those studies.

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