



## A Bibliometric Analysis of the Research Trends on Emotional Intelligence

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**Abstract:** The present study is an attempt to bring together all the studies related to Emotional Intelligence from the year 2000 to 2021. It is a bibliometric review that uses the VOSviewer software. The number of keywords, authors, journals, and countries are all considered for the purpose and Scopus database is used to generate a database of 240 articles from 2000 to 2021. A detailed discussion is done on trends in publications, most cited papers, prolific authors, journals, and cross country collaborations. This study serves as a convenient information source that compiles all the studies on emotional intelligence for interested researchers.

**Keywords:** bibliometric analysis • emotion • emotional intelligence • intelligence • review • VOS viewer.

### Introduction

Managing emotions in the workplace is evolving to be a pertinent developmental domain in management principles and practices.

The evolution of Emotional Intelligence, Emotional Labour, Affective Events Theory (AET), and mood theory has a considerable effect on overall organizational research (Ashkanasy et al., 2002). However, in comparison to similar emerging concepts, the theory of emotional intelligence has sparked unprecedented attention in both public and scholarly literary works. Programs to improve emotional intelligence have been adopted in a variety of situations, and courses on emotional intelligence enhancement have been established in numerous organizations, including colleges and schools, as well as other establishments. However, when the key question of what is emotional intelligence emerges, several answers are offered. As with all other constructs (personality, intelligence, leadership, etc.), different ideologies exist to effectively explain

and measure emotional intelligence. Emotional intelligence (E.I.) is the skill to fully comprehend and control one's own and other individuals' emotions (Goleman, 2001). Emotional intelligence (EI) is a well-known and extensively researched psychological concept in the twenty-first century (Ashkanasy, 2003; Bar-On 2006), which is concerned with the role of emotions in a person's accomplishments in personal and professional life. The notion of EI, popularized by Goleman (1995), has stimulated applied study throughout each sector, such as psychology, academia, biological sciences, and management. Emotional intelligence could indeed assist us to continue living a more fruitful life by developing a structure for implementing intelligence standards on emotional reactions and acknowledging that these reactions may be prudently consistent or inconsistent with certain suppositions about emotion. The concept of EI derives from social intelligence. Thorndike (1920) first established this concept in his work, describing it as "the ability to understand and



control men and women, boys and girls – to act correctly in human connections" (p. 228). Salovey and Mayer (1990) defined EI as a component of social intelligence that requires people to review their sentiments as well as the sentiments of others to improve judgment and decision-making. When Time magazine questioned on its cover, "What's your EQ?" and noted, "It's not your IQ." It isn't even a digit. However, emotional intelligence may be the most powerful predictor of life accomplishment, modifying what it implies to be intelligent (1995, Time).

The term "emotional intelligence" quickly gained popularity, appearing in a slew of magazine and newspaper articles. (e.g., Henig, 1996; Bennetts, 1996; Peterson, 1997) and books (e.g., Segal, 1997; Cooper & Sawaf, 1997; Simmons & Simmon; Gottman & DeClaire, 1997; Salerno, 1996; Weisinger, 2006; Shapiro, 1997; Steiner & Perry, 1997). Emotional intelligence contributes to job satisfaction and well-being, and positive path interactions contribute to worker participation and organizational commitment, which impact the intention to quit (Brunetto et al., 2012).

Given this backdrop, a comprehensive exploration of this review article using intensive bibliometric approaches would offer a detailed framework, and the analyzed results would also provide additional ideas for future directions in many evolving fields related to EI. In comparison to the conventional structured method, the bibliometric method is being used to manage large numbers of papers to build a scientific framework of study topics (Zupic and Cater, 2015).

## Methodology

In the last several years, bibliometric analysis seems to have become a significant instrument for shedding light on scientific influences and influences. Bibliometrics includes scholarly

publications, the works they cite, and a quantitative evaluation of those citations (Quinlan, Kane, and Trochim 2008). The present study focused on conducting a bibliometric analysis of the field of emotional intelligence. Bibliometric analysis, as compared to other text analyses, is less complicated and more reliable to address masses of articles and deeply examines relationships amongst articles, keywords, citations, and co-citations, and accordingly, the outcomes provide complete statistics. (Feng et.al 2017).

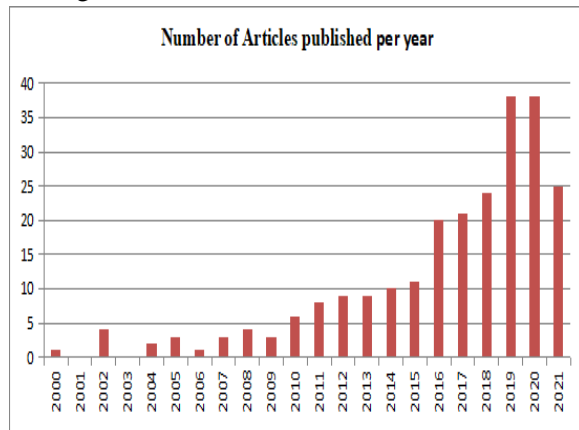
**Data Collection :** This study uses the Scopus database, which is the biggest abstract and citation database of peer-reviewed literature, to conduct a literature search. Its huge user proved to be the primary rationale for selecting it over the other databases offered. The Scopus database returned 11,612 documents after searching for "emotional intelligence" in the "title, abstract, keywords" field. Further filtration was carried out in the form of the years of publication under consideration, the subject area, document type, publishing stage, source type, and language in which the papers were published. The papers were refined based on the criterion that stated the year of publication should be between 2000 and 2021 and the subject as business management and accounting. The document type was only articles, with the source having to be only journals in English. Following the selection of the papers, the next stage entailed the usage of VOSviewer, modern software utilized in the field of bibliometric analysis.

**Results and Findings:** Fig 1 depicts the year-by-year published works related to emotional intelligence from 2000 to 2021. In recent decades, there seems to have been a surge in interest in the field of emotional intelligence.

It is beyond doubt that it is now a standard concept in psychology, both general and applied, as well as in business practice. The result shows



a gradual growth in publishing each year after 2009, indicating that the subject of emotional intelligence has piqued the interest of academicians all around the world since then. The year 2019 and 2020 saw the most publications on the topic of emotional intelligence.



**Fig 1.** Number of Articles published over the years 2000 to 2021

**Most cited papers:** Citations are probably the most widely used indicator of the importance of accepting prior literature in academia. Table 1 depicts the details of the 15 most cited papers on the subject of emotional intelligence according to the criteria applied from the Scopus database. "Diversity and emotion: The new frontiers in organizational behavioral research," authored by Ashkanasy, N.M., Härtel, C.E.J., and Daus, C.S., is the most cited paper in the category, with 302 citations. This paper dealt with two crucial topics in the field of modern organizational behavior: diversity and emotions. The second most cited paper, which is close to the most cited one, gaining 301 citations, is "Workgroup emotional intelligence." Scale development and relationship to team process effectiveness and goal focus "authored by Jordan, P.J., Ashkanasy, N.M., Härtel, C.E.J.,

and Hooper, G.S. The Workgroup Emotional Intelligence Profile, Version 3(WEIP-3) was designed in this study as an indicator of emotional intelligence. The paper "The rumors of the death of emotional intelligence in organizational behavior are greatly exaggerated" by Ashkanasy, N.M., and Daus, C.S. received 291 citations and was ranked third in terms of citations. As per the results of this study, emotional intelligence is an important factor in business management related to how people understand, interpret, and regulate their feelings. The fourth most cited paper was "Does leadership need emotional intelligence?" authored by Antonakis, J., Ashkanasy, N.M., Desborough, M.T. it received 219 citations. This paper attempted to throw light upon several issues concerning emotional intelligence and leadership.

**Most Notable Authors and Journals:** Fig 2 shows records of authors who've published more than 3 papers on emotional intelligence. According to our findings, the researcher who produced the highest number of articles on the subject of emotional intelligence is Ashkanasy, N.M. He authored nine articles on emotional intelligence. Neal M. Ashkanasy OAM, is an Australian scholar best recognized for his studies on workplace emotions. He is associated with the University of Queensland Business School in Australia.

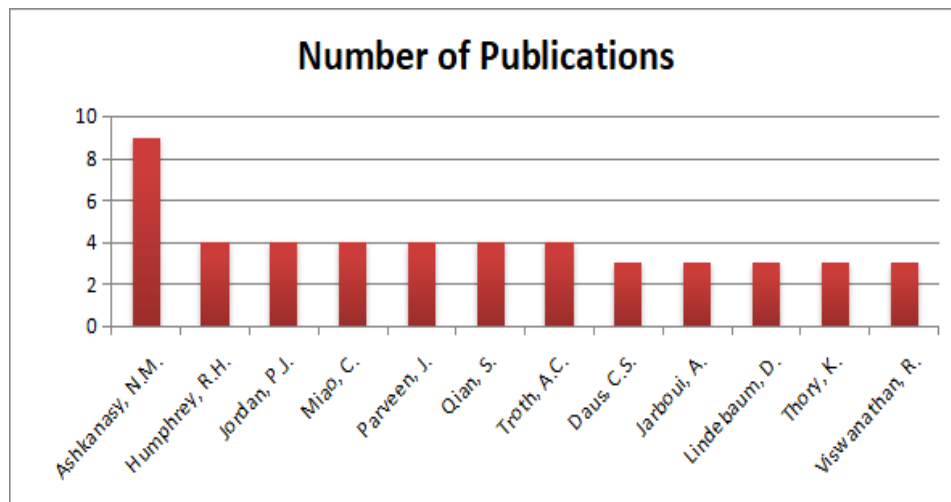
We further discovered two groups of writers, one with authors like Humphrey, R.H., Jordan, P.J., Miao, C., Parveen, J., Qian, S., and Troth, A.C, who have published four articles each, and the other with authors like Daus, C.S., Jarbou, A., Lindebaum, D., Thory, K., and Viswanathan, R, who have published 03 articles each.



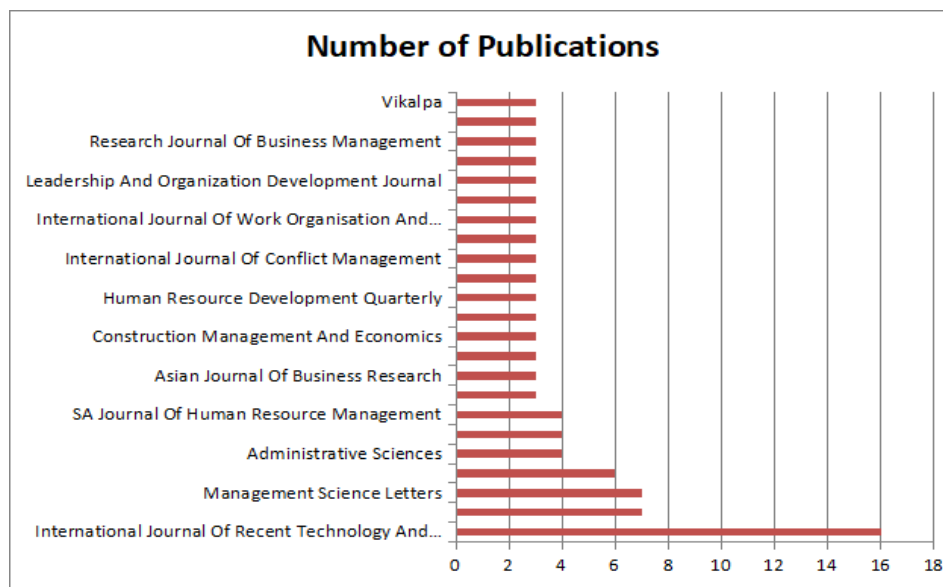
**Table 1.** Most Cited Papers on Emotional Intelligence

Authors	Title	Year	Cited By
“Ashkanasy, N.M., Härtel, C.E.J., Daus, C.S.”	“Diversity and emotion: The new frontiers in organizational behavioral research”	2002	302
“Jordan, P.J., Ashkanasy, N.M., Härtel, C.E.J., Hooper, G.S.”	“Workgroup emotional intelligence. Scale development and relationship to team process effectiveness and goal focus”	2002	301
“Ashkanasy, N.M., Daus, C.S.”	“Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated”	2005	291
“Antonakis, J., Ashkanasy, N.M., Dasborough, M.T.”	“Does leadership need emotional intelligence?”	2009	219
“Daus, C.S., Ashkanasy, N.M.”	“The case for the ability-based model of emotional intelligence in organizational behavior”	2005	211
“Brunetto, Y., Teo, S.T., Shacklock, K., Farr-Wharton, R.”	“Emotional intelligence, job satisfaction, well-being, and engagement: Explaining organizational commitment and turnover intentions in policing”	2012	204
“Harms, P.D., Credé, M.”	“Emotional intelligence and transformational and transactional leadership: A meta-analysis”	2010	203
“Fisher, C.D., Ashkanasy, N.M.”	“ The emerging role of emotions in work life: An introduction”	2000	198
“Miao, C., Humphrey, R.H., Qian, S.”	“A meta-analysis of emotional intelligence and work attitudes”	2017	111
“Der Foo, M., Elfenbein, H.A., Tan, H.H., Aik, V.C.”	“Emotional intelligence and negotiation: The tension between creating and claiming value”	2004	86
“Coetzee, M., Harry, N.”	“Emotional intelligence as a predictor of employees' career adaptability”	2014	81
“Chiva, R., Alegre, J.”	“Emotional intelligence and job satisfaction: The role of organizational learning capability”	2008	80
“Tejedor, G., Segalàs, J., Rosas-Casals, M.”	“Transdisciplinarity in higher education for sustainability: How discourses are approached in engineering education”	2018	76
“Clegg, S., Baumeler, C.”	“Essai: From iron cages to liquid modernity in organization analysis”	2010	70
“Menges, J.I., Kilduff, M.”	“Group Emotions: Cutting the Gordian Knots Concerning Terms, Levels of Analysis, and Processes”	2015	68

Source: *The authors* (from the Scopus database)



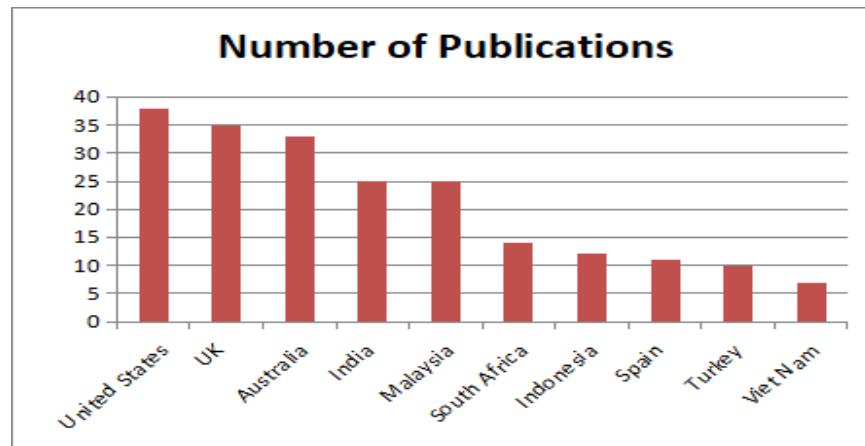
**Fig 2.** Authors with three or more papers on Emotional Intelligence.



**Fig 3.** Top 12 journals published papers on Emotional Intelligence.

Fig 3 shows a list of prestigious and famous journals that have published Emotional Intelligence research articles in the fields of business management and accounting between 2000 and 2021. "Blue Eyes Intelligence Engineering and Science Publication" (BEIESP) publishes the majority of emotional intelligence publications under the "International Journal of Recent Technology and Engineering" (IJRTE). This journal has published 16 articles on the

topic of emotional intelligence. Cogent Business and Management, published by the United Kingdom-based publisher Cogent OA, along with Management Science Letters published by Growing Science, has published seven research papers. Colegio Oficial de Psicologos de Madrid published six research papers in the journal Revista De Psicologia Del Trabajo Y De Las Organizaciones.



**Fig 4:** Most Prolific Countries

Fig 4 depicts the countries that largely contributed to the literature related to emotional intelligence. The developed nations of Australia have 33 research publications to their credit, while the United Kingdom and the United States have 35 and 38, respectively. India and Malaysia each published 25 research papers. South Africa with 14 research papers, Indonesia with 12 research papers, Spain with 11 research papers, Turkey with 10 research papers, and Vietnam with 7 research papers, are among the top ten

most prominent nations that worked in terms of emotional intelligence research publications.

**Keywords Occurrence Analysis:** Between 2000 and 2021, a total of 827 keywords were discovered while studying the specified database from the Scopus database. Table 2 shows all emotional intelligence-related keywords that appeared a minimum of three times in the database search between the years 2000 and 2021. For additional examination, a keyword occurrence network analysis was undertaken.

**Table 2.** Keywords that appeared three or more times in Emotional Intelligence Research.

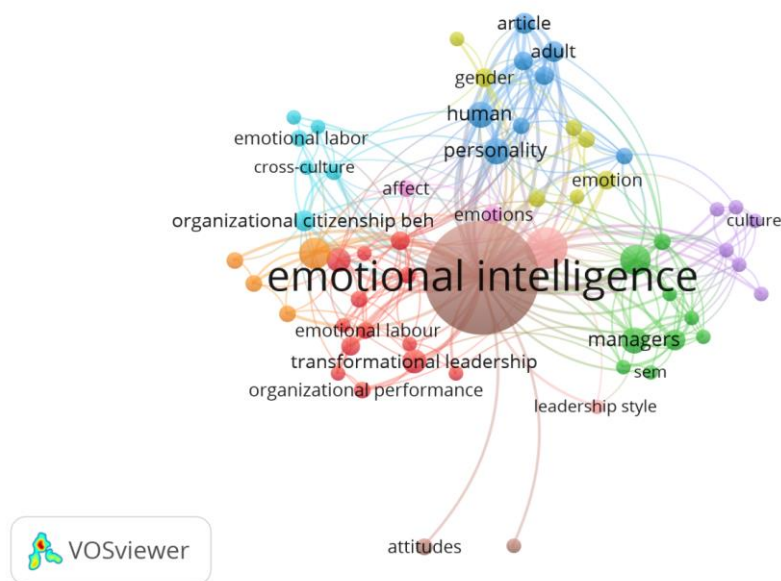
Serial No	Keywords	Number of Occurrences
1	“Emotional Intelligence”	170
2	“Leadership”	23
3	“Job satisfaction”	13
4	“Performance”	12
5	“Human”	9
6	“Managers”	9
7	“Personality”	9
8	“Job Performance”	8
9	“Transformational Leadership”	8
10	“Adult”	6
11	“Article”	6
12	“Organizational Citizenship Behaviour”	6
13	“Project Management”	6



14	“Burnout”	5
15	“Emotion”	5
16	“Emotions”	5
17	“Female”	5
18	“Gender”	5
19	“Male”	5
20	“Trait Emotional Intelligence”	5
21	“Academic Performance”	4
22	“Affect”	4
23	“Attitudes”	4
24	“Creativity”	4
25	“Emotional Labor”	4
26	“Emotional Labour”	4
27	“Humans”	4
28	“Job stress”	4
29	“Mediation”	4
30	“Meta-Analysis”	4
31	“Motivation”	4
32	“Organizational Commitment”	4
33	“Organizational Performance”	4
34	“Psychology”	4
35	“Satisfaction”	4
36	“Trait EI”	4
37	“Turnover Intention”	4
38	“Construction”	3
39	“Construction Industry”	3
40	“Counterproductive Work Behavior”	3
41	“Cross-culture”	3
42	“Cultural Intelligence”	3
43	“Culture”	3
44	“Decision Making”	3
45	“Employee Development”	3
46	“Human Resource Management”	3
47	“Intelligence”	3
48	“Leaders”	3
49	“Leadership Style”	3
50	“Malaysia”	3
51	“Moderation”	3



52	“Numerical Model”	3
53	“Personality Traits”	3
54	“Project Managers”	3
55	“Project Success”	3
56	“SEM”	3
57	“Spiritual Intelligence”	3
58	“Task Performance”	3
59	“United Kingdom”	3
60	“Well-being”	3



**Fig 5.** Keyword Occurrence Network

Fig 5 depicts a map that depicts the linkage of multiple keywords to one another using different lines. These lines represent the co-occurrence of keywords in the given data set's various publications.

**Co-authorship analysis:** A prominent approach for studying and evaluating collaboration patterns is co-authorship analysis. When authors collaborate on an article, nodes in co-authorship networks represent authors, organizations, or countries. The present study used the VOS Viewer 1.6.15 program for keyword co-occurrence network analysis, inter-country co-

authorship network analysis, and co-authorship network analysis. The VOS viewer software program, which is available for free, allows you to generate maps from network data. It also assists in the visualization and exploration of these maps. Co-authorship analysis was performed using the VOSviewer Figure 07 depicts a co-authorship network map, which depicts the names of noteworthy authors in the field of study, i.e. these are the authors who have made significant contributions in the domain of emotional intelligence in the discipline of business management and accounting between 2000 and 2021.



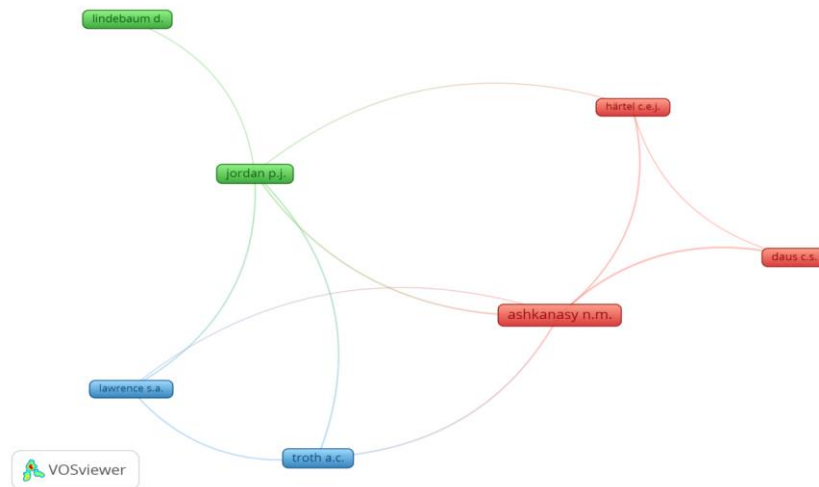


Fig 6: Co-authorship analysis:

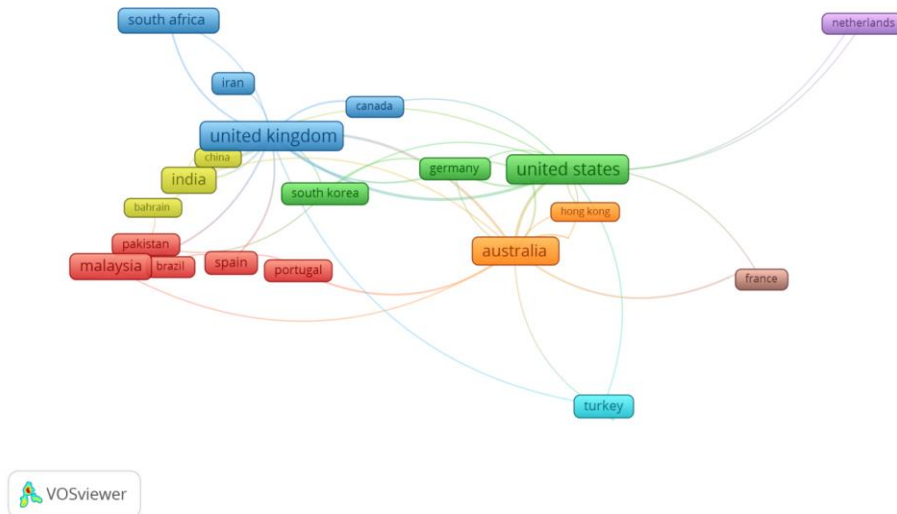


Fig 7: Co-authorship Country analysis Network

**Inter country Co-authorship Network analysis:** An examination of the inter-country co-authorship network is depicted in Figure 08. The goal of this analysis is to figure out which country's authors partnered up the most with those from other countries. In the emotional

intelligence study, 57 countries were selected. According to the VOS viewer software, 40 of 57 countries were connected in terms of co-authorship, with a total connection strength of 61. There were eight clusters produced. Cluster-1 included 8 countries (Brazil, Malaysia,



Pakistan, Portugal, Saudi Arabia, Spain, and Taiwan); cluster-2 included 5 countries (Germany, Italy, Singapore, South Korea, and the United States); cluster-3 included 5 countries (Canada, Ghana, Iran, South Africa, and the United Kingdom); cluster-4 included 4 countries (Bahrain, China, India, and Kuwait); cluster-5 included Belgium, Israel, and the Netherlands; cluster-6 included Indonesia, Malaysia, and Taiwan); Cluster-7 (Australia, Hong Kong, and Switzerland) and Cluster 8 (France, New Zealand, and Tunisia), all the clusters consisted of 3 countries each.

### Conclusion and Limitation

This present study provides a bibliometric analysis of several studies on emotional intelligence that were published between the years 2000 and 2021. A maximum of 240 publications were chosen from the Scopus database using various filters such as the year range from 2000 to 2021, subject exclusively limited to Business management and accounting, and so on. This study examined the year-to-year trend in emotional intelligence publishing. It recognized the most cited publications and prominent authors, and also the countries that contributed significantly to its research. Co-authorship country network analysis, keyword occurrence analysis, and co-authorship analysis are also included in this study. These analyses have benefited academics interested in the topic of emotional intelligence by offering information on notable journals, authors, and nations in this field, as well as keywords commonly used in emotional intelligence research.

While this study has brought forward key findings related to the topic of research, it has certain gaps that can be filled by other studies that could be taken along these lines. First, only articles from Scopus were included in our selection. Scopus contains far more publications

than most other databases, though some publications may be largely missing. A multi-source exploration and cross-comparison of databases would be far more impressive. Second, the papers on emotional intelligence that are available have been organized by year. The duration of which was only limited to the years 2000-2021, future scholars may incorporate the years before 2000. Third, the topic of emotional intelligence is present in almost every subject being studied today, but in this study, the authors only focused on the literature that was published in journals related to the subject of business management and accounting. This provides an opportunity for future researchers who can also include journals that publish articles on emotional intelligence but belong to different subjects other than business management and accounting. However, this study still stands out as a difference in this field of research as it attempted to bring together the varied areas of literature related to emotional intelligence. This could prove to be handy material for the interested researcher, in the field of emotional intelligence. 'The authors declare that there is no conflict of interest'.

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