

International Arbitration: A Meta-Analysis of Five Decade Research

Dr. Aaliyah Siddiqui*

Assistant Professor, Symbiosis International University, Symbiosis Centre for Management Studies, Nagpur, India

email: write2aaliyah@gmail.com

Dr. Mujahid Siddiqui

Associate Professor, Dr. Ambedkar Institute of Management Studies and Research, Nagpur, India

email: mjsiddiqui@gmail.com

*Corresponding Author:

Dr. Aaliyah Siddiqui

Assistant Professor, Symbiosis International University, Symbiosis Centre for Management Studies, Gat. No.167,168,169, Village Mauje, Bhandewadi, Wathoda Layout, Nagpur,

Maharashtra 440008

India

Abstract

Introduction - Surging trade relations, resulting in trade and commercial disputes are a matter of great concern in international trade between countries. It is therefore important to have a robust dispute resolution mechanism for such international commercial disputes. An analysis of studies undertaken in the last five decades in this vital area of international trade is presented in this study.

Purpose - Academic contribution through research is essential for the development of business and commerce. An outline of research trend in a Business laws is useful in analysing the nature and extent of studies performed. The current study is an effort to understand the trends of research linked with international arbitration over the last five decades, with an object of benefitting the business and commerce as well as for academicians.

Design/Methodology/Approach - The study was undertaken by using 'international arbitration' as the keyword and an analysis was done for the annual growth, productive countries, most cited papers, productive institutes, core journals and the most contributing authors.

Findings - United States is the country, while Queen Mary University of London is the institute which has the highest number of publications. 'Arbitration International' is the journal that has published the highest number of articles on the subject.

Originality/Value – The findings are pertinent for business management practitioners as they can identify the most crucial sources of information relating an important aspect of

business. For academicians this study offers a wide ranging summary of the trends of publications in the field of international arbitration.

Keywords:

International Commercial Disputes, Business Laws, International Arbitration, Trade law, Alternative dispute resolution, Meta-analysis

1. Introduction

Disputes and resolution of disputes are not uncommon in any civilization. Businesses across the globe, entering into trade and commercial agreements, are often confronted with commercial disputes. Effective management of business also requires effective resolution of the commercial disputes. Several Practices of dispute resolution has emerged and evolved over the years (Dezalay & Garth, 1996) which help the businesses save their crucial resources. One of such alternative dispute resolution is Arbitration, which has been thoroughly and meticulously encouraged by countries practicing civil law as compared to countries practicing common law. When this dispute arises between businesses of two or more than two countries, it becomes international in nature and when it arises because of trade and commercial relations between the countries then it is termed as “international commercial disputes”.

There are several commentators on international arbitration who have given many definitions and descriptions on the topic. One out of these explanations, in a book called as “Law and Practice of International Commercial Arbitration” written by Martin Hunter and Alan Redfern, states that the means of resolving a dispute which is international in nature and arise due to an agreement between the contracting parties, or by anyone making decision, which is not governmental in nature or in an individual capacity, is called as “International Arbitration” (Redfern & Hunter, 2004).

2. History of International Arbitration

Ancient mythology has portrayed evidences that trace back the roots of international arbitration. There are many cases which illustrates the presence of disputes and their resolutions as in case of the Greek Gods such as Poseidon and Helios over the ownership of Corinth which resulted in a split with the method of arbitration, by the standards and criteria of international arbitration, before a giant known as Briareus (Ralston, 1934), as also in case of possession of Aegina between Poseidon and Athena where decision was given by Zeus (Phillipson, 1911).

An example to prove the existence of arbitration, also comes from the settlement of dispute between Poseidon and Hera by handing over Argolis to the Hera, the king of Argos.(Ralston, 1934). These divine disputes were prevalent not only in Greek mythology but also in the Egyptian mythology. One such dispute between Osiris and Seth was decided by a non-partisan person named as Thot (Mantica, 1957).

In India, international commercial arbitration was formally introduced with New York Convention. India became a party to New York Convention (Borthakur, 2020).The

Arbitration and Conciliation Act of 1996 which governs both domestic and international commercial arbitrations is the pertinent legislation in India (Arbitration and Conciliation Act, 1996). The Indian parliament introduced many essential revisions in this principal legislation, the Arbitration & conciliation act, in the year of 2015 in the form of amendments (The Arbitration and Conciliation (Amendment) Act, 2015).

3. Reason and purpose of international arbitration

There are numerous reasons which have led to the growth and development of arbitration in the past. The businesses need to quickly tide over the crisis rising out of commercial transaction, as it cuts the losses and is a prudent business practice. Some of the most prominent reasons which contributed to the growth are the advancement of international business laws, progression in the art of diplomacy and most significantly, the progress of democratic thoughts, leading to the contribution of the public in the times of both concord and conflict (Lord, 1892).

The determining principle in the expansion of international arbitration was the increased focus on the freedom of contract. Business and the commercial transactions need a law which could help the disputing parties in finding an amicable solution and to save the businesses from lengthy litigations. With the help of this law, the parties into a contract have freedom to select the seat of arbitration, meaning their choice of law and the land for the conduct of arbitration proceedings (Sweet & Grisel, 1999).

4. Purpose of the study

In the previous studies related to on the international arbitration, none of the studies have been found on bibliometric analysis. With the help of the present study, it is aimed to prepare an outlook of research trend in the field of international arbitration in last fifty years. This study will present an analysis of the theoretical growth of international arbitration in the most widely used database, SCOPUS, which holds a very high citation rate for its database.

5. Methodology

5.1 Source of Information

To achieve the objective of the study, SCOPUS database has been selected due to its multi-operating functions, such as the document type, publication year, the names of the journal, citation numbers, affiliation of the authors etc. which aids the bibliometric analysis for the topic in a very distinctive manner (Agarwal et al., 2016).

The VOS Viewer, a powerful network analysis software tool that helps to visualize the dynamics and structures of science, was applied to perform the coupling and co-occurrence of keyword analysis to deeply explore and examine the intellectual structures of the addressed research field. The results of a keyword analysis provided by the bibliometric survey are merely based on quantitative properties mapping out the relations between variables. Here, the overall statistical patterns become visible, which helps to better understand the nature of a research field; nevertheless, it can be difficult to derive qualitative conclusions from quantitative data, which is why we conducted a qualitative literature analysis of the 30 most cited publications. In this process, the articles are arranged in clusters regarding contextual similarities relating to the keywords (see Table 1). (van Eck & Waltman, 2010)

While qualitative literature analysis underlies to a certain extent the subjectivity of the author, the benefits of this method are indisputable and refer to a well-established approach used in prior studies of this kind

5.2 Study design

Under the current bibliometric study, the period of fifty years (1970 to 2019) has been selected, based on the assumption that arbitration was adopted and developed by many countries during these years.

5.3 Search strategy

In any kind of search, the most vital part is to identify and select the keyword for the study. This is important as it has a forthright relation to the topic and thus has a great influence on the results and findings of the study. A limited set of keywords were selected from the published research papers and articles in journals and other forms of documents in the literature on international arbitration. The finalization of the keywords and the online search commenced in July 2020.

5.4 Indicators, analytics and mapping of the bibliometric data

According to Ellegaard & Wallin (2015), the bibliometric approaches and investigation have been conclusively proved to be very scientific and an essential fragment of assessment of research. This is true, especially in the context of applied and scientific knowledge areas.

Bibliometric analysis, which is based on citation and content are mainly used for analysis of data by extracting them from the database (Wallin, 2005). Thus, the data for this study has been retrieved from the SCOPUS database which is the largest abstract and citation database and multidisciplinary in nature.

The current study is based on the literature related to the bibliometric functions and thus the parameters identified for the assessment in the study, from the SCOPUS database, are number of publication, citation trend, most productive arbitration institutes as well as authors. The most searched keywords in the last fifty years in the field of international arbitration have been selected to assimilate the exponential development in this field across the globe. The choice of the indicators was randomly made and the number of years was chosen from the period from which the indexing of citation was introduced. Bibliographic data for the study was obtained from the SCOPUS database by using "International Arbitration" as the keyword for search. A total of 799 articles were found to have been published and thus retrieved during the study from the 1970 till 2019.

6 Results and Discussion

6.1 Publication Language and category of document

The database of SCOPUS is classifies and arranges the documents into various categories. International arbitration, when used as a keyword for discovering the documents for the study found 10 categories. There were a total of 799 documents, out of which 523 were articles which makes 65.45 percent. Thus, Articles were the most common type of published document. This is followed by 102 Book chapters making the second most recurrent type of document and contributing 12.76 percentage of the total number of documents. The next in the list was 90 Reviews which were published during the period of study thus making 11.26

percent, not very far from the Book chapters. Book 29 (3.63%), Conference paper 20 (2.50%), Notes 16 (2.00%), Business Article, Editorial and Erratum contributing to 6(0.75%) each and Short review is the last publication form supplying less than 1(0.13%) were the other categories of documents.

There are 8 languages on which all the 799 documents have been published. 769 documents have been published in English and that makes 96.25% of these articles. Other prominent languages included Spanish 17 (2.13%) and French 8 (1.00%). In addition to these languages, research in international arbitration has been published in Russian 3 (0.38%), Portuguese 2 (0.25%). Publications in few more languages such as Bosnian, Croatian and Persian have 1 publication in each language which is 0.42%.

6.2 Annual Production and Citation Trends of 1970 - 2019

The study demonstrates the researches undertaken in international arbitration during the last five decades. The articles related to international arbitration and the total number of citations of these articles from the year 1970 till 2019 has been represented in a graphical manner in figure 1. The number of publications were very less till the year 2000 and then there was a sudden spurt in the number of publications. Such vertical climb in the number of publication is clearly visible thrice in the years 2009, 2015 & 2017.

The number of publications was almost steady from 1970 till 2000. In 2000, the number of publication was only 3 but in 2001, the very next year, publication number changed from a single digit number to a double digit number that is from 3 to 12 for the first time. Again from 2001, a steadiness in the number of publication was clearly observed and this slag was broken in 2007, although not quite sharply, from 17 in 2006 to 29 in 2007. From the year 2007, a trend of alternate decrease and increase in the numbers has been noticed almost every year. There was no noticeable increase or decrease in publication number in the year of 2015 – 16. A visible rise is seen in the graph in the year 2017 with 94 publications, very close entering into a three digit number. The highest contribution in this is from United Kingdom (19), followed by United States (16). Post 2017, again came a decrease in the numbers from 94 in 2017 to 74 and 71 in 2018 and 2019 respectively. This decrease in the number of publication is noteworthy and such a decline in academic research indicates the dearth of work in the specific area and the reasons for such a lack in research provides a ground of further research.

When it comes to measuring the scientific excellence of an individual researcher and that of the ranks of institutions and universities, in bibliometric studies, citation analysis, undoubtedly, is the most appropriate technique used (Waltman et al., 2012).

The impact of an article can be gauged by the number of times the paper has been cited. In the current study, the citations per paper per year have been calculated. There was stability evident in the citations, which was prevalent till 2007. From 2008 till 2012, there is a constant rise in the citation. In 2013, there is a decrease in the number of citation as also in the case of number of publication. Again there was a constant rise in the number of citations from 2014 till 2018 with a decline in the year 2019. Thus, the trend which was identified in last twelve years is a growth in citation for five years with a downfall in the sixth year.

Figure I: About here

6.3 Productive Countries

The origin of the articles could be recognized through their affiliation with the countries. The first author is stated to be the primary and main contributor of the article (Ho 2014; Riesenber and Lundberg 1990).

71 countries produced a total of 799 articles on international arbitration. 7 per cent of these countries which is fifty six countries created articles which ranged from 1 to 10. 0.50 per cent countries, which mean 4 countries, published between 11-20 articles. A total of 1.13 per cent i.e. 9 countries contributed in the range of 21 to 50 and there was no publication in the range of 50 to 100 articles. Only 2 countries (10.67%) published 101–200 articles.

The maximum number of publications on international arbitration was published by 15 topmost countries are displayed in table 1. Out of them, 193 articles (24.16%) were published by United States which is a phenomenal contribution and thus can be called as the most productive country. The second and the third in the list are United Kingdom with 142 articles (17.78%) and France with 48 articles (6.00%) respectively.

Apart from these three countries, Hong Kong, South Korea, the Netherlands, Japan, Germany, Canada, Italy and China complete the list of the 15 topmost countries in terms of the total number of publications.

It is important to understand the policy of collaboration in research and this is done by identifying the affiliation of the authors. The publications which had more than one author is taken as a work done in collaboration. When the authors are affiliated to different countries, it was concluded that the collaboration was international in nature and when the authors belonged to the same country then the collaboration was international in nature. The database of SCOPUS has an arrangement where this kind of segregation is possible and thus the publications with more than one author belonging to different countries were taken as internationally collaborated publications.

The country that had the greatest number of research papers with international collaboration was United States which was about 25.95 per cent. United Kingdom followed United States with 16.03 per cent with France and Netherland assuming the third place in the list contributing 7.63 per cent of papers with international collaborations.

The average citation per paper was highest in Hong Kong which was 6.76 with total citations being 169; this is followed by United States with 5.77 average citations per paper, having a huge number of citations at 1114 for the 193 publications and Netherland having 4.08 of averaged citations per paper with 102 publications.

Table 1: About here

Figure II: About here

6.4 Productive Institutes

The best institutes which have published most of the international arbitration research articles from 1970 till 2019 is represented in table 2. The Queen Mary University of London (QUML) has 13 articles related to international arbitration during this period. This number was the highest amongst all other institutes and thus QUML tops the list of most productive institute, followed by the University of Cambridge which published an overall 12 articles being the second most productive institutes and the third one in the list being Columbia Law School with a publication of 11 articles.

City University of Hong Kong had the highest citation count at 145 citations. University of Cambridge with 57 citations and Columbia University in the City of New York with 43 citations are second and third top institutes respectively, in terms of citation count .

Université de Genève, Georgetown Law and Institut de hautes études internationales et du développement, Geneva have an h-index of 4 each which is the highest amongst the list of top institutions in terms of productivity of research.

The City University of Hong Kong is the leading institution in average citations per paper with 13.18 citations. The next in this category is the Columbia University in the City of New York with 6.14 citations and Université de Genève with 5.43 citations.

Table 2: About here

6.5 Productive Authors

It is essential to identify the author who is involved and contributed the highest number of documents to the academic world related to the topic during the entire period of the study. Park, W.W. who has published 9 articles is the highest contributing author amongst all other authors with 1.13 per cent of total publications which is a substantial number.

Gaillard E. published 7 articles and Berger, K.P. published 6 articles thus providing 0.88 per cent and 0.75 per cent respectively as their share of contribution to the total number of publications.

As regards the most cited articles by any author Bhatia, V.K. tops the list with an average citation per paper (ACPP) at 37.67. Brown, C. ranks second with 24.67 and Gaillard E with is third with 10.72 citations.

A higher number of publications not necessarily results in a number higher number of citations also and this is demonstrated in the current study by its results which is depicted in the table 3. Although, Park W.W. had the lead in number of articles published but the articles of Bhatia. V.K. are the most cited ones.

Gaillard E. placed first with 5 as the h-index value, which is termed as a parameter of quality on author and Park W.W. stood second with 4 as the h-index value.

Table 3: Most Contributing Authors

Authors	Affiliation	TP	% Share	R (TC)	R (ACPP)	h-Index of the author
Park W.W.	Boston University, United States	9	1.13	4 (54)	6 (6)	4
Gaillard E.	SciencesPo, Paris, France	7	0.88	2 (75)	3 (10.72)	5
Berger, K.P.	University of Cologne, Faculty of Law, Koln, Germany	6	0.75	10 (13)	12 (2.17)	2
Bermann, G.A.	Columbia Law School, New York, United States	6	0.75	7 (16)	10 (2.67)	2
Brower, C.N.	Iran-United States Claims Tribunal, United States	6	0.75	5 (47)	4 (7.83)	3
Cordero-Moss, G.	Universitetet i Oslo, Department of Private Law, Oslo, Norway	5	0.63	12 (8)	11 (2.4)	2
Fry, J.D.	The University of Hong Kong, Pokfulam, Hong Kong	5	0.63	8 (15)	8 (3)	3
Greenwood, L.	Wales, Port Talbot, United Kingdom England, Beverley, United Kingdom	5	0.63	9 (14)	9 (2.8)	2
Repousis, O.G.	International Arbitration Group, London, United Kingdom	5	0.63	13 (7)	13 (1.4)	2
Gotti, M.	Università degli Studi di Bergamo, Department of Foreign Languages, Bergamo, Italy.	4	0.50	14 (4)	14 (1)	1

Schultz, T.	King's College London, London, United Kingdom Institut de hautes études internationales et du développement, Geneve, Geneva, Switzerland	4	0.50	6 (30)	5 (7.5)	3
Betancourt, J.C.	University College London, London, United Kingdom	3	0.38	15 (1)	15 (0.33)	1
Bhatia, V.K.	Hellenic American University in Athens, Athens, United States Chinese University of Hong Kong, Shatin, Hong Kong	3	0.38	1 (113)	1 (37.67)	1
Brown, C.	The University of Sydney, Sydney, Australia	3	0.38	3 (74)	2 (24.67)	2
Carducci, G.	Université Paris-Est, Marne-la-Vallee, France	3	0.38	11 (9)	7 (3.67)	2

Total Publications and Total Citations

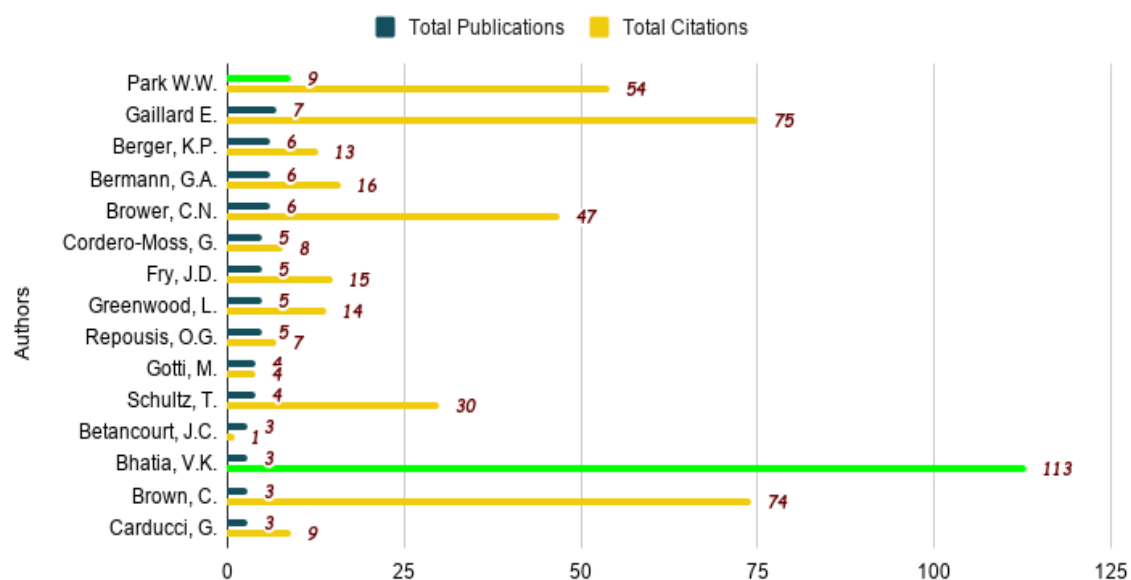


Figure III: Total Publications and Total Citations per Author

6.6 Core Journals

A journal which publishes the most number of researches in any specific area is considered to be a core journal (Singh et al., 2007). In total, 604 articles were published across 160 journals. Out of the 160 journals, there were 148 journals which published only one article.

Since the number of such journal is high, the total contribution of articles from these journals is 217 out of 604 articles. There are 8 journals which have published articles between 5 to 10 contributing a total of 56 articles. Three journals contributed total 81 articles and published 27 articles each. The major contribution of articles has come from Arbitration International with publication of 250 articles amongst the total 604 articles, amounting to 41.4 per cent. Arbitration International has published the highest number of articles and undoubtedly is the most productive source journal, when the search using international arbitration as a keyword was used.

The journal of international dispute settlement has received the highest citescore and SJR, followed by Icsid review, whereas Icsid review has the highest SNIP followed by the journal of international dispute settlement.

Table 4: The Core Journals Publishing articles on Arbitration

Journals	TP	% Share	CiteScore 2019	SJR 2019	SNIP 2019
Arbitration International	250	156	0.4	0.23	0.36
Icsid Review	27	17	1.6	0.37	1.02
Journal Of International Arbitration	27	17	0.2	0.23	0.42
Journal of International Dispute Settlement	27	17	1.8	0.38	0.80
Law And Practice Of International Courts And Tribunals	10	6	0.6	0.12	0.29

TP - Total Publications

6.7 Author Keyword Analysis & Hot Research Areas

Keyword extraction was a concept used by Garfield (1990) for illustrating the extension of the subject (Garfield, 1990). For the assessment of the expansion of the subject, author keywords has been used in several bibliometric studies (Mao et al., 2010).

For the measurement of hotspots in research related to international arbitration, author keyword has been used in the current study. International arbitration, arbitration, investment arbitration and international law were the keywords with maximum concentration and can be said to be the top keywords used in the researches related to the topic. Clusters of these keywords were formed for better understanding of their usage in the researches. Cluster 1 had five items including, arbitration, dispute resolution, international commercial arbitration, international trade and jurisdiction. Cluster 2 had 5 items again and they were bilateral investment treaties, commercial arbitration, enforcement, New York convention and public policy. Cluster 3 had 5 items namely foreign investment, international arbitration, international law, investment arbitration and UNCITRAL. The fourth cluster had 3 item which were foreign direct investment, international investment law and investor-state dispute settlement. There were a total of 49 links and the total link strength was of 85.

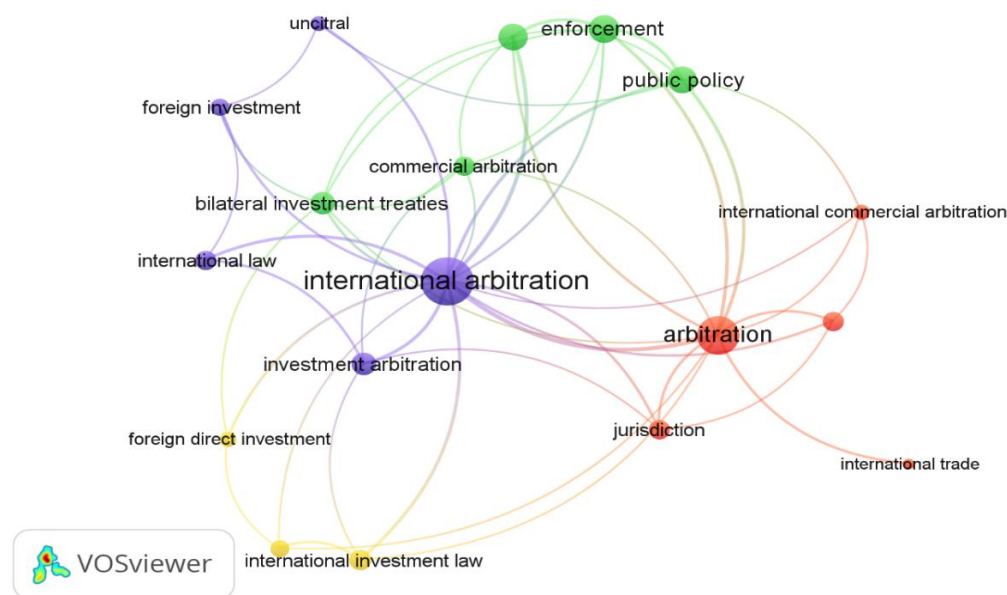


Figure IV: Arbitration - Keyword Analysis

8. Conclusion

A surge in global business, commerce and trade is being witnessed over last few decades. The businesses have begun taking advantage of the growing liberalization of economic policies by most nations of the world. This has given rise to the International trade agreements and resulting disputes of these agreements. The commercial and business relations have spread far and wide from the country of origin of the business firms and unprecedented expansion of business relations are noticed.

These commercial relations also provide the reason for commercial disputes. Such heightened trade relation between the nations also needs a robust mechanism for resolution of commercial disputes arising out of these international contracts. The efficient management of businesses also need effective resolution of commercial disputes. It is increasingly difficult to find a judicial settlement of these disputes as these involve multiple nations and their domestic laws differ substantially. In these circumstances arbitration has emerged to be the leading method of dispute resolution more specifically, in the business related disputes.

The outcome of the study evidently demonstrates that the research in the area of international arbitration lacks largely in numbers. This is indicated by the fact that in a period of fifty years, the total number of searchable researches found on the SCOPUS database was only 799, which is very few by all standards. There remained a stagnancy of research till 2000, perhaps due to muted international trade in the preceding years. It was only in 2001 that the number of research had a noteworthy increase. In 2017, although there was a sharp spike yet again, but that momentum could not be sustained in 2018 and 2019 and these years registered a decline in the number of research articles published.

United States has the distinction of producing highest number of publications as well as the highest number of internationally collaborated papers but the highest number of citations was generated from the research published from Hong Kong average citations per paper. Park W.W. is the author contributing the most number of articles. Queen Mary University of London was the institute which published the highest number of publications but City University of Hong Kong ranked first in when it came to citations and average number of citation per paper by institutes in the study using, 'international arbitration' as the keyword. The journal that has published an outstanding and highest number of articles is known as 'Arbitration International'. Also, the results clearly confirm Université de Genève and Georgetown Law as the institutes having the highest h-Index score.

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