

https://doi.org/10.23913/ride.v10i20.634

Artículos Científicos

Mecanismos alternativos de solución de conflictos. Análisis bibliométrico 2009-2018: base de datos Scopus

Alternative Dispute Resolution Mechanisms. 2009-2018 Bibliometric Analysis: Scopus Database

Mecanismos alternativos para resolução de conflitos. Análise bibliométrica 2009-2018: banco de dados Scopus

Blanca Noemí Silva Gutiérrez

Universidad de Guadalajara, Centro Universitario de Ciencias Económico Administrativas, México

bsilva@cucea.udg.mx

https://orcid.org/0000-0001-8851-7079

Jorge Alan Chávez Meléndez

Universidad de Guadalajara, Centro Universitario de Ciencias Económico Administrativas, México

alan.chavez.melendez@gmail.com

https://orcid.org/0000-0002-5131-9914

Resumen

El objetivo del presente estudio consistió en realizar un análisis bibliométrico de la producción académica en el campo de los mecanismos alternativos de solución de conflictos (MASC) en la base de datos Scopus. Lo anterior con el propósito de identificar en esta temática los indicadores por año, autor, afiliación, país o territorio, tipo de documento y área del conocimiento. Se aplicó la metodología de análisis bibliométrico descrita por Escorcia (2008) y Arias (28 de noviembre de 2014), que consiste en realizar técnicas estadísticas que tienen como propósito evaluar el proceso de investigación y su evolución. El estudio fue de carácter cuantitativo longitudinal con descripción de tendencias de la producción científica. Como parte de los principales resultados, se identificó que el 2015 fue el año que contó con el mayor número de registros sobre el tema, con un total de 80 documentos publicados en la base de datos,





considerando que Scopus cuenta con registros desde el año de 1985. Mientras que el autor que más publicaciones tuvo sobre el término *MASC* fue el investigador Cheung So, de la Universidad de Hong Kong, con un total de 19 documentos. De igual forma, se localizó que el país con más publicaciones en dicha base de datos fue Estados Unidos con 369 documentos entre los años de 1985 y 2018. Si bien en Scopus se tiene registro desde 1985, el periodo de análisis correspondió al decenio del 2009 al 2018. A pesar de que se observó un incremento en las publicaciones sobre los MASC, cabe destacar que se identificó un decremento significativo en la publicación de documentos alusivos al tema a partir del año 2015.

Palabras clave: análisis bibliométrico, conflicto, justicia alternativa, métodos alternos, Scopus.

Abstract

The objective of this study was to perform a bibliometric analysis of academic production in the field of alternative dispute resolution (ADR) mechanisms in the Scopus database. The above with the purpose of identifying in this subject the indicators by year, author, affiliation, country or territory, type of document and knowledge area. The methodology of bibliometric analysis described by Escorcia (2008) and Arias (November 28, 2014) was applied, which consists in performing statistical techniques that have the purpose of evaluating the research process and its evolution. The study was of a quantitative longitudinal nature with a description of trends in scientific production. As part of the main results, it was identified that 2015 was the year that had the highest production record on the subject, with a total of 80 documents published in the database, considering that Scopus has records since 1985. While the author who had more publications on the term ADR was Cheung So, researcher at the University of Hong Kong, with a total of 19 documents. Likewise, it was found that the country that had the most publications in said database was the United States of America with 369 documents between 1985 and 2018. Although Scopus has a record since 1985, the period of analysis corresponded to the decade from 2009 to 2018. Although there was an increase in the publications on the ADR mechanisms, it should be noted that a significant decrease was identified in the publication of documents alluding to the subject as of 2015.

Keywords: bibliometric analysis, conflict, alternative justice, alternative methods, Scopus.





Revista Iberoamericana para la Investigación y el Desarrollo Educativo ISSN 2007 - 7467

Resumo

O objetivo do presente estudo foi realizar uma análise bibliométrica da produção acadêmica no campo dos mecanismos alternativos de resolução de conflitos (MASC) na base de dados Scopus. O exposto a fim de identificar os indicadores por ano, autor, afiliação, país ou território, tipo de documento e área de conhecimento sobre este tópico. Foi aplicada a metodologia de análise bibliométrica descrita por Escorcia (2008) e Arias (28 de novembro de 2014), que consiste na execução de técnicas estatísticas cujo objetivo é avaliar o processo de pesquisa e sua evolução. O estudo foi de natureza quantitativa longitudinal, com uma descrição das tendências da produção científica. Como parte dos principais resultados, identificou-se que 2015 foi o ano com o maior número de registros sobre o assunto, com um total de 80 documentos publicados no banco de dados, considerando que o Scopus possui registros desde o ano de 1985. Enquanto o autor com mais publicações sobre o termo MASC foi o pesquisador Cheung So, da Universidade de Hong Kong, com um total de 19 documentos. Da mesma forma, verificou-se que o país com maior número de publicações no referido banco de dados eram os Estados Unidos com 369 documentos entre 1985 e 2018. Embora o Scopus tenha um histórico desde 1985, o período de análise correspondeu à década de 2009 até 2018. Embora tenha sido observado um aumento nas publicações do MASC, deve-se notar que houve uma redução significativa na publicação de documentos alusivos ao assunto a partir do ano de 2015.

Palavras-chave: análise bibliométrica, conflito, justiça alternativa, métodos alternativos, Scopus.

Fecha Recepción: Octubre 2019 Fecha Aceptación: Marzo 2020

Introduction

Alternative dispute resolution mechanisms

Access to justice is undoubtedly a human right that guarantees to any person the means through which they can find a way to solve their daily difficulties in the event of having a conflict (Castillo y Bautista, 2018; Cornelio, 2014). However, unfortunately the reality regarding such access is based on the skills and circumstances that each country has to solve the conflicts that may arise, as well as various situations that are specific to each individual, such as the environment socioeconomic.

Currently, the capacity to solve conflicts related to the justice system in various countries has been exceeded due to excessive demand and the accumulation of controversies,



which has resulted in a significant backwardness in the administration of justice. In this context, for several years the so-called alternative justice has arisen in Mexico and, with it, the alternative conflict resolution mechanisms (MASC). The fundamental intention is to achieve a paradigm shift in dealing with controversies and the delivery of justice, in addition to obtaining a decongestion of the saturation of work of the traditional justice system.

The term alternative justice can be understood, according to Mondragón (2007, cited in Nava and Breceda, 2017) and Estalvillo (2004), as a procedural structure different from the jurisdictional one that seeks the solution of controversies or conflicts between individuals through MASC, which include mediation, conciliation, negotiation and arbitration. These methods provide advantages such as a more active participation that involves the affected parties in the settlement process, optimization of the time that the legal process would take through the traditional route and one of the most significant: the economic advantage that they offer. The foregoing, following here Cadenas (2017), has the objective of "allowing greater participation of citizens in conflict resolution, a reduction of social tensions and thus reaching an improvement in social relations and quality of life "(p. 1631).

The origin of the alternative methods is located in the United States of America in the year of 1970; a little later they would be practiced in Canada and Australia. These mechanisms were institutionalized in the 1990s when the United States Congress mandated that all federal courts carry out the implementation and use of conflict resolution procedures. Currently, the countries of the European continent apply these methods in conflict resolution and resolution. In Spain there are 13 autonomous communities that have been practicing mediation and negotiation in collective labor disputes (Cornelio, 2014).

It is important to point out that, with the emergence of alternative justice and the MASC, it is not intended at any time to replace what has been carried out by the traditional system of justice, but rather to act as an alternative route that helps to alleviate the workload of this and that, in the same way, society is benefited through methods of conflict resolution that may be more efficient depending on the problem to be solved.

Bibliometric analysis

The essential purpose of a research paper is its disclosure. Knowing the above, the members of the scientific community seek to publicize the advances they have worked in their respective areas of knowledge, resulting in what we commonly know as scientific production.

A technique that is effective to know and measure how much scientific production exists in a certain disciplinary field is bibliometric analysis. And not only that, it is also an important tool for organizing bibliographic collections.



Bibliometric analysis generally presents in a visual and orderly way the behavior that scientific production has had in any area of research. Thanks to the various indicators that it can present, it is possible to know highly relevant data on the subject under study. As a result, an overview is obtained not only of the state of the matter as such, but also of its evolution.

According to Velázquez, Robledillo, Mangas, Veiga, and Maqueda (2013), the first reference to the concept of bibliometrics was made by Paul Otlet in 1934. In his work, Otlet highlights the need and importance of this science of measurement and describes the first indicators that make it possible to quantify production, as well as its organization.

Miguel and Dimitri (2013), for their part, within the oldest antecedents of bibliometric studies or analyzes that have been found in the literature, they cite the works of Cole and Eales from 1917, who published comparative anatomy from the period 1550-1860, as well as that of Hulme of 1923, librarian of the British Patent Office, who carried out a statistical analysis on publications in the history of science, and the work of Gross and Gross in 1927 on references included in articles in chemical journals indexed in the Journal of the American Chemical Society. Also Miguel and Dimitri (2013) highlight the studies that led to the formulation of "bibliometric laws", such as Lotka's law of scientific productivity (1926), the law of dispersion of literature on specific subjects by Bradford (1934), Zipf's law (1935) on the distribution of words in a text and Price's laws of exponential growth of science and obsolescence of scientific literature (1963).

In this regard, Castillo (2002) establishes the following classification of bibliometric laws (see table 1):

Tabla 1. Clasificación de las leyes bibliométricas

Leyes que inciden en la literatura	Leyes que inciden en los autores y su
científica	producción
Ley de crecimiento exponencial	Ley de productividad
Ley de obsolescencia o	Ley de impacto o visibilidad
envejecimiento	
Ley de dispersión	

Fuente: Elaboración propia con base en Castillo (2002)

In 1969, Alan Pritchard created his own definition of bibliometrics: "The application of statistical and mathematical methods arranged to define the processes of written communication and the nature and development of scientific disciplines through storytelling techniques and analysis of such communication" (Velázquez et al., 2013, p. 385). Other terms such as scientometry, informetry, library science, webmetry are also frequently used; each of them





refers to metric studies applied to specific phenomena or objects, although sometimes they are often used as synonyms for the term bibliometrics (Sengupta, 1992).

There are other more recent definitions that expose the meaning of bibliometrics. For example, the proposal by Pérez et al. (2003, cited in Herrera, Núñez, Tobón and Arias (2009):

A compilation of techniques and procedures to study the nature and behavior of a discipline through the systematization and analysis of the various aspects of written communication, taking into account a specific methodology that deals with the quantitative analysis of certain variables present in a published text. (p. 63).

On the other hand, for Camps (2009) bibliometrics deals with the following:

The science that allows the quantitative analysis of scientific production through literature, studying the nature and course of a scientific discipline. Bibliometric indicators are widely used for the evaluation of researchers, institutions and countries, but the data they give us should not be interpreted in isolation, as is frequently done with the impact factor. (p. 5).

For Aström (2007), it refers to an emerging field of research, the genealogy of which runs through the branches of library science and information science, which has achieved great development in recent decades.

While for Escorcia (2008) bibliometrics is defined as "a sub-discipline of scientometry that provides information on the results of the research process, its volume, evolution, visibility and structure. In this way, the scientific activity and the impact of both the research and the sources can be assessed "(p. 13).

To measure and evaluate various aspects of scientific research, bibliometrics has generated a system of bibliometric indicators, namely:

- The topics discussed
- The impact or visibility
- Type of documents consulted
- Updating and validity of the references cited
- Dispersion of publications
- Publication languages
- The origin of the bibliography cited (national and foreign) (Arias, 2017 pp. 81-82).

The application of this type of analysis is based on showing the evolution that science has had based on certain information and quantitative data, as well as to know the trends that such evolution presents. Therefore, and in this sense, the main objective of this research was to know and describe the scientific activity and production of information regarding MASC



registered in the Scopus database between 2009 and 2018, and thus obtain information about the publications that exist on the aforementioned platform on the subject in that period, as well as the authors who have published the most, the countries that have contributed the most to the topic, among others.

Method

The methodology for bibliometric studies described by Escorcia (2008) and Arias (November 28, 2014) was applied, which consists of applying statistical techniques that aim to evaluate the research process and the evolution of a given topic, in this case, regarding academic production in the field of MASC. The study was of a longitudinal quantitative nature and includes a description of the trends in scientific production for the period from 2009 to December 2018. The above based on the detection of a significant increase in production in that period. The year 2019 was not included because, at the start of this study, the data for the full year was not available.

As part of the descriptive analysis, a search for documents on the MASC was performed. As it was a database whose results and publications are in the English language, and because it was an analysis that is proposed in international terms, the translation of this concept was carried out. In this way, the most recurring keywords in Scopus were identified with the intention of narrowing down the specific search and alternative dispute resolution (ADR) was found as the most representative string among international publications.

Subsequently, the search for documents with the specific term mentioned above was carried out, taking as a criterion that the results yielded relevant documents through the title, the abstract and the keywords, to ensure that the result was reliable. Likewise, the searches were refined applying the Boolean operators, thanks to which greater accuracy was achieved, and an analysis of the results obtained from the database was generated. With this, historical information was obtained regarding the number of documents published per year, author, affiliation of the authors, country, type of document and area of knowledge.

Regarding the choice of the database to carry out the bibliometric analysis, initially the search was carried out in two of the most internationally recognized: Scopus and Web of Science; however, the latter produced only nine documents on the MASCs, so this result was considered insufficient to meet the objective of this investigation. Therefore, the decision was made to focus the analysis exclusively on the Scopus database, also due to its international relevance and specialization of its kind. Currently, the University of Guadalajara has access to the general repository of specialized and multidisciplinary databases, among the latter is Scopus, considered the largest database of citations and summaries of peer-reviewed



bibliography. It is worth mentioning that Scopus includes scientific magazines, books and conference proceedings from branches such as science and technology, social sciences, arts and humanities, among others.

Results

As a total production on the term ADR (remember that it is the equivalent of MASC in English) the Scopus database has a record of 1,132 documents until 2018. Although the first record dates from 1985, for the purposes of this study The period 2009-2018 was taken as a temporary delimitation, as previously indicated. The complete data on scientific production in the aforementioned database is presented below with the intention of offering an overview of its evolution since the year in which it is registered (it should not be overlooked, however, the clarification above). The first document that addresses the issue of MASC was located in 1985, while in 1986 no record of publications was found for the term in question. From 1987 to the present, it has been continuously published in this field with certain variations, this in relation to the database that served as a reference for the analysis.

Figura 1. Evolución histórica de la producción de investigaciones sobre el término en inglés *ADR* por año en la base de datos Scopus hasta el año 2018



Fuente: Elaboración propia con base en Scopus



As can be seen in the previous graph, over the years the trend of publications on MASC has been on the rise; however, the greatest growth occurs from the year 2010. 2015 was the year in which the greatest number of publications was registered, to give way in the years following a significant decrease, so it is pertinent to take as a sample for the analysis of the results the period that covers the last 10 years of production in the database.

Scientific production per year

During the period covered by this study (2009-2018), the database registered a total of 1,132 documents published on MASC. As already mentioned, the year 2015 was the year in which the highest production was found, with 80 documents, while, on the other hand, the year in which the lowest record was recorded was 1985, with only two documents published. This data is evident since it is the first year in which there is a record, while in the immediate subsequent year (1986) there are no records of any published document, and it is from the following year that production increased, with seven documents registered in 1987. From that date, production increased, maintaining an average of 22.80 documents per year until 2009. Figure 2 shows the evolution of this indicator during the production period of 2009-2018.

Figura 2. Evolución en la publicación de documentos sobre MASC durante el periodo 2009-2018 en Scopus



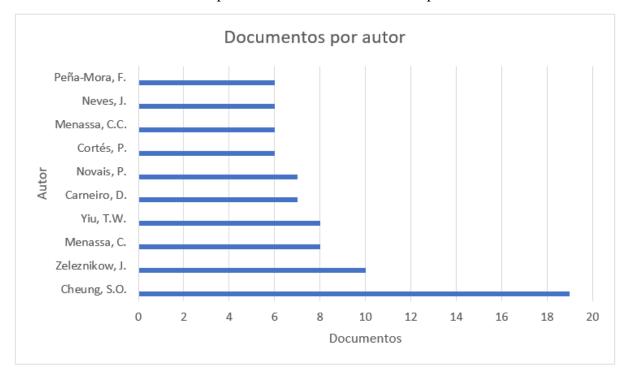
Fuente: Elaboración propia con base en Scopus



Scientific production by author

Regarding this category, it was found that the author who published the most during the investigation period was S. Cheung, with a total of 19 documents published, followed by J. Zeleznikow with 10 documents. While there are 114 authors representing the minority of published records with a total of two publications each from 1985 to 2018.

Figura 3. Evolución en la publicación de documentos sobre MASC durante el periodo 2009-2018 por autor en la base de datos Scopus



Fuente: Elaboración propia con base en Scopus

Scientific production by affiliation of the authors

According to the information located in the Scopus database, it was identified that, from the documents that were published during the analyzed period, the affiliation of their authors forms a very varied map of educational institutions, among which the University of Hong Kong, with 23 documents published by affiliated authors, the most in the field, followed by the University of Oxford with a total of 12 documents and the Victoria University of Melbourne with a total representation of 11 documents. 61 universities or institutions with only two publications each show a lower representation: the Institute of Medical Conflict Management, the University of Westminster in London, the University of Nevada in the United States or the University of Dundee in Scotland, to name just a few.





Figura 4. Distribución de documentos sobre MASC según la afiliación institucional de sus autores durante el periodo de 2009-2018 en la base de datos Scopus



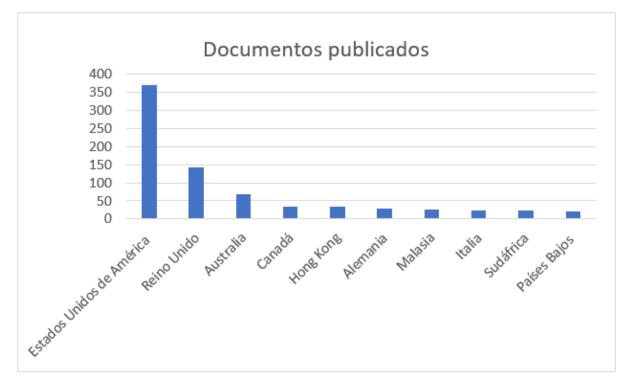
Elaboración propia con base en Scopus

Scientific production by country or territory

There are several countries or territories that contribute to the production of research on the term MASC. Despite the fact that it seems that the European countries have a greater contribution on the subject, the reality is that the country that contributed the most to production during the period of analysis was the United States of America, with a total of 369 documents published in the aforementioned database. data, followed by the United Kingdom with a total of 143 documents, while Australia ranks third with 69 documents. As relevant data, it stands out that Mexico is in 39th place with a total of four documents. On the other hand, the countries with the lowest scientific production are the United Arab Emirates, Uganda, Trinidad and Tobago, Tanzania, Serbia, Saudi Arabia, Puerto Rico, Kenya, Iran, Egypt, Argentina, Barbados, among others. The following graph shows the first 10 countries of scientific production with respect to the subject here.



Figura 5. Países que más documentos publicaron sobre MASC en Scopus



Fuente: Elaboración propia con base en Scopus

Scientific production by type of document

When it comes to disseminating knowledge, there are different formats that a researcher can use, be it through articles published in indexed journals, books, book chapters or presentations. Regarding the publication of documents on the subject of MASC in the Scopus database, most of these publications are made through scientific articles, a total of 682 articles during the period analyzed, followed by papers with a total of 144 existing documents; In third place are the book chapters with 109 records. Below is a graph (Figure 6) with complete information regarding publication by type of document.





Figura 6. Producción científica sobre MASC por tipo de documento



Fuente: Elaboración propia con base en Scopus

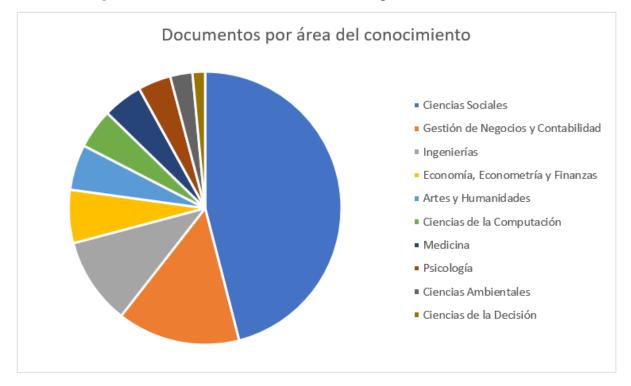
Scientific production by area of knowledge

Despite the fact that the scientific production related to the term MASC is mainly aimed at legal or social issues, there are various areas of knowledge through which this topic is spread, including engineering, economics, arts and humanities, to medicine or environmental science.

Next, information is presented regarding the 10 main areas of knowledge on which publications have been made regarding MASC. It should be noted that the criteria for the classification of these areas is determined by the same database. Thus, the social sciences stand out first, among which law and sociology predominate, in addition to including some others such as education, history, political science, etc., with a total of 607 documents identified in this area. In second place is the business, management and accounting area, with a total of 237 documents. In third place is the science of engineering with 199 published documents. On the contrary, the areas that present a lower publication index on this topic and according to their classification are dentistry or physics and astronomy with one published document each, in addition to chemical engineering, veterinary medicine or neuroscience with three, four and four publications, respectively.



Figura 7. Producción científica sobre MASC por área del conocimiento



Fuente: Elaboración propia con base en Scopus

Discussion

During the period evaluated, which included from 1985 to 2018, a total of 1,132 documents related to MASC were published within the Scopus database, of which a significant majority were scientific articles, approximately 60%, while around 13% was the publication and presentation of papers, followed by the publication of book chapters with approximately 9.5%, and lastly the publication of books on the subject, with a minimum amount (approximately 3%) compared with scientific articles.

A noteworthy fact of the aforementioned information was that the vast majority of researchers are focusing on the publication of scientific articles as a means of dissemination for their research, leaving aside the production of books, since the database is not limited to the publication of scientific articles, but this also includes the publication of other types of documents: books, book chapters, etc.

Another relevant fact was the high number of documents published in the database that come from the United States and the European continent: altogether 60% of total publications, with approximately 30% each, both the United States and the European continent .

Among the areas of knowledge that had the greatest scientific production were the social sciences (law, sociology), which predominated with approximately 37%, followed by the area of business, management and accounting (economic sciences) with 14.5%, while the



Knowledge areas with the least contribution were physics and astronomy, dentistry, immunology and microbiology (exact and health sciences), with approximately 0.1%.

With regard to the specific topics addressed by the documents of the period under review, mainly questions of law predominated; the topics on which the publications dealt are about "conflict resolution through mediation", "resolution of labor conflicts supported by alternative conflict resolution", "mediation practices, alternative resolution of conflicts before human rights "," Alternative techniques for conflict resolution, organizations and alternative methods of conflict resolution "," factors that affect conflict resolution ", as well as the MASC in different areas of law, such as school mediation and its application in various disciplines.

Conclusions

The publication of documents related to MASCs in the Scopus database showed a quite significant evolution, as well as an upward trend since an article related to this topic was first published in 1985; however, with respect to the period analyzed, namely, from 2015 to 2018, a considerable decrease was detected.

In addition to the above, the study allowed us to know what has been the evolution regarding scientific production with respect to MASCs in the Scopus database, as well as the main problems addressed by these investigations. However, this was a first approach that provides relevant elements for future research that consider what have been the motivations that have led different researchers to study alternative methods, as well as knowing what the reasons have been for Publication on this topic has decreased in recent years, contrary to what would be believed due to the current boom of these methods, so the way is open for future studies to be analyzed through qualitative approaches, with the intention to deepen the knowledge and motivations in this field of research.

As part of the results, it was detected that the majority of the authors who published are of European origin, which shows the importance that the old continent is giving to topics on alternative justice, at least those who decide to publish in databases. internationals like Scopus. It should be noted that in this period none of the authors who were among the top 10 places are of Latin American origin, which represents a clear need to carry out research on the subject and at the same time generate the dissemination of knowledge in this field.

Likewise, when identifying the 10 countries where the organisms and universities that have done the most research and, therefore, the most scientific production, most of them are European, lagging behind in the Spanish-speaking countries belonging to the American continent.





This study becomes relevant for the educational field by contributing to the low state of knowledge that currently exists in Mexico about MASCs and their production, as well as laying the groundwork for these methods to be taken into account as tools that contribute to the improvement of conditions under which both educators and learners perform.

An example is school mediation, whose main purpose is to improve the management of conflicts that originate in the educational field, seeking to establish better interpersonal relationships and promoting an environment that fosters maximum academic achievement.

As already mentioned, this research allowed knowing the trend in the production of the MASC study, however, one of its limitations lies in having carried out the analysis from the same database, which could leave out relevant research for the field. study. Regarding strengths, the contribution that the present analysis shows for the state of the art is identified, as it is a pioneering investigation in this regard. While as areas of weakness and opportunity we can point out the few scientific studies in English that exist on MASC, particularly in Latin America and Mexico.





References

- Arias, F. (28 de noviembre de 2014). Obsolescencia de la literatura científica. Ponencia presentada en la I Jornada del Centro de Investigación Edufisadred. Maracay, 28 de noviembre de 2014. Recuperado de http://www.docfoc.com/obsolescencia-de-la-literatura-científica-fidias-garias.
- Arias, F. (2017). Obsolescencia de las referencias citadas: un mito académico persistente en la investigación universitaria venezolana. *E-ciencias de la Información*, 7(1), 78-90.
- Aström, F. (2007). Changes in the LIS Research Front: Time-Sliced Cocitation Analyses of LIS Journal Articles, 1990–2004. *Journal of the American Society for Information Science and Technology*, 58(7), 947-957.
- Cadenas, A. (2017). *Mediación como justicia alternativa y diálogo social*. San Cristóbal de La Laguna, España: Universidad de La Laguna.
- Camps, D. (2009). El análisis bibliométrico de Universitas Scientiarum. *Universitas Scientiarum*, 14(1), 5-7.
- Castillo, C. y Bautista, M. (2018). Acceso a la justicia alternativa: un reto complejo. *Utopía y praxis latinoamericana*, 23(2), 1-18.
- Castillo, L. (2002). *Introducción a la Bibliometría*. Valencia, España: Universidad de Valencia.
- Cornelio, E. (2014). Los mecanismos alternativos de solución de controversias como derecho humano. *Barataria*, (17), 81-95.
- Escorcia, T. (2008). El análisis bibliométrico como herramienta para el seguimiento de publicaciones científicas, tesis y trabajos de grado. (tesis de licenciatura). Universidad Pontificia Javeriana de Colombia, Bogotá. Recuperado de http://www.javeriana.edu.co/biblos/tesis/ciencias/tesis209.pdf.
- Estalvillo, F. (2004). Medios alternativos de solución de controversias. México: Porrúa.
- Herrera, E., Núñez, A., Tobón, S. y Arias, D. (2009). Análisis bibliométrico de la depresión infantil. *Pensamiento Psicológico*, *5*(12), 59-70.
- Miguel, S. y Dimitri, P. (2013). La investigación en bibliometría en la Argentina: quiénes son y qué producen los autores argentinos que realizan estudios bibliométricos. *Información, Cultura y Sociedad: Revista del Instituto de Investigaciones Bibliotecológicas*, (29), 117-138.
- Nava, W. y Breceda, J. (2017). Mecanismos Alternativos de Resolución de Conflictos: un acceso a la justicia consagrado como derecho humano en la Constitución Mexicana. *Cuestiones Constitucionales*, (37), 203-228.
- Sengupta, I. (1992). Bibliometrics, Informetrics, Scientometrics and Librametrics: An Overview. *Libri*, 42(2), 75-98.





Revista Iberoamericana para la Investigación y el Desarrollo Educativo ISSN 2007 - 7467

Velázquez, D., Robledillo, A., Mangas, I., Veiga, J. y Maqueda, J. (2013). Análisis bibliométrico de la revista Medicina y Seguridad del Trabajo durante el periodo 2007-2012. *Medicina y Seguridad del Trabajo*, 59(233), 383-392.

Rol de Contribución	Autor (es)
Conceptualización	Blanca Noemí Silva Gutiérrez - Principal Jorge Alan Chávez Meléndez - Apoyo
Metodología	Blanca Noemí Silva Gutiérrez - Principal Jorge Alan Chávez Meléndez – Igual
Software	NO APLICA
Validación	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez – Igual
Análisis Formal	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez – Igual
Investigación	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez - Igual
Recursos	Blanca Noemí Silva Gutiérrez - Principal
Curación de datos	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez - Igual
Escritura - Preparación del borrador original	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez - Igual
Escritura - Revisión y edición	Blanca Noemí Silva Gutiérrez - Principal Jorge Alan Chávez Meléndez - Apoyo
Visualización	Blanca Noemí Silva Gutiérrez - Igual Jorge Alan Chávez Meléndez - Igual
Supervisión	Blanca Noemí Silva Gutiérrez - Principal Jorge Alan Chávez Meléndez - Apoyo
Administración de Proyectos	Blanca Noemí Silva Gutiérrez - Principal Jorge Alan Chávez Meléndez - Apoyo
Adquisición de fondos	Blanca Noemí Silva Gutiérrez - Principal

