ANALYSIS OF THE ASPECTS THAT MOST INFLUENCE THE PUBLICATION OF ARTICLES IN PERIODICALS WITH HIGH SCIENTIFIC IMPACT: A SYSTEMATIZED REVIEW

Keren Ane de Siqueira Wandresen Cardoso
keren_ane@id.uff.br
Fluminense Federal University – UFF, Niterói, Rio de Janeiro, Brazil

Helder Gomes Costa
helder.uff@gmail.com
Fluminense Federal University – UFF, Niterói, Rio de Janeiro, Brazil

Haydée Maria Correia da Silveira
haydeemcsb@gmail.com
Fluminense Federal University – UFF, Niterói, Rio de Janeiro, Brazil

Martius Vicente Rodriguez Y Rodriguez
martiusrodriguez@id.uff.br
Fluminense Federal University – UFF, Niterói, Rio de Janeiro, Brazil

Ana Claudia Dias
missdias@gmail.com
Fluminense Federal University – UFF, Niterói, Rio de Janeiro, Brazil

ABSTRACT

This research is relevant for the entire academic community, since it aims to contribute to the reduction of rework and the waste of time of authors, giving more agility and assertiveness in the process of sending articles to the publication. This study has as main objective to identify which are the aspects that most influence the publication of articles in journals of high scientific recognition. A systematic review of the literature on the bases of Scopus and Web of Science was carried out, selecting the articles from 2007 onwards, which resulted in a sample of 37 articles published in 31 journals. Based on the systematic review of the literature, it was verified that in order to write an article suitable for publication in high-impact journals, 17 key aspects to the success of publications are necessary, of which the most relevant are: originality/value, collaborative research, proper use of methodological procedures, validation, findings/discoveries, clarity and conciseness. **Contribution/originality:** In the available literature, this subject is still not much explored. Given the importance of the topic for the researchers, this work seeks to contribute to the elevation of the quality of the scientific works, promoting the publication in periodicals of high international recognition.

Keywords: High impact articles; Evaluation of article; Quality articles; High Impact Papers.

1. INTRODUCTION

The publication of articles in journals of high scientific recognition is considered an essential factor in the daily life of research institutions around the world. In order to publish an article in journals of high impact factor (IF), it must be submitted to an evaluation process that may result in the acceptance of the article or not. Analyzing the acceptance rates of articles in journals, it is observed that there is a high rejection rate of these papers, causing a large volume of rework in the evaluation systems.

According to Fazel et Wolf (2017), the most widely used metric to measure quality in an article or journal is to consider the number of citations published in the last two years. There are approximately 20 weighted citation metrics (which assign higher weights to citations that appear in more influential journals) and unweighted citations (assigning the same score regardless of the periodical). These citation metrics are available on international bases and are used as indicators of impact, prestige, reputation or perceived quality (Walters, 2017b).

This paper seeks to identify the aspects that most influence the acceptance of articles for publication in journals of high scientific recognition, hoping to contribute to the reduction of rework and the waste of time of authors, giving more agility and assertiveness in the process of sending articles for publication. Aiming to contribute to the reduction of this rework, this article presents a mapping of the specialized literature regarding the main factors that lead to the acceptance of the articles, thus being therefore relevant for the entire academic community.

2. LITERATURE REVIEW

Conceptual basis: JCR

The Web of Science (WoS) and Scopus, produced by the Clarivate Analytics and Elsevier organizations, respectively, are the bibliographic databases with the highest academic impact at the international level (Powell et Peterson, 2017; Trajtel *et al.*, 2017).

The Journal Citation Reports (JCR) is a bibliometric basis recognized for evaluating journals in the WoS database, classifying them according to the quality indicative layers in line with the IF: Q1, high impact; Q2; Q3; and Q4, the lowest category indicator. The impact of the productions is related to the utility of this publication for other researchers (Guan *et al.*, 2017). In consonance with Trajtel et al. (2017), for the purposes of scientific research accreditation, it is important

to publish articles that are located in the first quartile (Q1).

The IF, which is published annually in the JCR by the company Clarivate Analytics (formerly Thomson Reuters), is set as an indicator of the quotient of the number of all citations of articles published in a given year (Sygocki et Korzeniewska, 2018). It is one of the most important and ancient criteria to be observed for citation counting. This nomenclature was first mentioned by Eugene Garfiel, developed in the 1960s and made available by JCR in 1975 It is one of the most important and ancient criteria to be observed for citation counting. This nomenclature was first mentioned by Eugene Garfiel, developed in the 1960s and made available by JCR in 1975 (Walters, 2017a).

Journal Citations Reports (JCR)

JCR is a research base used by researchers worldwide, with data from 81 countries and more than 11,000 scientific journals, indicating which are the most important and relevant publications in the world; therefore, the publications with higher IF.

> Since 1975 – available online since 1997 – JCR provides statistical information that helps researchers, editors, and other professionals select the most meaningful journals in selected areas of knowledge. The platform is integrated with the Web of Science – a multidisciplinary reference tool that brings together only the most significant titles in their respective fields (Capes, 2016).

The Journal Citation Reports (JCR) is a recognized base for evaluating journals in the WoS database. The WoS database indexed 12,062 magazine titles in 2017 (1,094 open access titles), of which 3,233 titles are from the Social Sciences area, corresponding to approximately 30% of the total number of titles indexed (Trajtel *et al.*, 2017).

The origin and development of the JCR database was guided by the needs of the University of the United States, whose librarians wanted to use an objective method to select relevant journals for their users. The key question to drive the development of this process was: "What are the fundamental scientific journals that should be present in a university library in order to stimulate the intellectual development of its students?" Thus, it could be noted that the first use of the IF calculation was to facilitate the task of selecting journals using objective quantitative methods, which is fundamental for the commercialization of the product (Archambault et Larivière, 2009).

SCImago Journal Rank (SJR)

The SJR is a database that includes journals and scientific indicators developed from information obtained in the Scopus database (Elsevier B.V.). These indicators are used by researchers to evaluate scientific information. From this base, the authors can obtain more detailed data of periodicals and publications, establishing a ranking of the countries that most publish scientific articles in a certain area or subject (SCImago, 2017).

As with JCR, journals in JRS are also divided into four rating levels: Q1 - the highest level of impact, Q2, Q3 and Q4, the lowest impact level. The classification quarters of the journals are counted in the JRS, which indicates the citation rate of the scientific journals, counting the citations of the last three years (Trajtel *et al*., 2017).

Scopus covers all fields of research – Science, Mathematics, Engineering, Technology, Health and Medicine, Social Sciences, and Arts and Humanities. This database provides a broad overview of global interdisciplinary scientific information. Scopus content comes from over 5,000 editors and should be reviewed and selected by an Independent Content Review and Selection Board (CSAB) to be and continue to be indexed in this database (Elsevier, 2017).

With its broader coverage, some scholars, researchers, and accreditation agencies for universities, such as Quacquarelli Symonds and Times Higher Education, prefer to use Scopus to WoS to evaluate scientific output (Machin-mastromatteo *et al*., 2017).

3. MATERIAL AND METHODS

This chapter describes the methodology used in the research and its respective process to identify the aspects that most influence the publication in high IF journals.

For the development of this research, a review of the literature in the Scopus and WoS bases was carried out aiming to give theoretical basis to the study, highlighting the primordial aspects for the elaboration of an article of high scientific impact according to the needs of the proposed work.

The following steps have been performed and are detailed in Figure 1:

1. Sample definition

    a.Selection of the bases for the search of the articles: Scopus and WoS.

    b.Choice of search terms.

    c.Selection of articles for in-depth analysis.

2. Analysis of the articles, seeking to identify the elements of the following construct: objective, methods, results and conclusion.

3. Discussion of the results found.

4. Research Consolidation: Study Findings.

A systematic review of the literature, whose approach has as a principle the mining of bibliographic sources that appear in the main international bases with access to the internet, was carried out for the proposed study. This methodological application consists of four essential elements: Bibliometrics, Webometrics, Infometrics, and Bibliographic Mining, resulting in an analytical investigation (Costa, 2010).

The literature review is presented in this section. This process was consolidated through a structured and systematized bibliographical review, thus obtaining a response to the central theme of the research work. This thorough and detailed study procedure on the subject is also called "state of the art" (Costa, 2010).

4. RESULTS

Sample definition

The bibliographic survey was carried out by consulting Scopus and WoS databases. Access to the articles was carried out at Scopus in the period from September 11 to 22, 2017, January 10, 2018 and February 20, 2018; and, in the WoS database, in the period of October 25 and 26, 2017 and January 10, 2018, both accessed through the Capes News Portal.

37 articles were selected using the following keywords: "High impact article", "Evaluation of article", "Quality articles" and "High impact papers" to compose the systematic review. In order to reduce the number of articles found in the databases, the original scientific articles filters were used, with the exception of the last keyword: "High impact papers" which, in addition to filtering the original scientific articles, also searched the review articles to increase sampling. All articles selected were published as of 2007. After the execution of these search restrictions, the abstracts and titles of all publications were analyzed. With this action, the articles that are more based on the theme were selected, taking into account the purpose of this research.

In this stage, data related to the publications that will be addressed and discussed in this work were presented. The
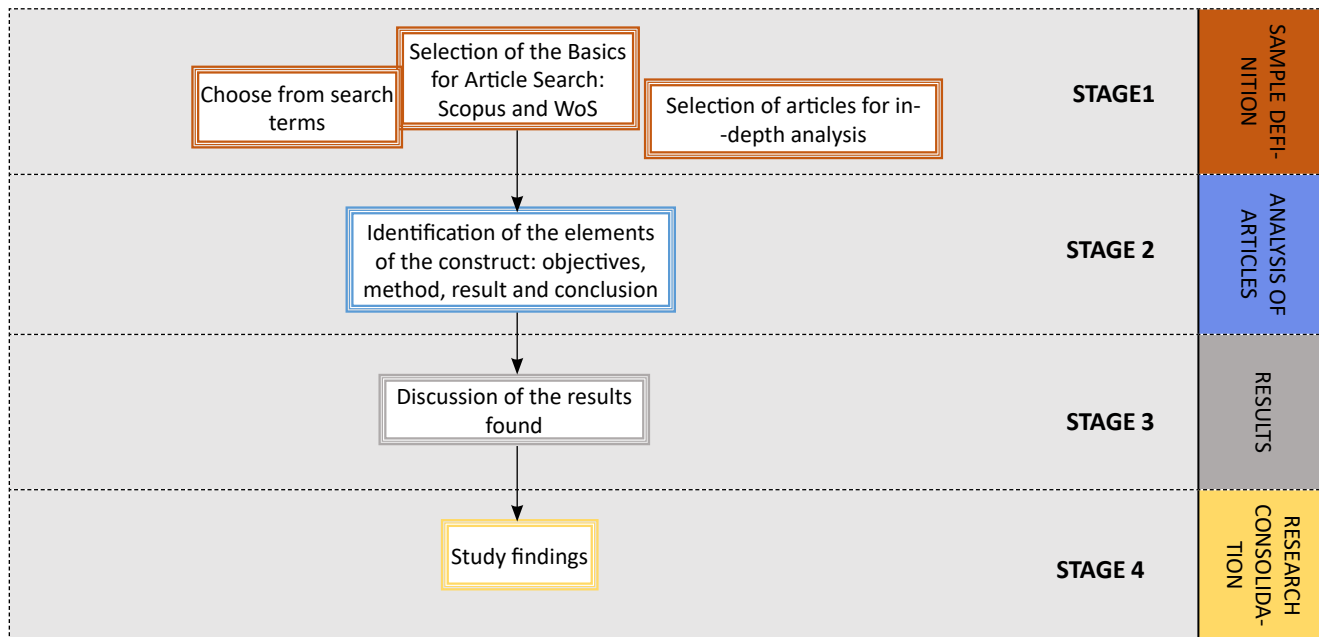
Figure 1: Stages of research
Source: Elaborated from Paixão (2014)

characteristics described were: year of publication, language, author, periodical distribution with related impact factor, and quantitative citations per article.

Keyword Cloud

The word cloud was formed from the use of Wordle software, which allows the visualization of words in size proportional to the frequency with which they appear in the search (Barros et al., 2017). For this analysis, the titles and keywords of the 37 articles selected for the systematic review were included in the software.

Figure 2: Keyword cloud and article titles selected in the research
Source: Elaborated from Barros *et al.* (2017)

Based on the analysis of Figure 2, most articles selected for this paper refer to impact, high impact, publication, knowledge, quality, research, science, citations, articles, analysis, production and collaboration. As a result, the words found are in agreement with the context of this research.

Distribution by year of publication

Figure 3 highlights the distribution of articles per year of publication, counting on a total of 37 articles. It is observed that no scientific article was selected for the year 2008. The year 2007 obtained the largest quantity of publications in the studied period, totaling six articles. It is verified that the number of selected publications is balanced, remaining constant in the last three years (2015, 2016 and 2017), each of which has three selected publications.

Based on these data, it was found that there is a scientific gap on this topic, since there are few articles of relevance with this content. Therefore, researchers need to be focused on this area of science, thus contributing to raising the scientific quality of the articles.

Figure 3. Distribution of articles by year of publication (n=37)
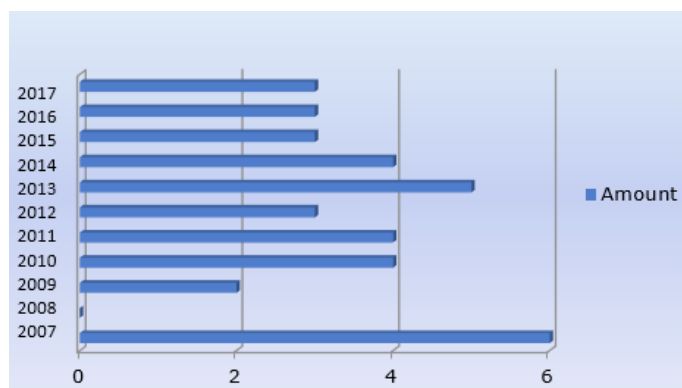**Source:** Prepared from research carried out through the Capes Periódicos Portal, at the Scopus and Web of Science bases *(2016).*

can be considered relevant, since they have passed through a screening of scientific quality.

The classification of journals in the SJR database is similar to that of the JCR database: most journals are located in the first and second ranking quartiles: 26 (72.22%) in Q1 and 6 (16.67%) in Q2, totalizing 32 (88.89%) publications of a set of 36 articles. The journal Advances in Digestive Medicine was recently included in the database therefore, it does not yet have a classification rating. Only two journals are located in the last classification quartile, corresponding to 5.56%; however, journals that are already indexed in the SJR database can also be considered relevant, since they have already undergone a scientific quality screening.

Distribution by author

In the list of selected publications, it was verified that all authors published only once on the subject in focus. As a result of this analysis, no researcher with more prestige in this area and who has excelled in the scientific community in this subject was identified.

Distribution by newspaper

Regarding the distribution of articles according to the periodicals in which they were published, there was no significant variation in the sample (Figure 4). Only Scientometrics, PloS one, Journal of the Medical Library Association and Research Policy published more than once in the sample, making a total of four articles for the first journal and two for the other journals. The other selected journals have published one article each. Scientometrics Journal, which has four selected articles, can be considered a reference in this subject; thus, it is fundamental that the researchers of this area observe the content of this journal.

In this section, the featured journals are divided by their classification in the quarters provided by JCR and SJR.

It was observed that five journals are not classified in the JCR: The Qualitative Report; Problems and Perspectives in Management; Science China Physics; Mechanics & Astronomy; and Advances in Digestive Medicine and Obstetrics, Gynecology and Reproductive Medicine. All journals selected are from Scopus.

Of the 32 JCR journals, 25 (78.13%) are located in the first and second classification quartiles, 14 (43.75%) in Q1 and 11 (34.38%) in Q2; only 3 (9.38%) journals are located in the last quartile of classification - Q4. It is important to mention that, in spite of this classification, the journals indexed in the JCR

JOURNAL	QUARTIL JCR Web Of Science (2016)	RANK SJR Scopus (2016)	ARTICLE(S)
Scientometrics	Q2	Q1	4
PloS one	Q1	Q1	2
Journal of the Medical Library Association: JMLA	Q2	Q1	2
Research Policy	Q1	Q1	2
Qualitative health research	Q2	Q1	1
The journal of academic librarianship	Q2	Q1	1
Otolaryngology-Head and Neck Surgery	Q1	Q1	1
Health research policy and systems	Q2	Q1	1
Information & Management	Q1	Q1	1
The Qualitative Report	*	Q2	1
Research Evaluation	Q1	Q1	1
Problems and Perspectives in Management	*	Q4	1
Australasian Psychiatry	Q4	Q3	1
Journal of the Royal Society of Medicine	Q2	Q2	1
Journal of Information Science	Q3	Q1	1
Genome biology	Q1	Q1	1
The European Physical Journal Special Topics	Q2	Q1	1
Journal of Organizational Behavior	Q1	Q1	1
SCIENCE CHINA Physics, Mechanics & Astronomy	*	Q2	1
Medical Science Monitor	Q3	Q2	1

El Profesional de La Información (EPI)	Q3	Q2	1
Clinical Chemistry and Laboratory Medicine (CCLM)	Q1	Q1	1
Informação & Sociedade	Q4	Q4	1
Technovation	Q1	Q1	1
Malaysian Journal of Library & Information Science	Q3	Q2	1
Paediatric respiratory reviews	Q2	Q1	1
Advances in Digestive Medicine	*	**	1
Obstetrics, Gynaecology and Reproductive Medicine	*	Q1	1
Surgical Oncology	Q1	Q1	1
Revista médica de Chile	Q4	Q3	1
BMC medicine	Q1	Q1	1

Figure 4. Distribution by journal

Source: Elaborated from data obtained by consulting JCR (*Web of Science*) and SJR (*Scopus*) databases. Available in Capes Journals (2016).
Subtitle:
* The journal does not appear in the database
** It does not have a note, since the journal was recently included in the base

Distribution by area of knowledge

In order to size the knowledge area of each selected article, a search was made on the Scopus and WoS databases. The results of this research are shown in Figures 5 and 6, respectively. It is emphasized that an article may have one or several areas of related knowledge. After analyzing Figure 5, it can be seen that the area of knowledge with the largest number of publications in the base in the SJR is the Library and Information Sciences, counting on a total of 12 articles referenced. The second position was for the General Medicine area, with a total of seven articles, emphasizing that the health area has great influence in the process of publication of this theme. The Computer Science Applications area ranked third, with a total of five articles referenced.

After the analysis of Figure 6, it is verified that the area of knowledge with the largest number of publications in the JCR database is Information Science & Library Science, counting on a total of ten articles referenced. In second place is the Computer Science area, with a total of seven publications. The Interdisciplinary Applications and Medicine areas occupy third place, with a total of four publications each. As in the SJR database, in the JCR, the researchers in the health area have published a large number of articles with the sub-

ject matter discussed in this study.

Based on the data presented, it was verified that the study of this subject is multidisciplinary, counting on several disciplines involved in this process: Medicine, Physics, Biology, Education, Librarianship, Informatics, Biology, Psychology, Administration, Psychiatry, Sociology and Engineering.

5. DISCUSSION

Were analyzed 37 articles, evidencing the fundamental aspects to write an article of high scientific recognition.

From the data related in Figure 7, it is observed that the aspects most frequently cited by the authors are: originality/value; collaborative research; appropriate use of methodological procedures; validation; and the findings/discoveries of the work.

The originality/value and collaborative research items are in first place, with 17 authors referenced. These aspects are mentioned in the literature since 2007, which is the deadline established for the beginning of the bibliographic search undertaken in this study, which means that knowledge is already consolidated among authors. According to Belcher et al. (2016), the four main attributes to measure the quality of a scientific article are: relevance/value, which includes the applicability of the content; credibility, which can be considered the scientific rigor of the research; legitimacy, meeting the ethical requirements of research; and effectiveness, which are the actual or potential contributions to solving social problems. The relevance of the content and the originality of the subject suggest that the theme is high in the scientific community, bringing current and productive discussions (Cokol *et al.*, 2007).

Collaborative research holds great value to researchers. Experienced authors can play an important role in guiding new researchers, providing support and guidance, thus achieving success in their academic publications (Bowen, 2010). The number of researches produced by a single author or institution has been reduced over the years, since cooperation among several institutions of higher learning produces articles of excellence. The proportion of articles from a single institution decreased from 65.46% in 1991 to 36.18% in 2010. It was observed that institutions of the same country tended to have a higher rate of collaboration; thus, the importance of collaborative participation among different institutions in scientific production becomes evident (Zhuang *et al.,* 2013). It is crucial that researchers be made aware that collaborative participation must be a strategic process in order to maximize the output of intellectual output, seeking advantages and raising the impact of their publications (Ah *et al.*, 2014).

According to Yaman et Kara (2007) the collaboration and citation network plays an important role in the success of a high impact publication. In the area of medicine, many countries have already established general practice research networks. With this information base, these are used for the dissemination to researchers of evidence-based content in basic health care.

Attendance to the methodological procedures and validation are the two aspects placed in second place, counting on a total of eight references. Akcan et al. (2013) state that the quality of a study is primarily evaluated by its originality, relevance/value or by its adequate methodology; that is, the methodological rigor of its execution.

For Brakoulias et al. (2015), the article should be written clearly, taking into account the methodological requirements and the coherent text and conclusions. It is worth mentioning that it is interesting to perform a systematic bibliographical research, in order to minimize the biases of the researchers. The content of the publication should be within the scope of the journal. It is essential that the author follow the methodological instructions of the chosen journal and carry out the proofreading process.

Validation, an aspect recently quoted by authors - as of 2010, is essential for writing an article of high recognition. For Hannes et al. (2010), the criteria that establish the relation of the validity of a qualitative research are based on the following attributes: descriptive validity, interpretive validity, theoretical validity, external validity (generalization) and evaluative validity. The descriptive validity refers to the process of data collection; the interpretive validity refers to the precision in the interpretation of the research data, this concept is reflected in the attribute "credibility". Regarding theoretical validity, researchers need to answer some central questions of the study, such as: Why does the phenomenon studied manifest itself? Should there be a level of abstraction in the construction and application of the generated knowledge? The external validity or generalization implies that a given research can be applied to different people, situations or contexts, and is reflected in the attribute "value of the research". Finally, the evaluating validity reflects the process of methodological solidity.

The aspects found and clarity and concision occupy the third place, counting seven authors referenced. They are mentioned since the year 2007, the limit date for the beginning of this research, which constitutes the consolidation of the subject among the authors. For El-Omar (2014), journals are concerned with publishing articles that have high impact and scientific discoveries. Belcher et al. (2016) identified that one of the four main attributes to measure the quality of a scientific article is efficacy, which are the actual or potential contributions to the resolution of social problems, an attribute linked to the findings/discoveries. For Hannes et al. (2010), Rosenfeld (2010), Bowen (2010) and Brakoulias et al. (2015), clarity is a fundamental aspect in the elaboration of scientific work.

A scientific text should be constructed in a clear and concise manner, adapting the content to the readers and editors of the magazines (Brakoulias et al., 2015; Audísio et al., 2009).

The aspects regarding ethical requirements and article size were cited by five authors and occupy the fourth place. Meeting ethical requirements is essential in a relevant publication. Plagiarism has been a constant concern of researchers, since it is not ethical to copy the data of another author and to forward the content to the publication (Audisio et al., 2009). For Hannes et al. (2010), Rosenfeld (2010) and Belcher et al. (2016), research ethics deserve special attention in the process of writing an article.

Quality articles are produced by a scientific approach, reflecting the quality of the content, structure and organization of the text. These publications should be coherent, comprehensible, and compelling, thus stimulating the reader's critical thinking (Bowen, 2010). The structure of the article is fundamental (Audísio et al., 2009, El-omar, 2014). A high-impact article should meet the following format: Introduction, Methodology, Results, Discussion, Literature Review, Conclusion, Tables, and Figures (Sun et Linton, 2014).

Items evaluation of researcher bias and command of English, which should be considered when writing a scientific work, have only three referenced authors and are in fifth position. In relation to the first, an important objective of the internal validity evaluation is to detect biases, defined as a systematic deviation of reality during the collection, analysis, interpretation, publication, or revision of the data (Rosenfeld, 2010).

As for the English language domain, for Chernick (2012), Audísio et al., (2009) and Chew et al. (2007), the language of the publication has relevance in the process of writing an article. If the native language of the main author is not English, the work must be validated by a researcher who has the native language in this language.

The "impact of the researcher" aspect was referenced only twice and occupies the sixth position, and, according to Hannes et al. (2010) and Avkiran (2013), it is relevant in the construction of a scientific work.

Aspects 12 to 17 (Figure 7) occupy the last position and were cited by a single author. For Gargouri et al. (2010), the number of pages and references makes a difference in the process of quantifying the value of a scientific work; simi-

SELECTED AREAS OF KNOWLEDGE (SJR)	Scientometrics	PloS one	Journal of the Medical Library Association: JMLA	Qualitative health research	The journal of academic librarianship	Otolaryngology-Head and Neck Surgery	Health research policy and systems	Information & Management	The Qualitative Report	Research Evaluation	Problems and Perspectives in Management	Australasian Psychiatry	Journal of the Royal Society of Medicine	Journal of Information Science
LIBRARY AND INFORMATION SCIENCES	4		2		1					1				1
GENERAL MEDICINE		2											1	
COMPUTER SCIENCE APPLICATIONS	4													
GENERAL SOCIAL SCIENCES	4													
INFORMATION SYSTEMS								1						1
EDUCATION					1				1	1				
GENERAL AGRICULTURAL AND BIOLOGICAL SCIENCES		2												
GENERAL BIOCHEMISTRY		2												
GENETICS AND MOLECULAR BIOLOGY		2												
HEALTH INFORMATICS			2											
PUBLIC HEALTH				2										
ENVIRONMENTAL AND OCCUPATIONAL HEALTH				2										
SURGERY						1								
OTORHINOLARYNGOLOGY						1								
HEALTH POLICY							1							
MANAGEMENT INFORMATION SYSTEMS								1						
INFORMATION SYSTEMS AND MANAGEMENT								1						
CULTURAL STUDIES									1					
SOCIAL PSYCHOLOGY									1					
BUSINESS AND INTERNATIONAL MANAGEMENT											1			
STRATEGY AND MANAGEMENT											1			
PSYCHIATRY AND MENTAL HEALTH												1		
ECOLOGY														
EVOLUTION														
BEHAVIOR AND SYSTEMATICS														
GENETICS BIOCHEMISTRY														
CELL BIOLOGY														
GENERAL PHYSICS AND ASTRONOMY														
GENERAL MATERIALS SCIENCE														
PHYSICAL AND THEORETICAL CHEMISTRY														
SOCIOLOGY AND POLITICAL SCIENCE														
ORGANIZATIONAL BEHAVIOR AND HUMAN RESOURCE MANAGEMENT														
APPLIED PSYCHOLOGY														
GENERAL PSYCHOLOGY														
GENERAL PHYSICS AND ASTRONOMY														
MEDIA TECHNOLOGY														
MANAGEMENT SCIENCE AND OPERATIONS RESEARCH														
BIOCHEMISTRY (MEDICAL)														
CLINICAL BIOCHEMISTRY														
SOCIOLOGY AND POLITICAL SCIENCE														
COMMUNICATION														
GENERAL ENGINEERING														
MANAGEMENT OF TECHNOLOGY AND INNOVATION														
PEDIATRICS, PERINATOLOGY AND CHILD HEALTH														
PULMONARY AND RESPIRATORY MEDICINE														
OBSTETRICS AND GYNECOLOGY														
REPRODUCTIVE MEDICINE														
ONCOLOGY														
(*) The base does not yet have the related areas in this journal														

Genome biology	The European Physical Journal Special Topics	Journal of Organizational Behavior	SCIENCE CHINA Physics, Mechanics & Astronomy	Information Processing & Management	Medical Science Monitor	El Profesional de La Información (EPI)	Clinical Chemistry and Laboratory Medicine (CCLM)	Informação & Sociedade	Technovation	Malaysian Journal of Library & Information Science	Paediatric respiratory reviews	Advances in Digestive Medicine (*)	Obstetrics, Gynaecology and Reproductive Medicine	Surgical Oncology	Revista médica de Chile	BMC medicine	Total
				1		1				1							12
					1		1								1	1	7
				1													5
																	4
				1		1											4
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															1		1

Figure 5: Distribution of selected articles by area of knowledge in SCImago base (SJR)

Source: Prepared from data obtained through consultation with SJR (Scopus). Available in Capes Journals (2016).

SELECTED AREAS OF KNOWLEDGE (JCR)	Scientometrics	PloS one	Journal of the Medical Library Association: JMLA	Qualitative health research	The journal of academic librarianship	Otolaryngology-Head and Neck Surgery	Health research policy and systems	Information & Management	The Qualitative Report (*)	Research Evaluation	Problems and Perspectives in Management (*)	Australasian Psychiatry	Journal of the Royal Society of Medicine	Journal of Information Science	Genome biology
INFORMATION SCIENCE & LIBRARY SCIENCE			2	1	1			1		1				1	
COMPUTER SCIENCE	4							1						1	
INTERDISCIPLINARY APPLICATIONS	4														
MEDICINE													1		
GENERAL & INTERNAL													1		
MULTIDISCIPLINARY SCIENCES		2													
SURGERY						1									
GENETICS & HEREDITY															1
INFORMATION SYSTEMS															
SOCIAL SCIENCES				1											
INTERDISCIPLINARY				1											
BIOMEDICAL				1											
OTORHINOLARYNGOLOGY						1									
HEALTH POLICY & SERVICES							1								
PSYCHIATRY												1			
EDUCATION															
DISCIPLINES															
PHYSICS															
MULTIDISCIPLINARY															
BUSINESS															
MANAGEMENT															
APPLIED PSYCHOLOGY															
RESEARCH & EXPERIMENTAL															
MEDICAL LABORATORY TECHNO-LOGY															
ENGINEERING															
INDUSTRIAL															
OPERATION RESEARCH & MANAGE-MENT SCIENCE															
PEDIATRICS															
RESPIRATORY SYSTEMS															
ONCOLOGY															
(*) Journals are not in the JCR database															

The European Physical Journal Special Topics	Journal of Organizational Behavior	SCIENCE CHINA Physics, Mechanics & Astronomy (*)	Information Processing & Management	Medical Science Monitor	El Profesional de La Información (EPI)	Clinical Chemistry and Laboratory Medicine (CCLM)	Informação & Sociedade	Technovation	Malaysian Journal of Library & Information Science	Paediatric respiratory reviews	Advances in Digestive Medicine (*)	Obstetrics, Gynaecology and Reproductive Medicine (*)	Surgical Oncology	Revista médica de Chile	BMC medicine	Total
					1		1		1							10
			1													7
																4
				1										1	1	4
														1	1	3
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Figure 6. Distribution of selected articles by area of knowledge in the JCR database

larly, short and attractive titles should be observed in the preparation of an article (Brakoulias *et al.*, 2015). For Yoneoka et Oka (2017), high quality articles tend to use longer words, but generally shorter sentences. In addition, a predominance of nominal phrases was observed in articles of high relevance.

6. CONCLUSION

It was verified that the articles selected in the bases Scopus and WoS, according to the systematic review used, met the objectives of the research. 17 fundamental aspects to write an article of high scientific recognition were identified, the six most cited being: originality/value; collaborative research; methodological procedures; validation; findings/discoveries; and clarity and conciseness.

In order to obtain a quality article it is necessary to observe whether the research is original and has value for the chosen journal, for the scientists or for the society. This aspect is fundamental for the acceptance of articles in scientific journals of high scientific impact. Researchers have a fundamental contribution to the development of science; thus, a work with a new, original or little studied subject has a high probability of being published in prestigious journals, as long as it is interesting for the scientific community.

Collaborative research is a differential aspect that raises the amount of citations and the impact of the work, and can be understood as a collective effort in order to develop a particular work. It should be noted that the term may have several definitions, among which: the contribution of several authors in a single work; contribution of several co-authors of various specialties and backgrounds in a single work; contribution of several co-authors from different institutions in a single work; and contribution of several co-authors of different nationalities in a single work. Researchers should use collaborative research as a strategy to raise the quality of their research, and it should be emphasized that the cooperation of more experienced researchers and experts in the content to be approached can favor the increase in the number of citations.

Validation is a fundamental aspect to be verified by the authors, because it is important to observe the external validity requirements of a work, which is the generalization power of the research. It is a process of analysis of the possibility of replication of work to other areas or scenarios.

It is worth emphasizing that the work should have some important contribution and that the article should allow new scenarios to be studied by other researchers. The findings of the research are the scientific discoveries, aiming to make possible improvements to the society or academic community.

A well written text should establish consistency, clarity and conciseness. Researchers should use the appropriate methodology to identify whether the research findings and results are consistent because the methodology chosen can define the success of a publication.

It is suggested for future work: the application of a questionnaire to validate the knowledge that was explained with the systematic review to the professionals of the academic area: teachers, students and editors of magazines of high scientific impact.

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ITEM	IDENTIFIED ASPECTS	SOURCE	FREQUENCY	PLACEMENT
1	Originality/Value	GARGOURI et al. (2010); HANNES et al. (2010); ROSENFELD (2010); WHIPPLE et al. (2009); BELCHER et al. (2016); BRAKOULIAS et al., (2015); CHEW et al. (2007); GAZNI (2011); COKOL et al., (2007); WRIGHT (2013); CHAUVIN et al. (2015); AKCAN et al. (2013); BOWEN (2010); LEE et al. (2015); SCHILLING e GREEN (2011); EL-OMAR (2014); BAKER (2012)	17	1º
2	Collaborative research (Institutions, countries, degree of influence of the author, diverse specialties) International Contribution	GARGOURI et al. (2010); HART (2007); YAO et al. (2014); CARILLO e OKOLI (2011); BOWEN (2010); WHIPPLE et al. (2009); CHEW et al. (2007); AVKIRAN (2013); WRIGHT (2013); ZHENG et al. (2011); AHN et al. (2014); ZHUANG et al. (2013); YAMAN e KARA (2007); CUDINA e OSSA (2016); LEE et al. (2015); CHUANG et al. (2017); EL-OMAR (2014)	17	
3	Methodological procedures	HANNES et al. (2010); ROSENFELD (2010); BOWEN (2010); DUNN e WICKHAM, (2012); BRAKOULIAS et al. (2015); AKCAN et al. (2013); CHAUVIN et al. (2015); EL-OMAR (2014)	8	2º
4	Validation	HANNES et al. (2010); ROSENFELD(2010); BOWEN (2010); BELCHER et al. (2016); CHAUVIN et al. (2015); FIALA e DIAMANDIS (2017); EL-OMAR (2014); BRAKOULIAS et al., (2015)	8	
5	Findings/Discoveries	BELCHER et al. (2016); GAZNI (2011); CODINA (2016); MCKIBBON et al. (2007); CHERNICK (2012); EL-OMAR (2014); BAKER (2012)	7	3º
6	Clarity and Conciseness	HANNES et al. (2010); ROSENFELD (2010); BOWEN (2010); BRAKOULIAS et al., (2015); EL-OMAR (2014); AUDÍSIO et al. (2009) ; WRIGHT (2013)	7	
7	Compliance with ethical requirements	HANNES et al. (2010); ROSENFELD(2010); BELCHER et al. (2016); EL-OMAR (2014); AUDÍSIO et al. (2009)	5	4º
8	Article structure and size	SUN eLINTON (2014); EL-OMAR (2014); BAKER (2012); AUDÍSIO et al. (2009) ; GARGOURI et al. (2010)	5	
9	Evaluation of the researcher's bias	HANNES et al. (2010); ROSENFELD(2010); CHAUVIN et al. (2015)	3	5º
10	Domain of the English language	CHEW et al. (2007); CHERNICK (2012); AUDÍSIO et al. (2009)	3	
11	Impact of the researcher	HANNES et al. (2010); AVKIRAN (2013)	2	6º
12	Number of references	GARGOURI et al. (2010)	1	7º
13	Nationality of the main author	GARGOURI et al. (2010	1	
14	Short and attractive titles	BRAKOULIAS et al. (2015)	1	
15	Use of most cited sources	ZHENG et al. (2011);	1	
16	Report of all results	CHAUVIN et al. (2015)	1	
17	Language features	YONEOKA e OTA (2017)	1	

Figure 7: Fundamental aspects to write an article of high scientific recognition according to the literature, by authorship

Source: Authors (2017)

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