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The bibliographical review as a research methodology

A revisão bibliográfica como metodologia de pesquisa

La revisión bibliográfica como metodología de investigación

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Abstract: The bibliographic review article is a methodology of observational research, retrospective, systematic, oriented to the selection, analysis, interpretation and discussion of theoretical positions, results and conclusions embodied in scientific articles disclosed in recent years on a topic of choice in order to obtain relevant information that contributes to the solution of problems. The purpose of the study was to explain the principles, importance, functions and phases or stages of the literature review article that provides university students and professionals with a methodological alternative in conducting research work. The methodology has revised scientific information dating from 1987 onwards, the cues were subjected to validity and reliability as provided by the information, the information derived from databases was considered: Scopus, Web of Science, among others. The principle of bibliographic narrative, conceptualization, quality indicators, review article steps such as the topic or title of the article of review, bibliographic search, organization of information and the writing of the article was explained. It is concluded that the bibliographic review article is a scientific article structure that is developed on the basis of an analysis of research related to a particular problem or information gap.

Keywords: Databases, Methodology, Review article, Systematic review.

Resumo: O artigo de revisão bibliográfica é uma metodologia de pesquisa observacional, retrospectiva, sistemática, orientada para a seleção, análise, interpretação e discussão de posturas teóricas, resultados e conclusões consubstanciadas em artigos científicos divulgados nos últimos anos sobre um tema de escolha, a fim de obter informações relevantes que contribui para a solução de problemas. O objetivo do estudo foi explicar os princípios, a importância, as funções e as fases ou etapas do artigo de revisão da literatura que oferece a estudantes universitários e profissionais uma alternativa metodológica na realização de trabalhos de pesquisa. A metodologia revisou informações científicas datadas de 1987 em diante, as pistas foram submetidas à validade e confiabilidade conforme fornecidas pelas informações, foram consideradas as informações derivadas de bancos de dados: Scopus, Web of Science, entre outros. Foi explicado o princípio da narrativa bibliográfica, conceituação, indicadores de qualidade, etapas do artigo de revisão como o tema ou título do artigo de revisão, busca bibliográfica, organização das informações e redação do artigo. Conclui-se que o artigo de revisão bibliográfica é uma estrutura de artigo científico que se desenvolve a partir de uma análise de pesquisas relacionadas a um determinado problema ou lacuna de informação.

Palavras-chave: Artigo de revisão, Bases de dados, Metodologia, Revisão sistemática.

Resumen: El artículo de revisión bibliográfica es una metodología de investigación observacional, retrospectiva, sistemática, orientada a la selección, análisis, interpretación

y discusión de posiciones teóricas, resultados y conclusiones plasmadas en artículos científicos divulgados en los últimos años sobre un tema de elección con el fin de obtener información relevante, que contribuye a la solución de problemas. El propósito del estudio fue explicar los principios, importancia, funciones y fases o etapas del artículo de revisión de la literatura que brinda a los estudiantes y profesionales universitarios una alternativa metodológica en la realización de trabajos de investigación. La metodología ha revisado información científica que data de 1987 en adelante, las pistas fueron sometidas a la validez y confiabilidad que brinda la información, se consideró la información derivada de las bases de datos: Scopus, Web of Science, entre otras. Se explicó el principio de narrativa bibliográfica, conceptualización, indicadores de calidad, pasos del artículo de revisión como el tema o título del artículo de revisión, búsqueda bibliográfica, organización de la información y redacción del artículo. Se concluye que el artículo de revisión bibliográfica es una estructura de artículo científico que se desarrolla a partir de un análisis de investigaciones relacionadas con un problema o brecha de información en particular.

Palabras clave: Artículo de revisión, Bases de datos, Metodología, Revisión sistemática.

INTRODUCTION

The article of bibliographic review as a methodology responds to the need to carry out research from the place and where we are through the management of information in different media, database, virtual libraries, digital videos, images, web pages, among other sensitive means of containing information, thus increasing the possibility of doing cabinet research, especially in difficult times when there is no possibility of conducting field or experimental work.

Conventionally, a review article is composed of principles of bibliographic narrative, at conceptual close of scientific literature review, functions, importance; quality indicators are envisaged in their elaboration such as completeness, the critical use of the literature, the quality of the information, the review of previous research, and there are certain steps to its realization: the topic or title of the review article, the search for the bibliography, the organization of the information, the writing of the article, which explains step by step its development, from the introduction to the analysis of the information, the methodology, the conclusions, the bibliographic references, the summary and the keywords.

The orientation of an investigation is evidence-based; it is often supported by systematic reviews that use rigorous and transparent methods to reduce the risk of bias and improve external validity. The search process is essential to develop a systematic (Higgins, and others, 2019) review, so that you do not lose relevant studies, introduce biases or reach invalid conclusions. However, it is unrealistic to expect a systematic review to locate all relevant evidence, as the time and resources required to do so would be excessive. (Levy, Ainsworth, Kettle, & Morgan, 2016)

The purpose and contribution of complementary search methods in systematic reviews is increasingly recognized. Numerous studies have demonstrated their potential to identify studies or data from studies that would have been lost with search in bibliographic databases. What is less secure is how to develop the bibliographic review methodology, how complementary search methods actually work, how they are applied, and

the consequent advantages, disadvantages, and resource implications of each search method. The objective of this study is to provide relevant academic information about the characteristics that need to be known for proper process development before and during the drafting of a bibliographic review article.

Principle of bibliographic narrative and immanence

Narrative is linked to the act of narration or narration through convocation. This is what puts into account the desire to enunciate, the need to build for one another the reality and experience lived, no matter what themes and iconizations. Narrative is the organization that forms the immanent domain of the semiotic universe. Given its various manifestations, it has been postulated that it has a double impact (Dorra et al., 2017): a) theoretically, as an epistemological pillar and in discourse, as a basic articulation, of support. In both cases it is understood as inherent property and active substance. This triggers the first consequence: by its great generality, which allows it to extend and project into an anthropological realm, since narrative structures are considered universal, that transcend the cultural peculiarities that try to configure them in a particular way as that which all men narrate. (Dorra et al., 2017); b) the second consequence is that narrative is, by definition, linked to immanence, an aspect that is related to the principles of adequacy and empiricism, which are not only epistemological, but also methodological. This means that semiotic theory is supported by principles that would be related to each other by forming an integrative network, which postulates the existence of an immanent and generative background in the semiotic universe. Immanence is a semiotic instance that constitutes, while constantly generating levels, layers, regimes, modes, strategies, fields and domains.

The writing of the individual is an instance that belongs both to the plane of the content and to the plane of the expression, that is, to the domain of the intelligible and that of the sensitive, since, although almost unexplored, we have in the theoretical acquis a problematic field expressed as immanence of the sensitive. (Castro Rodríguez et al., 2018)

On the other hand, at each level the narrative organizes the essence of what is written at levels of derivation, more or less deep, or, more or less superficial, where the sense flows and consolidates, it becomes shaped while a deep narrative level always generates a shallower one and transforms into a shallow one. This (Zinna & Ruiz Moreno, 2014) subjective complex is responsible for the discursive competence, based on a double strategy of conversion and convocation, active and carried it out. It creates, by openness, the discourse enunciated at the same time that it improves the discursive forms and updates the immanence, feasible by narrative, manifesting it on a plane of sign, because without the subjects and substances (in which the forms of the past are present) nothing would be realization, everything would be pure virtuality and no sustenance or relevance would be given to maintain a certain posture of analysis.

Conceptual approach to scientific literature review

According to Dijkers (2009), the review of scientific literature is itself a research method, whose data are based on inputs or results from multiple studies that coincide, directly or indirectly, with the subject of research, even though they have been developed using different analysis units, a different reality, different eras, latitudes and different languages. This compilation process has a number of very rigorous literature review procedures.

On the other hand, Reyes (2020) mentioned that a review article should be understood as a retrospective analysis of studies compiled in the literature on a particular topic that is considered of interest to a general or specialized public. For their part, Cué et al. (2008) explained it as a kind of scientific article whose function is to contribute, with an overview and explicit, on a research topic linked to the current state, the evolution of a subject over a period of time, to future perspectives, etc. One feature to consider is that, in such works, by their nature, no original results are presented. In addition, bibliographic sustaining for a review article that is considered relevant and objective must have at least fifty bibliographic references to support it.

The review article is a form of research that is commonly done in a library and not in a laboratory or care unit. The fundamental difference will be the type of information and the unit of analysis and not the scientific principles that apply. In this regard, there are mechanisms that make this process feasible as a Cochrane collaboration, which, according to Terreros et al. (2019), defines systematic reviews, such as the revision of a clearly formulated issue, using systematic, structured and explicit methods to critically identify, select and evaluate relevant research, as well as an analysis of the data from the studies included in the review. In this regard, the following are considered as functions of the bibliographic review: a) it shows that a researcher has skills in finding information; b) indicates that a researcher handles, analyzes, interprets, and argues scientific information; c) it makes us aware of the repetition of research and the use of outdated or discredited theories; d) they help identify gaps in knowledge and research opportunities; e) provides ideas and theories for new research; f) it provides theoretic and methodological foundations or as a starting point for new research; g) it provides evidence in states of art or states of the issue, as well as revision works; h) compare and synthesize divided or fragmented knowledge; i) identify new lines of research.

Importance of bibliographic review articles

Due to the increase in the number of scientific publications, literature reviews in the form of review articles have proved to be of paramount importance today. With the massification of publications in various formats, there is a very broad information. This scenario makes it impossible for researchers and specialists to read or review all published information for reasons such as accessibility to numerous journals, lack of

time and sometimes excessive cost. Therefore, review articles are a viable solution for professionals to stay up-to-date on the latest knowledge and trends in a given subject. In this sense, some authors, such as Cué Brugueras et al. (2008), noted that each certain number of articles urges the need for a compilation and revision of these, in order to consolidate existing information and generate a clear and up-to-date response on a particular topic. The importance of literature review is considered an elementary tool and necessary to advance the field of knowledge of the various fields of study. Another positive aspect of review articles is that they can help inspire and generate new ideas or trends, highlighting inconsistencies in current knowledge and thereby dispelling potential gaps in knowledge. On the other hand, Aveyard (2014) and Coughlan et al. (2013) stated that they are also useful for the study of existing theoretical or conceptual frameworks on a given topic or to facilitate the development or increase of theoretical or conceptual frameworks through exploration and critical evaluation of existing knowledge.

Quality indicators in the development of bibliographic review article

The construction of new knowledge is based on previous knowledge by referencing the literature consulted and making new contributions through connections, analysis, new visions, interpretations or criticisms, it is used in the background and theoretical framework of the research, it must be evaluated with scale of valuation assigning scores. According to Martín & Lafuente (2017), for the preparation of a review article, it is necessary to keep in mind the following criteria:

a) Exhaustiveness: which must be understood as the quality of an investigation in the identification of all relevant documents that exist on the subject studied, in order to determine whether the review identifies (depending on what is consulted) what is currently known or known on the subject or research problem, which will be evaluated in the theoretical framework and considered in the research background. To do this it is advisable to have an observation sheet with scales and scores.

b) Critical use of bibliography: which consists of the mention of each of the bibliographic citations in order to inform the information that is being presented in the text. The use of quotations when accompanied by analysis, synthesis, comparisons or criticism by the author is invaluable. For its part, Martínez de Sousa (2015) considered the critical apparatus as the set of references with which the original text is enriched and justified, such as the footnotes, among others.

c) Quality of information: the quality of the appointments used is usually identified with the adequacy to the objectives. Assessing the quality of bibliographic citations involves issuing a value judgment on meeting certain expectations such as assessing the level of background and the theoretical framework of the investigation. In addition, the relevance of quotations is the adequacy of quotations to the subject of research, which is considered appropriate to resolve a particular need

for information from an objective point of view (usually by a set of representative or competent judges).

d) Review of previous work: refer to previous research, relating to the research problem, which serves as justification for the study. This review will present a range of experiences, theories and opinions with diverse and complementary views on the problem and can also identify gaps in information on the subject.

STEPS TO CONDUCT A REVIEW ARTICLE

The topic or title of the review article

The theme becomes the formal presentation of the work. In general, it is readers who evaluate and decide whether the article is of interest to them, based on some cases in the title consultation, which is why it should be sought to correspond to the work submitted in order to generate some appeal in the manner of a marquee that allows to fix the attention of the reader. To this end (Ramírez et al., 2009), it is important that any research process must be carried out with a generous share of passion and interest, which will not only allow the achievement of the proposed objectives; since the aforementioned aspect tends to be generated from the choice of topic or matter to be investigated and on which the title of the review article will be concerned. Another important feature to take into account with regard to the drafting of the title is that it must be clear enough that, when conducting a bibliographic/hemerographic search, it is affordable to the reader or the researcher and that at the same time responds to the requirements of these, and on that, in addition, it must contribute to the state or the writing technique used, since it will depend on how the reader is conducted towards a fairly broad scenario, allowing him to be suggestive to his requirements. In order for this to be of paramount importance, it is recommended that the ideas arise from an area of interest related to the researcher, triggered by an internal motivation and that he also has a certain knowledge of the subject. It is also suggestive that there is sufficient information (bibliographic, electronic), that catalyze the feasible collection of useful, relevant data and that they contribute ideas to the knowledge of a particular topic (Gómez Luna et al., 2014)

On the other hand, it should be emphasized the importance of keeping in mind that the researcher should not be obliged, for any reason, to address a certain topic with which he has no affinity for study or identification. For the choice of a particular topic, it is relevant to identify the problem of interest that conditions the researcher, some difficulty, lack or emptiness of knowledge and that possesses the addition of an innovative topic, whose treatment has validity and relevance of local, regional, national or international order. Moreover, the title aspect of the work, which, in addition to being attractive to the reader, should not be neglected, should be exposed in a concrete and concise way to the subject matter worked on. Therefore, it is advisable to propose an attractive or suggestive title that regularly does not contain more than fifteen words.

Search for bibliography

The purpose and contribution of complementary search methods in systematic reviews are increasingly recognized. Numerous studies have demonstrated their potential to identify studies or data from studies that would have been lost with search in bibliographic databases. The search for bibliographic information is the key process that facilitates the location and access, in a series of multiple sources of information, to the necessary or relevant data set, documents and information that will allow to provide a theoretical/practical livelihood or respond to certain problems through the sources to which access is available. In the search for specialized literature, the general information is collected and then the reliability and validity of any information collected is verified (Cooper et al., 2017).

As stated by Levay et al. (2016), it is commonly believed that including complementary search methods tends to add value to the comprehensive identification process in systematic studies and reviews. In European case, Cooper, Booth, Britten, & Garside (2017) stated that manuals for systematic review methodology, such as The Cochrane or CRD Handbooks, provide practical (albeit limited) instruction on how to perform each complementary search method, and empirical studies have evaluated the effectiveness and efficiency of these search methods. What may be less secure is how complementary search methods actually work and what are the advantages, disadvantages, and resource implications of each search method.

It is worth mentioning the issue raised by Hinde & Spackman (2015) about literature reviews that underpin most health science research projects, but relatively few analyses have been published on the most appropriate method for identifying relevant literature, outside of information journals. The method of applying keyword search queries to bibliographic databases using Boolean logic dominates literature revisions due to its easy application to major online databases. However, it is increasingly recognized as problematic when the research question cannot be clearly defined or requires an exploration element, due to its reliance on the author's use of titles and keywords and cannot identify topics other than those defined in the search query.

Typical of the task of searching for information is to have references to macro and micro scale of the theoretical components of the topic. Such search will be carried out in primary sources such as scientific articles (original article, letters to editor and review articles), thesis and secondary sources (manuals, regulations and official work guides supported by an institution). For the general collection of information it is recommended to: a) working with articles in the language of prof domain (Spanish) and with publications in English and which, moreover, because of their relevance, fall within a age of not more than five years; b) It is important to consider designing database search strategies within the domain of a given discipline, as in the case of social sciences. According to Kugley et al. (2016), hay two important reasons for this: 1) range of databases: Given

the multidisciplinary nature of most social science research questions and the large selection of databases related to such disciplines, searches should be implemented across multiple databases. Terminology (both keywords and controlled vocabulary) will vary in such databases, as different disciplines often use different words to mean the same thing. 2) database providers: multiple organizations, called database providers, provide the same database. Examples of database providers include EBSCO, Gale, Institute for Scientific Information, Ovid, and Pro Quest. For example, ERIC is supplied by EBSCO, Pro Quest and Ovid, as well as its producer, the Institute of Education Sciences. Each database provider designs its own support (software, search algorithms) and packages the data within the database differently (for example, some fields may be included, others may not). This means that the commands, operators, throttling options, and field availability will be different, resulting in the need to fully understand each vendor's software.

Because a database is topic-specific and indexes only part of the literature, it must be searched in more than one database. However, there may be some evidence that sources for systematic review could be (Papaioannou et al., 2009) restricted.

In order to achieve a more efficient dynamic in the general collection of information, it is recommended to take into account Table 1, which states the following: a) first column: includes the name or title of the article (in the original language). b) second column: determine what type of article is in question (original article, letters to the editor, doctoral thesis or review article). All articles mentioned are primary sources, optionally with secondary fonts since they will not meet the requirements to validate a review article. c) third column: this section specifies the type of search or criterion used for the search for information, i.e. whether information was searched through the topic, descriptors, keywords, author, word game. d) fourth column: specify the database from which the article was selected (Eric, Dialnet, Redalyc, Scielo, Latindex, Scopus, ProQuest, among others). e) fifth column: geographical location of origin of the article. f) sixth column: specify when the article was consulted; that is, to locate the date of when information was sought about the topic. g) seventh column: mention the original language in which the article was written.

Table 1
Search and collection of bibliographic information.

Research title to review	Font type	Search strategy	Database	Country and place	Consultation date	Language
1. Analysis the Educational Factor of Graduate Students from a Bachelor's Degree in English as a Foreign Language	Item (original)	Subject	Eric	Colombia, Bogota	7/11/2020	English
2. The Effect of Peer Support on University Level Students' English Language Achievements	Item (original)	Subject	Eric	Turkey, Davutpaca, Istanbul	7/11/2020	English
3. Investigating the inhibiting factors in speaking english faced by senior high school students in Singaraja	Item (original)	Subject	Eric	Indonesia, Ganesha	7/11/2020	English

Analysis of reliability and validity of bibliographic information

Once the collection of information (bibliographic search) has been completed, that information must be organized and validated. To make such a process feasible, some specific components of the article (mainly summary) should be read in order to establish its usefulness, since inevitably work whose information is not relevant will have to be discarded. With regard to the validation of information, the following questions should be raised: what are the results or conclusions of the investigation, can the results and conclusions be relied on?, why?, and are the results or conclusions relevant or applicable in the area of the problem being addressed?

The following criteria shall be taken into account when establishing a validity and reliability table: a) first column, name of the research work; b) second column, results or conclusions (concrete, relevant and relevant data only); c) third column, you will need to answer the following: can the results or conclusions be trusted?, why? d) fourth column, you will need to answer the following: are the results or conclusions applicable to the problem being addressed?, why? e) fifth column, determines whether the item is valid or not.

Table 2

Validity and reliability of review articles.

There is little common agreement between studies as to which tool (or combination of tools) is superior in dating search, as the relative merits of each resource depend heavily on the review topic, the range of data in the resource, and its validity. A study that evaluated the Web of Science, Scopus and Google Scholar tools found that, if in doubt, dating search has its advantages. The dating link is neutral, in the sense that it only links the studies, but does not explain the nature of the link. This is important, as a citation search will identify any study linked to the primary study, including errata studies and studies that dispute or disagree with the primary study, and must also link different types of publications, such as editorial content, reviews, or gray literature. Such an operation could not only help the interpretation of studies, but could also help researchers explore the idea of the impact of the study. In addition, as reported in the Results section, a appointment search links by appointment and is not subject to the use of the (Kugley et al., 2016) "correct" search terms or database indexing. It can therefore facilitate fortuitous identification of the study, suggesting that dating search is valuable in determining the scope of review topics, to assist in search development and search review, to ensure that all studies have been identified. (Papaioannou et al., 2009).

Dating search can be done backwards or forwards. Backward search, also known as reference collection, involves reviewing the bibliography of

a relevant publication, thus providing links to previous research (Horsley et al., 2011). Forward dating search means checking whether a specific publication, which is already known to be relevant, has been cited by subsequent publications, which might also be of interest (Papaioannou et al., 2009).

Organization of information

The systematic organization of the documentation found can be carried out in both a basic or detailed way. To do this you can use specialized packages known as information managers such as JabRef, Zotero, Mendeley, Endnote and Reference Manager. Such applications are efficient, mostly free to use and allow you to organize information in an agile way in sections such as title, author, magazine and contribution. In addition, many of these media efficiently interact with various editing programs

Variables or characteristics are limited to the criteria assumed by the author (Gómez et al., 2014). The organization of information is the analysis and synthesis of information and, for this purpose, the essential information of each study, comparison and contrast of the results or conclusions, finally, identification of common findings is taken into account. With regard to the organization of bibliographic information, criteria are raised, which are shown in table 3.

a) Name of the authors of the research work, as well as the year of publication

b) Title of research work

c) Objective of research work

d) The sample study of research work

e) Data analysis method, determines what type of methodology has been used to analyze the research data. It can be research through bibliographic review, documentary analysis, experimental research, correlational, descriptive-explanatory, comparative, projective, phenomenological, action research, among others.

f) Results or conclusions (if relevant, these may be the same as in the validity table. These results or conclusions will explain the reason for the revision developed).

g) Insertion of findings (novel, distinct or relevant) or different aspects of the results or conclusions. The finding is "thing" other than the conception originally had on a given topic, most findings are found in the Recommendations section of a research work.

WRITING THE ARTICLE

Introduction

The introduction has the function of captivating the reader's attention. It is therefore advisable to focus on the main issue and the formulation of the

problem, demonstrating verbatim that the matter at issue is important and, moreover, that the hypothesis is novel and attractive. To do this, it is useful to use understandable, clear and concise terms, which are written herein, except for references or backgrounds that are written in the past time (Cohen, 2013; Sánchez Upegui, 2011). The objectives must be drawn up with the verb in infinitive. The wording of the paragraphs should be sequential allowing the reader to understand what was done in the study (Mitru & Aranda, 2009). Seek to justify each statement properly with at least one appointment. It is recommended to have at least 10 to 15 references (Sánchez Upegui, 2011). Finally, it recommends a maximum of one thousand or two thousand words per paragraph.

Any introduction should provide a general idea of what research is about. Therefore, the most relevant concept found in the revision of bibliographic references should be recorded; that is, to place the best idea of the work, which should impact the reader of the article by "hooking" it. The reasons and reasons for the issue addressed will be set out. To this end, the following questions must be raised: why was the issue addressed?, what are the reasons that prompted the study?

Author, year	Title	Objective	Sample	Method of analysis	Results	Find
Garji et al., 2017	Existing approaches to child-directed sex education.	Evaluate what is already known about sexual education (ES) policies or practical issues using review methods to critically find and evaluate existing/O approaches targeting children under the age of 12.	20 studies from different regions of the world	Data collection was carried out through an extensive search for published and unpublished literature in English and Persian, evidence from subject matter experts, and citation search.	Data collection results in the focus being on observed literature being efficient in developing healthy sexual behavior in children. However, even though parents are considered as frontline educators in ES, the programs or "packages" are not aimed at developing practical skills in parents.	The integration and training of parents in sex education is required to ensure the effectiveness of any program run under a promotional approach to sexuality.
Goldman, 2010	Queensland's new sex education curriculum for primary schools	Provide an audit and analysis of new education in sexual and reproductive health. Curriculum planned for Queensland primary schools and some current sexuality educational problems and contexts	Sex education curriculum for Queensland elementary schools. A study by HPECT	Comprehensive and comparative analysis of school curricula and resources for sex education and reproductive health education, in all Australian states and territories.	Curriculum analysis knows that a vocabulary is not used to refer to topics such as sexual, pubertal and reproductive health. It is further stated that teachers are not offered guidance or training to deal with child protection (most touched on in the first grades). Therefore, the teacher's lack of trust and competence	The curriculum has an approach aimed at the social acceptance of sex education, but not the management or development of sex education within the classroom and shows this at the time teachers handle the subject

Table 3
Organization of information.

The introduction will also locate the objectives by answering the following questions: what is known about the topic, which population is interested in studying?, and what has been the evolution of the topic over a period of time? On the other hand, the verb used in the formulation of the objective should be aligned to what is sought in the review article. To do this, it is suggested to answer the following: what is the purpose of the review? , what do you want to achieve with the review? Next, the explanation of the objective should answer the following questions: why was the objective raised? , what is sought with the objective? To do this, it is advisable to have conceptual clarity, specifying the concept or meaning of the verb chosen in order to better explain the topic being investigated. The background of a review work should contain four to six backgrounds from which more momentous results and conclusions are drawn.

Development or analysis of information

It is necessary at this stage to develop and delve deeper into the subject matter discussed with regard to introduction. This step proceeds to condense and organize the information, for which information can be expressed in results tables, conclusions and findings, fusion of information with coherence and cohesion of ideas. It is suggested to use the methodology of the acronym which consists in organizing the information that has to be defined, measured (talking about an information and concrete with the closure of the idea), analyzing, increasing and controlling, working without losing the initial approach of the research. The information should be sorted, labeled (organize information by placing sticky notes), be prioritized (relevant information or more complete ideas) and integrated (integrate ideas with coherence and cohesion). A work script should be designed to facilitate the decision to prioritize ideas according to their hierarchy and based on the researcher's guidelines and the essence of the research.

By its nature, the aspect related to the analysis of information is the task that consumes a greater amount of time in bibliographic research work, since it is oriented to identify the contribution to be made. At this stage, critical thinking needs to be used and should be aligned with some of the information poured into the introduction, since it is a concatenated process. For their (Bedoya et al., 2008) part, Rojas Sola et al. (2011) stated that it can be conceived as a cycle which allows to reaffirm the ideas raised in the formulation of the problem and, if the problem is well known, the solution will be available to the researcher.

With regard to wording, it is advisable to travel from the general to the specific or particular. In this sense, it could be the development of concepts, characteristics (dimensions), typologies, phases, elements, among others. It is important to contrast or discuss the information collected from the authors that have been used. It should be noted that there is no generic protocol or structure to perform development; because, according to each researcher's performance, the assembly or consolidated of that script must be based on their criteria and level of analysis. Another aspect to consider is that the article research should be supported by authors and coupled with this endorsed by the precepts and opinions of the researcher, adding in accordance with the circumstances novel ideas that will contribute to the interpretation, consolidation of ideas.

Methodology

In this section it is necessary to clearly specify aspects such as the methods used for finding and localizing information and decision criteria on which articles will be included or which will be discarded in the review. The collection of information is directly referred to with the sources of data or bibliographic search and in it should be clarified any restrictions established such as the revised period, language, geographical

scope, among others. Data sources may not only be bibliographic, but also personal and institutional.

The methods used for the search and location of information and decision criteria will make known to the reader the level of scientific rigor that has been used in the review work and, with it, the theoretical soundness of the approaches that have been poured into that study (Oxman & Guyatt, 1993; Burgos Rodríguez, 1998; Huth, 1987). In order for this aspect to be feasible, it is recommended to take into account the following references:

- 1) Use proper documentation of information search terminology. The search should focus on collecting data between the last five and ten years of publication of the articles.

- 2) Detail all databases used such as Scopus, Eric, Scielo, Latindex, Redalyc, among others. In addition, the time interval dating from the collected articles should be indicated.

- 3) Point out the search strategies used (keywords, topic, authors, among others).

- 4) Where appropriate, mention the procedure of validity and reliability, clarifying any restrictions established for the search for information, indicating the number of articles found and which inclusion criteria (characteristics established to select information that are part of the article) or exclusion (indicators by which such articles were not considered in the investigation) have been used. Mention the origin and language of the selected articles, in order to make known the context according to the contribution.

Mention the method or design of the research used based on a source.

Conclusions

The primary function of the conclusions is to summarize the results, as well as the conclusions that will be explicitly focused on the fundamental units of the search. On the other hand, Fuentes Cortés (2013) stated that the objectives, methodologies and hypotheses, allow to support the empirical and future implications of research, to propose research problems that emerge from the treaty. The conclusions make it possible to make known to the reader the consequences that are drawn from the review, new knowledge achieved and, if necessary, to propose specific lines of research for the future; in addition to expressing the limitations that were observed in the investigation. Example:

These new theoretical bases are developed under the slogan of a change in historical science, and in the way in which the perspective, explanation and interpretation of a given historical fact is addressed, this implies the incorporation of a new approach oriented to the training of students with new skills that allow it to develop a thought and a historical consciousness.

Historical thinking is one of the important foundations for the training of self-employed students capable of analyzing the different facts and processes based on a temporal perspective, mental representation and empathetic capacity. It should be noted that historical thought takes place within a gradual process involving

analysis, foundation, contextualization, comparison and understanding for the formation of new historical constructs.

Bibliographic references

This important component of the review article allows you to gather the set of data or elements that describe, with a sufficiently precise and detailed character, a document or part thereof; that will allow the potential reader to identify, locate and corroborate the clarifications made in this regard (Valenzuela, 2018). All authors mentioned in the review article should be endorsed in the bibliographic reference. The list of references is usually placed at the end of the structure or corpus of the review article, and the presentation of this is stylized that can be sorted or listed. To this end, it is right to use one of the standardized standards for the drafting of scientific articles available in the academic field at the international level (APA, Chicago, Vancouver, ISO 690, LMA, among others), since such guides will allow to make known in detail the presentation of the sources used, taking into account their origin (books, articles, theses, manuals, among others). Examples:

Wang, Y., Lavonen, J., & Tirri, K. (2019). An assessment of how scientific literacy-related aims are actualised in the National Primary Science curricula in China and Finland. *International Journal of Science Education*, 41(11), 1435-1456. <https://doi.org/10.1080/09500693.2019.1612120>.

Winarni, E., Hambali, D. & Purwandari, E. (2020). Analysis of Language and Scientific Literacy Skills for 4th Grade Elementary School Students through Discovery Learning and ICT Media. *International Journal of Instruction*, 13(2), 213-222. <https://doi.org/10.29333/iji.2020.13215a>

Summary and keywords

It is generally stylized that the summary should express a brief, short and concise idea on the subject addressed by the author. To this end, the wording of that paragraph will be based on fundamental words or terms, so that the subject can be described in its essence, the objectives of the work, and also the methodology on which the research is based. The summary will also show a special emphasis on those aspects of the work that are newer or more relevant, as well as reporting on the most fundamental results, as well as the primary conclusions of the work. On a regular basis, the standard rules on the presentation of summaries in research work are in mind that it should be made up of between 200 and 250 words maximum, but that according to the case of some publishing requirements expressed by the publishers of academic publications may be in less detail according to the format or design of a given journal.

On the above lines, it should be added that it is necessary to present in a section the keywords, which are considered as keys or guides to access a certain article, a kind of window to facilitate the search or access to such information. It is also stylized that these key terms should not exceed more than 6 words, and as a general rule of publication an average

of four to five. In addition, for the needs of publication and access to information, an abstract or summary is usually added, which is usually written in English (American or Anglo-Saxon) in order to amplify the range of dissemination of the work.

REFERENCES

- Aveyard, H. (2014). *Doing a Literature Review in health and social care: a practical guide* (3.^a ed.). Maidenhead: Open University Press.
- Bedoya, A., Castrillón, J. C., Ramírez, J. E., Vázquez, J. E., & Ariaz Zabala, M. (2008). Producción biológica de hidrógeno: una aproximación al estado del arte. *Dyna*, 75(154), 137-157.
- Brito, R. S., Prado, J. R., & Nunes, C. P. (2017). As condições de trabalho docente e o pós-estado de bem-estar social. *Revista Tempos e Espaços em Educação*, 10(23), 165-174. <https://doi.org/10.20952/revtee.v10i23.6676>
- Burgos Rodríguez, R. (Ed.). (1998). *Metodología de investigación y escritura científica en clínica*. Granada: Escuela Andaluza de Salud Pública.
- Castro Rodríguez, Y., Mattos Vela, M. A., & Aliaga del Castillo, A. (2018). Consideraciones en redacción científica: la introducción y los métodos. *Odontología Sanmarquina*, 21(2), 147-152. <https://doi.org/10.15381/o.s.v21i2.14781>
- Cohen, C. (2013). *Guía de redacción científica*. La Habana: Cirad.
- Cooper, C., Booth, A., Britten, N., & Garside, R. (2017). A comparison of results of empirical studies of supplementary search techniques and recommendations in review methodology handbooks: a methodological review. *Systematic Reviews*, 6, 1-16. <https://doi.org/10.1186/s13643-017-0625-1>
- Coughlan, M., Cronin, P., & Ryan, F. (2013). *Doing a Literature Review in Nursing, Health and Social Care*. Londres: SAGE.
- Cué Brugueras, M., Díaz Alonso, G., Díaz Martínez, A. G., & Valdés Abreu, M. D. (2008). El artículo de revisión. *Revista Cubana de Salud Pública*, 34(4).
- De Winter, J. C., Zadpoor, A. A., & Dodou, D. (2014). The expansion of Google Scholar versus Web of Science: a longitudinal study. *Scientometrics*, 98(2), 1547-1565.
- Dijkers, M. P. (2009). The Value of "Traditional" Reviews in the Era of Systematic Reviewing. *American Journal of Physical Medicine & Rehabilitation*, 88(5), 423-430.
- Dorra, R., Filinich, M. I., Ruiz Moreno, L., Rodríguez Vázquez, B. A., & Solís Zepeda, M. L. (2017). El estado de la cuestión. *Tópicos del Seminario*, (37), 5-24.
- Fuentes Cortés, M. (2013). Las conclusiones de los artículos de investigación en historia. *Literatura y Lingüística*(28), 215-232. <http://dx.doi.org/10.4067/S0716-58112013000200012>
- Gómez Luna, E., Fernando Navas, D., Aponte Mayor, G., & Betancourt Buitrago, L. A. (2014). Metodología para la revisión bibliográfica y la gestión de información de temas científicos, a través de su estructuración y sistematización. *Dyna*, 81(184), 158-163.

- Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (Edits.). (2019). *Cochrane Handbook for Systematic Reviews of Interventions*. Oxford: Cochrane/Wiley Blackwell.
- Hinde, S., & Spackman, E. (2015). Bidirectional citation searching to completion: an exploration of literature searching methods. *Pharmacoeconomics*, 33(1), 5-11. <https://doi.org/10.1007/s40273-014-0205-3>
- Horsley, T., Dingwall, O., & Sampson, M. (2011). Checking reference lists to find additional studies for systematic reviews. *The Cochrane Database of Systematic Reviews*, 2011(8), MR000026. <https://doi.org/10.1002/14651858.mr000026.pub2>
- Huth, E. J. (1987). Needed: Review Articles with More Scientific Rigor. *Annals of Internal Medicine*, 106(3), 470-471. https://doi.org/10.7326/0003-4819-106-3-470_2
- Kugley, S., Wade, A., Thomas, J., Mahood, Q., Jørgensen, A.-M. K., Hammerstrøm, K., & Sathe, N. (2016). *Searching for Studies: A Guide to Information Retrieval for Campbell*. The Campbell Collaboration.
- Levay, P., Ainsworth, N., Kettle, R., & Morgan, A. (2016). Identifying evidence for public health guidance: a comparison of citation searching with Web of Science and Google Scholar. *Research Synthesis Methods*, 7(1), 34-45. <https://doi.org/10.1002/jrsm.1158>
- Martín, S. G., & Lafuente, V. (2017). Referencias bibliográficas: indicadores para su evaluación en trabajos científicos. *Investigación Bibliotecológica: archivonomía, bibliotecología e información*, 31(71), 151-180. <https://doi.org/10.22201/iibi.0187358xp.2017.71.57814>
- Martínez de Sousa, J. (2015). *Manual de estilo de la lengua española* (5.ª ed.). Gijón: TREA.
- Mitru Tejerina, N., & Aranda Torrelio, E. (2001). *ABC de la redacción y publicación médico-científica* (2.ª ed.). Madrid: Cooperación Cultural.
- Oxman, A. D., & Guyatt, G. H. (1993). Guía para la lectura de artículos de revisión. *Boletín de la Oficina Sanitaria Panamericana*, 114(5), 446-458.
- Papaioannou, D., Sutton, A., Carroll, C., Booth, A., & Wong, R. (2009). Literature searching for social science systematic reviews: consideration of a range of search techniques. *Health Information and Libraries Journal*, 27, 114-122. <https://doi.org/10.1111/j.1471-1842.2009.00863.x>
- Ramírez Ramírez, F. J., De León Peguero, N. G., Cansino Vega, R. A., Arellano Contreras, D., & Ochoa Ayala, D. (2009). ¿Cómo redactar un artículo científico de revisión?. *Revista Médica*, 2(1), 21-22.
- Reyes B., H. (2020). Artículos de revisión. *Revista Médica de Chile*, 148(1), 103-108. <http://dx.doi.org/10.4067/S0034-98872020000100103>
- Rojas Sola, J. I., Fernández Sora, A., Serrano Tierz, A., & Hernández Díaz, D. (2011). Una revisión histórica: desde el dibujo en ingeniería hacia la ingeniería del diseño. *Dyna*, 78(167), 17-26.
- Sánchez Upegui, A. A. (2011). *Manual de redacción académica e investigativa: cómo escribir, evaluar y publicar artículos*. Medellín: Católica del Norte Fundación Universitaria.
- Silva, L. R., Santos, A. R., & Santos, I. T. R. (2020). Public policies for education of/in the field and the school environment in a settlement of the MST: the intimate relationship with the pedagogical policy. *Journal of Research*

and Knowledge Spreading, 1(1), e11737. <http://dx.doi.org/10.20952/jrks1111737>

Terreros, M. A., Salazar Arrata, J., & Toala Reyes, A. (2019). Artículo de revisión: fases de colaboración y protocolo. *Revista Científica Universidad Odontológica Dominicana*, 7(1), 30-38.

Valenzuela, C. (2018). Artículo de revisión.

Zinna, A., & Ruiz Moreno, L. (2014). Las razones de la inmanencia. *Tópicos del Seminario*, (31), 5-17.

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