

## How to Report Systematic Literature Reviews in Management Using SyReMa

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**Abstract:** The systematic literature review (SLR) method is becoming more prevalent in the field of management and administration. It is a research method that involves the selection, analysis, and evaluation of the best available evidence in a given thematic area. However, SLR must follow a series of steps that allow its replicability, and it must satisfy several minimum requirements to ensure validity. The present study provides a tool that outlines these steps and requirements. We first examined the instruments that are used in other disciplines along with the editorial standards for publication in journals in the field. Subsequently, we developed a checklist and had it validated by experts using the Delphi method. The checklist for reporting management literature review systems—SyReMa—contains 32 items divided into the following sections: general aspects, introduction, methodology, synthesis of results, discussion, and conclusions. Each item should be evaluated in terms of whether it is present in the SLR; whether it is clear or requires greater precision and whether it is applicable, given the characteristics of the subject matter. The SyReMa checklist will help authors, editors, reviewers, and readers improve the quality and accuracy of SLRs and clarify the contributions they make. It could also be used as a teaching tool for future researchers.

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## ¿CÓMO DESARROLLAR REVISIONES SISTEMÁTICAS DE LA LITERATURA EN ADMINISTRACION UTILIZANDO SYREMA?

Resumen: el método de revisión sistemática de la literatura (rsl) ha ganado cada vez más relevancia en el campo de los estudios en gestión. Este es un método de investigación que incluye la selección, el análisis y la evaluación de la evidencia más destacada en torno a una temática específica. Sin embargo, la rsl debe llevar a cabo una serie de pasos para asegurar su replicabilidad y el cumplimiento de requisitos mínimos para sustentar su validez. Por ello, la presente investigación proporciona una herramienta que detalla cada uno de estos pasos y requisitos. En primer lugar, examinamos los instrumentos empleados por otras disciplinas y los estándares

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editoriales para la publicación en revistas científicas. Posteriormente, desarrollamos una lista de verificación que fue sometida a valoración de expertos mediante el método Delphi. La lista de verificación para informar sobre los sistemas de revisión de la literatura en gestión, denominada SyReMa, consta de 32 ítems divididos en las siguientes categorías: aspectos generales, introducción, metodología, síntesis de resultados, discusión y conclusiones. Cada uno de estos ítems debe ser analizado para determinar si está presente en la rsl, si su abordaje es claro o requiere mayor precisión y si este es aplicable, dadas las características del tema analizado. La lista de chequeo SyReMa permitirá que los autores, editores, revisores y lectores puedan mejorar la calidad y precisión de las rsl, así como tener mayor claridad sobre su contribución al campo de la gestión. Además, esta herramienta podría utilizarse como recurso educativo para los investigadores en formación.

Palabras clave: gestión basada en evidencia, revisión de literatura, investigación en gestión, metodología, publicaciones, artículo científico, revisión sistemática.

## **COMO DESENVOLVER REVISÕES SISTEMÁTICAS DA LITERATURA DE GESTÃO USANDO O SYREMA?**

Resumo: o método de revisão sistemática da literatura (RSL) tem ganhado cada vez mais relevância no campo dos estudos de gestão. Esse é um método de pesquisa que envolve a seleção, a análise e a avaliação das evidências mais importantes sobre um tópico específico. No entanto, a RSL deve executar uma série de etapas para garantir sua replicabilidade e o cumprimento de requisitos mínimos para sustentar sua validade. Portanto, esta pesquisa fornece uma ferramenta que detalha cada uma dessas etapas e requisitos. Primeiro, examinamos os instrumentos usados por outras disciplinas e os padrões editoriais para a publicação em revistas científicas. Em seguida, desenvolvemos uma lista de verificação que foi submetida à avaliação de especialistas usando o método Delphi. A lista de verificação para relatar sistemas de revisão de literatura gerencial, denominada SyReMa, consiste em 32 itens divididos nas seguintes categorias: aspectos gerais, introdução, metodologia, síntese de resultados, discussão e conclusões. Cada um desses itens deve ser analisado para determinar se está presente na SLR, se sua abordagem é clara ou requer mais precisão e se é aplicável, dadas as características do tópico analisado. A lista de verificação SyReMa permitirá que autores, editores, revisores e leitores melhorem a qualidade e a precisão desse tipo de revisão, bem como tenham mais clareza sobre sua contribuição para o campo da gestão. Além disso, essa ferramenta pode ser usada como um recurso educacional para pesquisadores em treinamento.

Palavras-chave: gestão baseada em evidências, revisão da literatura, pesquisa em gestão, metodologia, publicações, artigo científico, revisão sistemática.

## **INTRODUCTION**

In the field of management, there is a growing interest in seeking mechanisms to find, refine, and synthesize the available evidence on a given research topic because of the increase in the number of publications. These documents must be reviewed in such a way that the most useful and those of the highest quality can be properly identified.

The systematic literature review (SLR) is a research method based on data from original studies that have been selected in an objective, rigorous, and reproducible manner. An SLR serves a varied range of purposes. For example, it can provide guidance to researchers planning future studies, allow the evaluation of theories, and offer a basis for recommending interventions. It can also be used to examine different methodological approaches. The development of an SLR requires the formulation of a question, the elaboration of a protocol,

a search for relevant literature, a critical reading thereof, and an analysis and interpretation of relevant findings. However, while this approach may have been standardized in other disciplines (e.g., health sciences, where collaborations provide guidelines on how to develop and evaluate such a process), scholars in other areas have many different conceptions of what an SLR is.



Hart (2018, p. 14) stated that an SLR helps to answer general questions such as “What are the origins and definitions of the topic? What are the major features of debates in a topic? What are the key sources of information? What are the concepts, theories, and ideas to the topic?” But as a research study progresses, it is sometimes necessary to answer more specific questions, such as What does the scientific literature state about the benefits or otherwise of an intervention? What is the relationship between two variables? These questions require an even closer systematic review of the literature.

In general, literature reviews can be classified into distinct types. The two best known are the narrative review and the systematic review. The former can give an account of the state of the art in a subject, while “a systematic review is based on data from original research studies that have been objectively and rigorously selected using a defined methodology” (Hall, 2003, p. 94). It is “conducted according to an explicit, rigorous and reproducible methodology” (Greenhalgh & Peacock, 2005, p. 331). An SLR facilitates the reproducibility of study results, ensures the identification of the most scientifically valuable research, and makes the training of researchers and students more effective (Pérez-Rave, 2012).

An SLR is based on the need to review the substantial amounts of information available in a systematic and replicable way. If the literature review is deficient, the rest of the research may also be seen as imperfect, since researchers cannot conduct meaningful studies without first knowing the literature in the field being addressed (Boote & Beile, 2005). Research must then be carried out holistically and comprehensively with the largest available amount of information incorporated into the analysis; this is in order to provide evidence that may be useful for policymakers and practitioners (Tranfield *et al.*, 2003).

Considering the above, several knowledge domains, such as medicine (Manterola *et al.*, 2013) and engineering (Pérez-Rave, 2012), have introduced guidelines and standards for the development and writing of SLRs in an attempt of providing the academic and professional community with a point of reference at the time of evaluating the quality of studies available in their area. However, although the management field has some guidelines and standards for conducting SLRs (Chicaíza-Becerra *et al.*, 2017), they are insufficient to ensure that the results are comprehensive. For instance, in some studies where recommendations have been made (Paul & Criado, 2020), bibliometrics has been confused with the purpose and aims of an SLR.

Given the lack of a reference guide to facilitate the reporting of SLRs in the field of management, this study seeks to deliver a tool—in the form of a checklist—that contains the minimum required elements before conducting an SLR, which should be based on a rigorous review of secondary sources and the validation of the proposal by a panel of experts. Therefore, we present a theoretical framework that conceptualizes this research problem, as well as the suggested method for approaching it. Subsequently, fieldwork results, the discussion, and conclusions derived from the complete process are developed.

## THEORETICAL FRAMEWORK

SLRs can be used to support a piece of research or an academic study (García-Peñalvo, 2017) and should relate to the research project. For an undergraduate dissertation, the function of an SLR would be essentially descriptive and focused on a particular topic. In the case of a master's dissertation, it should be analytical and summative and cover methodologies, techniques, and topics. As for a doctoral thesis, it should evaluate in depth all the available literature covering the problem being addressed, including studies in different languages. It should be at a high conceptual level and link the thesis to different theories (Guirao-Goris *et al.*, 2008).

However, in addition to the SLR, techniques such as bibliometrics are widely used in management. For example, bibliometric analyses apply quantitative techniques (i.e., bibliometric and citation analysis) on bibliometric data (e.g., publication and citation units) (Donthu *et al.*, 2021, p. 286). For this analysis, which needs to be rigorous in the selection criteria of publications, the ordination method has emerged as a key approach. Ordination is an index that allows ranking the relevance of a study based on the impact factor, the year of publication, and the number of citations (Pagani *et al.*, 2015). Other proposals have also arisen, such as that of Watson and Webster (2020), in search for a method to systematically encode papers' core knowledge contributions in the form of a graph.

An SLR seeks to answer a specific research question, identify theoretical and methodological approaches, and provide ideas for new research topics. In addition to addressing gaps in the current literature, SLRs should

also include an analysis of relevant documents that contribute to the current state of knowledge within the field of interest. Studies in the area of knowledge should be presented critically and their conceptual or methodological limitations indicated. In parallel, intrinsic relationships and connections should be established—and perhaps for the first time revealed—between studies from different contexts and approaches. This enables research teams to make accurate decisions and to update them (Chicaíza-Becerra *et al.*, 2017; Guirao-Goris *et al.*, 2008).

SLRS should define and delimit concepts and also explain the findings of previous reviews (Velásquez, 2014) or results that have not been published. A key element in an SLR is the evaluation of the methodological quality of the studies being discussed. Variables that can be taken into account include bias control, randomization, follow-up, sample size, and masking (Gisbert & Bonfill, 2004; Sanderson *et al.*, 2007; Valentine, 2009), and the number of citations. However, any form of evaluation of this aspect could be open to question. In this context, mechanisms for the quantification of effects also become relevant when analyzing experimental studies or performing meta-analyses (e.g., the survival of companies would be the effect, while the quantitative dimension would be the proportion of companies that exceed a given time).

Literature in other areas has also presented checklists (Higgins *et al.*, 2021; JBI Global, 2020) with advanced processes for the evaluation of heterogeneous studies, but these may limit the development of more advanced levels of review, such as meta-analyses. Where previous studies have been heterogeneous, it is recommended that they be considered in sub-groups as part of the SLR process.

Reviewing studies in the area of management and administration that report literature reviews has several purposes. Some of these works have contributed to the construction of a study or a line of research based on previous studies; that is, they provide the methodological background and descriptively indicate the structuring of variables, constructs, and contexts (Fayezi *et al.*, 2017; Gilal *et al.*, 2019; Paul & Benito, 2018). This allows researchers to build a framework of the progress made in a particular field. Other studies have made advances in this area, but with emphasis on a particular field. For example, in information systems (Webster & Watson, 2002), supply chains (Durach *et al.*, 2017), or accounting (Massaro *et al.*, 2016).

Additional works have proposed future lines of research (Hao *et al.*, 2019; Paul *et al.*, 2017), where the authors may go beyond description and present new areas of scrutiny in terms of variables and contexts, or a system of propositions or models that could be tested in the future.

In addition, some papers have reviewed the literature quantitatively. These take the form of meta-analyses (Botella & Zamora, 2017; Cumpston, n.d.; Gisbert & Bonfill, 2004; Liberati *et al.*, 2015) and bibliometrics (Gómez-Núñez *et al.*, 2016; Linnenluecke *et al.*, 2020). Meta-analyses seek to evaluate the effect or incidence of interventions or variables in a given population; they report on fields of research that are relatively mature and, therefore, have sufficient and sound information to compile and review effects. By contrast, bibliometrics may be applied in areas in which findings are not necessarily robust but enable a quantitative analysis of variables that may be of interest to those trying to discover the most representative authors, institutions, journals, and topics of a particular area. Such studies do not necessarily examine the topic comprehensively or in great depth.

Gelvis *et al.* (2021) presented an extensive review of the guidelines, standards, and editorial norms for systematic reviews of management literature based on the search and selection of journals that have

published articles of this type, comparing them with the PRISMA standard, the most widely used internationally. Consequently, whether literature reviews contribute to a discipline by providing background information, suggesting future lines of research, or carrying out meta-analyses, it is essential to have an SLR strategy that allows the process to be replicable and rigorous.

## METHOD

To address the research question and the problem outlined in the present study, the authors adopted a pragmatic perspective, considering both the objective reality and the vision of the actors involved and implementing a deductive approach in the case of the analysis of existing information and an abductive approach in the case of the participants.

In addition, two methodological strategies were followed. First, a documentary analysis of similar guides or checklists that have been recognized and accepted in different disciplines. These included Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA), A Measurement Tool to Assess Systematic Reviews (AMSTAR), Critical Appraisal Skills Programme Español (CASPE), Joanna Briggs Institute (JBI), Critically Appraised Topic (CAT), Consensus Health Economic Criteria (CHEC-List), and Consolidated Health Economics Evaluation Reporting Standard (CHEERS). These tools were compared with the main journals in the field of management that have published literature reviews and standards given to contributing authors, following the results of previous studies in the field (Gelvis *et al.*, 2021).

The second strategy arose from the consensus techniques that have been used to improve decision-making in various areas of knowledge (Hasson *et al.*, 2000). These offer a way of evaluating complex issues that no other technique could, and require the participation of experts in the field, who offer their judgment rather than just data (Hsu & Sandford, 2007; Paraskevas & Saunders, 2012), while considering that management is a field not unrelated to such a process (Donohoe & Needham, 2008; Hsu & Sandford, 2007; Paraskevas & Saunders, 2012; Rowe & Wright, 2001). Hence, the present study adopted the Delphi method, which involves defining the aims and objectives, determining the characteristics of the experts, and establishing a consensus.

The purpose of doing so was to seek consensus on a checklist for the reporting of SLRs in the field of administration and management. On the one hand, an unstructured questionnaire was designed for the first round, which also provided the foundation for the second round, as suggested in previous literature for this method (Hasson *et al.*, 2000). It is important to note that open-ended questions in the first round referred to categories designed to account for the differentials perceived by the experts for SLR in the field of management, as well as criteria that should be considered to ensure that the review is systematic, the main steps to perform them, and the elements that should be reported. On the other hand, for the second round, the questionnaire design was based on the work by Gelvis *et al.* (2021) and completed with the findings of the first round. Questions were designed for each of the SyReMa proposed elements asking for a scale with three options: accept, adjust, or reject. The experts answered both online questionnaires anonymously.

To determine the characteristics of the experts (Gelvis *et al.*, 2021), the most representative authors, journals, and editors in the field were examined according to the number and type of publications that had



used the SLR technique. We constructed a database of 229 individuals, including editors and authors with proven experience in SLR techniques, as demonstrated by their publications in Scopus database. They were sent an informed consent form and a request for voluntary participation in the study. Twenty-four responses were received over the two rounds.

The establishment of a consensus required two rounds. The first concerned the secondary sources; in the second, the experts agreed on the categories and items that should be incorporated in the final reporting guide. It is important to note that the guide placed special emphasis on the methodological quality of systematic reviews of management-related literature, which was given the name of SyReMa (Systematic Reviews in Management).

## RESULTS

Table 1 shows the definitive list of items that an SLR in the field of management is expected to contain. The evaluation should consider whether the aspect to be reviewed (i.e., the item) is included, whether it is clear or not, if it does not apply for some reason, and the page of the report where it is located. A total of 32 items were identified; three of these were considered optional. The general elements include the title and the summary. We proposed that the title should state that the study is an SLR, and that the abstract should consist of a structure outlining objectives, methodology, results, and a discussion. These two elements are necessary and important, since researchers usually screen studies by reading these two elements, so the more explicit and detailed the title and abstract, the easier the search process. For this reason, it is requested that the title explicitly states if a given work is a systematic review of the literature, and that the abstract also mentions the method used.

The second aspect is the introduction, where three items stand out. The first is the clear statement of the objective of the SLR; the second is the justification of the need for an SLR on the topic, as similar literature reviews can be found and thus an added value is expected; and the third is the review of the related review-based literature. This makes it possible to identify the relevance and need for an SLR, as well as the gaps in knowledge that this review will fill in.

The third component of the proposed guide is the methodology section. This is the most important element since the consistency of the SLR can be verified through its methodological approach. Thus, 11 of the 32 items to be considered are found in this section. These items have been elaborated in such a way that they detail the process by which an SLR should be completed.

Based on the above, the first point is the definition of a research question for the review, which, as suggested, must follow the clinical research question structure PICO (population/participants-intervention-comparator-outcome), or some adaptation of this, such as PICOT (population/participants-intervention-comparator-outcome-time); PICOC (population/participants-intervention-comparator-outcome-context); or PECO (population/participants-exposure-comparator-outcome). It is important to adapt the research question to the field of management; for example, in the case of intervention or exposure, the independent variables would be indicated. Having a question with this type of structure facilitates the search process, as it allows easily identifying the key terms or words, as well as the Boolean operators to be used.

The second point is the proposal for the SLR's methodological design, including whether a review protocol has been prepared. This protocol is a guide or work plan, so it should ensure the replicability of the SLR and prevent researchers from modifying the process. The sources of information (i.e., the databases or repositories in which the search was performed) should be explicit in the methodology, and the use of additional sources to the databases recognized in the academic field is recommended. Grey literature should also be included in the review as it contributes to enlightening the issue addressed by the SLR, and this could be retrieved from repositories or journals that are not peer-reviewed. The protocol makes it possible to specify how the search, selection and evaluation of the articles will be conducted in an SLR. An additional item in the methodology section refers to the search for and identification of the keywords or thesauri to be used. The exact descriptors should be included, as this will help to simplify the process and achieve more accurate results.

The next item is the bibliographic search strategy (equations) for each of the information sources. It combines keywords with Boolean operators (e.g., AND, OR, and NOT) with the descriptors and each of the previously selected sources. The construction of the search equations is one of the most important steps because it helps to guarantee reproducibility. The environment in which the review is developed should also be described (e.g., period, place, methods, and scope), as this allows the search to be more precise.

Once the search is completed and the results of the SLR are established, the selection process of the documents could begin. Inclusion and exclusion criteria must be reported, and these are defined by the authors and should be in line with the purpose of the review.

When consulting various sources, duplicate studies are usually unearthed, and for this reason the authors of the review should indicate the mechanisms used for their management and elimination. The selection process of articles (e.g., the number of reviewers and the mechanism for resolving differences amongst them) should also be stated. This is a crucial step, as Hiebl (2021) points out, hence the need to present it in a structured, transparent, and comprehensive way. An SLR should have at least two reviewers who select the studies independently; this helps reduce possible biases in the selection process. Differences or conflicts can be resolved by a third reviewer or by consensus. It is expected that differences between reviewers should not exceed 25% (Higgins & Green, 2011). An index such as Cohen's Kappa coefficient can be used (Berry *et al.*, 1988; Higgins & Thomas, 2021) for this purpose.

After selection, a method for extracting data from the articles is suggested, as it helps in the analysis and synthesis process. This involves standardizing the process using information analysis software, for example, NVivo®, or manually using Microsoft Excel® spreadsheets. Ideally, two or more reviewers should extract the data so that the information recorded can be validated. If this is not possible, they must indicate which method was followed. Data for extraction usually include aspects of document identification (authors, year, country, affiliation, title, and type of publication); characteristics of the study (objectives, population, sample, and methods); and findings of interest; some studies have provided examples of the latter feature (Chicaíza-Becerra *et al.*, 2017; Jonnalagadda *et al.*, 2015). Finally, the methodological section defines a strategy to avoid possible selection and publication biases. It should be indicated what actions the authors carried out in the selection process of the articles.



The next section in the SyReMa comprises the synthesis of the results. The first task here is to report on the number of studies included in the review, for which the PRISMA flowchart can be used (Moher *et al.*, 2009). The second is the identification of the type, scope, populations, and samples of the studies that are being analyzed; all this information is recorded in the information extraction matrix. The next item is a report on the possible biases of the studies, for example, participant selection biases, recall or confounding biases in the instruments, a lack of follow-up in the case of longitudinal studies, and so on.

Another item to bear in mind is related to the presentation of aspects relating to the quality of the reports in the studies, for instance, the degree to which an article provides detailed information about design, methodology, and analysis (Sergi & Serra, 2019). These should be summarized in tables or figures, depending on the subject matter and the information that has been obtained. The seventh item in this section asks whether a critique of the literature and any contribution to the field of knowledge is provided. The eighth item is the formulation of management recommendations regarding benefits or potential problems.

The next section is titled “Discussions and conclusions,” and is comprised of five items. The first item relates to the limitations of the SLR, which may be methodological (e.g., the number of studies or sources of information included, reviewer consensus during the title and abstract screening, full texts or the extraction of information, biases, and quality of the reports in the studies). The second element considers whether the systematic literature review provides recommendations for the management practice based on findings. The facilitating factors or barriers to the application of the findings are highlighted in the third item; some of these may have limitations arising from the context, the sector, company size, the perspective from which the problem was approached (clients, companies, and/or workers). The fourth item concerns theoretical contributions to the field. This item is one of the differentiating factors of the reviews in administration compared to those in other fields. One of the main contributions of the reviews is the possibility of developing robust theoretical frameworks for further empirical research. Finally, the fifth item is a reminder of the importance of suggesting future research avenues for other research studies.

The last items of the guide are optional: Has the review design been explained? Has it been peer-reviewed? Does it disclose sources of financing and possible conflicts of interest? Furthermore, indicating any potential conflict of interest is necessary to avoid repercussions on the quality of the reporting of the findings of the systematic review, in addition to providing transparency throughout the process.

**Table 1.**  
*Guidelines for reporting systematic literature reviews in the field of management: SyReMa.*

No.	Element	Items	Yes	No	Not clear	Not Applicable	Page
1	General aspects	The title states that the study is a systematic review of the literature					
2		Presents a structured summary: objectives, methodology, results, and discussion					
3	Introduction	Clearly states the objective of the systematic review of the literature					
4		Justifies the need for an SLR					

No.	Element	Items	Yes	No	Not clear	Not Applicable	Page
5	Methodology	Includes the previous literature reviews of the topic, the gaps in the literature, and the contribution of the present review					
6		Presents a review question using a type of structure such as: PICO (population/participants-intervention-comparator-outcome); PICOT (population/participants-intervention-comparator-outcome-time); PICOC (population/participants-intervention-comparator-outcome-context); PECO (population/participants-exposure-comparator-outcome)					
7		Propose a methodological design for the systematic literature search and review. This may include the development of a protocol					
8		Identifies sources of information such as recognized databases or other sources (i.e., grey literature)					
9		Identifies the keywords and thesauri to be used in the searches					
10		Presents the literature search strategy (equations) for each of the information sources					
11		Defines the setting for the development of the review (e.g., period, place, and scope)					
12		Presents the criteria for inclusion and exclusion of documents					
13		Indicates the mechanisms for handling and elimination of duplicates					
14		Outlines the process for conducting article selection (e.g., number of reviewers and mechanism for resolving differences among reviewers)					
15		Proposes a method for data extraction from the selected articles					
16		Defines a strategy to avoid possible bias in the selection of studies (selection and publication bias)					
17		Reports the number of studies included in the review					
18		Identifies the type of studies analyzed and their scope					
19		Indicates the population and sample of the studies, when applicable					
20		Reports the possible biases of the studies					
21	Summary of results	Presents aspects related to the quality of the reports in the included studies					
22		Synthesizes the results of the studies using tables, graphs, maps, and other resources					
23		Critiques the literature analyzed or contributes to the field of knowledge					
24	Discussion and conclusions	Presents the formulation of management recommendations (i.e., benefits and possible problems, managerial practice)					
25		Presents the limitations of the review					
26		Provides recommendations for management practice based on the findings of the review					
27		Presents the facilitating factors in or barriers to the application of the findings					

No.	Element	Items	Yes	No	Not clear	Not Applicable	Page
28	Others (optional)	Presents the theoretical contribution to the field from the findings of the review					
29		Indicates future research agendas					
30		Explains whether the methodological design of the review has been peer reviewed by external experts					
31		Indicates the sources of funding					
32		Indicates possible conflicts of interest					

**Source:** authors.

## DISCUSSION

The importance of SLRS in management is sometimes overlooked due to researchers' lack of knowledge about this methodology, or because they do not recognize the benefits that it can bring to their studies.

Using the SyReMa checklist makes it possible to answer general questions posed by previously published studies regarding future lines of research, the background of a specific topic, and key sources of information, among others (García-Peñalvo, 2017; Hart, 2018). In addition to reporting on the state of the art in management studies, the SyReMa checklist proposes a mechanism to validate reports, which should be based on data from original studies selected in an objective and rigorous manner (Greenhalgh & Peacock, 2005; Guirao-Goris *et al.*, 2008; Hall, 2003; Pérez-Rave, 2012). The aforementioned facilitates the arduous process of conceptualization and recognition of the key studies (Boote & Beile, 2005).

In contrast with the work by Chicaíza-Becerra *et al.* (2017), which proposes an extraction matrix for data analysis, the present study collects the necessary information based on the views of a panel of experts, who should reach a consensus. The SyReMa checklist can be used to self-and-hetero-evaluate the reports of management SLRS. Moreover, our research study complements the work by Gelvis *et al.* (2021), who proposed a comparative approach that adopts a prospective view and makes suggestions regarding the practice of reporting SLRS in the field of management.

Unlike the works by Hall (2003), Hart (2018), and Wentz (2017), which provide general guidelines on the importance of the SLR method in the development of a research study, we formulate specific guidelines for researchers to conduct their own SLRS or critically evaluate the literature reviews prepared by other scholars.

In short, the contribution of SyReMa to the academic community is broadening the methodological frontiers for the development of SLRS in the field of management, which will allow editors to have a specific verification tool, authors to conduct thorough research works, and reviewers to count on a material that will lead to evaluation process that will effectively improve the quality and accuracy of SLRS and clarify the contributions they make.

On the other hand, we also recognize some limitations of SyReMa. For instance, as it is a checklist, some items could be omitted, hence justifying the need for future studies to apply this tool in literature reviews in different areas of management in order to verify its practical application. Moreover, this instrument requires

knowledge and expertise in this type of methodology so that an evaluator or an author who is conducting a review, could apply SyReMa correctly.

## CONCLUSIONS

This paper provides a theoretical framework that presents the closest and most appropriate references for conducting a systematic review of the literature in the area of administration, as well as a method that allows us to approach a research problem according to its notion and nature, from which the results of the empirical validation are presented in order to discuss whether a given topic is relevant and could generate high quality evidence in the administration field. The development of systematic reviews using SyReMa will contribute to preparing review articles that synthesize evidence in any field of management for decision-making, policy development, or the incorporation of adequate organizational practices.

In recent years, the methodology of systematic reviews that has been developed in other disciplines has permeated the field of administration. However, this methodology has not yet become widespread as a standard practice. So, it should be noted that a literature review that does not follow a systematic process lacks validity in its findings.

One potentiality of the tool presented here is that it is general for the field of administration. However, it is expected in future studies to review whether some items on the list may become particular to the various areas of management.

Mechanisms are needed to facilitate the training and professional development of researchers. SyReMa could contribute to the improvement of SLRS, which are becoming increasingly popular as a result of the expansion in the number of management studies being published every day. This tool does not lose sight of the purpose of review studies while helping to ensure that they meet the expected demands of objectivity, rigor, and reproducibility. SyReMa will also help to construct research questions that could be answered through systematic reviews, the preparation of review articles, and the critical reading of systematic reviews.

Scholars in various fields have pioneered the development of guidelines and standards, so it is important that their peers in management studies follow their lead. SyReMa must be the requisite of quality since it provides the basis for the conceptualization of research projects in management. If such conceptualization is inadequate in any way, the consequences could represent excessive costs. In addition, future researchers should establish standards that encourage a diversity of qualitative and quantitative approaches to management and administration studies without losing sight of the practical dimensions of the discipline.

In addition, although a precise selection of participants resulted in a database of 229 individuals, the main limitation of this work is that the contribution of more of them in the two rounds that generated consensus for the Delphi would have been desirable. However, to compensate for this, the literature review and the peer review exercise carried out in the editorial process of the article contribute to providing greater academic rigor.

Consequently, future research studies should propose mechanisms for reporting literature reviews and research results in the area, which, despite a steady growth in terms of dissemination, disclosure and

contribution to knowledge, still has a long way before reaching the level of other disciplines. For example, there is a need for more rigor in the approach to quantitative methods and their flexibility for environments in which the information is nonparametric, as well as for the growing trend of qualitative methods, so that reviewers who may be familiar with the context or variables of the research but not with qualitative strategies could count on instruments to validate the methodological quality of research reports.

## DISCLOSURES

The authors declare no institutional or personal conflicts of interest.

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