Original article

Journals' guidelines about title, abstract and keywords: an overview of Information Science and Communication Science areas

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Abstract

Objective: The purpose of this exploratory study was to observe and analyse guidelines for authors on writing their papers' title, abstract and keywords.

Methods: The sample consisted of 64 journals indexed in the Journal Citation Reports (JCR): 32 (50%) Library & Information Science (LIS) journals and 32 (50%) Communication Science (CS) journals. A spreadsheet was used for data collection, containing 36 items grouped into four categories: identification data, guidelines for the title, the abstract, and the keywords of the scientific article. Then, in each category, the LIS journals were compared with CS journals, to verify how specific aspects of knowledge organisation and representation are reflected in editorial policies.

Results: Majority of CS journals (27, 84%) and less than a quarter of LIS journals (7, 22%) referred to a style guide on their website. Specific guidelines for the title were presented in 17 (53%) LIS journals and in 23 (72%) of CS journals, mainly concerning the word number. Twenty three (72%) LIS journals and 31 (97%) CS journals included guidelines for writing abstracts, focusing on word number and the structure of abstracts. Instructions for keywords were presented in 21 (66%) LIS journals and 28 (88%) CS journals, defining the number of keywords and the use of controlled vocabulary.

Conclusion: There is a tendency to standardise general indications and criteria about titles, abstracts and keywords. Guidelines on writing abstracts, titles and keywords have smaller presence in editorial policies of LIS journals, than of CS journals.

Keywords: journals guidelines, title, abstract, keywords, information science, communication science

Introduction

Scientific articles are nowadays an indispensable channel of expression and reception for the creators and consumers of knowledge.[1] The title, abstract and keywords have been the essential elements of the representation and retrieval of scientific articles. Intellectual access to the articles is provided through these representations organised in catalogues, bibliographies, indexes and databases.[2] Therefore, these representations are determinants of the visibility and various quality measurements of the particular article.[3]

Until the emergence of the Internet, access to the articles was controlled by information retrieval systems that had very specific rules for the normalisation of titles, abstracts and keywords. However, nowadays authors themselves are responsible for providing the document representation elements (title, abstract and keywords) of their papers and this metadata of scientific articles are available electronically. In this context, guidelines provided for authors about standardisation, style, structure, size and format for writing and submission of their articles are particularly relevant.

International standardisation entities (International Organization for Standardization – ISO), stylebooks or style guides of publishing companies (for example, Oxford University Press, SAGE), universities, scientific societies and professional associations (for example, American Psychological Association), through the standardisation of scientific publications, contribute to the systematisation of knowledge communication and evaluation. Some journals rely on their own editorial policies, and it is unclear if these policies are consistent with the standardised guidelines.

Sabadini, Sampaio and Koller consider that the title is the representation of the significant content with the objective of motivating the interest of the reader.[4] The title is the first and the most read element of the article and plays a decisive role during the recovery. The second most consulted item in a scientific article is the abstract, a documentary text less condensed than the title and endowed with textual structure. Like the title and abstract, the keywords are pre-textual elements representative of the document chosen by the author. However, in social sciences, keywords are not standardised, as, for example, in medicine, leaving to the journals the decision to adopt controlled vocabularies relevant to their areas of knowledge.

Guidelines provided by the journals to the authors should list the principles of representation of the title, abstract, and keywords, so that they help to recover and disseminate the scientific knowledge. Above all, these guidelines need to be properly understood and applied by the authors of the articles.

The purpose of this exploratory study was to observe and analyse editorial policies and guidelines provided for authors on writing their papers, in particular on the title, abstract and keywords, in the field of Librarianship and Information Science (LIS) and Communication Sciences (CS).

Methods

The editorial policies about the title, abstract and keywords of each of the journals were observed and analysed from the guidelines for the authors, which present instructions that authors should follow regarding the formal aspects of articles.

Sample of journals was selected from the Journal Citation Report database (JCR) in the field of Librarianship and Information Science (LIS) and Communication Sciences (CS), taking into account the first 8 titles of each one of the four quartiles in 2016 (Supplement 1). The total of 64 selected journals were searched for on the Internet, which allowed to identify the websites of the journals, on which the necessary information was found. LIS was selected because this field investigates scientific journals themselves, and shows interest into indexing and standards for elaborating titles, abstracts and for determining keywords in scientific articles. CS was selected as field of comparison because it belongs to the same area of Social Sciences and because it has a similar amount of journals indexed in JCR.

In order to perform the quantitative and qualitative analyses, a spreadsheet was designed for data collection and processing, containing 36 items grouped into four categories: journal identification data, guidelines for the title, for the abstract, and for the keywords of the scientific article. At the end, a field for notes and observations was added.

The items gathered were: a) identification of the scientific journal (title, web address, ISSN, ranking position, impact factor, type of access and standardisation manual and style adopted); b) guidelines for the title (writing, translation, language of translation, section of the journal, indications as to the number and types of words, type of information content, subtitle, abbreviations, acronyms, symbols, and formulas and style); c) guidelines for the abstract (writing, translation, language of translation, section of the journal, indications as to the number of words, type of information content, abbreviations, acronyms, symbols and formulas, style and inclusion of bibliographical references); and d) guidelines for keywords (writing, translation, language of translation, section, indication of the number of words and separation punctuation, vocabulary control and type).

Results

The total number of journals listed in JCR in the fields of LIS and CS was 167; 85 (51%) in LIS and 82 (49%) in CS. Our chosen sample consisted of 64 scientific journals, 32 journals from the LIS category (38% of the field) and 32 journals from the CS (39% of the field). The journals sampled had the impact factor between 4.180 and 0.154 in CS, and 7.268 and 0.022 in LIS.

At the time of data collection, in December 2017, it was not possible to find relevant information about title, abstract and keywords in two LIS journals. Anyway, for this paper, averages were calculate based on total number of our LIS sample, which was 32 journals.

Out of 64 journals sampled, 34 (53%) presented general, whole article guidelines or style guide on their website (Figure 1).

Seven (22%) LIS journals presented guidelines or style guide (Figure 2). There was one journal in the first quartile of impact factor, five journals in the second quartile and one journal in the third quartile. Two of these journals are published by Taylor & Francis, the remaining belong to different publishers (Wiley, Elsevier, Emerald, Sage and Medical Library Association).

The style guide was presented in 27 (84%) journals of the CS sample (Figure 2). In six of these journals, the style guide was the 6th APA style guide (Publication Manual of the American Psychological Association, Sixth Edition, https://www.apastyle.org/manual). In this group, there are two journals edited by SAGE, three by Wiley and one by Taylor & Francis, illustrating the widespread acceptance of APA guidelines. There are eight SAGE journals that turn to SAGE Manuscript submission guidelines (https://uk.sagepub.com/en-gb/eur/manuscript-submission-guidelines), evidencing a tendency to standardisation in journals of the same publisher.
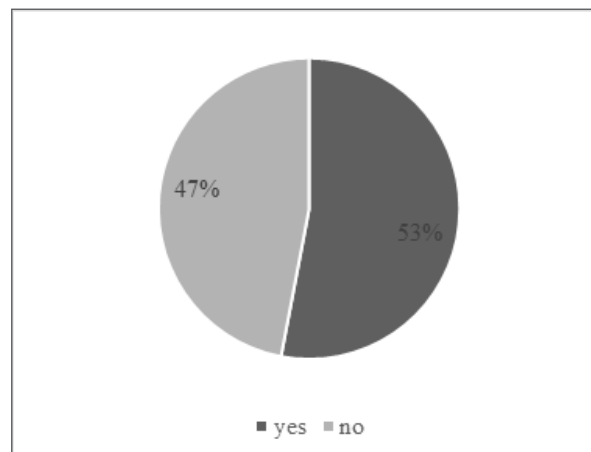
Figure 1. General guidelines for articles or a style guide available for authors on the websites of sample journals (n=64)

Guidelines for title

Out of 64 journals sampled, 40 (65%) presented guidelines for the writing of the title (Figure 2).

In LIS, 17 (53%) of journals presented guidelines for titles, with five journals in each one of the first three quartiles of impact factor and two journals in the 4th quartile.

In this group of 17 LIS journals, there were 10 that included guidelines about the number of words. Two journals accepted titles with up to 50 words, the remaining journals pointed to much more reduced titles: 45 characters, including spaces, or even 40 characters. In the mid-range, some journals accepted titles ranging from six to twelve words, or up to 16 words.

In terms of the type of words included in the title, there was one journal with specific guideline advising the use of expressions like "Investigation of ..."; "Study of …"; "More about …"; "... revisited". Two journals addressed the subtitle, indicating that the reference "research project" can be placed in this section or that it can be used to specify the content of the paper. There were also seven journals' guidelines which determined that the title must not contain abbreviations, formulas nor references.

In CS, 23 (72%) journals included guidelines for titles. In five cases, this section was entitled "Help readers to find your article". There were two journals in which a limit of characters for titles was mentioned, in one case with indication of a short title with 50 characters and in other with 40 characters. There were also four journals that suggested that authors should think to include in the title the research terms that readers can use to look for information.

Guidelines for abstract

There were 54 (84%) journals with guidelines for writing abstracts, 23 (72%) LIS journals and 31 (97%) CS journals (Figure 2).

In LIS, 23 (72%) of the sampled journals presented guidelines for writing abstracts, some of them in the same section as the titles. There were 18 journals that specified the number of words in the abstract; it varied from 50 to 250 words. Four journals indicated the need to create a structured abstract: one required Objectives, Outcomes and Conclusions; two considered the possibility of four to seven sections, some mandatory and some optional: Purpose (mandatory), Design/methodology/approach (mandatory), Findings (mandatory), Research limitations/implications (if applicable), Practical implications (if applicable), Social implications (if applicable), Originality/value (mandatory); and the fourth journal required Background, Objective, Methods, Outcome, Discussion and Conclusion.

Seven LIS journals advised against the use of abbreviations, acronyms, symbols and formulas in abstracts. Six journals did not allow the use of bibliographic references in abstracts. In terms of content of the abstract, 13 journals noticed that this section must describe the article and indicate its importance.

In CS, there were 27 (84%) journals that determined the number of words in abstract ranging from 100 to 250 words with different guidelines: two journals indicated from 100 to 150 words, 11 journals indicated a maximum of 150 words, one journal required a minimum of 150 words, one journal allowed from 150 to 250 words, three journals did not permit more than 200 words, one journal pointed the limit of 250 words, five journals considered 200 words necessary and three required 250 words.

With respect to the structure of abstract, four journals had considerably different guidelines for original and for review articles. For original articles, it was necessary to describe the method and results. For reviews, there was a different approach: first the primary objective of the review, with the reasoning for the choice, then the review outcomes and the conclusions must be indicated, including the implications for new researches, applications or practice. One journal required a structured abstract covering Background, Objective, Method, Outcome, Discussion and Conclusion.

As for the style of the abstract, in seven CS journals there were some guidelines about that: one indicated the instruction not to start the abstract with: "In this article...", but rather provide a statement regarding the article's key points of interest; six SAGE journals highlighted the importance of the abstract because it is free to access and it is where the search engines seek information, allowing the retrieval of the article by users. Two journals considered the possibility of creating and providing a video abstract, opening new ways for this component of scientific articles.

Guidelines for keywords

In total, there were 49 (77%) journals with instructions about keywords, 21 (66%) in LIS and 28 (88%) in CS (Figure 2).

There were 20 (63%) journals in LIS with rules about the number of keywords. This number varied from three to 12 keywords. It was highlighted that keywords are not only important for Search Engine Optimization (SEO), so the online search of the article by readers; the keywords are also used by abstracting and indexing services as a mechanism to tag research content. Seven (22%) of journals included guidelines about the vocabulary control to choose keywords. In one case, the guidelines mentioned the possibility of using a thesaurus, but without specifying any, and in another case the use of MeSH terms was referred. Two journals presented a list of recommended keywords.

In CS, there were 27 journals that required a specific number of keywords, which ranged from three to ten keywords. As for the type of keywords, there was one journal indicating that the plural and the use of multiple concepts should be avoided, and the use of abbreviations must be restricted. One journal indicated the use of a controlled vocabulary, which seemed specific to this journal covering communication issues.
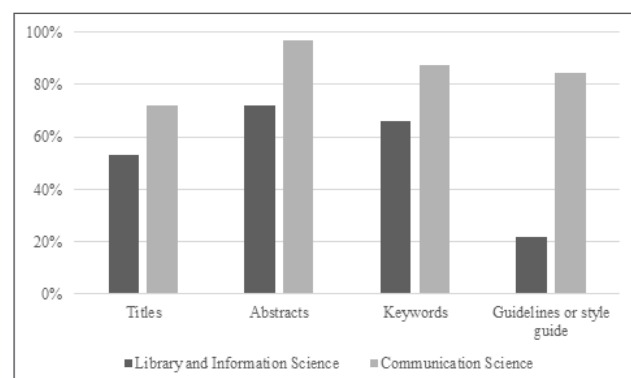

Figure 2. Percentage of journals providing guidelines for the writing of titles, abstracts, keywords, and for the general article style in LIS (n=32, dark) and CS (n=32, light) areas.

Discussion

Due to the importance of titles, abstracts and keywords for knowledge organisation in journal articles, this study analysed the editorial guidelines provided to the authors of the texts in a sample of journals indexed in Journal Citation Report in Library and Information Science (LIS) and Communication Science (CS) in 2016.

The study revealed that the journals have different guidelines in LIS and CS journal categories, which can be seen in editorial policies on titles, abstracts and keywords. The LIS journals seem to be less standardised, for example while majority (84%) of the CS journals present a standard or style guide, minority (22%) of the LIS journals have this type of instructions.

The precise and expressive writing of titles of articles can contribute to improve information visibility and retrieval within information systems.[5,6,7] Indications about the elaboration of titles appear in 72% of CS journals and in 53% of LIS journals, included in specific sections inside the "Guide for authors", "Format guidelines", "Manuscript submission" or "Manuscript requirements". These are concise indications about the maximum number of words and, to a lesser extent, about more adequate terms, or terms that should be avoided. In five CS journals, this section was entitled "Help readers to find your article", emphasising that titles can work as enhancer elements for the visibility of articles. However, there was little specific advice for writing titles, apart from providing the word limit or character limit.

The abstract of an article is a powerful tool to make the access to original text easier, and the most important aspect in the standards and recommendations studied.[8,9,10] Almost all CS journals and 72% of LIS journals provide specific guidelines for abstracts in their articles. These guidelines are different for original research and for review articles. They deal with the number of words and, to a lesser extent, with the structure and style of abstracts. There is some indication of adoption of innovative forms of abstract: Graphical Abstract mentioned on Elsevier platform, projected to allow the readers to have a quick understanding of the main message of the article in a visual summary, and, in two CS journals, the video abstract, opening new ways for summarising articles. Structured abstracts were not common in journals sampled: only four LIS journals and one CS journal had guidelines for them.

Guidelines for keywords were mentioned in the majority of the journals in this study. These guidelines dealt with the maximum number of keywords and, to a lesser extent, with issues related to the type of proper terms and to the vocabulary control. Authors who submitted texts in Wiley journals, for instance, were directed to a topic of the section Author Guidelines for explanations related to "Search Engine Optimization (SEO) for your article", which suggested to include the essential aspects and keywords in the first two sentences of the abstract because only these sentences appear in the results of the search engine. It is advised to repeat these keywords three to six times. For an optimal choice of keywords, Google Trends and Google Adwords were suggested. It certainly represents an innovation for authors/investigators who are asked to act as marketing agents of their own work.

Our study revealed that guidelines on writing abstracts, titles and keywords have a smaller presence in editorial policies of LIS journals, than of CS journals, and this while in LIS area the subject of study is the very structure and content of scientific articles. The rules and recommendations provided for authors of articles aim to improve the representation and the retrieval of their works. The research into the knowledge organisation in articles, and into its representation in editorial policies should be expanded and deepened. As the editorial policies were found to be quite various, it is also relevant to elaborate proposals for standardisation and style manuals with instructions for authors of scientific papers.

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