Analysis of the introduction of scientific articles published in Brazilian journals with Qualis A2 from the administration area

Análise da introdução de artigos científicos publicados em revistas brasileiras com Qualis A2 da área de administração

Análisis de la introducción de artículos científicos publicados en revistas brasileñas con Qualis A2 del área de administración

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Abstract

This study aimed to analyze whether the structures of introductions of articles published in scientific journals with Qualis A2 in the Administration area present any logical scheme capable of being followed safely. It used the bibliometric method, with a unit of analysis the introductions of texts published in the last 2018 editions of existing journals, whose qualitative and quantitative data were analyzed and interpreted with the aid of semantic, content and comparative analysis techniques. The results showed that the introductions occupy an average of two pages, start with contextualization, justification / motivation / importance and description of the theme / object, continue with the presentation of the objectives and question-problem and end with the presentation of the structure of the article and referencing of other parts (theoretical framework, methodology and results). The

conclusion shows that every introduction has initial, central and final elements. The contribution to the Administration area is to provide a safe structure for writing the introductions for these journals.

Keywords: Introduction; Academic texts; Parts of the introduction; Scientific articles; Scientific writing.

Resumo

O ato de redigir trabalhos acadêmicos ainda permanece um fardo para muitos estudantes e pesquisadores devido ao desconhecimento da estrutura das introduções desses textos e seus conteúdos. Neste sentido, este estudo teve como objetivo analisar se as estruturas das introduções dos artigos publicados em revistas científicas com Qualis A2 da área de Administração apresentam algum esquema lógico capaz de ser seguido com segurança. Para isso foi utilizado o método bibliométrico, tendo como unidade de análise as introduções dos textos publicados nas últimas edições do ano de 2018 dos seis periódicos brasileiros com a classificação A2 no Qualis/Capes, cujos dados qualitativos e quantitativos foram analisados e interpretados com o auxílio de técnicas de análise semântica, de conteúdo e comparativa. Os resultados mostraram que a) as introduções ocupam duas páginas dos artigos, dentre 17-18 páginas como quantidade modal; b) as introduções começam com contextualização, justificativa/motivação/importância e descrição do tema/objeto do estudo; c) prosseguem com a apresentação dos objetivos e pergunta-problema; e d) terminam com a apresentação da estrutura do artigo e com a referenciação de outras de suas partes, como marco teórico, metodologia e resultados. A conclusão mostra que toda introdução tem elementos iniciais, centrais e finais. A contribuição deste estudo para a área da Administração e afins é a de proporcionar uma estrutura segura de redação das introduções dos textos acadêmicos.

Palavras-chave: Introdução; Textos acadêmicos; Partes da introdução; Artigos científicos; Ensaios teóricos.

Resumen

El acto de redactar trabajos académicos sigue siendo una carga para muchos estudiantes e investigadores debido al desconocimiento de la estructura de las introducciones a estos textos y sus contenidos. En este sentido, este estudio tuvo como objetivo analizar si las estructuras de las introducciones de artículos publicados en revistas científicas con Qualis A2 en el área de Administración presentan algún esquema lógico susceptible de ser seguido con seguridad. Para ello se utilizó el método bibliométrico, teniendo como unidad de análisis las

introducciones de los textos publicados en las últimas ediciones de 2018 de las seis revistas brasileñas con la clasificación A2 en Qualis / Capes, cuyos datos cualitativos y cuantitativos fueron analizados e interpretados con la ayuda de técnicas de análisis semántico, de contenido y comparativo. Los resultados mostraron que a) las introducciones ocupan dos páginas de los artículos, entre 17-18 páginas como cantidad modal; b) las introducciones comienzan con la contextualización, justificación / motivación / importancia y descripción del tema / objeto de estudio; c) proceder con la presentación de los objetivos y pregunta-problema; yd) finalizar con la presentación de la estructura del artículo y referenciando otras partes de este, como marco teórico, metodología y resultados. La conclusión muestra que toda introducción tiene elementos iniciales, centrales y finales. La contribución de este estudio al área de Administración y afines es proporcionar una estructura segura para escribir las introducciones de textos académicos.

Palabras clave: Introducción; Textos académicos; Partes de la introducción; Artículos científicos; Ensayos teóricos.

1. Introduction

Writing quality academic texts is a challenge for many students (Fernsten & Reda, 2011; Snow, 2010; Mattus, 2007; Harris et al., 2019). This challenge is present both for undergraduate students and for those specializing in postgraduate courses. The academic literature has its own characteristics, and, in addition, there are the submission rules for each journal, which ends up requiring students to write quality in the standards of the journal to which the study will be submitted. The charging of educational institutions for quality publications is constant and is already part of the curriculum of many courses to obtain degrees. Thus, writing and publishing is a current need of students (Fox, 2019; Kirkpatrick, 2019).

The types of communication differ in the communicational and linguistic fields. Poetic texts have a specific structure, different from chronicles and short stories. But the differentials do not only cover the structure of textual productions. Each element that makes up the different types of texts also seems to differ from each other in the structure and content of its parts. In universities, the most common textual productions are essays (philosophical and theoretical) and scientific texts, which make up the modalities of texts called academic (Sadovets, 2019; Bal-Gezegin, 2019; Altunkaya & Ayranci, 2020).

The introduction stands out as a relevant part of academic texts. This part, in non-scientific texts, does not have the same importance as in science. After reading the introductions, the reviewers will have knowledge about the topic addressed and whether this communication is new or not, the precision of the research objectives, its relevance to the academic world, if the article is part of the journal's line of appreciation, among numerous other fundamental aspects for the beginning of the peer review process. The introduction, therefore, is of an importance that is often overlooked by the authors (Vincent-Lamarre & Larivière, 2020), a fact that also happens in the field of Administration and business (Qiao & Hao, 2019)

In this sense, this study aimed to present a logical scheme found in the introduction of scientific articles in the field of Administration. For this purpose, the last editions of 2018 of the six Brazilian scientific journals qualified as A2 by Qualis / Capes were selected to test the hypothesis that the structures of the articles published there are similar. For this, bibliometric methodological resources were used to analyze the data and generate the results, presented in the fourth part of this article. The second part presents the theoretical framework of the linguistic field used to structure the interpretation of the results and guide the methodological steps detailed in the third part.

2. The Introduction and its Terms of Equivalence and Attributes

To understand the textual introductions, it is first necessary to know the concept in extension and intent, through its equivalence terms and attributes, entering the linguistic field. A concept is an abstract content of a linguistic term (Nilsson, From & Lindwall, 2019), a part of a whole (Shaheen et al, 2019) and a mental representation (Resnick et al, 2019). From a linguistic point of view, all concepts have two parts. The first is the equivalence term, which makes the unknown (the concept) equivalent to something known, so that the unknown is translated, equated, made equivalence, equal to something known. For example, in the concept of man (unknown), the most appropriate equivalence term would be human (which is something known), which translates the unknown into something known. Thus, the first part of the definition of the concept would be "Man is a human being".

But the equivalence term alone does not allow understanding. It is necessary to complement, specify, describe, qualify, present the differentiating characteristics of the equivalence term to make understanding accurate. That is what attributes are for: to delimit and make the understanding of the equivalence term precise. And one of the essential

attributes of the Man concept is sex, which differentiates one part (a human being) from everyone (human beings). Man would then be the human male. Male, therefore, is the attribute of sex that differentiates it and makes it precise, completing the definition. It was exactly this linguistic procedure that was applied to accurately know the conceptual definitions found in the literature for the concept "Introduction".

In academic texts, it is possible to find different definitions for the word introduction. However, what has been seen is that many authors, instead of defining it, immediately start to explain its elements, its parts and even its writing structure. Among the concepts analyzed, are found as keywords: "important site" (Swales, 1987), "relevant part" (Zinani, 2007), "funnel" (Smidt, 1992), "synthesis" (Borges, 2006), "Second line in the evaluation of the article" (Serra, 2015).

When defining the introduction as an "important site", the author wishes to give the perception of space, from a place to the concept, since these words are synonymous with the word "site". The adjective "important" that accompanies the word website, refers to the idea of something relevant, interesting, to the point that it should be highlighted. In such a way, introduction can be understood as a place where the most important or relevant information of the research must appear (Swales, 1987).

Similar is the author's understanding that defines it as "relevant part", in which the term "part" has the meaning: piece, fragment or section. The expression "relevant" is intended to give the idea of something that has relevance, that should be highlighted, that stands out. In this sense, the author builds his concept based on the idea that the introduction is not just a place, or a space destined for something, but is part of a whole, which in this case, is academic work. Undoubtedly, it remains clear that in this part the most expressive information must be found among all the researched subject (Zinani, 2007).

The term "funnel", which is also brought by literature, demonstrates in a figurative and didactic way the idea not only of the concept of introduction, but also of its own textual construction. The funnel, which is shaped like something that starts big and ends small, can be compared with an idea that is born big and ends in a restricted way, at a specific point. Thus, it should be built, starting from the whole (universe of knowledge) and entering a specific theme. It is a function of the introduction, to assist in locating the reader about the theme to be developed by the work (Smidt, 1992).

Another interesting expression found in the academic literature for the definition of Introduction is the word "synthesis". Here, the author does not intend to equate the introduction with a simple summary or a synopsis of ideas only but aspires to clarify that the

introduction is a place where information should appear in a summarized form. Thus, the author, when writing the introduction, should synthesize the information of his work, avoiding long and wordy texts. This definition of a summary should not be confused with the "Summary" section, which is also included in academic texts (Borges, 2006).

Also defined as "second line in the evaluation of the article", the introduction gains "status" as the second most important part in the evaluation of an academic article. According to the author, the introduction should be the second most important point in an evaluation. Through this concept, the author draws attention to the writing and dedication that the writer must have when preparing the introduction. After all, it is through the introduction that the reviewer of a scientific journal becomes aware of the subject to be addressed and defines it as relevant for publication or not. Therefore, the preparation of this section should require the editor's attention and dedication (Serra, 2015).

In view of the various concepts available in the academic literature for Introduction, in this study the term "relevant part" will be used as an equivalent term for introduction. The choice arises from the idea that the Introduction, first of all, is a subdivision belonging to a whole, that is, the introduction is one of the sections of an academic work, therefore, the expression "part" coherently defines its meaning . The expression "relevant" brings the concept the defining complement, that is, it is a part of academic work, in which its objective is to highlight something, which in this case, is the researched theme. Once the equivalence term is known, it is necessary to find its attributes, so that the concept is understood.

In the academic literature, there are several attributes associated with the introduction, such as academic writing, statements of justification, purposes, descriptive modality, more significant aspects, main ideas of the theme and evaluation. To find an attribute that most adequately defines the introduction concept, it is necessary to first check the similar or equivalent terms, group them and then determine the frequency with which each one appears. The attributes therefore represent those essential components of the concept.

A first attribute group is formed by the expressions "academic writing" (Swales & Najjar, 1987) and "descriptive modality" (Zinani & Santos, 2007). In this grouping it is possible to detect expressions that characterize the introduction by its form of writing, associating it to a specific type of writing, the academic one. For that reason, there would be no reason to talk about introducing texts that are not academic. In novels and poetry, for example, because they are non-academic essays, there could be no introduction. As for the expression "descriptive modality", it means that the introduction must be written in a report format, that is, it must narrate, describe, inform, communicate what is desired.

The second group of attributes is formed by the expression's "purposes" and "statements of justification" (Smidt, 1992). In this group, the introduction is qualified as a segment in which the purposes of the study are exposed. Here, the introduction becomes a space in which the author reports the objectives and motivations of the research. Thus, from reading the Introduction, the reader should be able to understand the reasons that motivated the research, in addition to its general and specific objectives.

The third group of attributes is composed of the terms "most significant aspects" (Zinani & Santos, 2007) and "main ideas of the theme" (Borges & Alves, 2006). This group of attributes has in common the need to include in the Introduction the most relevant points of the research. According to the literature consulted, the introduction points out the most significant aspects of the research, that is, the information that, as it is relevant and indispensable for understanding the research, must be present in the introduction. This information is nothing more than the main ideas of the topic.

As a fourth and last attribute, there is the expression "evaluation" (Serra & Ferreira, 2015). The term evaluation which has the meaning of determining the value of a good based on a certain criterion. Thus, the introduction is a part of the academic text subject to evaluation, value creation. Despite being mentioned only once, the expression refers to content subject to evaluation. Thus, a text runs the risk of being accepted or not by the evaluator, due to the importance or value it received.

Thus, the Introduction concept, for this study, can be defined as the part of the academic work in which the most relevant aspects of the text are briefly presented. This concept was formed by joining the terms of equivalence with the attributes most cited in the researched bibliography. The concept is subject to the word "Party" which gives the idea of a piece of a whole; consequently, the introduction is only part of a whole, which in this case is academic work. The second part of the concept is formed by the complements, "summarized form" and "most relevant aspects", which are associated with the way the content should be described. Therefore, the introduction is a part of the academic text, and only of academic texts, in which the author, from his judgment, must clearly and succinctly explain the most important aspects, themes and information to be communicated. In the introduction, therefore, there is no space for long texts and irrelevant information. The central hypothesis of this study is that the introductions of scientific articles published in Brazilian journals qualified as A2 in Qualis / Capes present are in line with this conceptual structure.

3. Research Methodology

This study had the general objective of verifying whether the introductions of scientific articles published by Brazilian scientific journals in the field of Administration qualified as A2 by Qualis / Capes present any common logic scheme. For this, two guiding questions for the fieldwork were elaborated: the first was "what are the quantitative characteristics of articles and published articles?", while the second was "what are the elements that can be identified in each introduction of published texts?". Based on the search for these answers, the methodological scheme described here was outlined, as suggested by Nascimento-e-Silva (2012; 2020a; 2020b).

3.1 Research design

The methodological path of this investigation consisted of 12 stages, as shown in Figure 1. The first was the creation of two guiding questions as a necessary development to reach the general objective of the investigation, from which it was possible to define the introductions of the articles as units of analysis, a stage where it was specified what types of elements that make up the introductions would be sought. The third stage was the definition of the level of analysis, determining the explanatory limits of the investigation, which would cover only the elements that would appear in that part of the articles.

Figure 1. Study design.
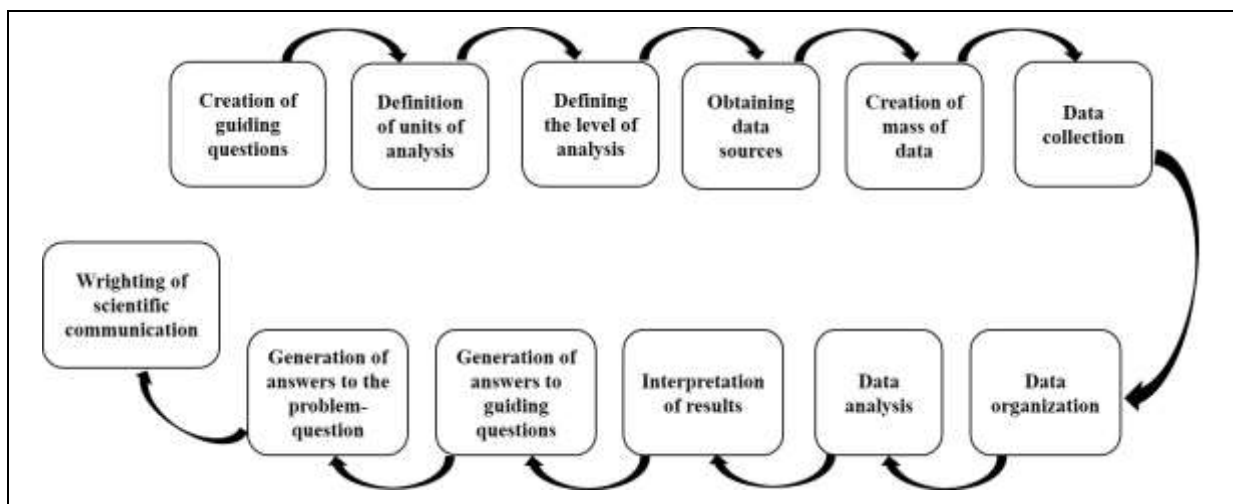
Source: Prepared by the authors.

The fourth stage consisted of capturing scientific articles from Brazilian magazines cataloged as A2 in Qualis / Capes, followed by the creation of the instrument where the data would be allocated, called the Mass of Data, fifth stage. The sixth was the data collection itself, followed by its organization, the seventh stage, where the answers obtained were allocated to each guiding question. In the eighth stage, the data were analyzed, identifying the relationships between them so that, in the ninth stage, their senses are constructed, the interpretation stage.

Based on the logical schemes and their meanings, the answers were constructed for each guiding question, which constituted the tenth stage. Then, in the eleventh stage, on the answers to the guiding questions, the answer to the global research question was constructed. The last stage consisted of preparing the final investigation report and transforming it into this scientific communication (Nascimento-e-Silva, 2020b).

3.2 Population and sample

The population object of this study consisted of all articles from the last current edition of 2018 of all journals in Portuguese, A2 concept of qualification in Qualis / Capes. The analyzed journals were: Revista de Administração Contemporânea (RAC), Revista de Administração de Empresas (RAE), Brazilian Business Review (BBR), Revista de Administração da Universidade de São Paulo (RAUSP), Revista Brasileira de Gestão de Negócios (RGBN), and Revista de Administração Pública (RAP). The size of the analyzed population corresponds to a total of 36 articles. Due to the fact that the population size is not very large and in order to give more precision to the results of the study, for this research, the sampling technique was not used, having performed the analysis and interpretation of data in the entire selected population.

In all the analyzed articles, a quantitative analysis of its structure was made, as well as the elements contained in its introductions were identified. All articles analyzed contained an introduction as an integral part of the text. In turn, in the structure of each introduction, elements of the introductions were present, although in some of them more completely than in others.

3.3 Data collection instrument

The construction of the data mass table was guided by the research's guiding questions. The data mass contains nine parts. In the first one, we sought to verify the size of the articles and their respective introductions. In the second, the objective was to identify the elements contained in each introduction. In the third, the number of paragraphs in each introduction was counted. In the fourth, the average of the periods per paragraph of each introduction was made and based on this step, the logic of the periods that refers to the fifth part was elaborated.

In the sixth part, the number of lines per paragraph was counted and based on this step, the logic of the paragraphs that refers to the seventh part was elaborated. In the eighth part, the objective was to verify if the paragraphs of the introductions followed the logic of after each statement is explained or exemplified. Finally, in the ninth and last part, the relationship between the introduction and other parts of the articles was analyzed.

3.4 Data collection strategy

On November 30, 2019, the last editions of 2018 were downloaded from the websites of Brazilian Portuguese-language magazines rated A2 on Qualis / Capes. The articles from the current editions of these journals, which were analyzed in this study, were saved in PDF to make the analysis more dynamic. Then, on November 30, the number of pages for each introduction was counted, as well as the total number of pages for each article. On December 1, 2019, in the morning, the number of paragraphs that contained each introduction was counted, as well as the number of lines for each paragraph, the respective average of lines per article was performed and the logic of the periods of the introduction was made. .

On December 2, 2019, in the morning period, the counting of the number of periods in each paragraph of each introduction by article and by magazine was started and their respective average and logic of the periods of the introduction were also completed, ending at afternoon on the same day.

On December 3 and 4, 2019, in the morning and in the afternoon, the articles were read, and the elements contained in the introductions were identified and accounted for. From that same reading, data were extracted from the relations of the introduction to the other parts of the articles and it was also verified whether in the paragraphs after each statement their explanation or exemplification was carried out.

3.5 Organization strategy and data analysis

The quantitative characteristics of each article were compiled and organized using Excel software. Through tables, the number of pages of the introductions as well as the number of pages of the articles were organized, by article and by magazine. In the same way and with the same counting technique, data on the number of paragraphs for each introduction were compiled, as well as the number and the respective line average of each paragraph. For this stage, the introductions were not read, only each data was counted. For the identification of the elements contained in each introduction, from its reading and analysis, each element that was present or not in its text was identified. The data were also compiled in Excel spreadsheets.

3.6 Results interpretation strategy

The results were generated from the analysis of each article in the selected journals. Without the need for reading, just using counting, the total number of pages of the articles, the number of pages of each introduction per article, the number of paragraphs that contained the introductions and the respective average were counted and summarized in tables. the number of lines in each paragraph and the averages must be counted. This information was saved in an Excel spreadsheet, in which in relation to the total page numbers of the article and the introduction, the lower and upper limits, as well as the difference and fashion of each magazine, were considered for the purpose of analyzing and interpreting the data.

Using reading, the presence of the initial elements of the introductions was analyzed (contextualization, justification / motivation / importance, theme / object); the central elements (general objective, specific objectives and Question-Problem) and the final elements (structure of the article, theoretical framework, result / conclusion and methodology). Regarding the initial, central and final elements, the frequency with which each element was present in each of the magazines was quantified. Thus, it was possible to arrive at a common denominator and quantify the elements from the perspective of each magazine.

3.7 Presentation of results

To facilitate the compilation and quick understanding and visualization of the collected data, the results of the analysis of the articles were exposed using tables. In this way

the reader can understand the exposed data as well as the research results in a dynamic way. Before and after each table an explanation of its content is also carried out with the interpretation of the data contained therein to facilitate the reader's understanding.

3.8 Study limitations

Two are the major limitations of this study. The main limitation is the fact that it covers only Brazilian journals published in Portuguese rated as A2 in Qualis / Capes. It is likely, therefore, that the journals qualified in the upper extract (A1) have slightly different structures from what this study found. In any case, it is possible that, following the structure presented here, most of the more stringent requirements are also covered.

The second concerns the content of the introductions. This study did not go into the merit of how the texts were written, how many paragraphs contained the introductions, what the internal structures of the paragraphs were, which systematic cohesion were practiced and how coherence was guaranteed. As they are concerns for future study, it would be necessary, before, to find the logic underlying those more superficial schemes, that is, dependent on the structure that this study found.

4. Results and Discussion

This part contains the findings of this investigation. It starts with the presentation of the characteristics of the analyzed articles, made in a structural way. Then it shows what are the initial, central and final elements of the introductions of articles published in the analyzed journals. At the end, a global outline is presented that summarizes all the empirical findings.

4.1 Characteristics of the analyzed articles

Table 1 shows the number of pages that the analyzed articles presented. Among them, introductions written on one page as a lower limit predominated, while those that occupied the most texts were written on three pages. These practices are summarized in the value of the difference between the largest introduction texts and the smallest ones, which was equal to one. However, what was found to be more frequent in the thirty-six articles studied were those with two pages, corresponding to the modal value.

Table 1. Page numbers of articles introduction.

Journals	Number of pages in the introduction			
	Smaller	Bigger	Difference	Mode
RAC	1	3	2	4
RAE	1	2	1	1-2
BBR	2	3	1	2
RAUSP	2	3	1	2
RBGN	1	3	2	2
RAP	1	2	1	1
Results	**1**	**3**	**1**	**2**

Source: Data collected by the authors.

These results show that the most frequent size of the introductions is the one that occupies two pages. Thus, two pages have been sufficient so that the authors can contextualize the problematic situation, present the problem that was treated, summarize the objective of the investigation and make available the other information they consider relevant so that the academic text can be understood in its scope. It is also likely that there is some relationship between the complexity of the problem addressed by the articles in relation to the number of pages written, a hypothesis that was not among the objectives of this investigation.

Table 2 shows the total number of pages in the analyzed articles. Among them, articles written on seventeen pages predominated as the lower limit, compared to the upper limit, which was twenty-six pages. The size of the articles can also be perceived more clearly by means of the difference between those who presented the largest number of article pages in relation to the smaller ones. The modal difference was equal to nine. However, what appears from the thirty-six articles analyzed, in general, was the modal value of 17-18 pages per article.

Table 2. Total page numbers of articles.

Journals	Number of Article Pages			
	Smaller	Bigger	Difference	Mode
RAC	18	26	8	18
RAE	12	14	2	12
BBR	17	21	4	17-18-21
RAUSP	19 (6)	28	9	20
RBGN	17	26	9	17
RAP	15	24	9	NT
Results	**17**	**26**	**9**	**17-18**

Source: Data collected by the authors.

These results show that articles in administration area published in magazines qualified as A2 in Qualis / Capes are presented with a minimum of seventeen pages, and a maximum of twenty-six, but that articles with seventeen and eighteen pages are more recurrent. It is assumed that there is some relationship between the complexity of the topic addressed in each article and the number of total pages written, so that more complex themes or procedures require a greater number of pages to be written.

In general, the content of the introductions can be divided into three groups. The first group is composed of the elements that start the introductory text, whose purpose is to draw the reader's attention to the content of the article, fulfilling, in a certain way, a role of "selling the idea", starting from the general to the specification of a determined question, in funnel format; the second group is constituted by the specification of the study, synthesizing and making precise the idea that will be presented throughout the article, as if the content of this second group was the consequence of the speech of the first; and the third group is made with the intention of allowing the reader to understand the logic of the idea's exposition, which will be found beyond the introduction.

4.2 Initial elements of the introduction

We tried to identify the elements that appear at the beginning of the introductions of the analyzed articles. Table 3 presents the results obtained for this purpose. The first column on the left identifies the journals studied, the second quantifies the articles analyzed by magazine, while the third, fourth and fifth shows the elements found in the introductions of the investigated articles. The numbers represent the absolute frequency of occurrences.

The introduction elements found in the articles were context, justification / motivation / importance and theme / object. As a rule, the introductions begin with the contextualization of the central themes of the studies, followed by the justification and motivation for carrying out the study or the importance of the discovery that the article brings. The explanation of the theme / object of the article was presented in thirty-one of the 36 articles analyzed, a rule that is almost always not followed by articles from RAP.

Table 3. Initial elements in introductions.

| Journals	Number of articles	Contextualization	Justification / Motivation / Importance	Theme / Object
RAC	6	6	6	6
RAE	4	4	4	3
BBR	6	6	6	6
RAUSP	7	7	7	7
RBGN	8	8	8	8
RAP	5	5	5	1
Total	36	36	36	31

Source: Data collected by the authors.

These results indicate that the following logical scheme for the writing of the introductions is practiced, based on the analysis of the articles published in these journals: it begins with the contextualization of the study and then presents the authors' justifications or motivations for the its realization, highlighting the importance of discovery for the Administration area. The theme or object of the study is not only explicitly presented in the RAP, being common in all articles in all the journals studied. The artifice of letting the theme / object of what is being talked about is quite characteristic of non-scientific literature, which requires the reader to fill this gap, forcing him to participate in the construction of the text. This practice is not recommended by science, which strives to reduce ambiguity to the maximum.

The contextualization, in most of the analyzed articles, extends for several paragraphs, leading the reader to have, in addition to the panoramic view of the theme, a specific view, which usually ends with the "justification / motivation and importance" of the study. The "justification / motivation and importance" element is, for the most part, highlighted, being clear its identification in the introductions. Although it is usually found as a constant part of contextualization, this element is the completion of contextualization and never presented before it. The "theme / object" element is usually found next to the "question-question" element of the research and the "general objective" and, most of the time, it is present below "contextualization" and "justification / motivation and importance", and it is found discreetly, without specifications such as "the theme of this work is ..." or "the object of this work is ...".

In analogical terms, the resulting logical scheme found in the analyzed literature for writing the introductions of scientific articles in administration would be "talking about something" (calling attention + justification / motivation + importance). In mathematical structure, $f(int) = phenomenon (cont + j / m / i + t / o)$ could be synthesized. This means that

the introductions deal with a specific organizational or managerial phenomenon based on the description of the context in which this phenomenon operates, around a specific theme or objective, highlighting its fundamental aspects or its operation that justify the study and give meaning motivation for that purpose.

Figure 2. Scheme of the initial elements of the introductions.
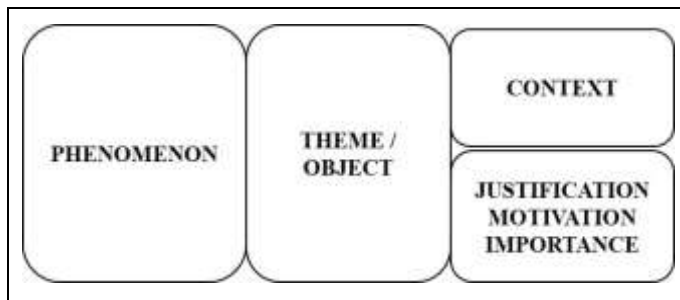
Source: Prepared by the authors.

As shown in Figure 2, the description of the context and the operational dynamics of the phenomenon are made in such a way as to make evident the importance of what will be reported in the article for the Administration area, which demonstrates its importance, justifies the study accomplished and the motivational sense of the researcher is understood. The delimitation of the phenomenon around a theme or object facilitates its contextualization and expands the comprehensive possibilities of the idea being presented, as suggested by Zinani (2007), Smidt (1992), Borges (2006) e Swales (1987).

4.3 Central elements of the introduction

Right after the initial elements appear the elements that, in this study, were cataloged as central. Table 4 presents the central elements of the introduction found in the articles: general objective, specific objectives and question-problem. Unlike the initial elements, the central ones do not appear as often in the texts, except for the general objective, which only did not appear in 6 of the 36 articles analyzed. Conversely, the specific objectives were only explicitly written in 6 of the 36 articles, while the presentation of the research question or problem was found in 15 of the studied texts.

Table 4. Central elements of the introductions.

Journals	Number of articles	General objective	Specific objectives	Question-Problem
RAC	6	6	0	1
RAE	4	3	0	2
BBR	6	4	2	4
RAUSP	7	5	2	3
RGBN	8	8	1	4
RAP	5	4	1	1
TOTAL	36	30	6	15

Source: Data collected by the authors.

The central elements are the point of convergence of the entire discourse that precedes it. The intention of scientists when writing this part is clearly to show that what the article is willing to show is fundamental for the whole area of Administration. It is the reason for the existence of the text itself, so that when it is written that "this article aims to" or "the question that guided this study was" this is precisely what is being said: if this were not of essential importance , would not be brought to the attention of the reader. This essentiality can only be perceived through the interpretation of the very structure of the objective phrase and the question-problem, but from the consistency and robustness of the information and efforts to convince found in the initial elements. While in the essential elements' precision resources are mixed with literary techniques, in the central elements, precision and synthesis are worth.

When the general objective joins the problem question, the introduction seems to gain in precision. The general objective is the reverse of the problem question. If the general objective is intended to "Show the relationship between size and organizational technology", the question-problem generally maintains the same base of the syntactic structure "relationship between size and organizational technology", changing the initial differentiating elements: for the general objective, there must be a verb in the infinitive; for the problem question, an interrogative pronoun. Thus, "Showing the relationship between size and organizational technology" is the general objective because it has an infinitive verb and "What is the relationship between size and organizational technology?" it is a problem question because it has an interrogative pronoun. Among the journals analyzed, only the articles from BBR present a general objective and a question-problem simultaneously. Figure 2 schematically represents the logical structure found in the literature regarding the central elements of the introductions.

Figure 2. Scheme of the central elements of the introductions.
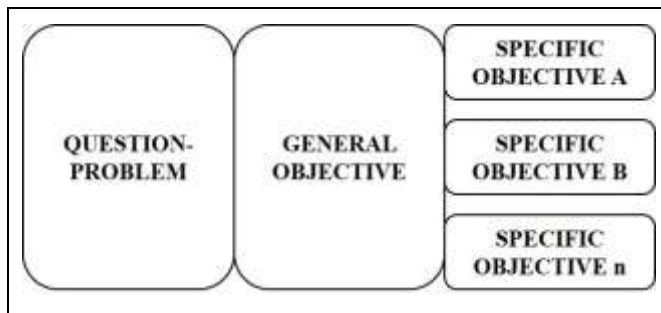
Source: Data collected by the authors.

Specific objectives rarely appear in introductions. In the articles published by RAC and RAE, they did not appear in any of the issues analyzed. They are less uncommon in BBR and RAUSP. In addition to making the focus of the study more precise, the specific objectives metaphorically represent greater discursive bottlenecks, taking as a reference the initial breadth of context. But it is likely that the precision obtained with the joint presentation of the general objective and the question-problem will render its presence in the introductions harmless.

There is no standard for the presentation of the central elements. In some articles the general objective appears first, and then the question-problem comes; in others the problem question precedes the general objective. But the most common is to come alone: when you have a general objective, you do not have a problem question and vice versa. Specific objectives, when they appear, come after the general objective.

4.4 Final elements of the introduction

Table 5 presents the elements here called final because they are part of the end of the scientific articles analyzed. The table shows the total number of articles analyzed and the quantification of the total final elements (at the bases of the columns) and individually per magazine (in the lines). The initial elements found were "article structure", "theoretical framework", result / conclusion "and" methodology ".

Table 5. Final elements of the introductions.

	Number of articles	Article structure	Theoretical reference	Results / Conclusion	Methodology
RAC	6	4	2	4	6
RAE	4	4	2	3	1
BBR	6	3	1	4	2
RAUSP	7	4	2	4	4
RGBN	8	4	1	4	5
RAP	5	3	0	3	4
TOTAL	36	22	8	22	22

Source: Data collected by the authors.

Internally, the final elements can be divided between article structure and post-introductory elements. The structure of the article presents the content of the text's subdivisions, while the post-introductory elements are a form of dialogue between the introduction and the other parts of the text. The introductory elements can be cited in the presentation of the text structure. Although uncommon, they can also appear in the central and initial parts. However, the presentation of the structure only appears at the end of the studied texts.

What is being called here as a theoretical framework has as equivalent terms "theoretical framework", "theoretical foundations" and "theoretical architecture" and are presented as belonging to the second chapter of scientific articles. Of the 36 articles analyzed, 31 presented "Theoretical Reference". The exception is found in the 5 articles of Revista de Administração Pública (RAP), where none of the articles were cited.

There was a significant presence of the "structure of the articles" and of the "results / conclusion" in the introductions of the analyzed articles. The "structure of the article" was presented in a majority form, that is, with over 50% of the texts of the introductions. The element "Result / conclusion" was the second in frequency found in the articles.

The element "methodology" was presented in a divided way in the articles. In the Revista de Administração de Empresas (RAE), this element appeared in 1 single article, compared to the 4 analyzed. In the Revista de Administração Contemporânea (RAC), it appeared in all 6 analyzed articles. In RAUSP, RGBN and RAP is quite common, unlike BBR, where it appeared only 2 times among the 6 published articles.

Both the "Result / Conclusion" and the "Methodology" are often located within the very description of the article's structure. This means that the author, when citing the organization of his article, mentions these elements, but this does not exclude cases where

these elements are found throughout the text of the conclusion. Figure 2 schematically represents the logical structure found in the final elements of the introductions.

**Figure 3.** Scheme of the final elements of the introductions.
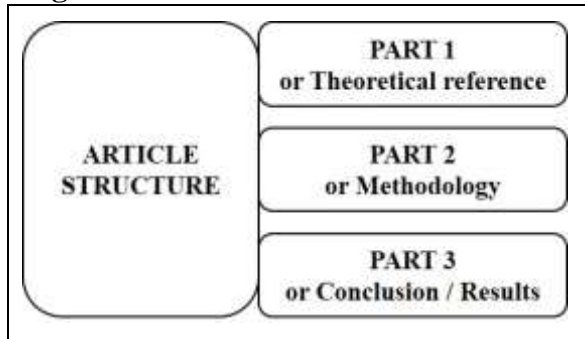
Source: Data collected by the authors.

These results show that there is a pattern in the final elements, which is to present the structure of the articles, methodology and the results / conclusion, as shown in figure 3. Although the components of the other parts of the articles may appear throughout the entire introduction, the most common place to find them is in the presentation of the structure of the texts. When the articles do not mention the title of the sections of the text, they identify their contents with expressions such as "the second part shows that ..."

4.5 Overall layout of introductions

Figure 4 shows that it is possible to find a logical scheme valid for all introductions of scientific articles published in Brazilian journals qualified as A2 in Qualis / Capes. Synthetically, this scheme starts from the presentation of something that is happening in the reality of the organizations that needed to be investigated; then the culmination of this occurrence is shown, which is precisely what will be revealed as a great discovery; and ends with the logical chain to be followed for the revelation of this great find.

Figure 4. Overall layout of the introductions.
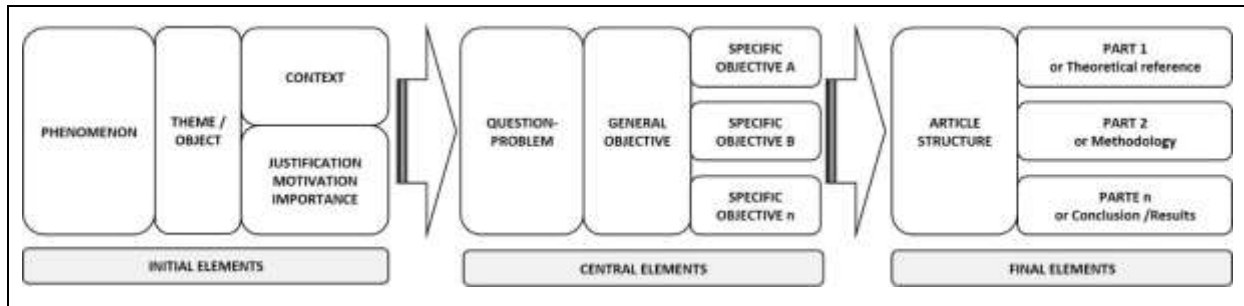
Source: Data collected by the authors.

The first part is composed by the contextualization of a theme or an object, which is the description of the behavior of a certain phenomenon still unknown to the scientific community towards which the scientific vehicle is aimed. Throughout the context, it becomes evident the importance of knowing that behavior, understanding the motivation of the researchers to carry out the investigative enterprise, which helps to justify the conduct of the research.

The second part is a consequence of the first. It begins with the synthesis of the reason for writing that article, as a way of specifying, making precise, what will be shown, what has been discovered, and ends with more specifications, in case the authors consider any possibility of not understanding with precision the purpose of scientific communication. The purpose of the second part is precisely to make sense of the context presented, helping the reader to buy the idea and / or continue reading the text.

The third part is the unfolding of the second. Here are presented precisely what the reader will find in each part of the text. It can be done in a generic way such as "The second part presents the theoretical framework of the investigation" or specific, such as "The third part makes it evident that there are no investments without return, even if this is in the form of learning, to the detriment of monetary failures. ". Here it is possible to have a complete view of the entire text.

Synthetically, the first part of the introductions has the function of "selling an idea", the second part is in charge of showing the idea in a synthetic way and the third part shows the stages of "delivery" of the idea (in the case of theoretical essays) or the "Production" of the idea. This shows, finally, that every scientific article is a way of communicating some discovery that is considered especially important for a given scientific community. Scientific journals are the vehicle, the channel of communication for this important message. The entire

message is summarized in the introduction. But only those who know the introductory structural components can adequately understand the message communicated.

5. Conclusion

This study presented a logical scheme found in the introduction of scientific articles in the field of Administration qualified as A2 in Qualis / Capes. The scheme is structured in three parts: initial elements, central elements and final elements. This nomenclature is due to the order that they must obey following the writing. The first part is responsible for contextualizing the reader about the universe in which that research is found, as well as the important reasons for carrying out this research, the second part is a consequence of the first, and the third part is the unfolding of the second.

The discovery of this logical scheme will assist in the challenge faced by the authors when submitting their articles to scientific journals. The publication of a scientific article in a journal requires the student to know about academic literature, which in turn has its own language and rules. Therefore, the logical scheme has exactly this function, to facilitate and assist the student in the knowledge of the writing structure of an introduction to a scientific article.

From the logical scheme defined in this work, the beginning student or the student already experienced in publication may come to orient himself. Although each journal has its own publication rules, the logical scheme defined here covers them all, since the analysis carried out in this research did not occur in a single magazine, but in several. This current need that universities see imposing on students in relation to publication, requires from them, a certain practicality that obtaining a logical scheme is essential for the development of a scientific article.

The logical scheme will serve in the preparation of essays and scientific texts, which make up the modalities of texts called academic. Each textual production has its particularities, and academic texts are no different. In addition to understanding its writing, the author of an academic text should be especially concerned with the introduction part, which is the gateway to the research. It is the introduction that presents the research, it is the introduction that often defines the publication of that article or not.

Knowledge about the parts that make up the structure of writing a scientific article introduction helps to develop more accurate and exciting texts. The introduction that contains all the elements necessary for understanding the research, but at the same time is a smooth

and thought-provoking writing, can make the article an important differentiator. After all, it is from reading the introductions that reviewers get knowledge about the topic addressed, its innovation, its objectives, its relevance to the academic world, as well as, if that article under analysis is part of that journal's line of research.

As an indication for future work, it would be interesting to investigate the structures of the other parts of the scientific articles published in magazines classified as A2 and A1 in Qualis / Capes. More precisely, these studies could focus on a) the components of the theoretical frameworks, b) the structure of the study methodologies, c) the logical outline of the presentation and discussion of the results and d) how the conclusions are structured.

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