ARTICLE

RDBCI Revista Digital Biblioteconomia e Ciência da Informação

RDBCI Digital Journal of Library and Information Science

doi: 10.20396/rdbci.v017i0.8656872/e019038

BIBLIOMETRY OF THE ENACIB(1994 TO 2018)

BIBLIOMETRIA DO ACERVO ENANCIB (1994 A 2018)

[1]Marcelo Maia

Universidade Federal do Paraná,
Curitiba, PR - Brazil

[2]Denise Fukumi Tsunoda

Universidade Federal do Paraná
Curitiba, PR - Brazil

Submitted: 29/09/2019
Accepted: 11/10/2019
Published: 10/12/2019

Correspondence

E-mail: maiamarcelomaia@hotmail.com

Antiplagiarism

turnitin

JITA: BB. Bibliometric methods

e-Location: e019038

ABSTRACT
One of the largest research and postgraduate events in the Information Science area in the country. Thus, the goal of this work is to map scientific production through bibliometric analysis, characterizing Enancib from the works published on the events pages, comprising the 19 editions so far, absorbing the groups of works. The corpus of study was composed of 4,282 publications in the event, inserted and processed in Microsoft Excel software, generating frequency information and number of published items of the most productive authors and co-authors, author position of the most productive authors, and these are separated by edition. and by working group. The study allows to verify the trajectory of the existence of the National Meeting of Research in Information Science, as for the components: publications, authors and co-authors more productive by edition, work group and in the whole of the event, 24 years. The research revealed that being in first place, as the most productive author of the event of the analyzed editions, does not mean that the author is the most productive by edition and also by work group. Also revealed, the number of authors in each working group, edition, demonstrating that the area of information science is constantly growing.

KEYWORDS
Lotka's law; Authors; Co-Authors; Enancib

RESUMO
Um dos maiores eventos de pesquisa e de pós-graduação da área de Ciência da Informação do país. Sendo assim o objetivo desse trabalho mapear a produção científica por meios de análises bibliométricas, caracterizando o Enancib a partir dos trabalhos publicados nas páginas dos eventos, compreendendo as 19 edições até o momento, absorvendo os grupos de trabalhos. O corpus de estudo foi composto de 4.282 publicações no evento, inserido e processado no software Microsoft Excel, gerando informação de frequência e número de itens publicados dos autores e coautores mais produtivos, posição de autoria dos autores mais produtivos, sendo estes separados, por edição e por grupo de trabalho. O estudo permite verificar a trajetória da existência do Encontro Nacional de Pesquisa em Ciência da Informação, quanto aos componentes: publicações, autores e coautores mais produtivos por edição, grupo de trabalho e na totalidade do evento, 24 anos. A pesquisa revelou que o fato de o autor estar no primeiro lugar, como o autor mais produtivo do evento das edições analisadas, não significa que este seja o mais produtivo por edição e também por grupo de trabalho. Também revelou, o quantitativo de autores em cada grupo de trabalho, edição, demonstrando que a área de ciência da informação está em constante crescimento.

PALAVRAS-CHAVE
Lei de Lotka; Autores; Coautores; Enancib

1 Introduction

The study of "information mediation has expanded in the field of Information Science, driven by the interest in understanding what conditions and moves it, what characterizes and shapes who participates" (FIALHO, NUNES; CARVALHO, 2017, p. 253). Thus, the academic production, published in events, meetings and congresses, presents numerous authors, which it is up to researchers to "decide [...] in which order their names should be arranged" (MONTENEGRO; ALVES, 1997, p.273), which implies the "counting of the literature produced: direct, complete and fractional" (URBIZAGASTEGUI, 2008, p.87).

One way to verify the productivity and memory of several studies in the field of knowledge is bibliometric research, which has a central research axis, which is the productivity of authors (URBIZAGASTEGUI, 2008). Mapping scientific production "through quantitative and qualitative analysis is to contribute to the constitution of a stronger scientific field, [...] since scientific journals are representative channels for the dissemination and socialization of scientific knowledge" (EVEDOVE; FUJITA; TARTAROTTI, 2013, p.2).

In this context, the event under consideration is the National Meeting of Information Science Research (ENANCIB) from the first edition (1994) to the nineteenth (2019), focused on bibliometric elements. The authors Santos; Reis, Dumont (2018), Fialho; Nunes and Carvalho (2017), Tartarotti; Fujita (2016), Castro; Oliveira (2016), Moreira; Moraes (2016), Evedove; Fujita; Tartarotti (2013); They also conducted studies on Enancib's trajectory, but with a different focus. The authors Santos; Reis, Dumont (2018) describe the analysis of the research profile that involves reading as a social practice based on bibliometry, Fialho; Nunes and Carvalho (2017) analyze the relationship between the scientific production in the ENANCIB GT3 and the CNPq, Tartarotti; Fujita (2016) characterizes the Brazilian scientific community from the publication of works in GT2 from 2009 to 2014 with the use of bibliometric indicators of production and connection. And Castro; Oliveira (2016) analyze the production from 2012 to 2015 on the indexing language, Moreira; Moraes (2016) describes the theme of how classification has been approached in Brazilian information science, identifying the most productive researchers between 2003 and 2014, and Evedove; Fujita; Tartarotti (2013) characterizes the Brazilian scientific community in the indexing theme from the articles from 2003 to 2012 through bibliometric indicators.

Thus, the objective is to map scientific production by means of bibliometric analysis, characterizing Enancib from the works published on the events pages, comprising the 19 editions so far, absorbing the groups of works. The separation into working groups "provides the visualization of parameters that make it possible to evaluate and rethink their objectives and provides decision-making support for a reprogramming of their growth strategies" (GRACIO; OLIVEIRA, 2010, p.3), when the groups express "measurement, mapping,

diagnosis and evaluation of information in the processes of production, storage, communication and use in science, technology and innovation" (GRÁCIO; OLIVEIRA, 2010, p.2).

This study is justified by the lack of exploration of the application of Lotka's law (URBIZAGASTEGUI, 2008), such that the "model has become the central axis of contemporary bibliometric research [...] such as periodicals, book chapters, papers presented at congresses and similar information channels capable of making public the results of a research" (URBIZAGASTEGUI, 2008, p.87), and also that "scientific events are relevant to the understanding of the status and the directions that information science presents" (MOREIRA; MORAES, 2016, p.1).

In this paper, we sought to indicate and discuss: the number of publications in all editions, by working group (WG), the characteristic of authorship (including the application of Lotka's Law), author position, whether in the editions or by working group, number of authors (main - 1st author and co-authors - other), and main authors of the event.

To develop the present study, the history and aspects of the studied event are initially presented, followed by the methodological foundations and the procedures adopted for its accomplishment, finally, the main results and final considerations, followed by the references.

2 National Information Science Research Meeting

The main event in the area of Information Science in the country, focused on research, encourages teachers, researchers, graduate students and professionals in the area, to reflect and share scientific production, aimed at the exchange of academic experience and the strengthening of academic traits, it is called National Information Science Research Meeting - ENANCIB, which for Noronha et al (2007, p.183) "constitutes [...] as an event that has contributed so much to the engagement of members involved in the post-graduate in the field, as in the possibility of knowing the current state of the art of research and its evolutionary."

In the year 2019, it's in its XX edition, which will be held in Florianópolis, Santa Catarina, in October with the theme "Information science and the age of data science", and the National Association for Research and Postgraduate in Information Science - ANCIB in one of its fronts, structures the event.

Ancib, founded in June 1989, is a non-profit civil society that aims to "monitor and stimulate postgraduate teaching and research activities in Information Science in Brazil" (ANCIB, 2019).

Enancib "aims to discuss and reflect the themes, perspectives and trends of Information Science research, in order to stimulate and promote the advancement of

knowledge generation in the area [...], through a wide dialogue between researchers who work in it (ENANCIB, 2019), and the first edition took place in 1994, in the state of Minas Gerais, represented in chart 1. The editions, first (1994), second (1995) and third (1997), did not present in their meetings a definite central theme.

Chart 1. History, location and theme of ENANCIB – 1994 to 2018

ENANCIB	ANO	PERÍODO	INSTITUIÇÃO	LOCAL	ESTADO	TEMA
XIX	2018	Outubro	UEL	Londrina	PR	"O Sujeito Informacional e as Perspectivas Atuais em Ciência da Informação".
XVIII	2017	Outubro	UNESP	Marília	SP	"Informação, Sociedade, Complexidade".
XVII	2016	Novembro	UFBA	Salvador	BA	"Descobrimentos da Ciência da Informação: desafios da Multi, Inter e Transdisciplinaridade (MIT)".
XVI	2015	Outubro	UFPB	João Pessoa	PB	"Informação, Memória e Patrimônio: do documento às redes".
XV	2014	Outubro	UFMG	Belo Horizonte	MG	"Além das 'nuvens': expandindo as fronteiras da Ciência da Informação".
XIV	2013	Outubro e novembro	UFSC	Florianópolis	SC	"Informação e interação: ampliando perspectivas para o desenvolvimento humano".
XIII	2012	Outubro	Fiocruz	Rio de Janeiro	RJ	"A sociedade em rede para a inovação e o desenvolvimento humano".
XII	2011	Outubro	UnB	Brasília	DF	"Políticas de Informação para a Sociedade".
XI	2010	Outubro	IBICT/UFRJ; Fiocruz; UNIRIO	Rio de Janeiro	RJ	"Inovação e inclusão social: questões contemporâneas da informação".
X	2009	Outubro	UFPB	João Pessoa	PB	"A responsabilidade social da Ciência da Informação".
IX	2008	Setembro e Outubro	USP	São Paulo	SP	"Diversidade cultural e políticas de informação".
VIII	2007	Outubro	UFBA	Salvador	BA	"Promovendo a inserção internacional da pesquisa brasileira em Ciência da Informação".
VII	2006	Novembro	Unesp	Marília	SP	"A dimensão epistemológica da Ciência da Informação e suas interfaces técnicas, políticas e institucionais nos processos de produção, acesso e
VI	2005	Novembro	UFSC	Florianópolis	SC	"A política científica e os desafios da sociedade da informação".
V	2003	Novembro	UFMG	Belo Horizonte	MG	"Informação, conhecimento e transdisciplinaridade".
IV	2000	Novembro	UnB	Brasília	DF	"Conhecimento para o Século XXI: a pesquisa na construção da Sociedade da Informação".
III	1997	Setembro	IBICT/UFRJ	Rio de Janeiro	RJ	
II	1995	Novembro	PUC-Campinas	Valinhos	SP	
I	1994	Abril	UFMG	Belo Horizonte	MG	

Source: Elaborated by the authors (2019)

From this VI edition (2005) the meetings take place annually, in several states in the Brazilian territory, which is divided into five regions (North, Northeast, Midwest, Southeast and South). There is a predominance of the Southeast region with 52.6% (comprising the states of São Paulo, Rio de Janeiro and Minas Gerais - totaling ten editions) in the locality of the event, followed by the Northeast region (João Pessoa and Salvador, with four editions), South region (Paraná and Santa Catarina, with three editions) and Midwest region (Federal District, with two events).

3 Method

The research is a quantitative approach, classified as exploratory and descriptive. As a research method we adopted the bibliographic, having as corpus the works published in Enancib in the period from the first edition (I - 1994) to the last edition (XIX - 2018). All editions are available via electronic access, on the page of the respective event or on Ancib's page; the access link of all the editions (http://enancib.ibict.br/index.php/enancib/index/schedConfs/archive).

Data collection took place manually and were entered into a spreadsheet using the MS-Excel software, which comprises the following fields: edition (number representing edition I to XIX), year (year of the event), work group (work group or thematic session that belongs to the work), communication (classified in poster or complete paper) and authors (name of the researchers who developed the research) (Chart 2).

Chart 2. ENANCIB collected items entry – 1994 to 2018

Edição	Ano	Grupo de Trabalho	Comunicação	Autor	Coautor 1 até o 18
nº. da edição que representa (I a XIX)	Ano do evento	Grupo de Trabalho (GT) ou sessão temática que pertence o trabalho	Classificado em pôster ou trabalho completo	Responsável pelo desenvolvimento da pesquisa	
Quantidade de itens				Nome dos autores	

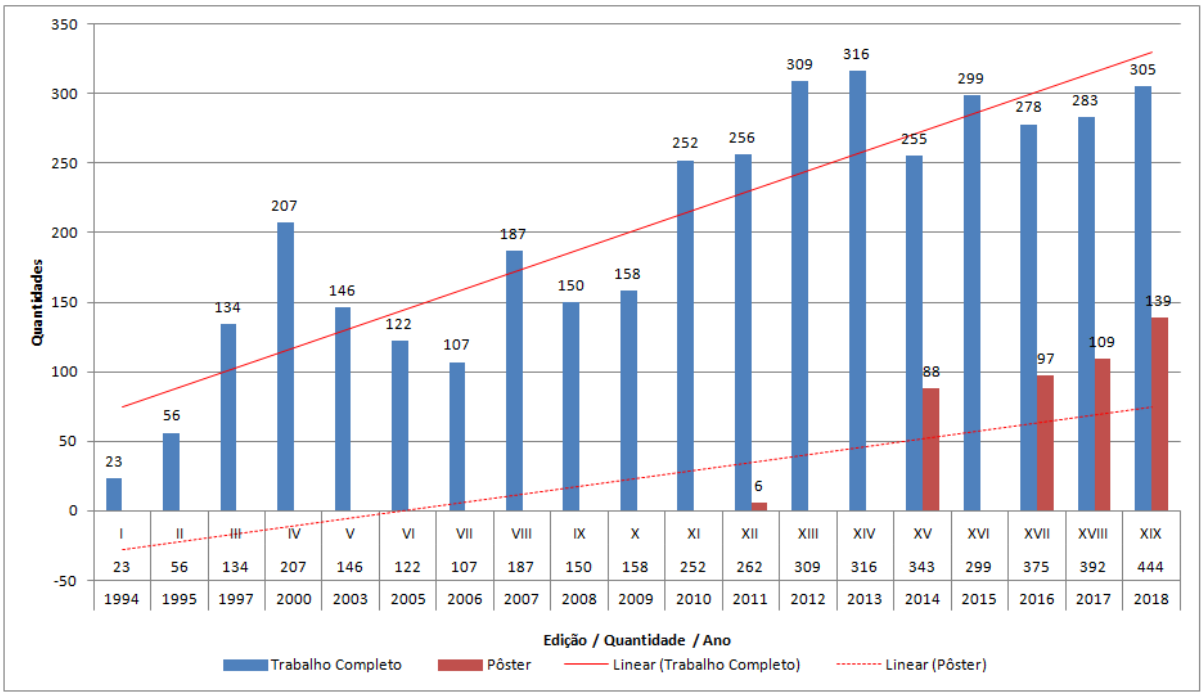
Source: Elaborated by the authors (2019)

The entries edition, year, work group and communication were used to quantify the items, as evolution of scientific production (by edition, by work group, number of authors in each group) and the authors field for the definition of the more productive authors (whether by edition, by work group or at the event as a whole), by applying Lotka's Law (BEUREN; SILVA, 2014; GUEDES, 2012; URBIZAGASTEGUI, 2008). In the authors' field, there was a need to investigate the full name of the authors for standardization, since not all items have the full name. The investigation occurs due to non-standardization regarding the abbreviation of names among the 19 editions such as (Carlos H. Marcondes - Carlos Henrique Marcondes; Carmen Irene C. de Oliveira - Carmen Irene Correia de Oliveira, among others). Thus, they were consulted in the collected data of the authors, if the same name of the abbreviated surname has already been published in the event, if it was, if it was standardized and if not, then searched in the researcher's academic profile.

4 Results: presentation and discussion

The analysis comprises the National Meeting of Information Science Research - ENANCIB, from 1994 to 2018, from the first to the nineteenth edition. The analysis comprises 4,282 items, of which 3,843 complete papers and 439 in poster mode. In this data, the average publication was 225 items, with a standard deviation of 119, the high standard deviation is due to the fact that there are few publications in the first editions. However, there is a growing trend, in full paper and poster, represented by the dashed line in red (Chart 1).

Graph 1. Evolution of scientific production - I to XIX Edition of the National Information Science Research Meeting



Source: Elaborated by the authors (2019).

In this context, the publications began with 23 occurrences in 1994, showing growth in practically every year except (2003, 2005, 2006, 2008 and 2015), which occurred in relation to its previous year. The fall caused by some working groups, caused a decrease in publications compared to the previous year, with greater expression, as in 2005 the WG 4 - Information and Knowledge Management; 2006, WG 3 - Measurement, circulation and appropriation of information; 2008, WG 2 - Knowledge organization and representation and WG 7 - Information production and communication in science, technology & innovation; and 2015 WG 7 - Information production and communication in science, technology & innovation.

The peak of publications came in 2018 with 444 items (both full paper and poster), a growth of 13.27% over the previous year. Based on the XIX editions and the total number of publications over Enancib's 24 years, the average publication is practically 225 items, exceeding this value after the XI edition (2010), in all editions after this period.

In the editions (I, II, III) the works are separated into thematic sessions and in the fourth edition, the works are listed in alphabetical order, since there is no uniformity for the published work groups, the respective items (23, 56 , 134 and 207), will be disregarded for further analysis, will also be disregarded seven items of the V edition (by virtue of the classification general submissions) and four items of the XVII (by virtue of presenting the classification as a conference of invited researchers). Thus, the new corpus of analysis will consist of 3851 items (complete paper and poster).

Thus, the editions V to XIX, from 2003 to 2018, were separated by the working groups, which according to Rabello (2013, p.157) "can cover two types: a) group of people working on the same project or b) group of people who share information in the same functional and / or disciplinary interest ".

The working groups are called GT1 through GT11, and are "the result of the discussion by the Working Group Coordinators Forum, which took place during the VI Enancib, [...] called Criteria for Creation, Operation and Evaluation of Working Groups at Ancib. "(ANCIB, 2019), under the names (WG 1 - Historical and Epistemological Studies of Information Science; WG 2 - Knowledge Organization and Representation; WG 3 - Information Measurement, Circulation and Appropriation; WG 4 - Information Management; WG 5 - Information policy and economy; WG 6 - Information, education and work; WG 7 - Information production and communication in science, technology & innovation; WG 8 - Information and technology; WG 9 - Museum, heritage; WG 10 - Information and memory, and WG 11 - Information and Health), depending on the edition, there is a quantification of the number of WG and some specificities of the edition according to Chart 3:

Chart 3. Quantification of scientific production by working group - V to XIX Edition of the National Meeting of Research in Information Science

		EDIÇÃO														
		V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX
Cidade do evento		Londrina	Marília	Salvador	João Pessoa	Belo Horizonte	Florianópolis	Rio de Janeiro	Brasília	Rio de Janeiro	João Pessoa	São Paulo	Salvador	Marília	Florianópolis	Belo Horizonte
Submissão geral		X														
Grupos de Trabalho (GT)	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	8	X				X	X	X	X	X	X	X	X	X	X	X
	9				X		X	X	X	X	X	X	X	X	X	X
	10							X	X	X	X	X	X	X	X	X
	11								X	X	X	X	X	X	X	X
Conferência dos pesquisadores convidados														X		

Source: Elaborated by the authors (2019).

After the classification and union of the editions (V to XIV), according to table 4, it is possible to observe the quantity of items by work group, by edition, and if the respective

group obtained growth (represented by the green color), equality (represented by the yellow color) and decrease (represented by the red color) compared to its previous edition.

Chart 4. Evolution of scientific production by working group - V to XIX Edition of the National Information Science Research Meeting

Ano	2003	2005	C	2006	C	2007	C	2008	C	2009	C	2010	C	2011	C	2012	C	2013	C	2014	C	2015	C	2016	C	2017	C	2018	C	Total
Edição	V	VI		VII		VIII		IX		X		XI		XII		XIII		XIV		XV		XVI		XVII		XVIII		XIX		
GT1	17	16		14		20		21		17		20		23		28		25		20		18		29		27		29		**324**
GT2	17	25		23		46		23		29		29		35		28		40		54		36		61		65		49		**560**
GT3	17	31		21		27		20		20		19		24		34		32		24		25		29		37		53		**413**
GT4	24	12		19		23		16		10		42		24		24		33		37		40		42		46		62		**454**
GT5	14	13		11		17		23		23		21		26		31		25		32		24		27		32		45		**364**
GT6	20	10		7		8		17		13		21		16		21		18		25		16		22		22		25		**261**
GT7	15	15		12		29		14		11		25		28		30		37		41		29		48		57		45		**436**
GT8	15							16		20		27		22		30		40		37		32		31		44		48		**362**
GT9						17				15		12		17		22		19		23		22		20		19		31		**217**
GT10												36		34		38		27		35		37		42		27		45		**321**
GT11														13		23		20		15		20		20		16		12		**139**
Total	**139**	**123**		**108**		**187**		**151**		**159**		**253**		**262**		**309**		**316**		**343**		**299**		**371**		**392**		**444**		**3851**
C = divisão do ano atual com o ano anterior (mesmo grupo de trabalho)																														
Legenda:			Aumento em relação ao ano anterior											Igualdade em relação ao ano anterior										Menor em relação ao ano anterior							

Source: Elaborated by the authors (2019).

It appears that in all working groups there are decreases and increases compared to the same group in a previous edition, highlighting group 4 (Information and Knowledge Management), which in the last six editions have shown growth (represented by the color green). It can be observed that the working group 10 (Information and memory) being presented since 2010, practically equals group 1 (Historical and epistemological studies of information science) that has been available since 2003, showing that researchers have been interested in the study "on the relationship between the fields of knowledge of Information Science and Social Memory. Transdisciplinary research [...] Collective memory [...] Social representations and knowledge [...] Articulation between art, culture, technology, information in memory [...] Preservation and virtualization of social memory "(ENANCIB, 2019). Also noteworthy is the working group 3 (Mediation, Circulation and Appropriation of Information) represented by the "study of processes [...] in different historical contexts and times [...] as well as diverse theoretical-methodological contributions in their constitution" (ENANCIB, 2019), make up productions of information metrics (infometry, bibliometrics, webmetry, altimetry, etc.) represents an average of 27 items and a standard deviation of nine items, with growth in the last editions (since the XVI, 2015).

Regarding the number of authors per item and by working group, the data show a variation between one and 18 authors for each item, except (10, 12, 13, 14, 15, 16 and 17), which in none item has this number of authors. For the study, it is considered as "main author" the one who is in the first position of the item, and as co-authors those who are from the second (2nd) position onwards. According to Youtie; Borzeman (2014) and Hilario; Grácio; Wolfram (2017) the author of greatest scientific and intellectual contribution to the research appears as the first author.

Chart 5 shows the amount of work produced in relation to authorship, starting with only one authorship, in collaboration with two, up to eighteen, separated by work group.

Chart 5. Frequency and number of published items by authors by working group - V to XIX Edition of the National Information Science Research Meeting

	Quantidade de autores por trabalho														
Grupos de Trabalhos	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**11**	**14**	**18**	**Total**	**%**	**% acum.**
GT 1: Estudos Históricos e Epistemológicos da Ciência da Informação	150	138	22	8	3	2		1					324	8,41	8,41
GT 2: Organização do Conhecimento e Representação da Informação	106	354	71	15	5	7	1				1		560	14,54	22,96
GT 3: Mediação, Circulação e Apropriação da Informação	107	240	42	15	2	4	1		2				413	10,72	33,68
GT 4 : Gestão da Informação e do Conhecimento nas Organizações	67	276	70	25	11	4	1						454	11,79	45,47
GT 5 : Política e Economia da Informação	89	212	48	12	2		1						364	9,45	54,92
GT 6 : Informação, Educação e Trabalho	56	147	33	15	8			2					261	6,78	61,70
GT 7 : Produção e Comunicação da Informação em Ciência, Tecnologia & Inovação	62	239	89	30	14	1		1					436	11,32	73,02
GT 8 : Informação e Tecnologia	45	187	78	25	15	7	3	1		1			362	9,40	82,42
GT 9 : Museologia, Patrimônio e Informação	78	106	27	4		1	1						217	5,63	88,06
GT 10: Informação e Memória	92	152	64	11	2								321	8,34	96,39
GT 11: Informação e Saúde	7	78	30	14	8	1						1	139	3,61	100,00
Total	**859**	**2.129**	**574**	**174**	**70**	**27**	**8**	**5**	**2**	**1**	**1**	**1**	**3.851**	**100,00**	
%	22,31	55,28	14,91	4,52	1,82	0,70	0,21	0,13	0,05	0,03	0,03	0,03	100,00		

Source: Elaborated by the authors (2019).

Working group 1 (historical and epistemological studies of information science) has a predominance of publication with single authorship, but the publication of up to eight authors, representing 324 authors who have already published in this group, which corresponds to 8.41 % of total works analyzed in the eleven WGs. The work groups from 2 to 11, there is a predominance of publication with two authors, which represents more than half of the items were produced by the main author plus a co-author (55.28%). In WG 2, there is superiority in relation to the other WG, in the number of publications (14.54%), ranging from only one author (106) to 14 authors in a single item. The WG 11 (Information and health) was the one that presented the largest amount of author in a single (18) item.

To know the most productive authors in the events by edition and by work group, such researchers were ordered from the number of published papers. From the "three types of counting of the produced literature: direct counting, complete counting and fractional counting" (URBIZAGASTEGUI, 2008, p.87), the complete counting form was used, which "credits the productivity to all employees, regardless of whether they participated in the production of the work as main or collaborators "(URBIZAGASTEGUI, 2008, p.95).

Regarding the number of authors, from the fifth (V) to the nineteenth (nineteenth) edition, there were 8204 authors, regardless of what position occupies in each item, as the second, third and so on (chart 6).

Chart 6. Number of authors per working group (WG 1 - WG 11) - V to XIX Edition of the National Meeting of Research in Information Science

Grupo de Trabalho	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	Total	Média	Máx.	Min.
GT 1	33	21	22	32	36	30	32	37	46	39	32	28	56	60	55	**559**	37	60	21
GT 2	40	42	46	90	55	53	61	71	53	89	115	72	127	151	110	**1175**	78	151	40
GT 3	26	63	40	50	52	37	42	46	69	65	46	51	60	73	112	**832**	55	112	26
GT 4	33	29	36	49	36	20	83	43	48	76	88	96	99	114	165	**1015**	68	165	20
GT 5	25	24	19	33	45	47	45	46	59	56	64	44	54	66	95	**722**	48	95	19
GT 6	35	24	20	17	33	33	39	37	47	36	51	33	48	56	56	**565**	38	56	17
GT 7	30	31	21	61	36	22	57	67	71	88	94	65	105	139	124	**1011**	67	139	21
GT 8	31				35	50	73	54	75	101	84	70	92	117	128	**910**	76	128	31
GT 9				31		26	20	28	40	36	42	39	44	30	64	**400**	36	64	20
GT 10							59	61	73	52	77	72	85	59	104	**642**	71	104	52
GT 11								36	77	54	44	49	45	40	28	**373**	47	77	28
Total	**253**	**234**	**204**	**363**	**328**	**318**	**511**	**526**	**658**	**692**	**737**	**619**	**815**	**905**	**1041**	**8204**			
Média	**32**	**33**	**29**	**45**	**41**	**35**	**51**	**48**	**60**	**63**	**67**	**56**	**74**	**82**	**95**				
Máximo	40	63	46	90	55	53	83	71	77	101	115	96	127	151	165				
Mínimo	25	21	19	17	33	20	20	28	40	36	32	28	44	30	28				

Source: Elaborated by the authors (2019).

It is observed that the 19th edition, held in 2018, has the largest number of authors (1041), with an average of 95 authors, with WG 11 presenting the lowest amount (28) and WG the 4 largest (165). There is also a growth in each edition of the number of authors, with the predominance of WG 2 (1175) authors, followed by WG 4 (1015) and WG 7 (1011). No work group obtained a minimum value of less than 21 researchers, regardless of edition, demonstrating the collective work that "learning together and doing together, of shared learning, [...] with guiding principles and anchored in solid scientific knowledge" (ROSSIT; et al, 2018, p.1512).

Based on the editions V to XIX, there were 8204 researchers, and 38.20% (3134) are different authors, highlighted those with more than 30 publications: Isa Maria Freire (38) publications, Silvana Aparecida Borsette Gregorio Vidotti (36), Maria Aparecida Moura (34), Plácida Leopoldina Ventura Amorim da Costa Santos (33), Marta Lígia Pomim Valentim (33), Emeide Nobrega Duarte (32), Maria Luiza de Almeida Campos (32), Leilah Santiago Bufrem (32) and Georgete Medleg Rodrigues (30) – chart 7.

Chart 7. Name and number of authors presenting the most publication - V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores (nome)	Publicações	Quant.	Pesquisadores	Publicações	Quant.
Isa Maria Freire	38	1	5	22	5
Silvana Aparecida Borsette Gregório Vidotti	36	1	3	21	3
Maria Aparecida Moura	34	1	5	20	5
Marta Lígia Pomim Valentim	33	1	5	19	5
Plácida Leopoldina Ventura Amorim da Costa Santos	33	1	14	18	14
Emeide Nobrega Duarte	32	1	11	17	11
Leilah Santiago Bufrem	32	1	8	16	8
Maria Luiza de Almeida Campos	32	1	8	15	8
Georgete Medleg Rodrigues	30	1	6	14	6
Ely Francina Tannuri de Oliveira	29	1	16	13	16
Beatriz Valadares Cendon	29	1	20	12	20
Rosali Fernandez de Souza	29	1	22	11	22
Ricardo Rodrigues Barbosa	28	1	17	10	17
Renato Rocha Souza	28	1	21	9	21
Marta Macedo Kerr Pinheiro	27	1	38	8	38
Gustavo Silva Saldanha	27	1	39	7	39
Lena Vânia Ribeiro Pinheiro	27	1	53	6	53
Gercina Angela Borém de Oliveira Lima	27	1	62	5	62
Evelyn Goyannes Dill Orrico	25	1	104	4	104
Izabel França de Lima	25	1	235	3	235
5 pesquisadores (Bernardina Juvenal Freire de Oliveira; Marcus Granato; Nanci Oddone; Regina Maria Marteleto; Sonia Elisa Caregnato)	24	5	486	2	486
3 pesquisadores (Giulia Crippa; Guilherme Ataide Dias; Mauricio Barcelos de Almeida)	23	3	1928	1	1928
Total de pesquisadores		**28**	**Total de pesquisadores**		**3106**

Source: Elaborated by the authors (2019).

There is a high number of authors (1928 - 61.52%) with only one publication, and the amount of advertising per researcher varies up to 38 (exceptions 26, 31,35 and 37). Authors with less than ten publications (2966) equate to 95.49% of the total number of researchers from the 5th to the 19th edition of Enancib.

In this context, the most productive authors in the 11 groups of works are present in the tables from 8 to 18. It is observed that the largest production per group of works is in WG 2 (Maria Luiza de Almeida Campos - 30), which is among the most published researchers in Enancib.

Chart 8. Most productive authors in WG 1 - V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Edivanio Duarte de Souza	17
Gustavo Silva Saldanha	16
Lena Vânia Ribeiro Pinheiro	13
Georgete Medleg Rodrigues	13
María Nélida González de Gómez	11

Source: Elaborated by the authors (2019).

Chart 9. Most productive authors in WG 2 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Maria Luiza de Almeida Campos	30
Gercina Angela Borém de Oliveira Lima	21
Mariângela Spotti Lopes Fujita	20
Rosali Fernandez de Souza	20
Mauricio Barcelos de Almeida	16

Source: Elaborated by the authors (2019).

Chart 10. Most productive authors in WG 3 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Regina Maria Marteleto	18
Helen de Castro Silva Casarin	13
Adriana Bogliolo Sirihal Duarte	13
Giulia Crippa	13
Marco Antonio Almeida	12

Source: Elaborated by the authors (2019).

Chart 11. Most productive authors in WG 4 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Emeide Nobrega Duarte	28
Marta Lígia Pomim Valentim	26
Ricardo Rodrigues Barbosa	23
Sueli Angelica do Amaral	17
Alzira Karla Araújo da Silva	16

Source: Elaborated by the authors (2019).

Chart 12. Most productive authors in WG 5 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Marta Macedo Kerr Pinheiro	24
Sarita Albagli	17
Georgete Medleg Rodrigues	14
Liz Rejane Issberner	11
Jose Maria Jardim	11

Source: Elaborated by the authors (2019).

Chart 13. Most productive authors in WG 6 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Aida Varela Varela	12
Helena Maria Tarchi Crivellari	11
Elizete Vieira Vitorino	10
Francisco das Chagas de Souza	10
Isa Maria Freire	9

Source: Elaborated by the authors (2019).

Chart 14. Most productive authors in WG 7 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Ely Francina Tannuri de Oliveira	27
Leilah Santiago Bufrem	24
Sonia Elisa Caregnato	19
Maria Cláudia Cabrini Grácio	18
Nanci Oddone	17

Source: Elaborated by the authors (2019).

Chart 15. Most productive authors in WG 8 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Silvana Aparecida Borsette Gregório Vidotti	26
Plácida Leopoldina Ventura Amorim da Costa Santos	22
Marckson Roberto Ferreira de Sousa	15
Fernando Luiz Vechiato	15
Guilherme Ataide Dias	15

Source: Elaborated by the authors (2019).

Chart 16. Most productive authors in WG 9 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Marcus Granato	22
Diana Farjalla Correia Lima	19
Luisa Maria Gomes de Mattos Rocha	14
Teresa Cristina Moletta Scheiner	13
Nilson Alves de Moraes	10

Source: Elaborated by the authors (2019).

Chart 17. Most productive authors in WG 10 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Bernardina Juvenal Freire de Oliveira	22
Izabel França de Lima	15
Evelyn Goyannes Dill Orrico	15
Carlos Xavier de Azevedo Netto	15
Leila Beatriz Ribeiro	13

Source: Elaborated by the authors (2019).

Chart 18. Most productive authors in WG 11 – V to XIX Edition of the National Meeting of Research in Information Science

Pesquisadores	Quant.
Cícera Henrique da Silva	17
Maria Cristina Soares Guimarães	14
Rosany Bochner	8
Rosane Abdala Lins de Santana	6
Rosane Suely Alvares Lunardelli	5

Source: Elaborated by the authors (2019).

We highlight the author Isa Maria Freire, present in table 5, as the researcher with the largest number of publications, but only highlighted in WG6 (9 items), that is, she has several productions by the groups. The author, Silvana Aparecida Borsette Gregório Vidotti present with 26 items in WG8, in second position in Enancib. As for the items analyzed, the authors Maria Aparecida Moura and Marta Lígia Pomim Valentim are not highlighted in any of the 11 groups of works.

After analyzing the most productive authors, from the fifth edition to the nineteenth, and also by working group, in the same period, now the prominent authors in each of the editions.

For the nineteenth edition, which comprises the largest number of authors (1041) who produced 444 items, author Leilah Santiago Bufrem featured with 7 items, followed by Carlos Xavier de Azevedo Neto, Gustavo Silva Saldanha, Izabel France de Lima, Luciana Ferreira da Costa and 3 other authors with 5 publications. With four publications 20 authors, with three publications 36 authors and so on. Charts 19 through 32 express the five most productive authors by edition.

Chart 19. Most productive authors at edition V (2003) – National Meeting of Research in Information Science

Nome	Quant.
Marta Araujo Tavares Ferreira	8
Beatriz Valadares Cendon	2
Carlos Henrique Marcondes	2
Carmen Irene Correia de Oliveira	2
Claudio Marcondes de Castro Filho	2
14	2
209	1
Total Autores / Itens	**253 / 139**

Source: Elaborated by the authors (2019).

Chart 20. Most productive authors at edition VI (2005) – National Meeting of Research in Information Science

Nome	Quant.
Jussara Borges de Lima	4
Mariângela Spotti Lopes Fujita	4
Nanci Oddone	4
Sonia Elisa Caregnato	4
José Augusto Chaves Guimarães	3
5	3
17	2
166	1
Total Autores / Itens	**234 / 123**

Source: Elaborated by the authors (2019).

Chart 21. Most productive authors at edition VII (2006) – National Meeting of Research in Information Science

Nome	Quant.
Ricardo Rodrigues Barbosa	4
Jussara Borges de Lima	3
Marilia Damian Costa	3
Othon Jambeiro	3
Antonio Miranda	2
19	2
151	1
Total Autores / Itens	**204 / 108**

Source: Elaborated by the authors (2019).

Chart 22. Most productive authors at edition VIII (2007) – National Meeting of Research in Information Science

Nome	Quant.
Maria Luiza de Almeida Campos	5
Gercina Angela Borém de Oliveira Lima	4
Lillian Alvares	3
Marcos Luiz Cavalcanti de Miranda	3
Maria Aparecida Moura	3
9	3
37	2
244	1
Total Autores / Itens	**363 / 187**

Source: Elaborated by the authors (2019).

Chart 23. Most productive authors at edition IX (2008) – National Meeting of Research in Information Science

Nome	Quant.
Beatriz Valadares Cendon	4
Plácida Leopoldina Ventura Amorim da Costa Santos	4
Renato Rocha Souza	4
Silvana Aparecida Borsette Gregório Vidotti	4
Clóvis Ricardo Montenegro de Lima	3
7	3
22	2
244	1
Total Autores / Itens	**328 / 151**

Source: Elaborated by the authors (2019).

Chart 24. Most productive authors at edition X (2009) – National Meeting of Research in Information Science

Nome	Quant.
Isa Maria Freire	4
Eduardo Ismael Murguia	3
Guilherme Ataide Dias	3
Joana Coeli Ribeiro Garcia	3
João Batista Ernesto Moraes	3
7	3
28	2
225	1
Total Autores / Itens	**318 / 159**

Source: Elaborated by the authors (2019).

Chart 25. Most productive authors at edition XI (2010) – National Meeting of Research in Information Science

Nome	Quant.
Isa Maria Freire	6
Marta Lígia Pomim Valentim	6
Beatriz Valadares Cendon	4
Asa Fujino	3
Dulce Amélia de Brito Neves	3
15	3
50	2
344	1
Total Autores / Itens	**511 / 253**

Source: Elaborated by the authors (2019).

Chart 26. Most productive authors at edition XII (2011) – National Meeting of Research in Information Science

Nome	Quant.
Marta Macedo Kerr Pinheiro	5
Májory Karoline Fernandes de Oliveira Miranda	4
Márcia Regina da Silva	4
Marcos Galindo de Lima	4
Ely Francina Tannuri de Oliveira	3
7	3
60	2
365	1
Total Autores / Itens	**526 / 262**

Source: Elaborated by the authors (2019).

Chart 27. Most productive authors at edition XIII (2012) – National Meeting of Research in Information Science

Nome	Quant.
Marcello Peixoto Bax	6
Aida Varela	4
Bernardina Juvenal Freire de Oliveira	4
Francisca Arruda Ramalho	4
Carlos Xavier de Azevedo Netto	3
19	3
79	2
422	1
Total Autores / Itens	**658 / 309**

Source: Elaborated by the authors (2019).

Chart 28. Most productive authors at edition XIV (2013) – National Meeting of Research in Information Science

Nome	Quant.
Marcello Peixoto Bax	4
Nanci Oddone	4
Ricardo César Gonçalves Sant'Ana	4
Sandra de Albuquerque Siebra	4
Adriana Bogliolo Sirihal Duarte	3
32	3
83	2
411	1
Total Autores / Itens	**692 / 316**

Source: Elaborated by the authors (2019).

Chart 29. Most productive authors at edition XV (2014) – National Meeting of Research in Information Science

Nome	Quant.
Mauricio Barcelos de Almeida	4
Sandra de Albuquerque Siebra	4
Rosali Fernandez de Souza	4
Fábio Mascarenhas e Silva	4
Leilah Santiago Bufrem	4
1	4
31	3
86	2
448	1
Total Autores / Itens	**737 / 343**

Source: Elaborated by the authors (2019).

Chart 30. Most productive authors at edition XVI (2015) – National Meeting of Research in Information Science

Nome	Quant.
Rosali Fernandez de Souza	4
Zeny Duarte de Miranda	4
Angela Maria Grossi de Carvalho	3
Asa Fujino	3
Beatriz Valadares Cendon	3
19	3
78	2
389	1
Total Autores / Itens	**619 / 299**

Source: Elaborated by the authors (2019).

Chart 31. Most productive authors at edition XVII (2016) – National Meeting of Research in Information Science

Nome	Quant.
Zeny Duarte de Miranda	6
Georgete Medleg Rodrigues	5
Maria Aparecida Moura	5
Moises Lima Dutra	5
Renata Maria Abrantes Baracho Porto	5
15	4
31	3
87	2
462	1
Total Autores / Itens	**818 / 371**

Source: Elaborated by the authors (2019).

Chart 32. Most productive authors at edition XVIII (2017) – National Meeting of Research in Information Science

Nome	Quant.
Isa Maria Freire	6
Caio Saraiva Coneglian	5
Carlos Candido de Almeida	5
Gustavo Silva Saldanha	5
Ieda Pelógia Martins Damian	5
6	5
15	4
31	3
94	2
508	1
Total Autores / Itens	**905 / 392**

Source: Elaborated by the authors (2019).

Chart 33. Most productive authors at edition XIX (2018) – National Meeting of Research in Information Science

Nome	Quant.
Leilah Santiago Bufrem	7
Carlos Xavier de Azevedo Netto	5
Gustavo Silva Saldanha	5
Izabel França de Lima	5
Luciana Ferreira da Costa	5
3	5
20	4
36	3
123	2
565	1
Total Autores / Itens	**1041 / 444**

Source: Elaborated by the authors (2019).

From Chart 19 to 33, there is a predominance of authors among the five positions as: Isa Maria Freire, present in the X, XI and XVII edition, Silvana Aparecida Borsette Gregório present only in edition IX. Being among the first, in general, and being in only one working group (among the most productive) means that the author studies in several WGs, demonstrating a sharing of knowledge about the various participants, it's the case of author Isa Maria Freire.

4 Final Considerations

The study identified that scientific production in conjunction with bibliometrics, in the context of an event, congress or meeting, represents the essence of identifying the quantity of items on which they can be analyzed and what feature the present meeting can form. In this perspective, the standard of information available to the reader, represents the capture of the data much faster, not having to work the data much.

According to the survey data, it was observed that from the V edition (2003) there is a pattern regarding the work groups of each edition, and that the studies already conducted focus on only one specific group to perform measurement or in a different approach than the one performed, which allows the diversity of study to which each work group represents.

With all the collected data, as for the edition, working group, communication and authors, it was possible to identify that there are several ways to explore the respective base, especially the counting of the authors, which can be done in a fractional and direct way , not explored in the study, which allows to develop a comparative regardless of the position occupied by the author in the items, it continues to be the author with the highest representativeness of the event, or work group.

The research identified through the use of the National Information Science Research Meetings strategically enables the constitution of a stronger scientific field, which enables the visualization of parameters regarding the event's growth, and the measurement, mapping of the structure already performed.

The study, however, had limitations regarding the non-standardization of the first four events, as the separation in thematic session and in alphabetical order.

From the data collection, adopting the use of Excel software, the research revealed the possibility of the development of more in-depth studies as to which author cites, the accomplishment of an association network between authors of the articles, because there was an analysis of each edition's authorship, working group and in full. Otherwise, considering the characteristics of the research, it was also possible to identify the growth in each edition of the event.

However, the research revealed that the fact that the author is in the first place, as the most productive author of the event of the analyzed editions, does not mean that the author is the most productive by edition and also by work group. Also revealed the number of authors in each working group, edition, demonstrating that the area of information science is constantly growing.

The role of bibliometrics, however, in the context of analysis is to measure, diagnose, map, and evaluate information about the production process. However, it was observed that this embodiment is focused on demonstrating the study group and strengthening their knowledge as to which author is studying the respective subject.

For future studies, the goal may be to analyze the network of authors of Enancib, and to use other counting methods. In addition, the comparison between direct, fractional and complete counting methods can be performed.

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