

Analysis of Publications of Brazilian Speech-Language-Hearing Pathology Society Congresses by Thematic Area

Análise dos anais de Congressos da Sociedade Brasileira de Fonoaudiologia por área temática

Análisis de Publicaciones de los Congresos de la Sociedad Brasileña de Fonoaudiología por Área Temática

*Antonio Lucas Ferreira Feitosa**

*Amanda Almeida de Menezes***

*Nicolly Menezes Silva dos Santos***

*Marciana da Costa Carlos***

*Kaliane Silva de Souza***

*Ariana Vitória dos Santos Teixeira***

*Marisa Siqueira Brandão Canuto***

Abstract

Objective: To analyze scientific publications by thematic area of the last six editions of Brazilian Speech-Language Pathology Society congresses. **Methods:** The search was realized accessing Brazilian Speech-Language Pathology Society webpage and searching *specific sites* of their congresses, considering works under the following categories: posters, prize-associated, thesis and dissertations. Selection criteria include studies published in the last six editions, excluding works partially published or duplicates. The data were extracted using a contingency table. Variables analyzed were year, type of study, region and Brazilian state, modality of the higher education institution, presentation sessions of the event and scientific areas of the congress. Descriptive analysis was performed. **Results:** 4,136 studies were published. The

* Centro Integrado de Saúde Amaury de Medeiros-Universidade de Pernambuco – CISAM-UPE – Recife (PE), Brazil.

** Universidade Estadual de Ciências da Saúde de Alagoas – UNCISAL – Maceió (AL), Brazil.

Authors' contributions:

ALFF: study conception, sampling, analysis, data interpretation and essay writing;

AAM, NMSS, MCC, KSS, AVST: sampling and essay writing;

MSBC: attended group conception, data interpretation and final approving of the final published version.

E-mail address: "Antonio Lucas Ferreira Feitosa" <fgolucasferreira@gmail.com>

Received: 02/02/2020

Accepted: 03/04/2020

year 2014 was the one with the largest number of published papers. The largest production was original works, and language largest number of publications area. The Southeast Region was responsible for the largest number of publications, especially in São Paulo state. The public institutions were the most present at the event. The Session called Poster showed the largest number of publications and there was growth in the session of theses and dissertations. **Conclusion:** the scientific production of the thematic areas at the congress showed prominence in 2014, as the theme Language area had the highest production, the original studies the most developed and presented in the Poster Session, produced in greater number by researchers from the southeast and northeast regions of Brazil.

Keywords: Speech, Language and Hearing Sciences; Scientific Publication Indicators; Publications for Science Diffusion; Review; Brazil.

Resumo

Objetivo: analisar as publicações científicas por área temática das últimas seis edições de Congressos da Sociedade Brasileira de Fonoaudiologia. **Métodos:** a busca foi realizada acessando o portal da Sociedade Brasileira de Fonoaudiologia e buscando os *sites* específicos das edições dos Congressos promovidos por essa entidade. Foram considerados os trabalhos nas categorias: pôsteres, concorrentes a prêmios, teses e dissertações. O critério de seleção estabelecido foi estudo publicado nas últimas seis edições e de exclusão trabalhos publicados parcialmente ou duplicados. Os dados foram extraídos utilizando-se tabela de contingência. As variáveis analisadas foram: ano, tipo de estudo, região e estado brasileiro, modalidade da instituição de ensino superior, sessões de apresentação do evento e áreas científicas do congresso. Foi realizada análise descritiva. **Resultados:** foram publicados 4.136 estudos. O ano de 2014 foi a edição com maior número de trabalhos publicados. A maior produção foi de trabalhos originais, sendo Linguagem a área com o maior número de publicações. A região Sudeste foi responsável pelo maior número de publicações, com destaque para o estado de São Paulo. As instituições públicas foram as mais presentes no evento. A sessão denominada Pôster evidenciou o maior número de publicações e houve crescimento na sessão de teses e dissertações. **Conclusão:** a produção científica das áreas temáticas no congresso evidenciou destaque no ano de 2014; quanto à temática, a área de Linguagem foi a de maior produção; os estudos originais, os mais desenvolvidos e apresentados na sessão Pôster, sendo produzidos em maior número por pesquisadores das regiões sudeste e nordeste do país.

Palavras-chave: Fonoaudiologia; Indicadores de Produção Científica; Publicações de Divulgação Científica; Revisão; Brasil.

Resumen

Objetivo: analizar las publicaciones científicas por área temática de las últimas seis ediciones de los Congresos de la Sociedad Brasileña de Fonoaudiología. **Métodos:** la búsqueda fue realizada accediendo el sitio web de la Sociedad Brasileña de Fonoaudiología y buscando los *sitios específicos* de las ediciones de los congresos promovidos por esta entidad. Fueron considerados los trabajos en las categorías: pósteres, concurrentes a premios, tesis y disertaciones. El criterio de selección establecido fue estudios publicados en las últimas seis ediciones y de exclusión los trabajos publicados de forma parcial o duplicados. Los datos fueron extraídos utilizándose tabla de contingencia. Las variables analizadas fueron: año, tipo de estudio, región y estado brasileño, modalidad de institución de enseñanza superior, sesiones de presentación del evento y áreas científicas del congreso. Fue realizado análisis descriptivo. **Resultados:** fueron publicados 4.136 estudios. El año 2014 fue la edición con mayor número de trabajos publicados. La mayor producción fue de trabajos originales y lenguaje el área con el mayor número de publicaciones, destacándose el estado de São Paulo. Las instituciones públicas fueron las más presentes en el evento. La sesión denominada Póster evidenció el mayor número de publicaciones y hubo crecimiento en la sección de tesis y disertaciones. **Conclusión:** la producción científica de las áreas temáticas en el congreso destacó el año 2014, en cuanto el área de lenguaje fue la de mayor producción, los estudios originales los más desarrollados y presentados en la sección Póster, producidos en mayor número por investigadores de las regiones sudeste y noroeste del país.

Palabras clave: Fonoaudiología; Indicadores de Producción Científica; Publicaciones de Divulgación Científica; Revisión; Brasil.

Introduction

The advent of Speech, Language and Hearing Sciences as an official profession occurred in the beginning of the 20th century, which culminated in the first colleges of graduation strictly related to speech, language and audiology^{1,2}. The decade of 1960 saw the beginning of Speech, Language and Hearing Sciences in Brazil, with the objective of rehabilitating patients with communication issues. On December 9th of 1981, Law n° 6965 regulated the Speech, Language and Hearing Sciences profession, sanctioned by President João Figueiredo. Besides that, the Federal and Regional Speech, Language and Hearing Sciences Council was created^{3,4}.

The speech, language pathologist and audiologist is defined by the Federal Council of Speech, Language and Hearing Sciences (CFFa) as the professional responsible for health promotion, evaluation and diagnostic, orientation, therapy (enabling and rehabilitation) and improvement of aspects of peripheral and central hearing functions and vestibular function, oral and written language, voice, fluency, speech articulation, orofacial mio-functional system, cervical and deglutition.

Between 2002 and 2005, the CFFa organized, along with the Regional Speech, Language and Hearing Sciences Councils (CREFONO), the Brazilian Speech, Language and Hearing Sciences Society (SBFa) and the Speech, Language and Hearing Sciences audience, consultations, forums and researches, resulting, in 2006, the publishing of resolutions that updated and regulated the assessment of five professional specialties: Audiology, Language, Orofacial Motricity, Voice and, as a new area, Collective Health^{7,8}. With the professional demand, seven new professional specialties were introduced: Educational and Dysphagia (2010); Gerontology, Neurofunctional and Speech, Language Pathology and Audiology in the work environment (2014) and Fluency (2017). However, the areas of Audiology, Orofacial Motricity and Voice, present the biggest number of experts.

The Brazilian Speech, Language and Hearing Sciences Society (SBFa) was founded in 1988 by a group of professionals and is defined as a non-profit organization that has the objective of reuniting professionals interested in the academic and clinic activities related to the area⁷. Currently, SBFa is organized in seven departments and a commission: Balance and Hearing Department, Dysphagia

Department, Orofacial Motricity Department, Collective Health Department, Voice Department, Educational Department, Language Department, along with the Teaching Commission^{7,9}.

In 1989, SBFa organized the 1st International Speech, Language Pathology and Audiology Meeting in the city of Fortaleza-CE. Afterwards, the Brazilian Meeting (CBFa) occurred in other states like: Rio Grande do Sul, Rio de Janeiro, São Paulo, Goiás, Santa Catarina, Rio Grande do Norte, Pernambuco, Espírito Santo, Minas Gerais, Paraná, Bahia, Distrito Federal, the last edition being held in 2019 in the city of Belo Horizonte-MG with the total of 27 editions of the CBFa and ten editions of international events⁷. Since the 1991 edition, the CBFa occurs annually, being considered by the developing departments as the most respectable in its category. Since 2014, the CBFa is organized in eight thematic areas following the same structure of the SBFa departments and commission⁴.

In this manner, the meetings have established, along the years, exchanges of experiences between graduation students and professionals, as well as presenting itself as an important vehicle for the scientific production in the country, due to the elevated number of works published annually, allowing the scientific dissemination within Speech, Language and Hearing Sciences¹⁰. Some authors^{11,12} affirm that the mapping of scientific productions contribute directly to the advance of research in the country, whether directing new research or assisting the decision making process and strategic management, as well as allowing to delineate a better visibility of the trajectory undertaken in the production of knowledge, in a determined area, which can be improved in the subsequent publications.

For this purpose and the need of sharing the scientific knowledge generated by an area, the objective of this bibliometric review was to analyze the scientific publications generated by thematic areas in the last six editions of meetings of the SBFa.

Methods

Research Strategy

Descriptive-Exploratory study of bibliometric revision, which happens without approval of the Ethics and Research Committee, for treating of the analysis of public data. All data were collected online by six researchers. The reports of the last six editions of meetings (2014-2019) were analyzed verbatim through the SBFa website. The

bibliometric assessment was undertaken during the months of April and May 2019, being updated in November of the same year.

To determine some variables (origin of scientific works, related to state and region of Brazil), it was necessary to access the Lattes platform, because of the lack of information available in the published reports. For this research, it was considered the name of the first author and, in case of the author not having a subscription in the referred platform, the remaining authors were verified, for the same way the research by the title of the work was considered.

Selection Criteria

All the work found in the event websites of the categories, including: posters, prize contestants, thesis and dissertations were included in the review, and organized in the scientific areas recommended by the Meeting organization, with the inclusion of: Hearing and Balance (AUDIO), Language (LGG), Educational (FONOEDUC), Dysphagia (DIS), Teaching (ENSINO), Orofacial Motricity (MO), Voice (VOZ), Collective Health (SC). Incomplete, duplicated or not available studies were unconsidered.

Data Analysis

The variables analyzed were: Year (considering the edition of the meeting), type of study (classified by the authors as: systematic review, integrative review, original study, case report and experience

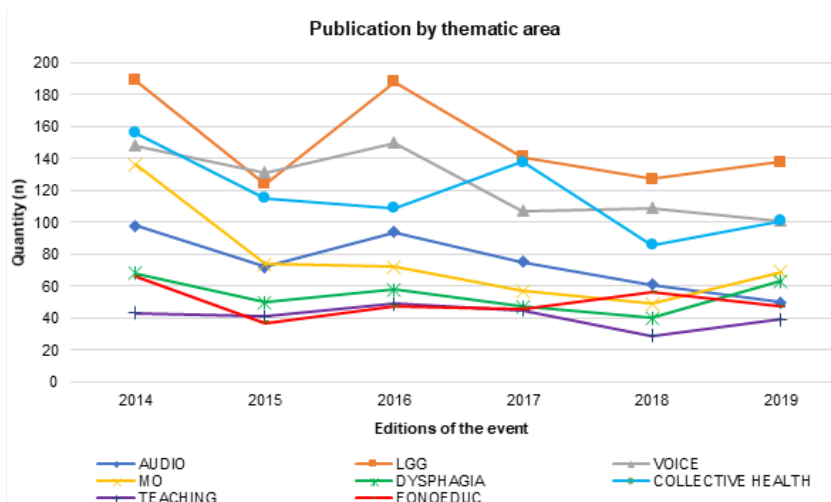
report), region and Brazilian state, modality of college degree institution (IES) (public or private), sessions of presentation (posters, prize contestants, thesis and dissertations) and scientific areas of the meeting (AUDIO, LGG, FONOEDUC, DIS, ENSINO, MO, VOZ e SC).

The data were organized within the contingency chart of the *Microsoft Excel* 2016 software. It was also performed correlations between the variable 'year of publication' with the remaining variables. Analytic descriptive analysis was performed according to the absolute values (n) and relative values (%).

Results

In the last six editions of SBFa meetings, 4136 studies have been published. The year of 2014 was the edition with the biggest number of published works (n=904).

Picture 1 shows the scientific areas of the meeting within the last six editions. Correlating the scientific areas with the edition of the event, it was noted the predominance of the language area in five editions, with emphasis in the year of 2014 (n=189). The scientific area of Voice obtained predominance in the year of 2015 with 131 published studies, and Collective studies having 156 studies. The area of Speech, Language and Hearing Sciences Studies reached the least number of publications in the last six years (n=246), 2018 being the year with least number of published works (n=29).

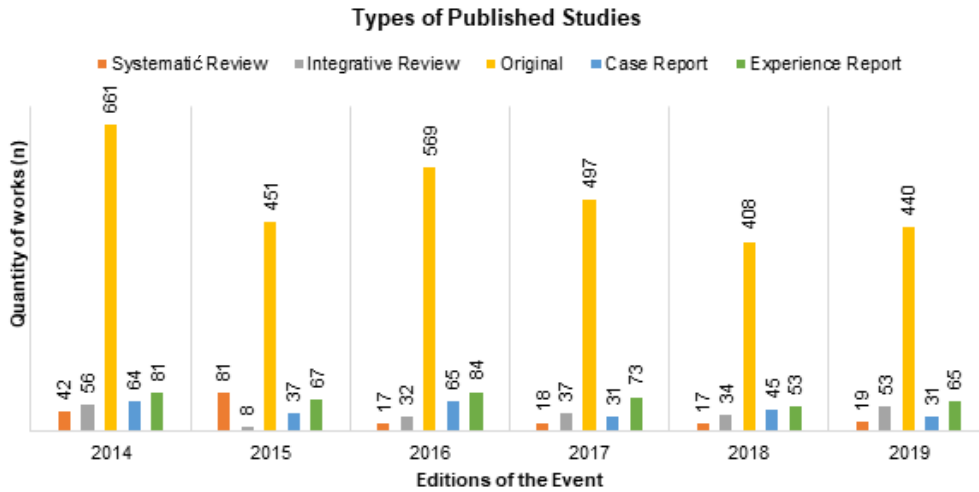


Subtitle. AUDIO: Audiology; LGG: Language; MO: Orofacial Motricity; FONOEDUC: Educational Speech, Language Pathology and Audiology.

Picture 1. Distribution of scientific production in the meetings of the SBFa Society according to the thematic areas of the event in the last six editions (2014-2019)

About the type of study, the ones denominated Originals were the most published, representing approximately 73,16% (n=3026), highlighting the years of 2014 (n=661) and 2016 (n=569), following the experience reports with 10,23% (n=423),

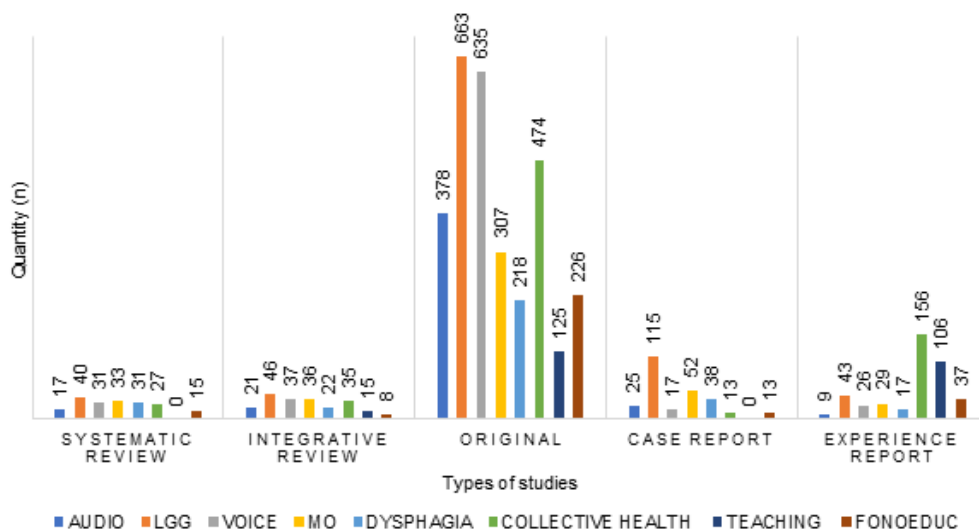
with emphasis to the year of 2014. The Systematic Review type of study obtained the least number of published studies with 4,69% (n=194), highlighting the years of 2016 and 2018, both with 17 publishing's. (Picture 2).



Picture 2. Distribution of scientific production in the meetings of the SBFa according to the types of studies published in the last six editions (2014-2019)

Correlating the scientific area with the type of study, the original works were more prevalent in the area of Language (n=663) and Voice (n=635) as presented in picture 3. On the other hand, experi-

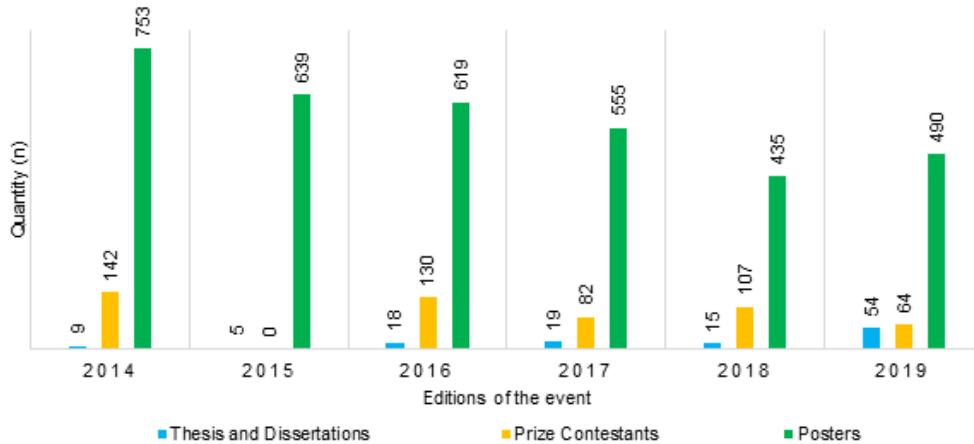
ence reports were more prevalent in the areas of Collective Health (n=156) and Teaching (n=106). The systematic reviews and case reports didn't obtain publications in this area.



Picture 3. Distribution of the types of study by scientific areas in the meetings of the SBFa in the last six editions (2014-2019)

The presentations of works in the Poster section (n=3491) was the most prevalent (89,2%), followed by 12.7% of the Prize Contestants. Both forms of presentations had bigger concentration

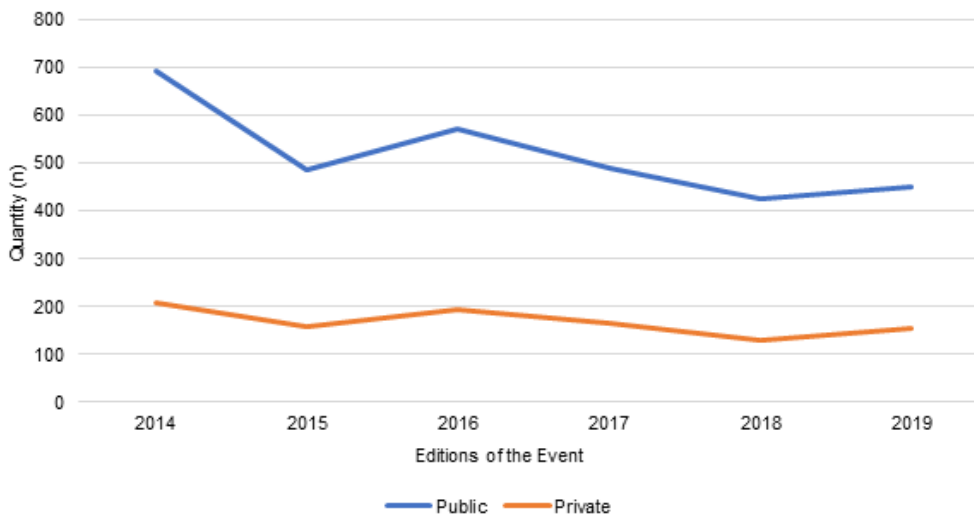
in 2014. The year of 2015 didn't obtain register of works with the Prize contestant presentation. Thesis and Dissertations obtained the greater number of presentations in 2019 (n=54) (Picture 4).



Picture 4. Distribution of the number of published studies by section of presentation in the events of the last six years (2014-2019)

Picture 5 denounces that 2014 was the edition that most concentrated published works, counting with 76.4% of participation of the public teaching institutions. The private institutions presented

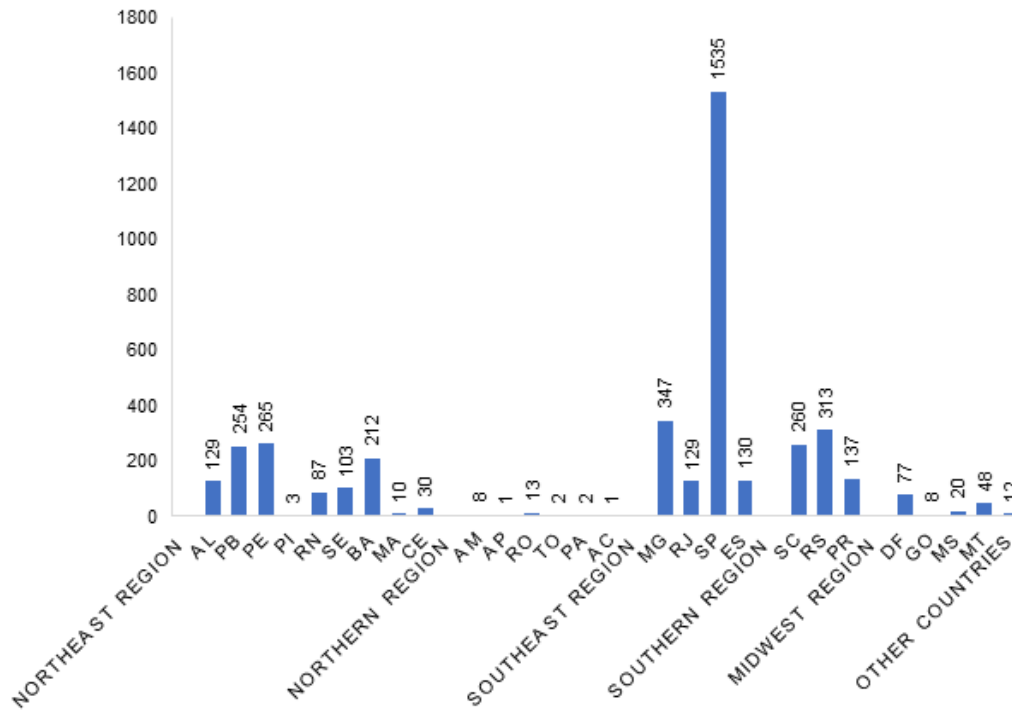
little growth in participation during the last five years, returning to growth in 2019 in relation to the previous edition.



Picture 5. Participation of College Degree Institutions (public or private) in the last six years (2014-2019)

Picture 6 shows that the predominant Brazilian regions in publications records were: Southeast (2141-51.8%) and Northeast (1095-26.5%). The foreign studies obtained less publication, with 12 published studies in the six editions of the event.

In the Southeast, the states of São Paulo (1535-37.1%) and Minas Gerais (347-8.4%) had the record of highest number of publications. In the Northeast, the states of Pernambuco (265-6.4%) and Paraíba (254-6.1%) obtained the biggest highlight and, in the South region, the states Rio Grande do Sul (313-7.6%) and Santa Catarina (260-6.3%).



Subtitle: AL: Alagoas; PB: Paraíba; PE: Pernambuco; PI: Piauí; RN: Rio Grande do Norte; SE: Sergipe; BA: Bahia; MA: Maranhão; CE: Ceará; AM: Amazonas; AP: Amapá; RO: Rondônia; TO: Tocantins; PA: Pará; AC: Acre; MG: Minas Gerais; RJ: Rio de Janeiro; SP: São Paulo; ES: Espírito Santo; SC: Santa Catarina; RS: Rio Grande do Sul; PR: Paraná; DF: Distrito Federal; GO: Goiás; MS: Mato Grosso do Sul; MT: Mato Grosso.

Picture 6. Distribution of scientific production by Brazilian region and participating countries in the editions of the meetings of SBFa.

Discussion

The 2014 edition of the SBFa meeting, held in the state of Santa Catarina, presented the prevalence of published works. This state, along with Paraná, composes the 3^o region of CRFa with 4190 registered professionals, being the fifth, among nine regions, with the most professionals in the area¹³. Relating the quantity of attendants, this edition is in second place among the others within the time period analyzed, counting 1042 participants, behind only of the 2016 edition (1089)⁹. Beyond

these aspects, the existence of two universities in Santa Catarina which offer the Speech, Language Pathology and Audiology course, and the touristic influence of the region may have influenced the result.

The dominance of Language is related to the focus in which the graduation and post-graduation courses have in the area, since the beginning of Speech, Language and Hearing Sciences, in its lines of research and teaching¹⁴. However, different from Audiology, Language doesn't have its own meetings, thus concentrating in publications of this

specialty in SBFA meetings. The emphasis, in the year 2014, can be related to the South region, which possesses 120 experts in Language¹⁵.

Studies on the analysis of Speech, Language Pathology and Audiology scientific production about family¹⁶ interface between this area and Education¹⁷ and the production of knowledge in the areas of Communication Disorders¹⁸, also presented in their results, predominance in the area of Language in relation to others. However, a research of the scientific production of the post-graduation students, from 1979 to 2011, presents Audiology as the most approached subject among the institutions².

Voice is one of three areas with the highest number of experts in Speech, Language and Hearing Sciences⁹, in addition to being the main theme within research centers, such as the Center of Voice Studies – CEV, which is the responsible for the regular publication of works in every year of the SBFA meetings. Despite predominating only in the year 2015, it is an area which obtains the highlight in every year of the analyzed period of publications. On the other hand, the Teaching area is the only, among the others, that is not a specialty, justifying, perhaps, the inferior number of publications in relation to the rest of the areas in all analyzed editions.

The experience reports are related, in its majority, with Collective Health and Teaching areas, being important mentioning that the collective dimension of health problems and clinic-therapeutic action of the Speech, Language Pathologist is structured within the practical experience of the public health professional¹⁹. It is also necessary to understand the paths of the academic formation of Speech, Language Pathology and Audiology based in the practice experience and the discussions about the graduation²⁰.

Concerning the types of studies analyzed, the reduced quantity of publications of Systematic Reviews may be related to its more rigorous and more exacting methodology compared to the traditional literature reviews, for they possess a high scientific rigidity in order to minimize the bias, besides that they are structured in similar fashion to the original article²¹.

The prevalence of Poster presentation and Prize contestants, respectively, was similar to the data from a study that analyzed the SBFA meetings from 2008 and 2017, with 2014 being the year with the higher number of prize contestant works⁹.

It is important to emphasize that the majority of Prize Contestant works originate from thesis and dissertations.

According to a study published in 2019, in the SBFA meetings, the thesis and dissertations presented an increase in the number of publications. In 2017, a growth of 110% was reached in agreement to what was demonstrated by the authors. This bias was maintained in this review, posing that in 2019, there was an increase in the quantity of publications of this section, as shown in Picture 4. Authors demonstrate that between 1976 and 2017, 1125 thesis were defended by Brazilian professionals, and the areas with bigger volume of production were: Language (35.2%) and Audiology (26,0%)²².

This growth is associated to the great search for qualification by Speech, Language Pathologists and Audiologists. In addition, post-graduation is the most important path to the growth process of the scientific area that has increased in Brazil²², despite the cuts and limitations in public financing, counting in 2015, with 5537 post-graduation courses, being 1905 doctorates, 3105 master courses and 527 professional master courses²³.

In 2014, there was the highest concentration of publications in the last six years, occurring because of the elevated number of enrollments in graduation courses in the same year²⁴. The participation of public institutions in the event, relating to their own profile of public institution in what relates to research incentive, since this is one of the pillars of the public institution²⁵. Besides this, part of the financial resources of the country are destined to the financing of scientific research in the public realm, transforming this meeting into means of updating and publishing the scientific production^{11,26}.

Another factor that could justify the public institutions gaining highlight in comparison to the private institutions, in terms of number of publications, would be the number of enrollments into public institutions, which differ from the private universities, university centers and colleges. Over the fact that public institutions, in spite of having a small number of institutions in the country (8.1%), performs the biggest number of enrollments according to the statistical data (53.6%)²⁰. Regarding the distribution of scientific production by each Brazilian region in the editions of the congress, it can be noted that the Southeast and Northeast regions are highlighted as possessing the biggest quantity of publications, for detaining a relevant parcel of

institutions that provide the bachelor degree in Speech, Language and Hearing Sciences²⁷.

In the Southeast region, the states that obtained highlight in publications were São Paulo and Minas Gerais, São Paulo being the state which possesses the oldest institutions to offer the Speech, Language Pathology and Audiology course (Universidade de São Paulo and Pontifícia Universidade Católica de São Paulo)^{7, 28, 29, 30}. In addition to this, the states of São Paulo and Minas Gerais together offer the biggest number of academic organizations in the region²⁵, demonstrating being two federal pioneers, thus concentrating the biggest number of Speech, Language Pathologists and Audiologists in the country.

In the northeast, the state of Pernambuco receives notoriety in relation to what was published in the event, having as a justification the majority number of academic institutions²³, as also the historical character of the state, where the first Speech, Language and Hearing services in the northeast were concentrated. Another state in the northeast region that presented a highlight in production was Paraíba, a fact that can be justified by the presence of a predominance of students with a productivity scholarship by the National Council of Scientific and Technological Development (CNPq)³¹.

This way, the SBFa meetings present themselves as scenario of important scientific dissemination of Speech, Language and Hearing Sciences, because of the fact that their editions are able to reunite students, professionals and teachers from several regions of Brazil, thus consolidating the exchange of experience and the formation of an investigative network within the profession.

Conclusion

The scientific production presented in the meetings organized by the SBFa Society, in the last six editions, had its biggest highlight in the year of 2014. Regarding the thematic area, the Language area predominated, as well as the studies denominated originals presented in the poster section, these, in its majority, performed by researchers from the Southeast and Northeast regions of the country.

References

1. Nascimento R. Cursos de graduação consolidaram a Fonoaudiologia no Brasil. *Comunicar*. 2011; Ano XIII(51):7.
2. Danuello JC. Estudo da produção científica dos docentes de pós-graduação em Fonoaudiologia, no Brasil, para uma análise do domínio [Tese]. São Paulo: Universidade Estadual Paulista, Faculdade de Filosofia e Ciências de Marília; 2014. 163 s.
3. Conselho Federal de Fonoaudiologia [Homepage na Internet]. História da Fonoaudiologia [acesso em 16nov 2019]. Disponível em: <http://www.fonoaudiologia.org.br/>.
4. Aarão PC, et al. Histórico da Fonoaudiologia: relato de alguns estados brasileiros. *RevMed Minas Gerais*. 2011; 21(2): 238-244.
5. Hayashi MC, Bello SF. Fonoaudiologia e Educação Especial: Um Olhar Pela Produção Científica Fonoaudiológica. In: IV Congresso Brasileiro Multidisciplinar de Educação Especial; 2007 out 29-31; Londrina, Brasil.
6. Eugênio ML, Escalda J, Lemos SM. Desenvolvimento cognitivo, auditivo e linguístico em crianças expostas à música: produção de Conhecimento nacional e internacional. *Rev. CEFAC*. 2012 Set/out.; 14(5): 992-1003.
7. Sociedade Brasileira de Fonoaudiologia [Homepage na Internet]. [acesso em 16 nov 2019]. Disponível em: <https://www.sbfa.org.br/portal2017/>
8. Ferigotti AC, Nagib L. Fonoaudiologia: reabertas as discussões sobre especialidades. *Rev. soc. bras. fonoaudiol*. 2009; 14(3): 992-1003
9. Seno MP, Capellini SA. Congresso brasileiro de fonoaudiologia: história, organização e produção científica. *Rev. CEFAC*. 2019; 21(1)
10. Ostiz HC, Andrade CR. Periódicos nacionais em Fonoaudiologia: caracterização de indicador de impacto. *Pró-Fono R. Atual. Cient*. 2006 Jan/abr.; 18(1): 99-110.
11. Souza M. Produção científica brasileira: caminhos norteadores para instituições de fomento à pesquisa. *Brajis*. 2018; 12(1): 46-60.
12. Berberian AP, et al. produção do conhecimento em fonoaudiologia em comunicação suplementar e/ou alternativa: análise de periódicos. *Rev. CEFAC*. 2009; 11(2): 258-266.
13. Conselho Federal de Fonoaudiologia [Homepage na Internet]. Quantitativo de Fonoaudiólogos no Brasil por Conselho Regional [acesso em 16 jan 2020]; Disponível em: <https://www.fonoaudiologia.org.br/cffa/index.php/numero-por-regiao/>.
14. Munhoz CM, et al. Análise da produção científica nacional fonoaudiológica acerca da linguagem escrita. *Pró-Fono R. Atual. Cient*. 2007; 19(3): 249-258.
15. Conselho Federal de Fonoaudiologia [Homepage na Internet]. Pesquisa Especialistas [acesso em 16 jan 2020]; Disponível em: <https://www.fonoaudiologia.org.br/cffa/index.php/especialista-por-area/>.
16. Friedman S, Pereira AS, Pires TI. Análise da produção científica fonoaudiológica brasileira sobre família. *DistúrbComun*. 2010 abril; 22(1): 15-23.
17. Trenche MC, Biserra MP, Ferreira LP. Interface entre Fonoaudiologia e Educação: análise da produção em periódicos científicos. *DistúrbComun*. 2011 Dezembro; 23(3): 357-363.



18. Berberian AP, et al. A produção do conhecimento em Distúrbios da Comunicação: análise de periódicos (2000-2005). *RevSocBrasFonoaudiol.* 2009; 14(2): 153-9.
19. Mendes VL. Fonoaudiologia e saúde coletiva: perspectivas de atuação nos serviços públicos de saúde. *DistúrbComun.* 1999 Jun.; 10(2): 213-224.
20. Brasil BC, Gomes E, Teixeira MR. O ensino de fonoaudiologia no Brasil: retrato dos cursos de graduação. *Trab. educ. saúde.* 2009 Jul; 17(3)
21. Cassundé FR, Barbosa MA, Mendonça JR. Entre revisões sistemáticas e bibliométricas: como tem sido mapeada a produção acadêmica em administração no Brasil? *Informação & Informação.* 2018 jan./abr.; 23(1): 311- 334.
22. Ferreira LP, et al. Fonoaudiólogos Doutores no Brasil: perfil da formação no período de 1976 a 2017. *CoDAS.* 2019 out; 31(5)
23. Azevedo MLN, Oliveira JF, Catani AM. O Sistema Nacional de Pós-graduação (SNPG) e o Plano Nacional de Educação (PNE 2014-2024): regulação, avaliação e financiamento. *RevBras Política e Adm da Educ.* 2016; 32(3): 783.
24. Ministério da Educação [Homepage na internet]. Censo da educação superior 2017: divulgação dos principais resultados [acesso em 9 jan 2020]. Disponível em: <http://portal.mec.gov.br/docman/setembro-2018-pdf/97041-apresentac-a-o-censo-superior-u-ltimo/file>
25. Moita FM, Andrade FC. Ensino-pesquisa-extensão: um exercício de indissociabilidade na pós-graduação. *Rev. Bras. Educ.* 2009 maio/ago.; 14(41): 269-280.
26. Hilu L, GisiML. Produção científica no brasil - um comparativo entre as universidades públicas e privadas. In: X Congresso Nacional da Educação; 2011 nov 7-10; Paraná, Brasil.
27. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira [Homepage na internet]. Sinopse Estatística da Educação Superior [acesso em 9 jan 2020] Disponível em: <http://portal.inep.gov.br/web/guest/sinopses-estatisticas-da-educacao-superior>.
28. Figueiredo Neto LE. O início da prática fonoaudiológica na cidade de São Paulo: seus determinantes históricos e sociais [Dissertação]. São Paulo: Pontifícia Universidade Católica de São Paulo; 1998.
29. Conselho Federal e Fonoaudiologia, 7º Colegiado. Fonoaudiologia comemora 21 anos de regulamentação profissional. *RevFonoaudiol Bras.* 2002; 2(2): Carta ao leitor.
30. Aarão PC, Pereira FC, Seixas KL, Silva HG, Campos FR, Tavares AP, et al. Histórico da Fonoaudiologia: relato de alguns estados brasileiros. *RevMed Minas Gerais* 2011; 21(2): 238-244.
31. Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq [homepage na internet]. Bolsas e Auxílios [acesso em 26 dez 2019]. Disponível em: <http://lattes.cnpq.br/>.