



Speech-language pathology and audiology on the WEBradio¹

Fonoaudiologia em WEBradio¹

Fonoaudiología en WEBradio¹

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Abstract

Purpose: to characterize and analyze speech-language and audiology literature regarding professional practices on the WEBradio. **Methods:** Systematic literature review. Searches were conducted on Academic Google and Scielo bases and on scientific congress proceedings. Search results were selected for Systematic Review according to inclusion/exclusion criteria and Relevance Tests conduction. The data were organized, synthesized and classified in figures presenting data of characterization of the publications and speech-language pathology and audiology practices they describe. **Results:** Six publications were selected by the Relevance Tests, and were thus characterized: all in congress proceedings (83% INTERCOM); regarding university educational WEBradios. The publications' subjects are interns, professors and students in Advertising, Journalism and Speech-Language Pathology and Audiology majors; in practices that involve interdisciplinary approach and have positive results to the academic community and the educational process. Only one of the publications is by Speech-Language Pathologists. The publications do not focus on the Speech-Language Pathology and Audiology actions and have clinical and educational focus; are developed in process and involve: the idealization of the WEBradio, radio speaker voice selection, vocal direction in show recordings; accessory to radio speakers; vocal health guidance and care (assessment, therapy, and workshops). Speech-Language Pathology and Audiology themes are the same as those proposed for hertzian radio stations, without WEBradio specificities. **Conclusion:** Further studies are needed in order to standardize experiences with radio speakers from exclusively online stations in a clear, detailed and comprehensive manner; and also to subsidize reflections and discussions on the perspectives, characteristics and specificities of Speech-Language Pathology and Audiology practices on the WEBradio. .

Keywords: Speech-Language Pathology and Audiology; Webcasts; radio; communications media; education.

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Resumo

Objetivo: caracterizar e analisar a literatura fonoaudiológica referente a atuação em WEBradio. **Métodos:** Revisão Sistemática da literatura. Foram feitas buscas nas bases Google Acadêmico e Scielo e anais de congressos (Fonoaudiologia: SBFa e Comunicação: INTERCOM). As publicações foram selecionadas para Revisão Sistemática a partir de critérios de inclusão/exclusão e aplicação de Testes de Relevância. Os dados foram organizados, sintetizados, classificados em quadros que apresentam uma caracterização das publicações e das ações fonoaudiológicas neles descritos. **Resultados:** Seis publicações foram selecionadas após os testes de Relevância, assim caracterizadas: todas em anais de congressos (83% INTERCOM); referentes a WEBradios universitárias educativas. As publicações têm como sujeitos estagiários, docentes e discentes de cursos de Publicidade e Propaganda, Jornalismo e Fonoaudiologia, em práticas que envolvem a interdisciplinaridade, com resultados positivos para a comunidade acadêmica e processo educativo. Apenas uma publicação tem autoria fonoaudiológica; as demais são da área da Comunicação. As ações fonoaudiológicas não se encontram no foco das publicações; elas apresentam caráter clínico e educativo; são desenvolvidas de modo processual e envolvem: idealização da WEBradio; seleção de vozes de locutores; direção vocal na gravação dos programas: assessoria aos locutores; orientação de saúde vocal e atendimentos (avaliação, terapia e oficinas). Os temas/conteúdos fonoaudiológicos são os mesmos propostos para a realidade das rádios hertzianas, sem especificidades para WEBradio. **Conclusão:** Faltam estudos que sistematizem as experiências fonoaudiológicas junto a radialistas de emissoras sediadas exclusivamente na internet de maneira clara, detalhada e aprofundada; e que subsidiem reflexões e discussões acerca das perspectivas, características e especificidades da atuação da Fonoaudiologia em WEBradio.

Palavras-chave: Fonoaudiologia; Webcasts; rádio; meios de comunicação; educação

Resumen

Objetivo: caracterizar y analizar la literatura fonoaudiológica referente a la actuación en WEBradio. **Métodos:** Revisión Sistemática de la literatura, con búsquedas en las bases Google Académico y Scielo y en anales de congresos (Fonoaudiología y Comunicación). Las publicaciones fueron seleccionadas para la Revisión Sistemática a partir de Pruebas de Relevancia. Cuadros presentan datos de la caracterización de las publicaciones y de las acciones fonoaudiológicas en ellas descritas. **Resultados:** Seis publicaciones fueron seleccionadas (anales de congresos - 83% INTERCOM) y referentes a WEBradios universitarias educativas. Las publicaciones tienen como sujetos estudiantes, profesores y alumnos de cursos de Publicidad y Propaganda, Periodismo y Fonoaudiología; en prácticas que implican la interdisciplinaridad y tienen resultados positivos para la comunidad académica y el proceso educativo. Solamente una publicación tiene autoría fonoaudiológica. Las acciones fonoaudiológicas no se encuentran en el foco de las publicaciones; ellas presentan carácter clínico y educativo; se desarrollan de modo procesual e implican: idealización de la WEBradio; selección de voces de locutores; dirección vocal en la grabación de los programas: asesoría a los locutores; orientación de salud vocal y atendimientos (evaluación, terapia y talleres). Los temas/contenidos fonoaudiológicos son los mismos propuestos para la realidad de las radios hertzianas, sin especificidades para WEBradio. **Conclusión:** Faltan estudios que sistematicen de manera clara, detallada y minuciosa, las experiencias fonoaudiológicas en conjunto con locutores radiales de emisoras con sede exclusivamente en la internet, y que subsidien reflexiones y debates sobre las perspectivas, características y especificidades de la actuación de la Fonoaudiología en WEBradio.

Palabras clave: Fonoaudiología; difusión por la Web; radio; medios de comunicación; educación

Introduction

The voice of radio speakers has always had a recognized importance for a good radio broadcast; that should be adequate to the professional's social position and profile, to the type of show being broadcast, to the profile of the audience and the radio station, among other aspects ⁽¹⁻⁴⁾.

Speech-Language Pathology and Audiology acts with radio speakers in actions that take place since their educational process and professional training (participating in subjects and in courses that can be technical and undergraduate level); and also in guidance, vocal improvement and accessory alongside free lance professional and radio companies, aside from the clinical practices in the fields of voice and language ^(1,5-7).

References in Speech-Language Pathology and Audiology regarding the practices in radio broadcasting or with radio speakers of hertzian stations state that, in general, intervention action should involve: a survey of the habits and vocal complaints; voice production; vocal health/well-being promotion and healthy habits, behaviors and vocal care measures; warm-up cool down; vocal psychodynamics and relationship between voice and emotion; stretching, relaxation and body movements and use of equipment; development of expressivity and vocal resources (parameters of vocal quality, pitch, rhythm/speed, articulation/enunciation, resonance, speech-breath coordination, intonation and modulation), of non-verbal resources (posture, alignment, body/facial expressions and use of gestures) and pauses – considering the different situation and types of radio speech, with varied characteristics and needs, depending on the radio station ^(1, 5-9). The work of Speech-Language Pathologists and Audiologists with radio speakers is based on the search for synchronicity between voice and text/message; and thus there is a need to know the work conditions, dynamics and environment of the radio speaker ⁽⁶⁾.

Speech-Language Pathologists and Audiologists find bases for their proposals and actions in literature and studies that were conducted in the context of work actions, demands, needs, realities and conditions of radio speakers in radio stations with analogic transmissions through Modulated Frequency/MF and/or Modulated Amplitude/MA ⁽⁵⁻⁷⁾.

¹Literature states several spellings: "webradio", "web rádio", "Web radio", "radio web", "web-radio" and "WEBradio". The present study adopts "WEBradio", as employed by Nair Prata (2012), journalist, administrative director of the Brazilian Association of Media History Researchers (Aclar) and coordinator of the Research Group named Radio and Sound Media at INTERCOM (Brazilian Society for Interdisciplinary studies in Communication), researcher on the field of digital radio and author of several publications on the subject in Brazil.

Over the years there have been important changes regarding technological innovations and development, including the field of communication, with transformations in how content is produced, conveyed and accessed. Internet and mobile phone networks favored new platforms and the integration of technologies in communication vehicles ⁽¹⁰⁻¹⁴⁾. Since 2008, there has been the convergence of medias: newspapers, magazines, books, photography, television, radio, internet, telephone, movies, video, computers that encompassed all forms of communication, so that the virtual universe has formed a new culture: cyberculture or cyberspace culture ⁽¹²⁾.

Technological transformations deeply changed all medias, including the radio that is currently undergoing a phase of reinvention of radio broadcasting and of the work of radio speakers ⁽¹²⁾, begun by the need to face the challenges posed by the new ways and changes in the patterns and processes of content creation, production, emission, circulation, sharing contents the transmission and reception in radio broadcasting. ^(12; 15-20).

There are currently three types of radio stations: hertzian stations (with analogic or digital transmission); hertzian stations present on the internet (conventional/open station that also has digital, internet transmission); and the genuinely digital webstations, with exclusive presence and addresses on the internet, called WEBradios ⁽¹²⁻¹⁵⁾.

The first WEBradio transmission in Brazil occurred in 1997, but it wasn't until the year 2000 that WEBradios effectively came into existence in the country; and today there are thousands of stations with exclusive internet broadcast⁽¹³⁾. The WEBradios continue to grow, through traditional broadcasting companies and also through universities, associations, communities, among others. Since they are not subject to the same concession rules and bureaucracy of traditional hertzian stations, WEBradios have a simpler implementation and way of working; thus not only traditional Brazilian radio broadcasters are present on the WEBradio today, but also the beginners, the schools, the associations, the minorities and many who would not have a chance of having a concession for broadcasting in hertzian space ⁽¹³⁾.

Currently, thousands of radio stations have exclusive internet broadcast in Brazil, and studies

point towards the existence of 2018 WEBradio stations in the country, with approximately 87 different segments and varied showcases⁽¹³⁾. However, the distribution of these WEBradio stations is uneven throughout states and cities, and they are more heavily concentrated in the Southeast and Southern regions, in detriment of the North, Northeast and Midwest⁽¹³⁾.

On the WEBradio, the communicative field, the language and the forms of interactions among users and the station are different from the rest of the radio stations^(10-12, 21).

On the traditional radio stations, the styles (journalism, educational-cultural, entertainment, marketing, advertisement, services and special) have a clear and precise configuration, based on the sound environment^(12, 21-22). On the WEBradio, the styles are redefined and incorporate visual and imagery elements, generating a constellation of styles and forms of interaction in constant transformation and new combinations^(12, 21-22).

New channels and ways for participation, communication and interaction between listeners, stations, professionals and advertisers are arousing^(10, 12); and they change the ways the radio stations interact with the listeners. In traditional hertzian radio stations, the interaction with the listeners happens in phone calls, emails, games. In the hertzian stations present on the internet, the interaction occurs on the telephone, email, chats, surveys, access to customer service numbers, forums, games, online lists for song requests. On WEBradios, the interaction with the listeners happens through the telephone, email, chats, access to customer service numbers, forums, promotions, online lists for song requests. Furthermore, the design of each homepage may offer other options, such as access to several links and websites^(10-13; 21-22).

Radio sound production on the WEBradio is also different as it involves new ways and resources, such as recorders, telephones, mobile phones, photo cameras, video cameras and computers⁽¹²⁾. Communication professional and radio speakers who work at WEBradio stations are challenged in the perspective of agility and versatility in dealing with and integrating information and data coming from different resources and support systems, which demands adaptations and changes in the expected skills and in the functions performed by the professionals⁽²³⁾.

The voice, an essential element in traditional sound radio, may have new traces and appear as texts and even images and/or icons (such as chat emoticons) on the WEBradio⁽¹²⁾. On the WEBradio, the sound of the voice is added to new multimedia resources, enabling, while speaking, the transmission of texts, images, photographs, audio files, maps, graphs and *infographs*⁽²³⁾.

What would, then, be the importance of voice understood as language and expressivity on the WEBradio? Would there be differences among the Speech-Language Pathology and Audiology practices with radio speakers at a WEBradio and those traditionally developed with hertzian station broadcasters? Is there specificity for Speech-Language Pathology and Audiology practices on the WEBradio? Finally: “What would the perspectives of Speech-Language Pathology practices on the WEBradio be?”

The WEBradio is a field with very little scientific exploration. There is a need for studies that will contribute to producing scientific knowledge about the WEBradio and that would help to understand the ways through which changes in society impact the uses of the voice, in language, in communication, in interaction and in the world and the work process of communication professionals.

There is a need for studies that will contribute with building knowledge about the WEBradio and that will enable the understanding of the possible relations and perspectives of Speech-Language Pathology and Audiology practices on the WEBradio, in order to subsidize future processes of education, training, intervention and accessory articulated with the tendencies and needs of current communication professional.

The purpose of this study is to characterize and analyze Speech-Language Pathology and Audiology literature regarding practices involving the WEBradio.

Material and method

The strategy used is a systematic review of the literature.

Considering the following problem question that guides the study: “what would be the perspectives of Speech-Language Pathology and Audiology” practices involving the WEBradio?” there was a need to survey and review the literature

that involves Speech-Language Pathology and Audiology practices with WEBradio.

Searches were conducted on the following data bases: Scholar Google and Scielo - Scientific Electronic Library Online, as well as in national congress proceedings in the fields of Speech-Language Pathology and Audiology and Communication, from 2001 to 2014, being: Brazilian Society for Speech-Language Pathology and Audiology - SBFa (<http://sbfa.org.br/portal/pg.php?id=7&ttpg=Congressos&tpc=cinza>) and the Brazilian Society for Interdisciplinary Studies in Communication- INTERCOM (<http://www.portalintercom.org.br>). It should be noted that, in the case of the Speech-Language Pathology and Audiology, the proceedings regarding the period between 2001 and 2007 are not available online and, thus, searches were conducted using the proceedings CDs, from the personal files of a Speech-Language Pathologist and Audiologist who took part in the events at the time. INTERCOM does not provide proceedings of the events up to the year 2000.

The following descriptors were employed for the searches: “Fonoaudiologia”/“Speech, Language and Hearing Sciences” (using the boolean expressions “e”/”and”) “WEBradio”, “webcasts”, “radio on-line” and “internet radio”.

The searches took place between January 15 and 17, 2015.

There was no period limitation on searches on Scholar Google and SciELO bases; however, for the proceedings, the searches were conducted from 2001 onwards, since literature indicates that the WEBradio began in Brazil on this year (13).

Publications in English, Portuguese and Spanish were accepted.

As this is a systematic review study, the publications destined for review and analysis were

Figura 1 – Form for Relevance Tests I and II

FORM FOR RELEVANCE TEST I		
Inclusion Criteria	Yes	No
1. Does the publication concern WEBradio?		
2. Does the publication mention Speech-Language Pathology and Audiology?		
Exclusion Criteria		
1. It is an editorial, letter, review, dissertation, thesis, newspaper story or blog text		
2. Publication concerns the radio speaker, broadcasting and radio in hertzian transmission		
FORM FOR RELEVANCE TEST II		
Inclusion Criteria	Yes	No
1. The publication concerns WEBradio and Speech-Language Pathology and Audiology		
Exclusion Criteria		
1. The publication does not concern Speech-Language Pathology and Audiology actions on WEBradio		

submitted to a complex selection process that involves several stages that will be described below.

From the initial search, a preliminary selection occurred by Reading the titles of publications, in order to discard all publications with titles that did not correspond to the scope of the study and/or concerned themes that were not related to the focus of the study. When doubts arose in this preliminary selection, the abstracts were also read.

The publications that were previously selected by title (those near to the study’s theme of interest) were then reviewed for a new selection, this time in order to reject/exclude repeated publications. Thus, the duplicate publications were excluded and only one copy of each one was kept in the study.

Then, only the publications resulting from this preliminary selection of titles and exclusion of duplicates compose the material submitted to the process of Relevance Tests I and II (Figure 1).

During the process of Relevance Testing I and II, the publications were read another time (titles and abstracts) but, in this stage, the publications were evaluated independently by two reviewers, who used standard forms, and following previously established criteria of inclusion/acceptance and exclusion/rejection contained in Relevance Test I and Relevance Test II. Disagreements were solved by reaching a consensus between the reviewers. When title and abstract did not clarify, the studies/papers were read in their integrity.

As this is a Systematic Literature Review Study, there should be no intentional choices.

Even though it would be expected or desirable to have a great deal of publications and studies for analysis, it should be considered that the number of accepted/selected Works results from a systematic process that is finalized by the conduction of Relevance Tests I and II.

Therefore, the approval/acceptance in the Relevance Tests is what

Only the publications that were selected and validated by the steps above will compose the corpus of analysis of the study; that is, those that will be submitted to the Systematic Review, *per se*.

In this manner, the publications selected for Systematic Review were, again, submitted to Reading, this time considering the organization, synthesis and classification of its data in two figures.

The first chart (figure 3) shows aspects of the characterization of the publications; and the second chart (figure 4), aspects of the analysis of Speech-Language Pathology and Audiology actions described in them.

The publications involving Speech-Language Pathology and Audiology actions concerning the WEBradio were characterized according to: authors/year, type/form of publication (full text or abstract; paper in journal, congress proceedings or other), WEBradio involved, subjects involved and obtained results (figure 3).

The data concerning Speech-Language Pathology and Audiology actions on WEBradio, described in the selected publications, were organized, synthesized, classified and presented according to: the way actions were developed (brief – when it involved only one or two encounters; or in

process – three or more encounters); the character of the actions (clinical or educational); the themes/ contents approached; and the strategies employed; the perspective from which the actions are organized (centered on the individual or concerning work issues), such as in previous Speech-Language Pathology and Audiology studies about educational processes in vocal health ⁽²⁴⁾ (figure 4).

Results

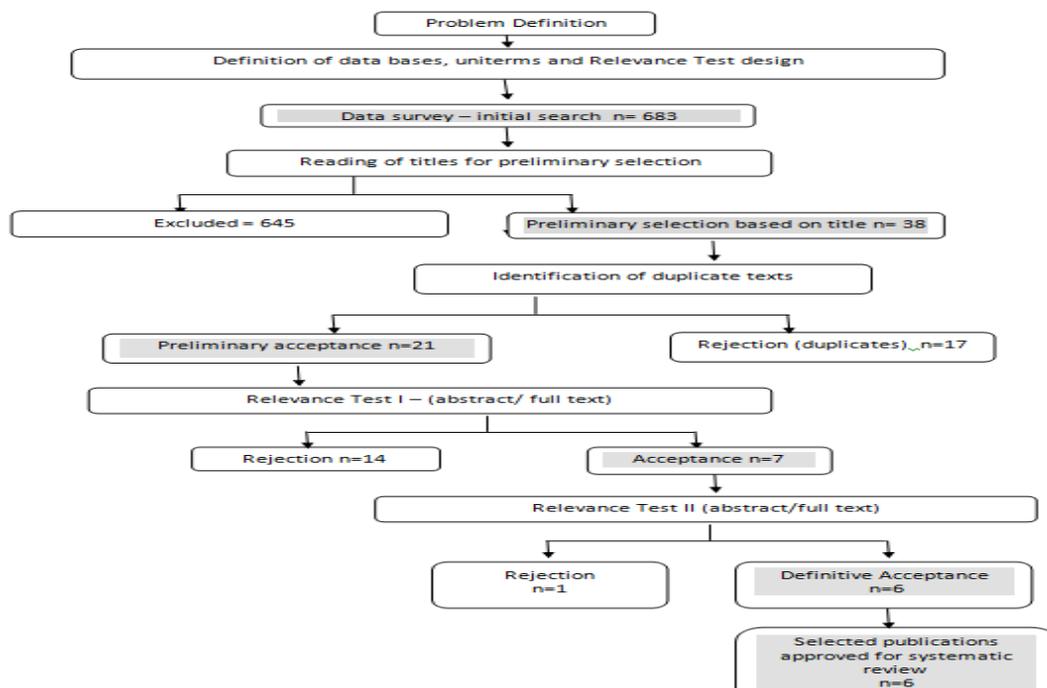
The first search resulted in 683 publications, and, after the initial selection based on the titles, 38 publications were identified, distributed as follows: scholar Google, (n=11), *SciELO* (n=0); and congress proceedings INTERCOM (n=26) and SBFa (n= 1).

Of these, 17 repeated publications were excluded, leaving 21 eligible publications for abstract and full text readings, and conduction of Relevance Test(s).

After Relevance Test I, seven publications were selected and, after Relevance Test II six publications were selected and approved to compose the corpus for systematic review.

The flow-chart (figure 2) summarizes the methodological steps of the study.

Figure 2- Flow-chart



It should be clarified that the last publication excluded by Relevance Test II regards the description and analysis of a radio product (the “Radio Unifor” Jingle), produced at the Radio Central of the Integrated Communication Nucleus of the University of Fortaleza (CE). The jingle was broadcasted during the first semester of 2011, in actions to promote, among University students and internet users, the University WEBradio, “Rádio Unifor”. The publication does not concern Speech-Language Pathology actions with WEBradio (exclusion

criteria); even though Speech-Language Pathology and Audiology was mentioned in the introduction, as part of the historical account of the creation of that specific WEBradio (first called “Rádio Gentileza”), originated from ideas of on professor at the Advertising program, with help from on professor of the Speech-Language Pathology and Audiology program.

Figure 3 - shows the chart that characterizes the publications involving Speech-Language Pathology and Audiology actions in WEBradio.

AUTHORS Year	Field of Authors	Type/kind of text	WEBradio	SUBJECTS	RESULTS
MOREIRA; CARVALHO; VERAS; MOTA (2005) (25) "Rádio Gentileza: educomunicação e interdisciplinaridade na Web"	Advertisement	Full text / Proceedings INTERCOMCongress	Rádio Gentileza (UNIFOR)	WEBradio interns, faculty members and students from the Advertisement, Speech-Language Pathology and Audiology and Journalism Programs	Discussion of concepts: interdisciplinary approach, interactivity, hypermedia and educommunication. Interdisciplinary approach, integration and dialogue among programs, faculty and students. Learning about music as cultural representation Approximation between education and communication. Dynamic/enhanced learning Speech-Language Pathology and Audiology action – favored auditory perception and improvements in language, articulation and voice of subjects. WEBradio – space for sharing, interaction, teaching, experimentation, learning, communication and cultural expression.. Image, sound and text as open fields of possibilities for the listener/user. Experience shows the need to invest in projects that approximate Education and Communication..
RRIEDEL; MAIA; PAIVA (2006) (26) "Produção de spots da rádio Gentileza"	Advertisement				Practice in producing spots and devising radiophonic texts of educational characteristics. Integrating ideas, script, message, voice, background music and sound effects. Approximation between theory and practice and knowledge that provides culture and entertainment. Learning about musical styles, use of oral communication and elements of language and radiophonic writing. Positive Experiences. Sharing between faculty members and students
PALMEIRA; PINHEIRO RIEDEL; MAIA, (2006) (27) "Rádio Gentileza – uma experiência interdisciplinar"	Speech-Language Pathology and Audiology Advertisement	Abstract/ Proceedings SBFa Congress			Enhancement of oral communication of broadcasters and learning related to: breathing, warm-up and vocal flexibility. More efficient radio speaking. Broadened view of communication and knowledge about the radio and about Advertisement. Production of spots with varied themes Speech-Language Pathology and Audiology as a knowledge that adds to and transforms the communicative universe of advertisement.
MAIA; ANDRADE; CAVALCANTE (2008) (28) "Portfólio Rádio Gentileza"	Advertisement	Full text / Proceedings INTERCOMCongress			Devising a sound portfolio structured as a radio show, containing a summary of the productions made at the WEBradio Gentileza in 2007 (including shows, jingles, spots and radio theater). Sharing the experiences of experimentation, learning, study and entertainment obtained on the WEBradio space. Possibility for education, teaching and learning beyond the classroom.
MACIEL; CARVALHO; MOTA; CAVALCANTE (2012) (29) "Experiência que nasce da sala de aula: o caso da Rádio Gentileza"	Advertisement Education				Re-signifying the concept of radio, according to the evolution of communication languages. Space for student experience and independence, and for production of knowledge and significance. Processes of theoretic-practical knowledge with a sense of discipline, shared responsibility and satisfaction.
PERREGIL SILVA (2013) (30) "Os bastidores do Núcleo de Locução – Rádio Unesp Virtual"	Journalism		Rádio UNESP Virtual (UNESP)	Students in the Journalism, TV and Radio and Public Relations programs.	Improvement of participants and professional growth in the field of communication. Teamwork and preparation for the work Market with ethics, seriousness and expressivity during radio broadcasting.

FFigure 3. Distribution chart of data from the publications concerning Speech-Language Pathology and Audiology on WEBradio and their characterization according to authors/year/title, field of authors, type/kind of publication (article in Journal, abstract or text in congress proceedings), WEBradio involved, subjects involved and results

obtained in the study.

The Speech-Language Pathology and Audiology actions usually happen in a process.

Figure 4 shows the chart with the data from Speech-Language Pathology and Audiology actions in WEBradio, described in the selected publications.

Figure 4. Distribution chart of the data of Speech-Language Pathology and Audiology actions on WEBradio, according to: type and character of actions, themes/contents approached and action organization perspectives.

PUBLICATION (AUTHOR/YEAR and title)	TYPE OF ACTION	CHARACTER	THEMES / CONTENTS	ORGANIZATION PERSPECTIVE	
				Focus on the individual	Focus in work environment/ conditions
MOREIRA; CARVALHO VERAS; MOTA (2005) (25) "Rádio Gentileza: educação e interdisciplinaridade na Web"	Faculty member from the Speech-Language Pathology and Audiology program provided guidance about vocal care. Individual weekly Speech-Language Pathology and Audiology follow-up (6 sessions) conducted by interns under faculty supervision. Clinical Speech-Language Pathology and Audiology assessment at NAMI (Integrated Medical Attention Nucleus) Perceptive auditory vocal analysis of the recordings of the WEBradio interns and media.	Guidance and Clinical	Importance of Speech-Language Pathology and Audiology Vocal Health Caring for the voice Vocal Warm-up and Cool Down Vocal Parameters (breathing exercises) Auditory perception Voice and Speech disorders	yes	no
RIEDEL; MAIA; PAIVA (2006) (26) "Produção de spots da rádio Gentileza"	Faculty member from the Speech-Language Pathology and Audiology program conducted selection tests for the radio's voice files and would aid interns in their broadcasting. Individual weekly Speech-language Pathology and Audiology sessions - focus on voice and oral communication Participation in spot production and recording, integrating voice to the idea, script, message, musical background and sound effects.	Clinical and Accessory	Vocal Psychodynamics Vocal health Breathing Relaxation Vocal warm-up Vocal intensity Body posture	yes	no
PALMEIRA; PINHEIRO RIEDEL; MAIA, (2006) (27) "Rádio Gentileza - uma experiência interdisciplinar"	Collaboration in selecting speakers for the spots and defining the broadcasting model. Vocal direction in spot recordings Speech-Language Pathology and Audiology assessment of oral communication Speech-language Pathology and Audiology sessions - focus on voice, oral communication vocal resistance and prevention of disorders	Clinical and Accessory	Vocal health; Breathing Vocal Warm-up Relaxation Vocal Flexibility Vocal psychodynamics	yes	no
MAIA; ANDRADE; CAVALCANTE (2008) (28) "Portfólio Rádio Gentileza"	Faculty member from the Speech-Language Pathology and Audiology program - Devised the WEBradio project Supervised Speech-Language Pathology and Audiology interns: 1) WEBradio interns follow-up every two weeks; and 2) presence at radio show recordings.	Clinical and Accessory	Vocal Quality Interpretation Intonation, clarity and rhythm Vocal psychodynamics	yes	no
MACIEL; CARVALHO MOTA; CAVALCANTE (2012) (29) "Experiência que nasce da sala de aula: o caso da Rádio Gentileza"	Faculty member from the Speech-Language Pathology and Audiology program coordinated the WEBradio activities alongside faculty members from the Advertisement and Journalism programs.	Coordination	Music programming and interview and News shows.	Does not apply	Does not apply
PERREGIL SILVA (2013) (30) "Os bastidores do Núcleo de Locução - Rádio Unesp Virtual"	Speech-Language Pathology and Audiology workshop at the beginning of the school year to those interested in auditioning for the WEBradio Speech-Language Pathology and Audiology workshops throughout the school year	Workshop	Use of Voice Phonation Physiology Vocal Psychodynamics Vocal Quality Voice Types Vocal and Breathing Exercises Intonation Enunciation Rhythm and Fluency Vocal Health Care	yes	no

Discussion

The study shows that there are very few publications involving Speech-Language Pathology and Audiology and WEBradio.

It also shows that Speech-Language Pathology and Audiology participates of isolated experiences of actions concerning WEBradios that have not received due attention in relation to scientific productions. The actions have been indirectly mentioned in the body of publications in the field of Communication, mediated by authors who, most times, have an education in the field of Advertising (figure 3).

It should be noted that only one publication⁽²⁷⁾ has a Speech-Language Pathologist and Audiologist as co-author, and was published in the proceedings from the SBFA congress. This publication is an abstract, and therefore the information, discussions and reflections cannot be detailed and read in depth.

It should also be noted that there are not articles published in periodicals relating Speech Language Pathology and Audiology to WEBradio; this confirms that science periodicals have not been the elected channel for the publication of the experiments realized, either in the Speech Language and Audiology or in the Social Communication fields.

When the field of the congresses is taken into account, Communication (INTERCOM) prevails.

The study shows that the issue of practices in WEBradio is far from the focus of attention, discussion and reflection of Speech-Language Pathology and Audiology. The possible reasons for this theme to be far from this field should be questioned. Is there a lack of interest? Is there a lack of demand? A lack of need? Lack of knowledge? Opportunities for action? Is there a lack of studies and researches about the field?

Regarding the WEBradios involved in the experiences concerned in the publications, figure 3 shows that all of them are inserted in a university environment and involve the academic community in interdisciplinary actions. However, the study also shows the endogenous character of the publications. Almost all of them (83.34%) come from the same experience, at the “Rádio Gentileza” (University of Fortaleza– UNIFOR). The exception (16.66%) was developed at the “Rádio Unesp Virtual” (Paulista State University Júlio de Mesquita Filho– UNESP). Thus, there is a perspective based on very punctual realities regarding the field of experience,

intervention, the possibilities and the groups of researchers involved. Considering that Brazil is a country with contrasts and different realities and that the distribution of WEBradios in the country is uneven⁽¹³⁾, the need for expansion of studies and diversifying the research groups, subjects and realities is highlighted in this paper. Literature would be enriched with the development of varied studies that would encompass the diversity of realities of the WEBradios in our country⁽¹³⁾, as well as the several possibilities of experiences and points of view regarding Speech-Language Pathology and Audiology practices that may occur.

Due to the WEBradios being from Universities, the subjects involved are always from the academic communities involved. In this context, interdisciplinary action has always been considered positive, either to the teacher-student relationship or to the educational process of teaching-learning and theoretic-practical knowledge.

Figure 4 shows that the Speech-Language Pathology and Audiology actions are varied and involved: idealization of the WEBradio; voice selections; accessory to the WEBradio speakers; Speech-Language Pathology clinical practice (assessment and therapy); vocal direction; participation in the production and recording of the radio products/shows; guidance about vocal care and health; conducting workshops. However, there was no approach or discussion about the importance of the voice as Language and Expressivity.

The development in process prevailed in the Speech-Language Pathology actions in WEBradio described in the analyzed publications (weekly individual and collective sessions). The actions in process are strategies valued in Health Promotion⁽²⁴⁾; but, however, the actions have, in the most part, a clinical character, with weekly sessions, or sessions every two weeks.

The voice and communication evaluations were usually individual. This shows the difficulties of Speech-Language Pathology and Audiology in detaching from its traditional practices, focusing on clinical-therapeutic practices and set in clinical practice facilities and outpatient units. The fact also shows difficulties in Speech-Language Pathology and Audiology to recreate its professional practices considering the new realities, the new places of intervention and new populations, in a way that is coherent with building educational processes based on the premises of Health Promotion⁽²⁴⁾.



In spite of the WEBradios being from universities and involving the academic community, no specific courses were mentioned that were given by Speech-Language Pathologists and Audiologists in the syllabus of the programs that would offer subsidies and bases for the themes and contents practiced on the WEBradio. In other words, the practices are more of clinical and accessory character, rather than educational. The educational and formative scope of Speech-Language Pathology and Audiology when working with Social Communication courses is rarely developed in a formal way in the syllabi of the several programs in communication (Journalism, Radio, TV and Internet, Multimedia, Advertisement, Cinema, among others), with few exceptions. Speech-Language Pathology practices are important for the education of the communication professionals, especially regarding the issues of language, professional voice, vocal health and expressivity^(5-7; 19).

Regarding the contents and themes featured in the actions, figure 4 showed that the most prevalent were: vocal health, vocal warm-up and cool down, vocal exercises and techniques, vocal parameters (loudness, breathing, enunciation, posture and vocal flexibility); professional voice/language/communication/expressivity use. It may be seen that the themes/contents that were focused were more restricted than those in Speech-Language Pathology literature concerning traditional radio broadcasters in MA and MF^(1; 5-7; 10) and with no specificity for the WEBradio. Furthermore, the findings agree with a review study of the educational processes and Speech-Language Pathology and Audiology actions in teachers' vocal health⁽²⁴⁾ that showed a tendency to focus on rationalization and self-control of vocal production and in performing exercises; as well as laying the genesis and the responsibility on the vocal health-illness process on the individual.

Whether in the themes and contents or in the perspective of organization of the actions and themes, there were no contexts regarding the work environments, conditions and organization of the radio speakers on the WEBradio – even though Speech-Language Pathology and Audiology literature about hertzian radio stations states such importance⁽⁶⁾. In this aspect, it may be said that the Speech-Language Pathology and Audiology actions on the WEBradio, in the analyzed studies

were below those expected even for a hertzian radio station.

The publications have no information or answers on issues such as the effects of the work conditions and new language and communicative/interactive processes on the expressivity and vocal profile of the speakers/broadcasters of a WEBradio. In addition, they are not clear about the specificities of the Speech-Language Pathology and Audiology practices with WEBradio speakers.

Thus, the existing publications⁽²⁵⁻³⁰⁾ are not enough to show the differences between the Speech-Language Pathology and Audiology actions with WEBradio speakers and those traditionally developed in hertzian stations. Nor are they enough to indicate specificities for Speech-Language Pathology and Audiology in this new field.

Now, if we consider that, on the WEBradio, the sound is added to new multimedia forms, then it would be expected that the work of WEBradio speakers, broadcasters, journalists, reporters, and hosts involved expressivity demands that are different in successfully integrating voice, message, content, text, image, photo, video, audio files, map, graph, info graph, among others. However, figure 3 confirms that the themes and contents approached are no different from those proposed in literature with radio speakers of hertzian stations^(1, 5-9). In fact, many times these are reduced to literature, since there were proposed topics and contents in literature that were not developed in the publications.

Regarding the analyzed publications, it should be noted that the fact of being abstracts implies in a consequent lack of detailing and depth of the aspects and issues regarding Speech-Language Pathology and Audiology – which, most times, were mentioned superficially and/or were kept out of the central focus of the studies.

Another topic of stress should also be the absence of a Speech-Language Pathologist and Audiologist in most works (83.34%); so it is possible that innovative actions are being developed without the professionals' concern to socialize them.

Thus, it was not possible to identify different and innovative forms of Speech-Language Pathology and Audiology actions that were distinct from the practices and models that were traditionally used with hertzian radio speakers and broadcasters. This confirms the reality of evolution

of the WEBradio in the country, since studies show that radio broadcasting on the internet has been repeating the models existing in the traditional context; and that there are difficulties to identify national WEBradios that are using sound, text and imagery in an unprecedented way⁽¹³⁾.

A reflection is needed in order to contemplate possibilities of Speech-Language Pathology actions with WEBradio professionals: aside from the relations between health-work-quality of life, communication/language and expressivity (including pauses and non-verbal and vocal resources), would there be other aspects and issues to be approached with WEBradio professionals? And in what way do these and other aspects, themes, issues and topics would articulate with the new professional demands and realities of a WEBradio? New studies are needed in order to answer these and other questions yet to come, faced with the possibilities and realities of Speech-Language Pathology and Audiology intervention with WEBradios. However, the main question of this study remains unanswered: “what would be the perspectives for Speech-Language Pathology and Audiology practices on the WEBradio?”

Conclusions

A The present systematic review showed that there are isolated experiences of Speech-Language Pathology and Audiology actions with WEBradios in Brazil, but the characterization and analysis of Speech-Language Pathology and Audiology literature regarding practices on the WEBradio did not identify differences and/or specificities regarding the work with radio speakers of hertzian stations.

There is a lack of studies that will systematize the Speech-Language Pathology and Audiology practices on the WEBradio in a clear, detail and deep manner. In addition, studies that will subsidize reflections and discussions about the current changes of the radio and the characteristics and specificities of the intervention with professionals at radio stations that are exclusively online and that may show perspective for actions on the WEBradio are needed.

Therefore, Speech-Language Pathology and Audiology should give due attention to studies focusing on the WEBradio, so as to subsidize the professional practice and the education/training of Speech-Language Pathologists and Audiologists, in a coherence with the modern tendencies in communication

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