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# Expressiveness of voice professionals: construction process of a speech-language pathology assessment script

## *Expressividade do profissional da voz: processo de construção de um roteiro fonoaudiológico de observação*

### Keywords

Communication  
Voice  
Speech, Language, and Hearing  
Sciences  
Evaluation Studies  
Therapeutic Equivalency

### Descritores

Comunicação  
Voz  
Fonoaudiologia  
Estudos de Avaliação  
Equivalência Terapêutica

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Received: April 29, 2019.

Accepted: June 27, 2019.

### ABSTRACT

**Purpose:** To create a consensus version of a speech-language pathology (SLP) script to assess the expressiveness of voice professionals. **Methods:** The process was divided into three stages: stage 1 included a survey of the literature and classification of the variables found in the instruments used; in steps 2 and 3, through teamwork, expert judges (focus groups I and II) created and adapted, along with the researcher, a consensus version of the expressiveness assessment script. **Results:** The initial list presented to the judges contained 48 variables found in the literature: 11 related to emotional and interpretation aspects, 20 associated with oral expressiveness, three related to issues of verbal expressiveness, and 14 related to nonverbal expressiveness. In stage 2, the initial version of the script of the focus group I resulted in a document with 28 parameters, distributed in three thematic assessment groups: general aspects of communication, with three parameters; aspects related to oral expressiveness, with 16 parameters; aspects associated with body expressiveness, with nine parameters. In stage 3, after adequacy by focus group II, the consensus version also resulted in 28 parameters, distributed in two thematic groups. **Conclusion:** The consensus version of the SLP expressiveness assessment script for voice professionals was finalized with 28 parameters, distributed in two thematic axes: initial impact of communication, with six parameters; expressiveness, with 22 parameters.

### RESUMO

**Objetivo:** criar uma versão consenso de roteiro de observação fonoaudiológica da expressividade. **Método:** o processo foi dividido em três etapas sendo a primeira levantamento e classificação das variáveis encontradas nos instrumentos apresentados na literatura; e nas etapas 2 e 3, na direção de trabalho coletivo, juízes especialistas (grupo focal I e II) criaram e adequaram, junto com a pesquisadora, a versão consenso do roteiro de avaliação da expressividade. **Resultados:** a lista inicial apresentada aos juízes continha 48 variáveis presentes na literatura, sendo 11 relacionados a aspectos emocionais e de interpretação, 20 à expressividade oral, três a aspectos relacionados à expressividade verbal e, finalmente, 14 à expressividade não verbal. Na etapa 2, a versão inicial do roteiro do grupo focal I resultou num documento com 28 parâmetros distribuídos em três grupos temáticos de avaliação: aspectos gerais de comunicação, com três parâmetros; aspectos relacionados à expressividade oral, com 16; e aspectos relacionados à expressividade corporal, com nove parâmetros. Na etapa 3, a versão consenso, após a adequação do grupo focal II, também foi finalizada com 28 parâmetros, distribuídos em dois eixos temáticos. **Conclusão:** a versão consenso do Roteiro Fonoaudiológico de Observação da Expressividade foi finalizada com 28 parâmetros, distribuídos em dois eixos temáticos sendo: de impacto inicial da comunicação, com seis parâmetros; e expressividade, com 22.

Study conducted at Departamento de Pós-graduação em Fonoaudiologia, Ciências Humanas e da Saúde, Pontifícia Universidade Católica de São Paulo – PUC SP - São Paulo (SP), Brasil.

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**Financial support:** This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) - Finance cod: (88887.151940/2017-00).

**Conflict of interests:** nothing to declare.



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## INTRODUCTION

In the speech-language pathology (SLP) clinic, the evaluation suggests the use of tools and techniques<sup>(1)</sup>. It directs the therapeutic processes and may vary depending on the demands of the individual being evaluated and on the professional performing the assessment.

Assessment instruments are commonly used in SLP clinic, and most of them are directed to the evaluation of a particular disorder and employed in rehabilitation<sup>(2)</sup>. In the absence of specific instruments to this end, SLP has borrowed some instruments primarily designed for the evaluation of disorders. Studies addressing intervention with singers and teachers have used validated vocal assessment and self-assessment tools pre- and post-intervention<sup>(3,4)</sup>.

Most speech-language therapists use non-validated instruments to assess expressiveness in their intervention studies conducted with voice professionals<sup>(5)</sup>.

Lack of detailed description and non-standardization of the procedures used hinder comparison between studies as well as a more robust data collection<sup>(6,7)</sup>.

A systematic literature review found that the number of SLP studies on the validation of assessment instruments has increased in recent years<sup>(1)</sup>. According to these authors, the SLP areas that presented the most significant number of validated instruments between 1999 and 2015 were language and audiology, with 20 and 13 studies each, respectively. The areas of voice, dysphagia, and orofacial motricity had, respectively, seven, four, and three studies addressing instrument validation published in that period.

Working with expressiveness is an approach that has permeated; for many years, the main strategies used to improve the communication of voice professionals. There are still few published studies identifying and operationalizing the indicators of SLP clinical practice, even after scientific production in this area has adopted the levels of evidence as a guideline for quality classification of studies conducted in the health area<sup>(8)</sup>.

## OBJECTIVE

This study aims to present a consensus version of a Speech-language Pathology (SLP) script to assess the expressiveness of voice professionals.

## METHODS

This descriptive and prospective study is part of the research project that was submitted to the Research Ethics Committee (CEP) of the *Pontifícia Universidade Católica de São Paulo* and approved under protocol no. CAAE 66711317.8.0000.5482. In this study, in particular, the construction and validation of the script content were divided into three stages. In the first stage, a survey of the literature was conducted, and the variables found in the instruments used were categorized. In the second stage, speech-language therapist judges, all with experience in assisting journalists, jointly and in the presence of the researcher, evaluated the content validity, and produced an initial version

of the script. In the third stage, speech-language pathologist and phonetician judges validated the content of the initial script and created a consensus version of the speech-language pathology (SLP) expressiveness assessment script for voice professionals. The construction of this script is part of a larger research project that, in a subsequent study, will evaluate its applicability.

**Stage 1:** Literature survey and classification of the variables found in the instruments used.

The Scopus, ScienceDirect, SAGE Journals, and MEDLINE databases were surveyed for data collection. The literature search considered the period from 2006 to 2016. The following keywords were selected to direct the search: expressiveness, nonverbal communication, professional voice, and speech-language pathology, with combined search in Portuguese and English.

In all, 5295 productions were found in the four selected databases. The findings were categorized and analyzed according to the journal of publication, area of knowledge, type of study (literature review, observational or interventional study), research individuals (voice professionals), and assessment instruments used. After filtering and evaluating the productions, 36 articles addressing the theme expressiveness and voice professionals remained, and only five of these studies presented their instruments in full. These studies served as a basis for the script construction. The parameters found in the five surveyed instruments were listed according to the classification provided by the authors and following the order of description in the works.

The five instruments included the aspects of oral, vocal, and nonverbal expressiveness in their evaluation parameters.

For a better assessment of the content covered in the instruments, the parameters found were initially separated into three categories: evaluation of emotional and interpretation aspects, evaluation of aspects related to oral/verbal expressiveness, and evaluation of aspects associated with nonverbal expressiveness.

Aiming to complement the questions that encompass expressiveness, the parameters of verbal expressiveness not mentioned in any of the instruments found in the literature were added. The initial list presented to the judges contained 48 variables: 11 related to emotional and interpretation aspects, 20 associated with oral expressiveness, three related to aspects of verbal expressiveness, and 14 related to nonverbal expressiveness.

**Stage 2:** Preparation and analysis of the script content through application and evaluation by speech-language therapists experienced in assisting television journalists.

A choice was made to prepare an initial version of the script based on a focus group composed of speech-language therapists experienced in assisting television journalists, considering the historical practical performance in improving the expressive demands (verbal, vocal, nonverbal and emotional) of this population, as well as because all the instruments found in the literature survey were used in studies conducted with these professionals.

At this time, 11 speech-language pathologists experienced in assisting television journalists (average experience time of

12 years) composed focus group I, and in a single meeting, together with the researcher, prepared a pilot of the SLP expressiveness assessment script from the list of parameters presented. The meeting began with a brief account of the research. The researcher presented some data on the literature survey and the script proposal. Two parameter lists were displayed on a screen, in Excel® (48-parameter version) and Word® (41-parameter version) software, so that the group could discuss them. In the reduced version using the Word software, items with redundancy were removed. Subsequently, after viewing and evaluating the aesthetics of both versions, the focus group chose to work on the script using the shortlist as a guide. During the construction of the initial script, special attention was given to the number of parameters, evaluation of the thematic groups, revision of the items (text), and format (font type and size).

**Stage 3:** Validation of the content of the expressiveness assessment script for voice professionals.

The initial version of the expressiveness assessment script produced in stage 2 was used as a basis at this time. Content validation and creation of a consensus version of the script was also performed through a focus group. The so-called focus group II was composed of six professionals (four speech-language therapists and two phoneticians), all with experience in assisting voice professionals.

In all, it took three meetings for the consensus version of the script to be finalized. In the first meeting, the script resulting from stage 2 was presented in print, and from it the professionals were invited to discuss which parameters would be important in a script to evaluate expressiveness, clarity in the presentation of the questions, relevance of the questions, need for response, and which model would be the best. In the second meeting, special attention was given to the number of parameters that the script would have, evaluation of the thematic groups, and preparation, inclusion, and revision of new parameters. In the third and last meeting, which was attended only by the speech-language therapists, the material was reviewed and formatted (font type and size). Regarding the revision of the parameters, the syntactic and semantic aspects that contributed to the clarity, relevance, coherence and comprehensiveness of the script were considered, as well as its operational aspects.

Finally, based on suggestions, the consensus version of the SLP expressiveness assessment script for voice professionals was prepared.

## RESULTS

As previously mentioned, Stage 1 aimed to survey the items present in the five instruments found in the literature review.

### Stage 2

According to the validation studies, the focus group aimed to verify the comprehensiveness and redundancy of each item proposed in the instrument<sup>(9)</sup>, and thus determine its permanence or exclusion. As for the results of Stage 2, the focus group also understood that there was no need to maintain verbal

expressiveness as a separate parameter, as it is inherent in the orality process.

As for content, participants' manifestations were often related to the scope of each parameter and its apparent similarity to the others. The parameters that addressed the same subject, but with more or less specificity, were revised, reformulated, or even eliminated so that the script could become practical and self-explanatory. Regarding the possibility of adopting a metric evaluation score, it was deemed unnecessary, considering the guiding nature of the script. Similarly, to avoid classification or quantification, focus group, I decided not to adopt the words "adequate" or "inadequate" in the description of the parameters. The focus group suggested that the description of the parameters be adjusted, turning them into statements such as: "Voice quality meets the speech situation" and "Presents facial movement."

As for the way the questions were presented, focus group, I understood that the script would fit best on one page, thus maintaining its practicality. Therefore, the script kept a spreadsheet format, with font type *Calibri* size 11.

The initial structuring of the script resulted in a document with 28 parameters divided into three thematic evaluation groups: general communication aspects, with three parameters; aspects related to oral expressiveness, with 16 parameters; and aspects associated with body expressiveness, with nine parameters.

### Stage 3

In the assessment made by focus group II, manifestations favored the continuation of the effective construction and subsequent validation of the instrument, as well as valuable observations and suggestions for its improvement. Focus group II also agreed that it would be better to maintain the script without the adoption of a measurement score.

The objective of this phase was to verify the content validity of the parameters that comprise the script. Establishing content validity involves specifying the concept content domain and constructing and selecting indicators that represent it <sup>(9)</sup>.

Focus group II chose to subdivide the expressiveness axis into three subgroups, namely, vocal, verbal, and nonverbal aspects. In the nonverbal aspect, the subdivision between the parameters related to the face and body no longer appears. The consensus version of the expressiveness assessment script was finalized with 28 parameters, divided into two thematic axes: initial communication impact (six parameters) and expressiveness, divided into vocal (five parameters), verbal (10 parameters), and nonverbal (seven parameters) aspects. Focus group II chose to adjust the description of the parameters again, turning them into questions (to be observed), e.g., "Is vocal quality able to meet the professional's work situation?" and "Are eye, lips and eyebrows movements present?"

Chart 1 presents the division into subcategories and the number of topics for each aspect in the two stages.

Adaptations and modifications to the expressiveness assessment script can be verified by comparing the initial and consensus versions (Chart 2).

**Chart 1.** Description of the categories and their respective subcategories and total parameters of the expressiveness assessment script after the completion of Stages 1 and 2

	CATEGORIES	SUBCATEGORIES	No. of TOPICS	TOTAL TOPICS
STAGE 1	General aspects of communication	-	3	3
	Aspects related to oral expressiveness	Speech rate	1	16
		As for the articulation of sounds	3	
		As for pause and emphasis	5	
		As for the vocal quality	4	
	Aspects related to body expressiveness	As for verbal expressiveness	3	
As for the face		4	9	
	As for the body	5		
	CATEGORIES	SUBCATEGORIES	No. of TOPICS	TOTAL TOPICS
STAGE 2	Initial impact of communication	-	6	6
	Expressiveness	Vocal aspects	5	15
		Verbal aspects	10	
		Nonverbal aspects	7	7

**Chart 2.** Comparison between the initial and final versions of the expressiveness assessment script with the adjustments and modifications suggested by focus group I (initial version) and focus group II (consensus version)

SCRIPT INITIAL VERSION (Focus Group I)	SCRIPT CONSENSUS VERSION (Focus Group II)
<b>1-- Evaluation of the general aspects of communication</b>	<b>1 — INITIAL IMPACT OF COMMUNICATION:</b>
Speak naturally	As for the communication of the professional in question, does any expressive feature overlap during communication? ( ) Yes ( ) No
Speaks assertively	Does the professional speak naturally?
Conveys credibility	Does the professional speak safely?
	Does the professional look convincing?
	Does the professional look nice/friendly?
	Does the professional present an interesting/captivating communication?
	Does the professional demonstrate knowledge about the subject?
<b>2-- Evaluation of the aspects related to oral expressiveness</b>	<b>2 — EXPRESSIVENESS</b>
Speech rate appropriate to the style adopted Does vocal quality draw attention negatively?	<b>VOCAL ASPECTS:</b>
<b>As for the articulation of sounds</b>	Is vocal quality able to meet the professional's work situation?
Articulation of speech sounds appropriate to the style adopted	Does the pitch used meet the work situation of the professional?
Coarticulation of chained speech sounds	Does the loudness used meet the habitual situation of the professional?
Speaks clearly	Resonance: ( ) Balanced ( ) Laryngopharyngeal ( ) Pharyngeal ( ) Hyponasal ( ) Hypernasal
<b>As for pause and emphasis</b>	<b>VERBAL ASPECTS:</b>
Uses appropriate content pauses	Articulation tends to be: ( ) precise ( ) imprecise ( ) blocked ( ) exaggerated
Performs ( ) expressive/interpretive ( ) breathing pauses	The use of pauses tends to be: ( ) limited ( ) medium ( ) frequent
Makes use of loudness/pitch variation emphasis	Pause duration tends to be: ( ) brief ( ) medium ( ) prolonged
Makes use of accent with accent displacement	Speech rate tends to be: ( ) increased ( ) medium ( ) decreased
There is a predominance of modulation	Emphasis resources tend to be: ( ) natural ( ) excessive ( ) few ( ) displaced
( ) descending ( ) ascending ( ) neutral	What is the nature of the most frequently used emphasis resources:
	( ) loudness elevation ( ) ascending modulation ( ) ascending/ descending downward modulation ( ) syllable lengthening
<b>As for the vocal quality</b>	Does the speech construction present oral traits?
Proper habitual vocal quality	Are jargon and or other communication noise noticed during speech?
Usual loudness appropriate to the individual	Does the speech seem organized from a planning standpoint?
Proper habitual pitch	When there is reading, is it natural and constituted?
Personal habitual resonance	
Vocal quality meets speech situation	<b>NONVERBAL ASPECTS</b>
Loudness meets speech situation	Are eye, lips, and eyebrows movements present?
Pitch meets speech situation	Does the professional keep natural eye contact during different speech situations?

Chart 2. Continued...

Resonance meets speech situation	Does the professional use any expression of emotion, not consonant with speech?
	(sadness, joy, fear, anger, disgust, surprise, or contempt)
<b>As for verbal expressiveness</b>	Can the professional move naturally?
Presents organized speech	(walking, moving the arms, legs, and head)
Uses orality markers	Are body movements in line with speech/discourse?
Presence of communication noise	(movement of arms, legs, and head)
	Does the professional use movements or gestures to support expression?
<b>3-- Evaluation of aspects related to nonverbal expressiveness</b>	Does the professional use movements or gestures not consonant with speech?
<b>As for the face</b>	
Presents facial movements	
The predominance of some emotion in facial expression	
Expressions consonant with speech	
Maintains natural eye contact in different situations	
<b>As for the body</b>	
Proper body posture	
Moves naturally	
Movements in line with the speech	
Head nodules ( ) present ( ) absent ( ) appropriate	
Gestures consonant with speech	

## DISCUSSION

Assessment and reassessment instruments have been traditionally used in speech-language pathology (SLP) practice, especially in rehabilitation clinics. The fact that these validated instruments are mainly directed to the voice clinic to treat vocal disorders may, in part, explain the lack of tradition of using them to assess the voice, communication, and expressiveness voice professionals, that is, SLP vocal improvement and communicative habilitation clients.

The survey also pointed to the lack of validated instruments to assess the expressiveness of voice professionals<sup>(7)</sup>. Another issue that should be considered is the communicative uniqueness of these professionals. Voice professionals are, above all, communicators who cope with different expressive and emotional demands daily. A factor that also impacts the construction of more uniform training programs<sup>(6)</sup> and hinders the preparation and validation of standardized assessment instruments.

The literature review showed prevalence of studies in which expressiveness is related only to oral communication<sup>(7,10)</sup>. The instruments found in the literature search and the preparation of the script by the two focus groups endorse this statement, as it details the evaluation of speech parameters (oral, verbal, and vocal) to the detriment of body parameters (nonverbal). This situation seems to be due to the strong tendency inherited from the approximation of SLP studies to Linguistics, as well as from advisory work provided predominantly by speech-language pathologists specialized in voice.

The approach of oral expressiveness has been part of SLP for approximately 40 years, both in the rehabilitation and intervention with voice professionals. For speech-language therapists, practice in communicative competence, for instance, is mostly composed of expressive exercises that aim to promote communication

consistent with the context and intention of speech, develop self-perception, and improve communication<sup>(6,11)</sup>. Therefore, practice with expressiveness seeks interactivity between body, verbal, vocal, and emotional resources that reflects a particular moment of expression<sup>(12)</sup> of each individual who communicates. There is a dimension of communication capable of functioning as an element of spontaneity that is strictly associated with expressiveness concerning its communicative effects<sup>(13)</sup>. This seems to be a challenge for SLP, especially for therapists who work with advisory and professional communication.

Different authors have warned about the lack of SLP instruments validated for the Brazilian context<sup>(1,14,15)</sup> and the lack of consensus on the assessment instruments used in studies conducted with voice professionals. It is worth noting again that voice professionals are those who present different communication demands that require various adjustments, not only concerning professional issues but also in the determination of SLP intervention (type and duration, for example)<sup>(6)</sup>. In this context, when creating a standardized instrument for expressiveness evaluation, it is possible that patterns be expected and sought and that the expressive uniqueness of the individual loses its space. Hence the interest in developing an expressiveness assessment script for voice professionals. This care comes from the understanding that the work of enabling professional communication is complex, specific, and must account for the observation of the spontaneity, authenticity, and colloquial style of the professional.

For an SLP expressiveness assessment script to have potential, in its essence, to promote multidimensional observation of the professional, it is necessary to consider, in addition to the parameters listed in the consensus version, broader issues such as the socio-historical-cultural characteristics of these individuals, the discursive genres, and the aspects of tessitura and timbre variations as a function, for instance, of text/verbal construction.

In this context, the SLP expressiveness assessment script proposes to function as a guide, not only for those who perform advisory work but also for further research on the expressiveness of voice professionals.

## CONCLUSIONS

The consensus version of the speech-language pathology (SLP) expressiveness assessment script for voice professionals was finalized with 28 parameters, divided into two thematic axes: initial communication impact, with six parameters, and expressiveness, with 22 parameters.

## ACKNOWLEDGEMENTS

The authors are grateful to CAPES for the funding provided to this study under process no. 88887.151940/2017-00.

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## Author contributions

*TDS was responsible for the study design and writing of the manuscript; LPF was the study adviser, responsible for the revision of the manuscript.*