



# Actors' perception on the role of speech therapy in cinema, dubbing, theatre and television contexts in Portugal

Perceção dos atores sobre o papel da terapia da fala nos contextos de cinema, dobragens, teatro e televisão em Portugal

Percepción de los actores sobre la función de la logopedia en los contextos de cine, doblaje, teatro y televisión en Portugal

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## **Abstract**

Introduction: Speech therapists and the actors have developed straight professional relations in some countries. Therefore, a growing expansion has been observed in the speech therapist intervention in several working contexts of professional actors. In Portugal, this situation is poorly known. Objective: Describe and relate the perception of professional actors from different performance areas (cinema, dubbing, theater and television), about the role of speech therapists in their working contexts. Methods: A descriptive and cross-sectional study was conducted, using an online questionnaire to collect data in a sample of 72 actors from all regions of Portugal. Results: In the dubbing and theater contexts, speech therapists are assessed as extremely important, while in television and cinema they are classified as important. Although respondents consider as highly important the integration of speech therapists in their working teams, they mostly reveal a partial awareness about speech therapy. In the actors' opinion, speech

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therapists may have a role in the four analyzed contexts, especially in the following areas: voice therapy, voice warm-up guidance, and follow-up assistance. Conclusion: Actors are receptive to work with speech therapists, although they have a narrow view of their functions. Speech therapists are considered partially prepared to work with actors, so work is needed to better adapt to their vocal and professional needs, according with each working context.

**Keywords:** Speech Language Pathology and Audiology; voice; voice training.

### Resumo

*Introdução:* Em alguns países tem-se verificado um aumento da parceria entre o terapeuta da fala e o ator, existindo uma expansão crescente da intervenção do terapeuta nos vários contextos profissionais do ator. Em Portugal, esta realidade é ainda pouco conhecida. *Objetivo:* Descrever e relacionar a percepção que os atores das diferentes áreas performativas: cinema, dublagem, teatro e televisão, têm em relação ao papel do terapeuta da fala. *Material e Método:* Realizou-se um estudo observacional descritivo-transversal. Recorreu-se a um questionário online para recolha de dados, numa amostra de 72 atores, proveniente de todo o país. *Resultados:* Nos contextos de dublagem e teatro o terapeuta da fala é considerado como extremamente importante, enquanto em cinema e televisão a classificação obtida é de importante. Apesar de os inquiridos atribuírem um grau elevado de importância à integração do terapeuta da fala nas suas equipas de trabalho, as suas áreas de intervenção ainda não são completamente conhecidas. Na opinião dos inquiridos, o terapeuta da fala pode integrar a equipas de trabalho em quatro contextos, nos seguintes aspectos: terapia vocal, orientação de aquecimento vocal e assistência contínua aos atores. *Conclusão:* Os atores estão receptivos ao trabalho do terapeuta da fala, embora demonstrem uma visão parcial das suas funções. A preparação dos terapeutas da fala para esta área é questionada, pelo que é necessário, desenvolver mais conhecimento sobre as suas reais competências, bem como formas de aprimoramento profissional de modo a melhor responder às necessidades dos atores, nos vários contextos. .

**Palavras-chave:** Fonoaudiologia; voz; treinamento da voz.

### Resumen

*Introducción:* En algunos países se ha verificado un aumento en la asociación entre el terapeuta del habla y el actor, existiendo una expansión creciente de la intervención del terapeuta en los varios contextos profesionales del actor. En Portugal, esta realidad es aún poco conocida. *Objetivo:* Describir y relacionar la percepción que los actores de diferentes áreas escénicas: cine, doblaje, teatro y televisión, tienen con respecto al papel del terapeuta del habla. *Material y método:* Se realizó un estudio observacional descriptivo-transversal. Con la ayuda de un cuestionario online se pudieron recolectar datos, con una muestra total de 72 actores, provenientes de todo el país. *Resultados:* En los contextos de doblajes y teatro, el terapeuta del habla es considerado de extrema importancia, mientras que en el cine y televisión la clasificación obtenida es importante. Aunque los encuestados hayan atribuido un grado elevado de importancia a la integración del terapeuta del habla en sus equipos de trabajo, sus áreas de intervención no son aun completamente conocidas. En la opinión de los encuestados, el terapeuta del habla puede integrar el equipo de los cuatro contextos, en los siguientes aspectos: terapia vocal, orientación del calentamiento vocal y apoyo continuo a los actores. *Conclusión:* Los actores están receptivos al trabajo de los terapeutas del habla, aunque demuestren visión parcial de sus funciones. Se cuestionó el preparo de los terapeutas del habla para esta área, lo que indicó que es necesario desarrollar más conocimientos sobre sus efectivas competencias, así como formas de perfeccionamiento profesional para contestar mejor a las necesidades de los actores en los varios contextos..

**Palabras clave:** fonoaudiología; voz; entrenamiento de la voz.

## Introduction

Nowadays it is quite often to find voice professionals, i.e. people who use their voice as a working tool, looking to further their vocal skills in order to achieve a differentiation in labour market. Actors, teachers and lawyers are just some examples of professionals who rely on their voice to perform their job duties,<sup>2</sup>

According to the Portuguese Classification of Occupations from 2010, the actor can undertake his duties in a variety of contexts, namely in cinema, dubbing, theatre and television<sup>3</sup>, which require fundamentals that are essential to any actor: interpretation, body and voice. To be effective in their roles, actors should take these three items into account<sup>4</sup>.

Despite the transversal nature of the above features, actors' four main working areas refer to different realities, wherefore the relevance of interpretation, body and voice varies according to the performance art in question<sup>5,6</sup>. In dubbing, performers are voice actors, not shown on the screen, and thus voice takes on greater relevance<sup>7</sup>. In cinema and television, the camera works as a mediator between the actor and the audience, and the film actor performs for the camera, which does not happen in theatre<sup>8</sup>. Also, the use of microphones allows for a natural speech<sup>1</sup>. In theatre, the actor achieves his maximum vocal projection and articulation, together with body movements and gestures<sup>1,9</sup>.

In some countries, like Brazil, there has been an increase of the cooperation between the speech therapist (speech language therapist and audiologist) and the actor, they exchange knowledge and practices to support performance practices and research. There is also a growing expansion of the speech therapist's intervention in the actor's various working contexts, with the theatre being the most relevant<sup>8,10,11,12</sup>. However, this reality seems not to be so evident in Portugal. It is therefore important to carry out studies to provide a better insight of these two areas, with a view to better guide the development of speech therapy and its ability to address new challenges, in particular among actors.

Some studies show that the speech therapist is fully qualified to be a supporting member in schools and theatre groups. Nevertheless, drama teachers usually work alone, carrying out a variety of exercises, sometimes without an awareness of the physiological function associated. In this area,

the speech therapist has been pointed as a possible adjunct to the teacher, helping him to improve his knowledge of the anatomy and physiology of the vocal tract and vocal technique<sup>11</sup>.

The role of the speech therapist among theatre actors focuses on three main points: prevention, rehabilitation and enhancement of artistic performance, the latter being of greater relevance for this study<sup>11,13</sup>. The main areas of work are: voice, verbal articulation and non-verbal communication<sup>13</sup>. The contribution of the speech therapist in theatre is becoming increasingly complex. In addition to monitoring the actors' training, providing effective vocal technique, the speech therapist has also been asked to join the creative team, assisting in character building<sup>10</sup>.

Previous studies have shown that the work of the speech therapist in cinema should focus on a set of parameters, namely: oral expressiveness of the characters, including training of breathing, articulation, speech intelligibility, resonance, vocal resistance, intensity, vocal quality, projection, regionalisms and singing, including also vocal warm-up and guidelines to vocal enhancement<sup>14,15,16</sup>. Since in this context scenes are often recorded out of chronological order, special attention should be paid to the continuity of the oral expressiveness. The speech therapist can assist the actors in keeping their vocal consistency, focusing on vocal quality, pitch, loudness and vocal dynamic issues<sup>16</sup>. Several authors point out that body and voice integration should also be considered in the vocal preparation of film actors, arguing that the speech therapist should raise the actor's awareness to this relation to maximize his performance<sup>5</sup>. The work of the speech therapist in the film industry should therefore go beyond the text to assist the actor in the non-verbal elements related to the character building<sup>14,15</sup>.

The action of the speech therapist in dubbing is still underdeveloped. However, considering that the voice is the unique working tool of dubbing actors, the engagement of the speech therapist in the entire dubbing process should be envisaged. Dubbing actors face high demands in terms of vocal and articulatory plasticity and they are commonly asked to produce uncomfortable speech patterns, often produced under vocal stress<sup>1</sup>. As in the case of occupations that require physical support of a physiotherapist, the speech therapist should be part of the actor team, to help him to achieve a better

vocal output, reducing vocal risks associated to the performance practice.

Concerning the way other professionals feel about speech therapists' possible role in their working team, we could only find references focusing on cinema and theatre. In these areas, although everyone seems to be well aware of the need for speech therapy, the intervention of the speech therapist is regarded as exclusively associated to vocal health care<sup>11, 14</sup>.

Regardless of the type of intervention required for the different contexts, the speech therapist should play a role in terms of vocal preparation and awareness, thus preventing potential vocal problems. Also, he should enlighten the actors on their individual vocal capabilities, working on their breathing, posture, relaxation and vocal hygiene, along with resonance, articulation, intensity, among others<sup>11</sup>.

When working with actors, their individual physiological features should be respected, otherwise organic fatigue may occur, as the muscles begin to function indiscriminately and the body starts working in stress to produce a specific voice quality. The speech therapist should also foster individual independence and autonomy to empower the actor to develop the voice he needs to build his characters in the future<sup>12, 17</sup>.

Due to the lack of studies covering the relation between the speech therapy and actors in Portugal, the main purpose of this work is to describe how the actors from the different performance areas perceive the role of the speech therapist. Moreover, this work aims to: 1) identify the most relevant competences of the actor in different working contexts; 2) determine how the duties, the importance and the background of a speech therapist is perceived

in the working context of the respondents; 3) identify the ways a speech therapist can be integrated in the different performance areas; and 4) analyse the importance given to the speech therapist in the different working contexts when compared to the importance given to each competence for each performance area.

## Material and Method

A descriptive cross-sectional observational quantitative study was undertaken by using a method of systematic collection of observable and quantifiable data based on a non-probabilistic sampling method: snowball sampling.

The population targeted by this study consists of professional actors graduated in Portugal working in, or having worked in, Portugal. A minimum experience of 3 years in acting was also required. Actors with a background in speech therapy were excluded from the sample.

The sample consisted of 72 individuals, 54 % (n= 39) male, from all over the country. The respondents' age ranged from 19 to 67 years, with an average of 36 years and a standard deviation of 11.41.

Working contexts covered in the sample included: cinema (n= 53; 73.6 %), dubbing (n= 32; 44.4 %), theatre (n= 71; 98.6 %), television (n= 45; 62.5 %). The information from the 'others' field includes: teaching and training; advertising; circus arts; voiceover; animation; dancing, and opera. 45 individuals (63 %) are or have been responsible for actors' vocal and utterance preparation (table 1).

**Tabela 1** – CARATERIZAÇÃO DA AMOSTRA (N=72)

		N	Porcentagem (%)
<b>Contextos Profissionais</b>	<b>Cinema</b>	53	73.6
	<b>Dublagens</b>	32	44.4
	<b>Teatro</b>	71	98.6
	<b>Televisão</b>	45	62.5
	<b>Outros</b>	21	29.2
<b>Preparação Vocal</b>	<b>Sim</b>	45	62.5
	<b>Não</b>	27	37.5

Data were collected through an online questionnaire, mostly containing closed questions in scale format to account for the ‘perception’ of the speech therapist role by actors.

To develop the questionnaire, we conducted semi-structured interviews to four elements of the target population, intending to determine the most relevant variables and the most appropriate response options. The terminology used in the questionnaire was based on the language currently used by actors. We find therefore necessary to clarify the meaning of some terms used: ‘vocal placement’ refers to the adjustment of timbre (including source and filter) and can assume different dimensions and sounds depending on the specific working context of the actor; ‘resonant voice’ refers to a healthy production, using flowphonation and resulting in a strong, ‘bright’ and clear output with minimum stress; ‘vocal cool-down’ refers to a set of exercises with the purpose of returning to colloquial voice; and ‘non-modified voice’ refers to the actor’s ‘natural’ voice, with no changes.

A final review of the structure and content of the questionnaire was made by an expert panel of three speech therapists to account for content relevance. Also, three individuals from the target population were selected for a pilot test to assess

the adequacy of the questions and scales used. These individuals were excluded from the final study sample.

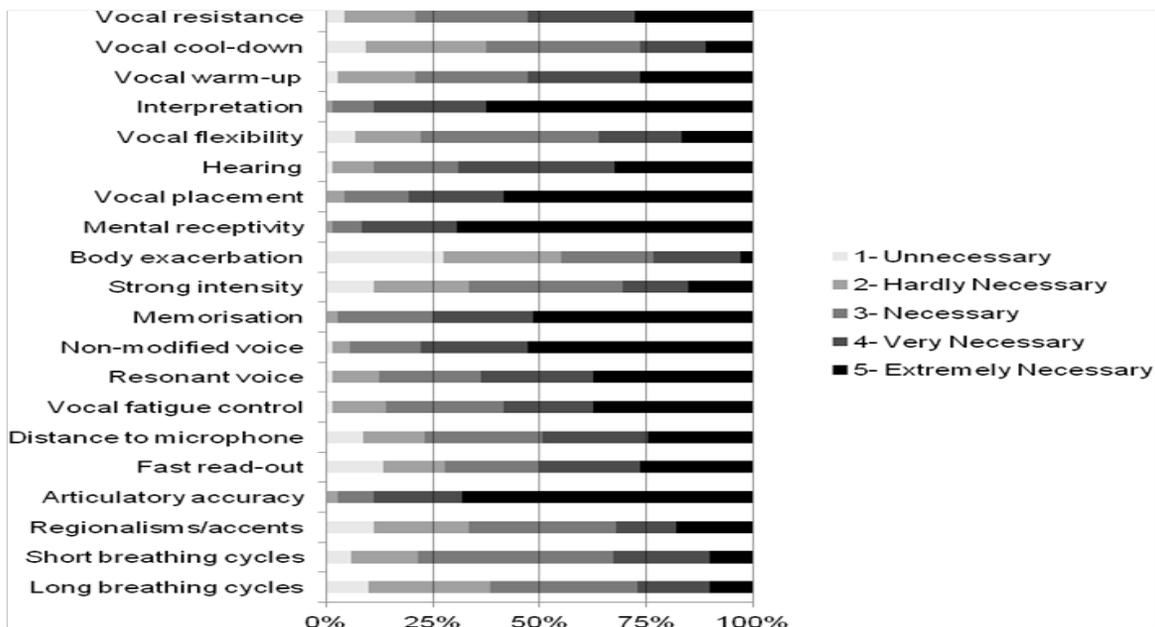
The final questionnaire was sent to actors and entities related to the sector, including sound and audio-visual studios, national theatres, TV producers, acting schools, artistic agencies and cultural production agencies, among others.

Data were handled using SPSS version 21 and Microsoft Excel 2010. In data analysis, we used descriptive and inferential statistics for relative frequencies, as well as Spearman correlation and a significance level of 0.05.

### Results

From the 72 individuals included in the sample, 26 (36.11%) have had direct or indirect contact with speech therapists throughout their professional career. The main reasons given for contact were: multidisciplinary work team with a speech therapist and vocal assessment.

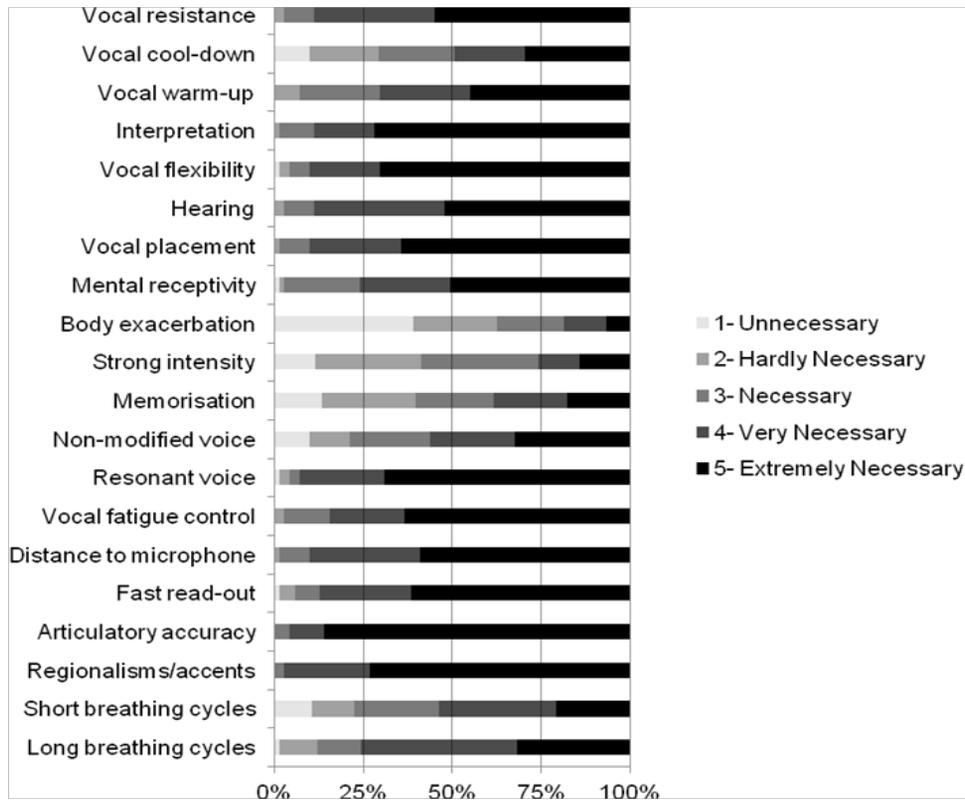
Regarding the actor competences, in the cinema the highlight goes to: articulatory accuracy, non-modified voice, memory capacity, mental receptivity, vocal placement and performance abilities (graphic 1).



Graphic 1 – Competences in cinema context (59 ≤ n ≤ 72)

Dubbing was the working context where most competences were referred to as extremely/very needed, with an emphasis to: long breathing cycles, ability to imitate regionalisms/accents, articulatory accuracy, fast read-out, distance to

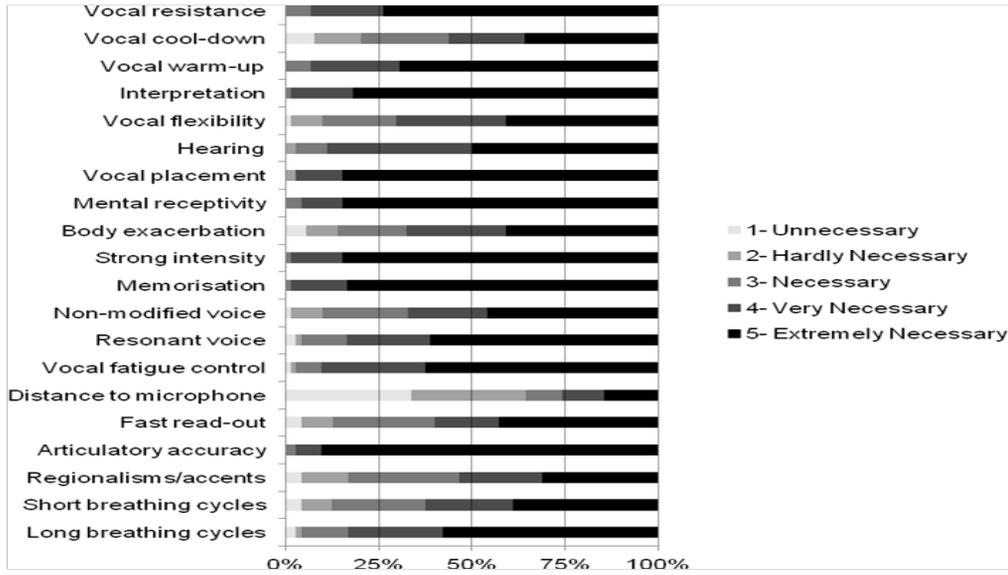
microphone control, vocal fatigue control, resonant voice, mental receptivity, vocal placement, hearing capabilities, vocal flexibility, performance abilities and vocal resistance (graphic 2).



**Graphic 2** – Competences in dubbing context ( $59 \leq n \leq 72$ )

In theatre, the competences most frequently identified are: long breathing cycles, articulatory accuracy, vocal fatigue control, resonant voice, memory capacity, strong intensity, mental

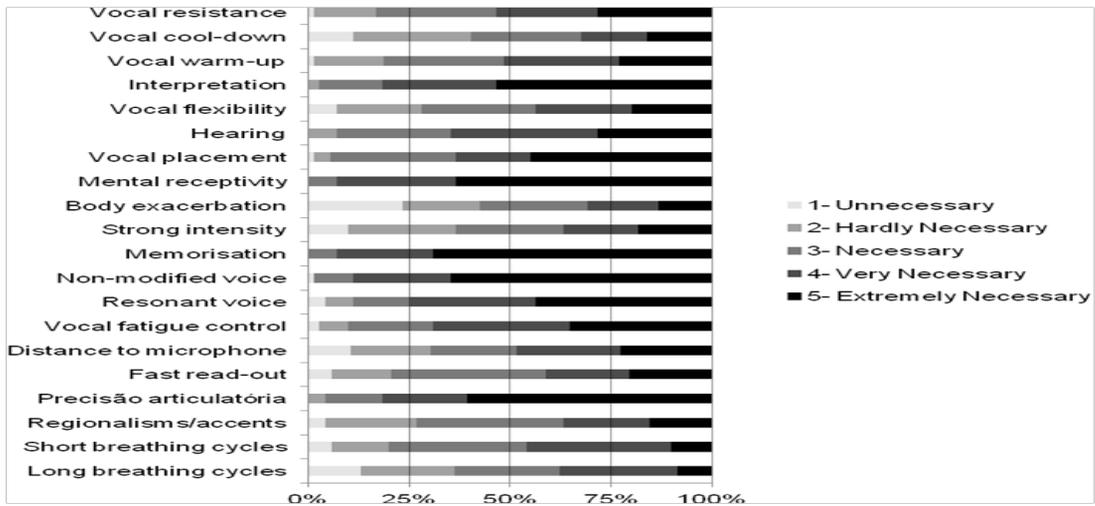
receptivity, vocal placement, hearing capabilities, performance abilities, vocal warm-up and vocal resistance (graphic 3).



**Graphic 3** – Competences in theatre context (59 ≤ n ≤ 72)

In TV, the competences most considered as extremely/very needed were: articulatory accuracy, resonant voice, non-modified voice, memory

capacity, mental receptivity and performance abilities (graphic 4).

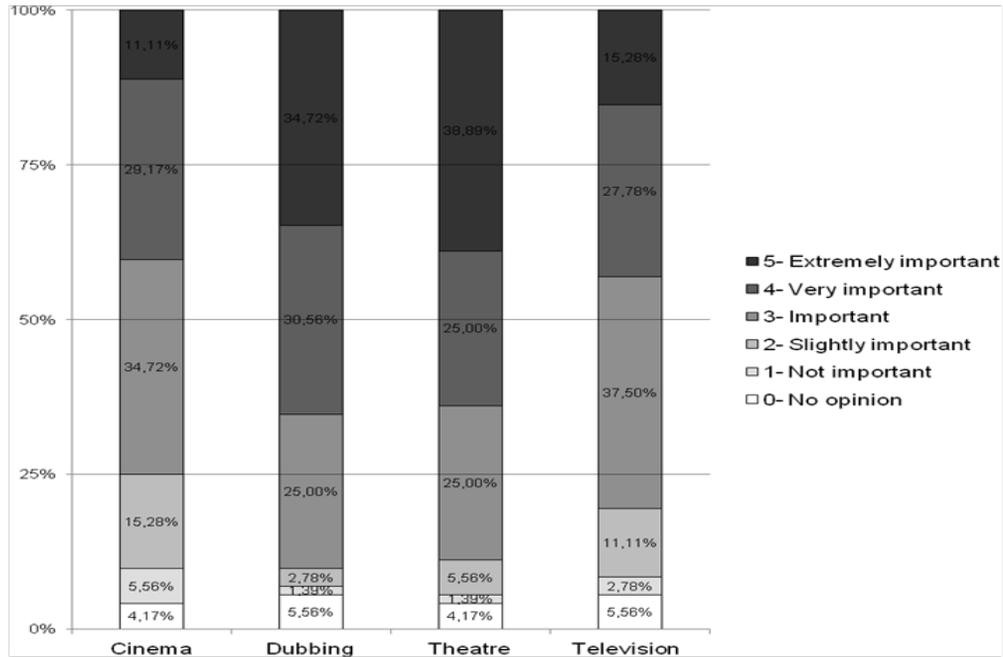


**Graphic 4** – Competences in television context (59 ≤ n ≤ 72)

Regarding the working areas of the speech therapist, respondents highlighted the following: articulation of speech (90.3%), voice (80.6%) and oral language (79.2%). Half of the respondents (50%) mentioned posture, followed by orofacial movement, with 48.6% references. Facial aesthetics, deglutition, non-verbal communication and written language were the areas considered as less relevant: 20.8%, 19.4%, 13.9% and 2.8% respectively. In the field 'Others', selected by three respondents (4.2%), we can find a reference to relaxation

and eating habits as working areas of the speech therapist. Also, three respondents (4.2%) have no opinion on this matter.

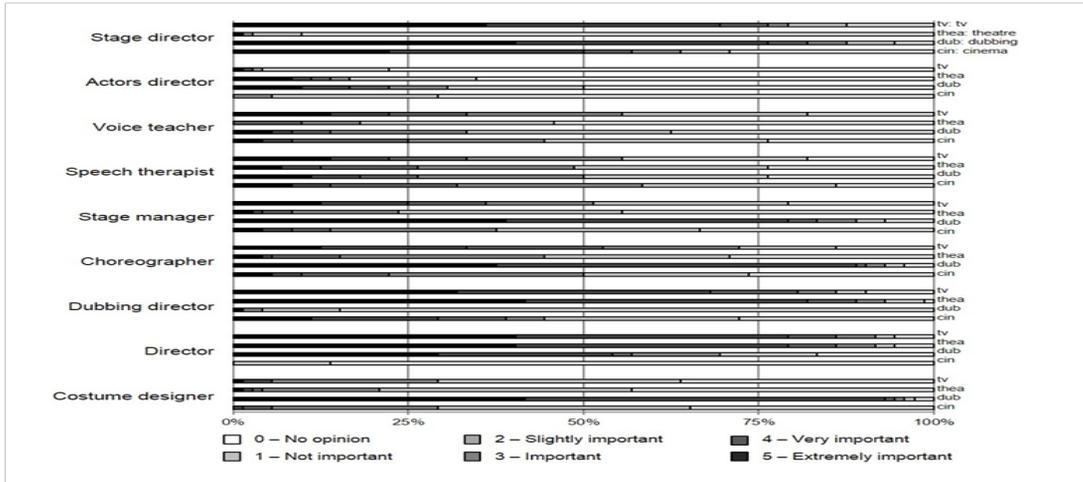
We assessed the degree of importance given to the speech therapist in the different working contexts and found that his role is mostly rated as important in cinema and TV, whereas in dubbing and theatre the most frequent rating is extremely important (graphic 5).



**Graphic 5** – Importance of the speech therapist in the different contexts (n=72)

The importance given to the speech therapist when building the actor's team in relation to other professionals dealing directly with the actor was also considered (graphic 6). The results were

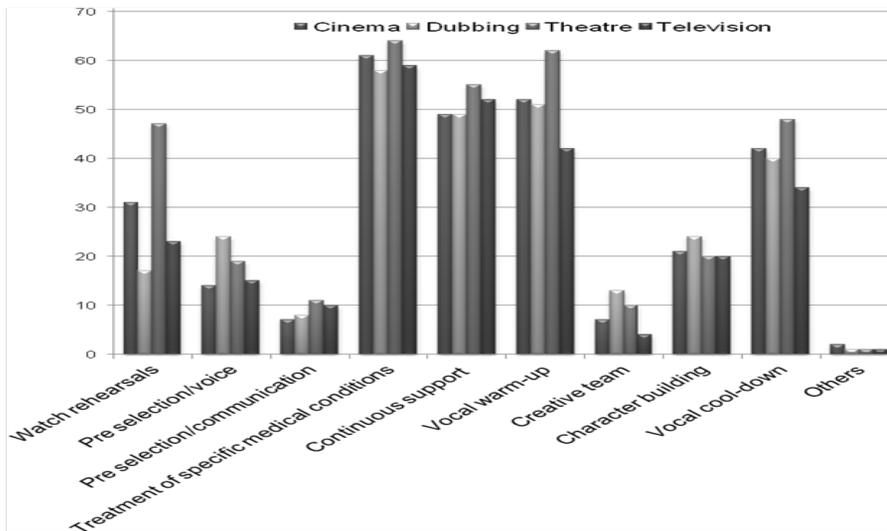
common to the four working contexts, with a rating of 'extremely/very necessary'.



**Graphic 6** – Integration of the speech therapist in the different working contexts (n=72)

From the 72 individuals included in the sample, 49% considered the speech therapist was partially prepared to work with him, 29% stated he was fully prepared, 19% have not yet formed an opinion, and 3% considered he was not prepared.

Regarding the integration of the speech therapist in the actor’s working team, we found three items common to all four working contexts: treatment of specific medical conditions, vocal warm-up guiding and continuous support to actors (graphic 7).



**Graphic 7** – Forms of integration in the actor’s working team (n=72)

Also, correlations between ‘the importance of given to competence’ were determined for each the speech therapist integration’ and ‘the importance working context and competence (table 2).

**Table 2** – CORRELATION BETWEEN THE IMPORTANCE ASSIGNED TO SPEECH THERAPIST IN THE DIFFERENT CONTEXTS AND THE IMPORTANCE ASSIGNED TO COMPETENCES FOR EACH PERFORMANCE AREA.

	Cinema		Dubbing		Theatre		Television	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>P</i>	<i>R</i>	<i>P</i>	<i>r</i>	<i>P</i>
Long breathing cycles	0,475	0,000	0,245	0,047	0,164	0,172	0,217	0,074
Short breathing cycles	0,347	0,003	0,25	0,041	0,372	0,001	0,213	0,077
Regionalisms/ accents	0,100	0,402	0,268	0,024	0,167	0,165	0,267	0,024
Articulatory accuracy	0,399	0,001	0,26	0,029	0,263	0,025	0,275	0,020
Fast read-out	0,315	0,009	0,264	0,027	0,292	0,014	0,321	0,008
Distance to microphone	0,564	0,000	0,366	0,002	0,228	0,075	0,414	0,001
Vocal fatigue control	0,483	0,000	0,367	0,002	0,341	0,003	0,301	0,011
Resonant voice	0,445	0,000	0,239	0,044	0,358	0,002	0,335	0,004
Non-modified voice	0,217	0,066	0,031	0,800	0,223	0,064	0,277	0,019
Memorisation	0,188	0,115	-,020	0,870	0,117	0,329	0,091	0,451
Strong intensity	0,35	0,003	0,077	0,529	0,252	0,033	0,239	0,044
Body exacerbation	0,243	0,044	-,064	0,629	0,085	0,481	0,357	0,003
Mental receptivity	0,206	0,082	0,076	0,528	0,302	0,010	0,135	0,262
Vocal placement	0,401	0,000	0,181	0,134	0,217	0,067	0,222	0,063
Hearing	0,408	0,000	0,27	0,023	0,348	0,003	0,364	0,002
Vocal flexibility	0,408	0,000	0,197	0,100	0,401	0,001	0,177	0,140
Interpretation	0,478	0,000	0,050	0,679	0,256	0,030	0,167	0,164
Vocal warm-up	0,415	0,000	0,454	0,000	0,419	0,000	0,352	0,003
Vocal cool-down	0,326	0,009	0,383	0,002	0,137	0,279	0,29	0,022
Vocal resistance	0,363	0,002	0,518	0,000	0,46	0,000	0,428	0,000

Spearman correlation and significance level of 0.05

In cinema, the importance given to the speech therapist is correlated, in a positive, moderate and significant way, to the importance of the following competences: long breathing cycles, distance to microphone, vocal fatigue control, resonant voice, vocal placement, hearing, vocal flexibility, performance and vocal warm-up ( $p < 0.001$  in all tests).

In dubbing, the importance given to the speech therapist is correlated, in a positive, moderate and significant way, to the importance of the following competences: vocal warm-up and vocal resistance ( $p < 0.001$  in all tests).

In theatre, the importance given to the speech therapist is correlated, in a positive, moderate and significant way, to the importance of the following competences: vocal flexibility and vocal warm-up ( $p < 0.001$  in all tests).

In television, the importance given to the speech therapist is correlated, in a positive, moderate and significant way, to the importance of the following competences: distance to microphone and vocal resistance ( $p < 0.001$  in all tests).

## Discussion

The study sample is quite varied in terms of ages, with an average of 36 years and a standard deviation of 11.41. This may be related to the fact that all respondents have worked in more than one context associated to acting.

In cinema, the actor's performance depends to a large extent on oral and body language and the actor must adapt his performance to the other items of the *mise-en-scène*, such as the microphone, camera and framing<sup>8,15,16</sup>. The sound capture media enables voice amplification, boosting the volume of breathing, articulation, whispering, and thus requiring a more demanding vocal uttering. Loudness, pitch, tonal inflections, speed, extensions and pauses are important resources for oral utterance in cinema, which should be very slight, with subtle variations of volume and rhythm<sup>15</sup>.

Previous studies show that vocal technique in cinema, according to actors and directors, aims at achieving: good diction, intensity adapted to the working environments and sound capture media, vocal warm-up, vocal resistance, good extension, vocal dynamics and vocal continuity<sup>14,16</sup>. Vocal problems were also described, mainly related to the use of the microphone, in particular when directing the voice to the sound capture media without raising its intensity<sup>14</sup>.

Competences referred to in this study as being the most important in cinema match those from previous literature, in which the importance of vocal placement and articulatory accuracy is pointed out. In addition to the competences referred to in previous literature, the following were also mentioned in large scale: non-modified voice, memory capacity, mental receptivity and performance abilities.

In dubbing, the actor must synchronise his speech with the character's mouth movements, thus recreating the vocal pattern reflected by the onscreen character<sup>18</sup>. To embody the character, dubbing actors must put across the whole context, such as facial expressions and other details included in the original version, through the voice, hence the importance of the actors' voice and their ability to merge with onscreen character<sup>1,19</sup>.

The preconditions to be a good dubbing actor include: flexible vocal quality, ability to produce caricature speech and regionalisms, good reading and articulation, sense of speaking rate and performance abilities<sup>1</sup>. The findings of this study match those of previous literature, with a focus on: articulatory accuracy, ability to imitate regionalisms/accents, fast read-out, performance abilities, resonant voice and vocal flexibility. In addition to the competences referred to in previous literature, the following were also broadly mentioned: long breathing cycles, distance to microphone control, vocal fatigue control, mental receptivity, vocal placement, hearing capacity and vocal resistance.

In theatre, voice and body combine to enhance the actor's performance<sup>20</sup>. The texture of the voice relies on the body features and movements, emotions, gestures and state of mind required by the character<sup>10</sup>. The actor's performance is also determined by a few factors, including the distance between the stage and the audience and may require, on certain occasions, vocal and body exacerbation<sup>5</sup>.

The actor's vocal requirements have changed over time. In the 1990s, a deep over-articulated voice was required<sup>21</sup>, while nowadays a lot of other attributes are used to describe an actor's voice, including 'strong', 'resonant'. But what really matters is a well-developed vocal projection<sup>21,22</sup>. To achieve this, resonance, breathing and intensity must be well established, for only that way can the actor project his voice with minimum or no stress<sup>6</sup>.

The vocal technique applied to theatre actors goes beyond working vocal projection. It also includes articulation, tone, rhythm and speaking rate<sup>1</sup>. Theatre actors' complaints are about: problems in imitating voices and accents, vocal stress, adapting the voice to the characters, vocal fatigue, foreign body sensation, posture, verbal articulation, speech intelligibility, phonoasthenia and vocal projection<sup>13</sup>.

In this study, most of the competences rated as highly important have been referred to in previous literature, namely: long breathing cycles, articulatory accuracy, vocal fatigue control, resonant voice, strong intensity, vocal placement, performance abilities and vocal resistance. In addition to previously referred competences, relevant mentions were obtained for: memory capacity, mental receptivity, hearing capacity and vocal warm-up.

The actor's working process in TV is not very different from the one in cinema. Both value natural voice, putting vocal projection on the back burner<sup>18</sup>, which is consistent with the findings of this study, where the non-modified voice competence was highlighted. In addition to the competences referred to in previous literature, the following were also mentioned in large scale: articulatory accuracy, resonant voice, memory capacity, mental receptivity and performance abilities.

After examining the level of need attached to each competence, we could find three competences that are common to all four working contexts – articulatory accuracy, mental receptivity and performance abilities. Cinema and TV share similar conditions and both get high rates for non-modified voice and memory capacity. In theatre, strong intensity, memory capacity and vocal placement have a major importance. In dubbing, fast read-out, vocal flexibility and ability to imitate regionalisms/accents stand out.

Despite the common competences in the actor's four main areas of activity, they relate to different realities. Therefore the speech therapist should have a comprehensive knowledge of the specific features and requirements of each area, to be better prepared to cooperate with the actor and more effectively serve his specific needs.

The duties of a speech therapist, as a professional dealing with human communication disturbances, include prevention, screening, consulting, assessment, diagnostic, treatment, intervention, management, advisory and follow-up of patients with speech, language, non-verbal communication

and swallowing disorders<sup>23</sup>. This study enabled us to get an overview of how the speech therapist work is perceived by actors within different operational areas. We found a close association between the speech therapist and verbal articulation, voice and oral language. Posture was also pointed out as a possible working area, something that is not currently foreseen as a direct intervention area. Regarding non-verbal communication, like in previous studies<sup>11</sup>, we found no relevant connection with speech therapy. Actors acknowledged the speech therapist action on vocal health, as documented in Brazilian reality<sup>8,11</sup>.

The integration of the speech therapist was most frequently rated as extremely/very necessary in the different working contexts. However, when compared to other parties involved with similar rating, the speech therapist was the least valued. This may be due to the lack of a consistent combination of practices and knowledge in Portugal.

The rating given to the professionals working with the actor gave us a better understanding of how the working teams associated to all four working contexts are established. By knowing the professionals who the actors often work with, the speech therapist can adjust his role to the global dynamics of the teams. Also, the therapist's cooperation with professionals related to the performing area can be a good starting point to develop competences to work with the actor.

The importance given to the speech therapist within the actor's work team is rated slightly differently when examined on a standalone basis or based on a comparative analysis. On a standalone basis, the integration of the speech therapist in cinema and TV is most frequently rated as important, while in dubbing and theatre it is considered as extremely important. On a bottom-up approach regarding the importance of the speech therapist integration we could find: cinema, television, dubbing and theatre. Despite the ratings achieved, the speech therapist is seldom part of the actor's work team.

As for the way the actors envisage the background of the speech therapist to work with them, it is most frequently considered as partial. This rating seems to result from a narrow vision of the speech therapist intervention and the lack of a comprehensive knowledge of the distinctive attributes of the actor's work. This information matches the data from previous studies, to the extent that the

actors seem to be familiar with the intervention of the speech therapist in vocal health only<sup>8,11</sup>. A substantial percentage of respondents with no opinion about the speech therapist competences to work with actors further strengthen this view.

A review of the graduation programmes in Speech Therapy would be relevant in the future. Although there has been great advances in the profession<sup>13,24</sup>, we might find reminiscences of the rehabilitation model in the education process and in the professional identity which might have an impact on the external image of the profession.

Previous studies describing the Portuguese context show the importance for speech therapists to invest in additional training to gain more specific skills needed to work with actors<sup>13</sup>. From the speech therapist point of view, the difficulties experienced in working with actors are chiefly related to artistic performance enhancement, especially concerning body posture, voice self-knowledge, body-voice work, and non-verbal communication<sup>13</sup>, which match the opinion of most of the respondents from this study.

A set of advanced skills are deemed to be necessary for an appropriate intervention with actors, including: wide knowledge of biopsychosocial eventualities for a range of vocal activities; deep and diverse background in vocal technique and a variety of vocal experiences<sup>9</sup>. In order to address the peculiarities of the actor's work, the speech therapist may invest in additional training that will help him to become better acquainted with the role of the actor in the different working contexts, to better understand the needs and reality of this professional. The close contact between the speech therapist and the actor may also create an enriching learning environment, where both can learn from each other's past experiences and benefit from the activities jointly undertaken.

As regards how the speech therapist can be part of an actor's work team, our findings differ from the literature reviewed. In the present study, the most relevant parameters, common to all four working contexts, are: treatment of pathologies, vocal warm-up guidance and constant support to actors. It would be worth clarifying what the respondents mean by 'constant support', to determine whether they refer to follow up in a context of vocal health/emergency, continuous processes of voice coach, or other forms of follow-up.

It is well documented in the literature that in cinema and theatre the speech therapist, in addition to voice and speech articulation, has also been giving guidance on non-verbal communication. He has also been invited to take part in the character building<sup>10,15</sup>. In dubbing, it has been suggested that the speech therapist should be part of the whole dubbing process, from the actors' selection to the end of the recording process<sup>1</sup>. While usually regarded by the actors as a rehabilitation provider, the speech therapist provides vocal warm-up and constant support activities that seem to be more related to prevention and enhancement.

The way the actors participating in this study envisage speech therapy may have influenced the opinion about how the speech therapist can become part of an actor's work team in different performance areas. It may also have had an impact on the opinion about the relevance of the speech therapist background to work with actors.

Regarding correlations, the importance given to the speech therapist in cinema varies in the same proportion as the importance given to: long breathing cycles, distance to microphone, vocal fatigue control, resonant voice, vocal placement, hearing, vocal flexibility, performance and vocal warm-up. In dubbing, the importance given to the speech therapist varies in the same proportion as the importance given to vocal warm-up and resistance. As for negative and weak correlations (although not very significant) between the importance given to the speech therapist in this context and the importance given to memory capacity and body exacerbation, they are considered normal, as they are not competences needed in dubbing. In theatre, the importance given to the speech therapist varies in the same proportion as the importance given to vocal warm-up and flexibility. Finally, in television, the importance given to the speech therapist varies in the same proportion as the importance given to distance to microphone and vocal resistance.

## Conclusion

In the light of this study we may conclude that the needs of actors in the different working contexts are rather variable. Despite the common competences in the actor's four main areas of activity – articulatory accuracy, mental receptivity and performance abilities – the speech therapist must have a comprehensive knowledge of the peculiarities of each performance area when invited to work

with an actor. Cinema and television share some similarities, with a focus on non-modified voice and memory capacity. In theatre, strong intensity, memory capacity and vocal placement stand out. In dubbing, speech merits special attention, so vocal features are given greater prominence.

On the basis of this study we could also find that the integration of a speech therapist in the actor's working team is given different levels of importance depending on the working context. Again cinema and television share some similarities, considering the speech therapist as important. However, in dubbing and theatre he is regarded as extremely important. Still, when compared to other team members, the speech therapist is given a lower rating of importance. It seems quite a natural and normal occurrence since the intervention of the speech therapist with actors in Portugal is still scarce and mostly related to rehabilitation.

We may then conclude that the higher the importance given to each of the covered competences the higher is the importance given to the speech therapist.

In the future, we believe it would be helpful to review the competences developed through basic training in Portugal and the potential additional training. Also, bringing the professionals together would be relevant for a mutual development of competences and greater professional recognition. Therefore, it will be highly relevant to foster teamwork not only in terms of artistic production processes, but also in research projects, supporting shared knowledge across these areas of activity.

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