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Dysphonia Risk Screening Protocol for Musical Theatre Actors: a preliminary study

Protocolo de Rastreio do Risco de Disfonia para Atores de Teatro Musical: resultados preliminares

ABSTRACT

Purpose: To propose the Dysphonia Risk Screening Protocol for Musical Theatre Actors (DRSP-MTA), to verify its applicability in association with the General Dysphonia Risk Screening Protocol (G-DRSP), to correlate the final scores of both, and these with the total risk score, and to compare the risk of dysphonia measured in musical theater actors with and without vocal complaint. **Methods:** An observational cross-sectional study with 34 musical theater actors, adults, of both genders, with and without vocal complaints and regardless of whether they are professionals or students. The questionnaires were applied individually. Statistical analysis made it possible to verify the correlation between the dysphonia risk scores and to compare the groups with and without vocal complaint. **Results:** Most of the participants were male, young adults, professional actors and without vocal complaint. There was a high risk of dysphonia, evidenced by the application of G-DRSP, with means scores compatible with values found in individuals with dysphonia, and reinforced by the indices found with DRSP-MTA application. There was a moderate and directly proportional correlation between the two questionnaire scores; and a correlation of both with the total risk score. Higher G-DRSP scores were observed in the vocal complaint group. **Conclusion:** DRSP-MTA was feasible and easy to apply and was positively correlated with the total score and G-DRSP score. A high risk of dysphonia was evidenced in individuals with vocal complaints. Although the specific DRSP-MTA score did not differentiate musical theatre actors with and without vocal complaints, the G-DRSP score and the total risk score performed such differentiation.

RESUMO

Objetivo: Propor o Protocolo de Rastreio do Risco de Disfonia para Atores do Teatro Musical (PRRD-TM), verificar sua aplicabilidade em associação ao Protocolo de Rastreio do Risco de Disfonia Geral (PRRD-G), correlacionar escores finais de ambos, e desses com o escore total, e comparar o risco de disfonia entre atores com e sem queixa vocal. **Método:** Estudo transversal observacional com 34 atores de teatro musical adultos, ambos os sexos, com e sem queixa vocal, profissionais ou estudantes. Os questionários foram aplicados individualmente. A análise estatística possibilitou verificar a correlação entre os escores de risco de disfonia e para comparação entre os grupos com e sem queixa vocal. **Resultados:** A maioria dos participantes era do gênero masculino, jovens adultos, atores profissionais e sem queixa vocal. Observou-se elevado risco de disfonia, evidenciado pela aplicação do PRRD-G, com escores médios compatíveis com valores encontrados em indivíduos com disfonia, e reforçado pelos índices encontrados com aplicação do PRRD-TM. Observou-se correlação moderada e diretamente proporcional entre os escores dos dois questionários e desses com o escore total. Escores mais elevados do PRRD-G foram encontrados no grupo que apresentou queixa vocal. **Conclusão:** O PRRD-TM mostrou-se viável e de fácil aplicabilidade e apresentou correlação positiva com o escore do PRRD-G e com o escore total. Elevado risco de disfonia foi evidenciado em indivíduos com queixa vocal. Apesar do escore específico do PRRD-TM não diferenciar atores de teatro musical com e sem queixa vocal, tanto o escore do PRRD-G quanto o escore total realizaram tal diferenciação.

Study conducted at Departamento de Fisioterapia, Fonoaudiologia e Terapia Ocupacional, Faculdade de Medicina, Universidade de São Paulo – USP - São Paulo (SP), Brasil.

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INTRODUCTION

The use of standardized and validated protocols favors speech therapy practice as it facilitates the comparison of results between different services and allows the realization of studies that direct and improve procedures, which contributes to evidence-based practice and provides better quality of care to the patient⁽¹⁻⁴⁾.

The instrument for the initial voice investigation called General Dysphonia Risk Screening Protocol (G-DRSP), with the calculation of scores, showed high sensitivity to differentiate groups with and without dysphonia and demonstrated effectiveness in the voice clinic⁽⁴⁾. The same instrument was applied to individuals with different laryngeal diagnoses and its score was positively correlated with the degree of vocal alteration⁽⁵⁾.

The G-DRSP has its applicability indicated to individuals of any age group, gender and regardless of the professional use of the voice, allowing the study of the multiplicity of factors involved in the development of dysphonia⁽⁴⁾. The proposal is to analyze general factors related to the voice, being necessary to complement it with specific instruments according to the age group and profession. The Specific Teachers Dysphonia Risk Screening Protocol (Specific-DRSP), for example, demonstrated that its score, associated with the G-DRSP score, supports the differentiation between groups with and without vocal disorders, in addition to providing relevant qualitative data for the evaluation and planning of speech-language therapy assistance with this particular professional category⁽⁶⁾.

One variable that can be extracted by applying the G-DRSP associated with a specific dysphonia risk screening protocol is the total dysphonia risk score. This score is represented by the simple sum of the General-DRSP score and the Specific-DRSP score. Theoretically, this total score makes it possible to quantify the risk of dysphonia in a manner consistent with the reality of the individual assessed, as it allows a single measurement, both of the general risks, to which the entire population may be exposed regardless of age and profession, as well as the specific risks related to different age groups or professions.

Concerning the voice of musical theater actors, there are many specificities to be considered. They are a special group within the vocal elite due to the need to sing, act and dance⁽⁷⁾, and are considered more susceptible to the development of vocal problems⁽⁸⁾. In the speech-language assessment of these professionals, in addition to aspects related to vocal production, it is necessary to understand the specific demands of each character, the possible adverse conditions concerning the environment, the preparation of the actor and the musical style of the production. It is important to consider the wide range of musical styles that exist in this scenario and the differences among them⁽⁹⁻¹¹⁾. Besides, the structure of musical theater production that can involve grand scenarios and long choreographies stands out, which requires precise control of both vocal techniques (laryngeal adjustments, vocal tract and respiratory support) and expressive techniques⁽⁷⁾.

The need to combine projected singing and athletic dance, which is the basis of musical theater, in a journey of many rehearsals and presentations, presupposes physiological effects

that need to be better known not only for the aesthetics of the musical but mainly for the well-being of the artist and his/her career longevity⁽¹²⁾.

However, data on vocal habits and symptoms and voice quality in this population are still limited⁽⁷⁾.

A specific investigation instrument to be used with musical theater actors will contribute to a deeper understanding of the risks and aspects that may interfere with their vocal performance.

The present study aimed to propose the Dysphonia Risk Screening Protocol for Musical Theater Actors (DRSP-MTA), verify its applicability, correlate its specific score to the score of the General Dysphonia Risk Screening Protocol (G-DRSP) and with the total risk of dysphonia score and, finally, to compare the risk of dysphonia measured in musical theater actors with and without voice complaints.

METHODS

Observational cross-sectional study approved by the Ethics Committee of the "Faculdade de Medicina da Universidade de São Paulo" (n° 0560/10).

The convenience sample consisted of 44 musical theater actors aged between 18 and 47 years old (average 25.7 years old; \pm 6.08), of which 28 were men (17 professionals and 11 students) and 16 were women (8 professionals and 8 students).

Initially, each participant was asked: "Do you have any complaints related to your voice?". Seventeen (39%) responded affirmatively and 27 (70%) reported not having a vocal complaint. Thus, two groups were established: with vocal complaints (WVC) and without vocal complaints (WOVC).

The WVC group was composed of: ten male participants (58.8%) and seven female (41.2%), eleven students (64.7%) and six professionals (35.3%), totaling 17 individuals (average 23.7 years old \pm 4.01); the WOVC group was composed of eighteen male participants (66.7%) and nine female (33.3%) being eight students (29.6%) and nineteen professionals (70.4%) totaling 27 participants (average age of 27 years \pm 6.86).

All individuals filled out the Free and Informed Consent Form and answered the G-DRSP⁽⁴⁾ and the DRSP-MTA, the latter being elaborated for the present study (Appendix A). The questionnaires were applied by the same researcher, individually, in a quiet place and at the convenience of the participants.

For the preparation of the DRSP-MTA, a comprehensive review of the literature on the subject was carried out and two pilot applications were made for the necessary adjustments. Pilot application data was not included in this study.

Both G-DRSP and DRSP-MTA allow the calculation of partial scores and a total score. The G-DRSP score can vary from zero to 131 points and the DRSP-MTA score from zero to 166 points. In both, the more negative the response, the higher the score and the greater the risk. For the G-DRSP, the cut-off score for high risk of dysphonia was defined, 22.75 for adult men and 29.25 for adult women⁽⁴⁾.

The DRSP-MTA is composed of 28 questions, of which four are qualitative and 24 scored in subscores (presenting sub-items), they are: the career moment, performance in other professions, artistic training, singing class, dance class, physical preparation,

rehearsals, use of the microphone, environmental conditions, self-reported breathing type, difficulties in maintaining vocal quality, function in production, vocal quality before artistic practice, vocal quality after artistic practice, stress, vocal warm-up and cooling, daily vocal use, smoking, drinking alcohol, using drugs, using a dental prosthesis, specific issues for women, signs and symptoms.

For this study, the two total scores were considered, in addition to creating a final risk score for dysphonia (RS) from the simple sum between them (G-DRSP + DRSP-MTA; range from zero to 298).

Data analysis was descriptive and inferential. To define the statistical analysis, the Kolmogorov-Smirnov normality test was applied. To analyze the correlation between the final scores of the two instruments applied, Pearson's Correlation test was used, with an interpretation of the correlation coefficient based on Dancey and Reidy⁽¹²⁾, who point to a weak correlation with a coefficient from 0.1 to 0.3, moderate from 0.4 to 0.6 and strong from 0.7 to 1; Student's t-test was used to compare the scores between the WVC and WOVC groups. The level of significance was set at 5%.

RESULTS

In the sample of 44 actors, averages of 40.58 (\pm 15.48) were observed in the G-DRSP, 58.39 (\pm 15.80) in the DRSP-MTA and 98.98 (\pm 26.86) in the total score. The values obtained in each group were: WVC = 51.12 (\pm 17.26) in G-DRSP, 60.82 (\pm 17.38) in DRSP-MTA and 111.95 (\pm 30.38) in the total score (G-DRSP + DRSP-MTA); WOVC = 33.95 (\pm 9.74) in G-DRSP, 56.86 (\pm 14.85) in DRSP-MTA and 90.82 (\pm 21.13) in the RS.

The DRSP-MTA score showed a moderate positive correlation with the G-DRSP score, both in the WVC and WOVC groups. It was also positively correlated with the RS in both groups, with a strong correlation in both the WOVC and WVC groups, the same occurred with the G-DRSP score, which showed a positive and strong correlation with the RS in both groups (Table 1).

The RS and the G-DRSP score differentiated musical theater actors with and without vocal complaints, identifying higher averages in the WVC group for both scores (Table 2).

DISCUSSION

When considering the cutoff points for low and high risk of reference dysphonia⁽⁶⁾, there was a high risk of dysphonia in musical theater actors complaining of voice changes. Also, the G-DRSP score values observed are close to the average found in individuals with dysphonia⁽⁶⁾. Laryngological findings⁽⁷⁾, high vocal load⁽⁸⁾ and the results of the present study reinforce the need for research with this population, identifying and describing their needs and risks, both in students and professionals; besides, explaining the need for specific training programs⁽¹³⁾.

Musical theater actors have a high vocal demand and also a high demand for vocal quality⁽¹⁴⁾. Thus, vocal changes, even if mild, can have a strong impact on their careers. Excellence in performing specific vocal adjustments for each character and in each artistic production is required of them; both adjustments

concerning the glottic source and related to the vocal tract and breathing⁽¹³⁾. Besides, there is a high vocal load composed of the volume of weekly presentations, rehearsals and choreographies, which are often complex and associated with the use of voice⁽⁷⁾. Any problem, whether vocal, physical, or emotional, can compromise the actor's performance and result in difficulties for him to establish himself in the job market^(7,8,10).

Regardless of the presence or absence of vocal complaints, the average scores obtained with the application of the screening protocols indicated a high risk of dysphonia⁽⁴⁾. The average value obtained in the G-DRSP, in addition to being above the cutoff point for high risk of dysphonia⁽⁴⁾, is close to the average found in individuals who presented dysphonia⁽⁴⁾. Laryngological findings⁽⁷⁾, high vocal load⁽⁸⁾ and the results of the present study reinforce the need for research with this population, identifying and describing their needs and risks, both in students and professionals; besides, explaining the need for specific training programs⁽¹³⁾.

In this context, the DRSP-MTA was innovative in its proposal and, in addition to bringing quantitative questions, it offers qualitative data relevant to the screening of the risk of dysphonia in musical theater actors.

The positive correlations between the DRSP-MTA and G-DRSP scores, both in the group with vocal complaints and in the group without complaints, reinforce the importance of associating both questionnaires in the investigation of the risk of dysphonia in this population⁽⁶⁾. The more present the general risks the more present the specific risks mentioned by the musical theater actor. This evidence is also reinforced by the positive correlations observed between the total score and the G-DRSP and DRSP-MTA scores, also observed in both groups (WVC and WOVC).

The presence of vocal complaints was determinant for a higher risk of dysphonia, as evidenced by the G-DRSP and the total score. The subscores available in this questionnaire may be analyzed in the future to detail this difference. Previous research has shown the questionnaire efficiency in differentiating individuals with and without dysphonia⁽⁴⁾.

The DRSP-MTA score did not differentiate the WVC and WOVC groups. Questioning the actor about complaints related to the voice can give rise to several interpretations, as for some it may reflect difficulties in specific adjustments of speech and singing⁽⁷⁾. For others, it may be related to the presence of changes in vocal quality, for example. The finding of the present research may be indicative that, in this case, the vocal complaint would be more related to general aspects such as vocal signs and symptoms, comorbidities and previous vocal changes, which can be explored in the continuity of the study on this theme.

Another study⁽⁷⁾ found a high prevalence of negative vocal signs and symptoms in 31 musical theater students, such as vocal fatigue, dry throat and vocal tract discomfort, but which were not associated with the presence of vocal disorders. Even so, a high occurrence of laryngological changes was found, such as inflammatory lesions, which may also explain, at least in part, some of the referred signs and symptoms⁽⁷⁾. The symptom most mentioned in another study was also vocal fatigue, in this case not always considered by the actors as something negative, but a consequence of excessive effort/dedication⁽⁸⁾. They also

Table 1. Analysis of correlation between questionnaire scores by group with and without vocal complaints

Groups	Scores	Scores			
		DRSP-MTA	G-DRSP	Total	
With Vocal Complaint	DRSP-MTA	Pearson's correlation	1.000	.537	.878
		Significance		.026*	.000*
		n	17	17	17
	G-DRSP	Pearson's correlation	.537	1.000	.876
		Significance	.026*		.000*
		n	17	17	17
No Vocal Complaint	DRSP-MTA	Pearson's correlation	1.000	.453	.912
		Significance		.018*	.000*
		n	17	27	27
	G-DRSP	Pearson's correlation	.453	1.000	.779
		Significance	.018*		.000*
		n	27	27	27

Pearson's correlation test *Statistically significant

Caption: DRSP-MTA = Dysphonia Risk Screening Protocol for Musical Theater Actors; G-DRSP = General Dysphonia Risk Screening Protocol

Table 2. Comparison between groups with and without vocal complaints concerning the questionnaire scores

Scores	Groups		p-value	
	With vocal complaint	Without vocal complaint		
DRSP-MTA	Average	60.82	56.86	0.424
	Standard deviation	17.38	14.85	
	n	17	27	
G-DRSP	Average	51.12	33.95	0.001*
	Standard deviation	17.26	9.74	
	n	17	27	
Total	Average	111.95	90.82	0.009*
	Standard deviation	30.38	21.13	
	n	17	27	

Student t-test *Statistically significant

Caption: DRSP-MTA = Dysphonia Risk Screening Protocol for Musical Theater Actors; G-DRSP = General Dysphonia Risk Screening Protocol

indicated breathiness, difficulty in reaching high notes and discomfort in the throat⁽⁸⁾.

The need for specific training was highlighted in a study that demonstrated breathing difficulties when singing and dancing occur simultaneously in the musical theater, which can lead to overload, discomfort and loss of aesthetic quality⁽¹³⁾.

Musical theater actors with vocal complaints had a higher RS than those without vocal complaints, general and specific risks. This finding confirms the hypothesis of the applicability of this variable and indicates the need for studies that encompass it.

Among the actors with vocal complaints, many were students. Some authors believe that professional actors have a better command of vocal techniques for singing in musical theater and therefore would have a slightly lower risk than students⁽¹¹⁾. On the other hand, professionals may be involved in more exhaustive theatrical productions in terms of required performance, the number of rehearsals and presentations and inadequate environment, which can also interfere with adequate rest time and little dedication to aspects of vocal well-being such as vocal warm-up and cool-down practices⁽⁷⁾.

Another important aspect to be considered in this population is the presence of comorbidities that can interfere with the voice. A study with musical theater students found a high prevalence of anxiety or stress⁽⁷⁾.

The other data collected with the application of the two questionnaires involve the survey of signs and symptoms, routine and work environment, tests and presentations, in addition to those related to hydration, smoking, and comorbidities, among others. And all will be analyzed in the continuity of this study, in association with voice assessment data, to broaden the analysis, including regarding the relationship between complaints of dysphonia and the presence of vocal disorders, and possible associations between the presence of complaints and/or dysphonia, general and specific risk scores and laryngeal changes.

In addition, the impact of such intense vocal load on the vocal function, necessary in this type of performance, needs to be better known to prevent or at least reduce the damage⁽⁸⁾. Music theater teachers are concerned with the risks of singing styles as they are highly exhausting, physically and vocally, and it is essential that teaching takes place efficiently and safely⁽¹⁵⁾.

Expanding specific qualitative and quantitative knowledge about musical theater actors will contribute to the development of more targeted and effective practices for this population.

CONCLUSION

The preliminary results of the present study indicate that the proposed DRSP-MTA enabled the qualitative and quantitative

survey of specific information about performance in the musical theater, being easy to apply and interpret with this population.

The actors had a high risk of dysphonia by G-DRSP and DRSP-MTA and there was a correlation between the scores of the two questionnaires, suggesting the associated application of both.

The G-DRSP score and the total score were higher among those with vocal complaints. In the group with vocal complaints, there was a significant presence of students.

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Author contributions

LCP was responsible for the conception and design of the study, selection of participants, collection, analysis and interpretation of data, writing and revision of the manuscript and approval of the final version; MSZ was responsible for the conception and design of the study, participation in data analysis, participation in the writing of the manuscript, review of the manuscript and approval of the final version; KN was responsible for the conception and design of the study, participation in data analysis, review of the manuscript and approval of the final version.

Appendix A. Dysphonic Risk Screening Protocol Specific for Musical Theatre Actors (DRSP-MTA)

Patient's name: _____
 Artistic name: _____
 Gender: M (0) F (1) RG: _____ BD: ____/____/____ Age: _____

S: 1. Time of artistic performance in the Musical Theater: _____

MT: 2. At what point are you in relation to work as an actor/actress:
 A. () Rehearsal; which play(s)? _____
 (consider 2=one production, 3=more than one production)
 B. () Season/Running; which play(s)? _____
 (consider 2=one production, 3=more than one production)
 C. () Season and rehearsals (3); which play(s)? _____
 D. () Is not acting or in preparation for any production (0)

3. Which category best fits:
 () Professional (*your income depends on artistic performance*)
 () Professional, but carries out other activities
 () Professional/Student (*income is dependent on artistic performance, but in the last year studied in the area*)
 () Student/Professional (*keeps studying in the area and participates/participated in professional productions receiving remuneration, but income does not depend on artistic performance*)
 () Student (*did not participate in paid productions*)

OPR: 4. Do you work in another profession(s)? (note: if the answer is "no", skip to question #5)
 () no () yes; which one (s)? _____
 (consider 0=no; 1=profession not dependent on the professional use of voice; 2=profession dependent on the professional use of voice)
 4.1 Average time of voice use per day in other job (s):
 . Working days: _____ hours
 (consider 0=up to 2hs of use/day, 1=between 2h01 and 5hs, 2=between 5h01 and 8hs, 3=more than 8hs of use/day)
 . Weekends: _____ hours
 (consider 0=up to 2 hours of use/day, 1=between 2h01 and 5hs, 2=between 5h01 and 8hs, 3=more than 8 hours of use/day)
 4.2. Do you take breaks that allow your voice to rest? () no () yes; if yes, describe the average time of breaks and the frequency at which they occur:

 (0=yes; 1=no)
 4.3. Environmental conditions in this other job where you use your voice
 () there is internal/external noise (2) () air conditioning (2)
 () dust (2) () very large location (1)
 () dry ice (2) () very cold environment (1)
 () very hot environment (1) () environment does not have efficient ventilation (2)
 () other: _____

FA: 5. Artistic Education:
 How your artistic education occurred/occurs (all general data most relevant to performance training: theater, musical theater, dance, singing, etc.) _____
 5.1 During your education, did you have studies and/or guidance on how healthy voice production occurs?
 () no () yes; What about vocal well-being? () no () yes
 Describe some of these guidelines: _____
 Do you follow these guidelines? () no () yes
 (consider 0=appropriate guidelines and are followed; 1=appropriate or inadequate guidelines, but do not follow them; 2=inadequate guidelines, but follow them; 3=no guidelines)

6. Vocal classification:
 () bass () baritone () tenor () countertenor () contralto () mezzo-soprano
 () soprano () can't describe () other: _____

7. Most recently used type of singing (last six months):
 () Popular () Erudite
 () Belting/POP () MPB School: () Italian () English
 () Legit () Other _____ () French () German
 Other _____

AC: 8. Do you or did you take singing lessons? () no () yes; which style (s) studied? Describe who were the professionals who accompany/accompanied you and for how long: _____

(consider 0=take a singing class, 1=took a singing class, but the last one was more than six months ago, 2=did not and never took a singing class)

AD: 9. Do or did you take a dance class? () no () yes; which style (s) studied? _____
 (consider 0=take a dance class, 1=took a dance class, but the last one was more than six months ago, 2=did not and never took a class)
 9.1. When performing choreographies, does the body assume extreme postures during moments of vocal use? () no () yes; explain (if possible, demonstrate): _____

 Do you notice that someone's posture interferes with voice production? () no () yes; explain: _____

 (consider 0=positive trend, 1=negative trend)
 9.2. After performing the choreographies, do you notice an increase in body tension?
 () no () yes; notice that there is a change in vocal production? _____

 (consider 0=no change, 1=notice little change, 2=notice big change)

PF: 10. Do or did you do any physical preparation?
 () no () yes; which? _____
 (0=yes; 1=no)
 11. Do or did you take theater/acting classes? no () yes ()
 Describe which professionals accompany/accompanied you and for how long: _____

EN: 12. Rehearsals:
 no yes; location and who runs the rehearsals: _____

(consider 0=rehearsal directed by a voice professional; 2=rehearsal not directed by a voice professional; 3=not rehearsed)
 12.1. Describe frequency and number of hours: _____
 (consider: 0=up to 2 hours of use/day, 1=between 2h01 and 5hs, 2=between 5h01 and 8hs, 3=more than 8hs of use/day)

MIC: 13. Do you use a microphone or other vocal amplification feature during rehearsals?
 no yes sometimes; describe: _____

(consider 0=yes, 1=sometimes, 2=no)
 13.1. Do you use a microphone or other vocal amplification feature **during presentations**?
 no yes sometimes; please describe: _____

(consider 0=yes, 1=sometimes, 2=no)
 13.2. If you use it in any of the situations, did you have guidance or training on how to use the equipment?
 no yes; which one? _____

(consider 0=appropriate guidelines and are followed; 1=appropriate or inadequate guidelines, but do not follow them; 2=inadequate guidelines, but follow or did not have guidelines)

AMB: 14. Environmental conditions during performance:
 there is internal/external noise (2) dust (2) air conditioning (2)
 dry ice (2) very large location (1) very hot environment (1)
 very cold environment (1) environment does not have efficient ventilation (2)
 other: _____

TR: 15. Respiratory type:
 costodiaphragmatic inferior mixed superior
 does not know how to describe (must be checked by the evaluator): _____

(consider 0=costodiaphragmatic; 1=inferior; 2=mixed; 3=superior)
 16. As for vocal psychodynamics in the theater, you recently had to modulate your voice to convey:
 excitement sadness anger fragility whisper
 scream fear insanity animal sounds tiredness
 drunk older age younger age
 other; which? _____

DIF: 17. Show difficulties to maintain:
 . the same vocal quality from the beginning to the end of the presentation/rehearsal (daily)? never sometimes always; if you checked "sometimes" or "always", describe: _____

(consider 0=no, 1=sometimes, 2=always)
 . the same vocal quality from the beginning to the end of the week?
 never sometimes always; if you checked "sometimes" or "always", describe: _____

(consider 0=no; 1=sometimes; 2=always)

FP: 18. What is your role in production?
 PROTAGONIST - responsible for a heavy role in the plot (2)
 ENSEMBLE - only member of the stage choir (1)
 SWING - replaces characters in the ensemble (2)
 DANCE CAPTAIN - dancer responsible for maintaining the choreographies. (0)
 COVER - has a shorter role and replaces other main actors in their roles (1)
 ALTERNATE - alternates a role (usually main) (1)
 SECONDARY CHARACTER (1)
 PIT SINGER - a singer who does not enter the scene (0)
 STANDIN - does not have a role in the piece, but can enter if necessary (1)
Note: if the participant is in more than one production, the score of the functions must be added

QVAP: 19. Regarding vocal quality, indicate on the scale below, with a vertical line, how much your voice displeases you before daily artistic practice:

 Pleases Displeases

QVDP: 20. Regarding vocal quality, indicate on the scale below, with a vertical line, how much your voice displeases you after artistic practice:

 Pleases Displeases

RSTR: 21. Regarding the possible stress caused by the production routine (rehearsals, presentations, etc.), indicate on the scale below, with a vertical line, how stressful your routine is:

 Nothing Stressful Very Stressful

AQ: 22. Do you perform voice warm up and/or cool down?
 no yes: WARM UP yes: COOL DOWN yes: BOTH
 If yes, describe situations and frequency: _____

(consider 0=yes, heating and cooling; 2=only heating or cooling only; 3=neither heating nor cooling)
 22.1 Procedures: _____

(consider 0=adequate procedures; 1=partially adequate 2=inadequate procedures)

UV: 23. Average voice usage time **per day**:
 23.1. working days: work _____ hours and use your voice for _____ hours
 (consider 0=up to 2hs of use/day, 1=between 2h01 and 5hs, 2=between 5h01 and 8hs, 3=more than 8hs of use/day)
 23.2. weekends: work _____ hours and use your voice for _____ hours
 (consider 0=up to 2hs of use/day, 1=between 2h01 and 5hs, 2=between 5h01 and 8hs, 3=more than 8hs of use/day)
 23.3. do you take breaks that allow the voice to rest? no yes
 (consider 0=yes; 1=no)
 If **yes**, describe the average time of breaks and the frequency at which they occur: _____

FU: 24. Regarding smoking:
 never smoked
 smoked/smokes only during performance/rehearsals; describe the frequency and duration _____
 is a former smoker; describe how long you smoked; how long you have stopped; average number of cigarettes you smoked per day: _____
 is a smoker; describe how long you have been smoking; average number of cigarettes per day: _____
 (consider 0=non-smokers or ex-smokers for 10 years or more; 1=ex-smoker for less than 10 years; 2= smoking on stage or rehearsals; 3=smoker)

AL: 25. Do you drink alcohol?
 no yes; describe: type of drink; quantity and frequency: _____
 (consider 0=no, 1=yes)

DR: 26. Do you use drugs?
 no yes; describe type, quantity and frequency: _____
 (consider 0=no, 1=yes)

PR: 27. Do you wear dental prosthesis?
 no yes; describe type and how long (consider whether to wear and not wear): _____
 if **yes**, do you have any complaints regarding the wear of this prosthesis? no yes; describe: _____
 (consider 0=do not wear and do not need; 1=wear and complain about wearing; 2=need to wear, but do not wear)

M: 28. **Only for women:**
 Do you have symptoms of premenstrual tension? no yes; if yes, describe: _____
 are you pregnant? no yes; if yes, time of pregnancy: _____
 are you in menopause? no yes; if yes, how long ago: _____
 has hormonal problems? no yes; if yes, describe: _____
 (consider **for each item:** 0=no, 1=yes)

SSE: 29. Check the frequency in which the items below occur:
 (indicate: 3 - daily/always; 2 - weekly/almost always; 1 - monthly/sometimes; 0 - never)
 (3) (2) (1) (0) Frustration due to vocal production
 (3) (2) (1) (0) Loss of control of breathing pattern during the habitual speech
 (3) (2) (1) (0) Loss of control of breathing pattern during the singing
 (3) (2) (1) (0) Loss of control of breathing pattern during the performance
 (3) (2) (1) (0) Loss of control of breathing pattern during the dance
 (3) (2) (1) (0) Loss of technical control of the singing voice
 (3) (2) (1) (0) Loss of vocal dynamics control
 (3) (2) (1) (0) Loss of vocal frequency control
 (3) (2) (1) (0) Vocal fatigue after heating
 (3) (2) (1) (0) Vocal fatigue after presentation
 (3) (2) (1) (0) Need to be absent from presentation/rehearsal due to voice
 (3) (2) (1) (0) Tuning out of control
 (3) (2) (1) (0) Aphonia

30. Other relevant comments _____

SCORE DRSP-MTA:

TOTAL SCORE (G-DRSP + DRSP-MTA):

Date: ___/___/_____

Speech-Language Therapist _____