

SELF-PERCEPTION AND VOICE QUALITY OF JOURNALISM STUDENTS

Autopercepção e qualidade vocal de estudantes de jornalismo

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ABSTRACT

Purpose: to relate data from auditory vocal analysis, complaint and vocal self-perception of journalism students. **Methods:** it is an observational, descriptive, cross-sectional study with prospective data collection, conducted at Universidade Estadual do Centro-Oeste/UNICENTRO-PR. 41 journalism students participated, 27 women and 14 men. A protocol was applied to collect data of identification and voice complaints, and vocal recordings were made with sustained emission of the vowel “a” and chained (counting of numbers and months of the year). These recordings were analyzed by a speech therapist, voice specialist, related to voice quality (adapted or altered). Students also responded to the protocol “Descriptive terms about voice”. **Results:** despite presenting adapted voices, the students presented voice complaints. The most common complaints reported to pitch change, phonemic production, voice quality and speech speed. The students who presented adapted voice quality mentioned a greater amount of positive terms related to the self-perception. There was no difference when compared the average amount of positive and negative terms presented by the group. The most positive terms listed were: nice voice, expressive, confident, feminine, strong and docile. The negatives were: tuneless voice, unstable, oscillating, irregular, rapid, nasal voice, low and timid. **Conclusion:** even with adapted voices from the auditory vocal point of view, journalism students refer voice complaints, probably due to the demand placed upon them during graduation.

KEYWORDS: Voice; Evaluation; Students; Journalism

■ INTRODUCTION

Speech Language Pathology proceeding with journalism professionals has been transformed in the last years and the concern with communication improvement gaining more space. However is still small the number to researches about these professionals and their graduation students.

To communicate properly is a need of journalists. Literature reports that these professionals need a voice pattern that guarantees the viewer attention and news credibility and interpretation¹. The knowledge that journalism students have about vocal health coming from common sense deserves attention of Colleges and Speech-language pathologists, aiming to avoid possible voice problems, as well as the improvement of job quality of these future professionals².

Regarding the students, still part of a group with little experience about professional communication, the speech-language pathologist intervention during the graduation may improve the communication and avoid vocal problems. Therefore, the speech-language pathologist is considered the professional capable to act in complex phonation process, due to their anatomic and physiologic knowledge³.

The person that frequently communicates to public, professional or socially may still have the conscious that in some how the speech shape is as important as its content, but not always they know

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how to do to modify it. However, to the communication process to occur in a proper way it is fundamental the person awareness about the aspects that need to be improved, besides recognizing the importance of adhere a specific developed training program⁴.

Voice deviations, even to subjects that use voice professionally, in most of times are seeing as individual health issues, which difficult the treatment and the prevention programs implantation⁵. The subject that seeks for voice improvement is part of specific public that in majority do not have voice deviations or laryngeal lesions.

The speech-language pathologist work has been highly explored in researches, as the need of objective protocols to voice assessment the consensus among the professionals⁶. The scientific look to voice assessment has been observed in literature recently. Despite the acoustic analysis advent, the perceptual analysis is sovereign in voice quality assessment, providing biologic, psychological, and social information⁷.

The self-perception assessment have been gaining space in scientific studies about voice voz⁸⁻¹², since it captures the person perception regarding own voice, and largely used to compare the objective measures extracted during assessment¹³. It is an initial non-invasive, integrating a diagnose methodology armory, may be used as premature detection and prevention of voice disturbances¹⁴. To journalism students and professionals it is also important the viewers perception assessment¹³.

The results of this study will allow knowing the profile of the students regarding the self-perception characteristic and assessed by the speech-language pathologist, contributing to the graduation of journalism student, as well as professional practice. The purpose of this research was to relate the vocal quality and presence of vocal complaints with the voice self-perception of journalism students.

■ METHODS

The present research was approved by th Ethical in Research Committee of *Universidade Estadual do Centro-Oeste* under the protocol number 096/2009. The participants signed the informed consent, following the 196/96 CONEP resolution.

This is an observational, descriptive, transversal study, with prospective data collection. Performed in *Universidade Estadual do Centro Oeste – UNICENTRO-PR, Campus Santa Cruz, Guarapuava – PR*. Participated from the study 41 journalism student, 27 female and 14 male. They have between seventeen and twenty eight years, and were coursing from 1st to 4th years of graduation.

From the total, 20 students were at the first year, two at second, 14 at third, and 5 at fourth year.

Inclusion criteria: students of journalism graduation course. All should had coursed the television and radio journalism disciplines, as in theoretical and practical (this as possible to the students of all grades, because the graduation contemplates these disciplines since the first year).

Exclusion criteria: were excluded the students have any pathology that could interfere in communication process (hearing loss, neurologic problems, laryngeal, etc) or had been through speech therapy to voice improvement or professional communication.

Data collection happened at institution during the discipline of television journalism discipline. The students were individually approached and assessed. Initially it was applied a protocol elaborated by the authors, to collect identification data (name, age, gender, and grade). As followed, two questions about possible voice complaints: the first one was closed, wondering whether the student had or not complaint, with only two responses possibilities (yes or no); the second was open, allowing the student to write the complaints down in case it was present. The responses of open questions were grouped and characterized by the researches. The complaints could be categorized in disturbances of: vocal quality, pitch, loudness, speech rate, phoneme production, articulation flexibility, laryngeal discomfort, and accent.

After applying this protocol, vocal samples were collected direct in computer, using available recorder in Windows, in a silent room, to posterior analysis. It was requested: sustained vowel 'a' emission, counting numbers from one to ten, and saying the months of the year. After, the samples were analyzed by a speech-language pathologist voice expert, with proximally five years of experience in perceptual assessment, which characterized the samples regarding voice quality (adapted or deviated) and type of voice (roughness, breathiness, harshness, strain, or other), in case there was a deviation. The voice could be classified with one or more different parameter.

Right after, the students answered to a protocol called "Descriptive terms about voice"¹⁵, translated and adapted¹⁶. The protocol has 172 entries descriptive to be related to the interviewers' voices. Each student was guided to select ten descriptors that most related to own voice, according to his self-perception. Afterwards, judging the signed descriptors, they were divide in positive and negative to communication.

It was performed the intra-rater reliability to the collected voice samples. It was randomly repeated 15% of the samples, to posterior speech-language

pathologist analysis. It was used the Kappa agreement test intra-observer to statistic analysis. It was obtained a good agreement to the evaluated parameters.

The data and the variations crossing were analyzed through the statistic tests: chi-squared, equality of proportions, and Mann-Whitney. It was adopted the significance level of $p < 0.05$.

■ RESULTS

Table 1 presents the relation between voice complaint and voice quality of the students showing

there is difference between the vocal quality and the presence of vocal complaints.

Table 2 present the distribution of the most common complaints among the students, showing differences among them.

Table 3 present the mean distribution of self-reported descriptors regarding presented voice quality, and showing differences among them.

Table 4 presents the positive and negative self-reported descriptors, showing the main positive and negative descriptors.

Table 1 – Relation between complaint and voice quality of the students.

	Complaint				Total	
	No		Yes		N	%
Voice	N	%	N	%	N	%
Adapted	8	100%	23	69,70%	31	75,60%
Deviated	0	0,00%	10	30,30%	10	24,40%
Total	8	19,50%	33	80,50%	41	100%

p-value = 0.073

Chi squared test $p < 0.05$

Table 2 – Most common complaint type distribution among the students.

Complaint	N	%	p-value
Pitch	10	30.30%	RV**
Phoneme production	8	24.20%	0.58
Voice quality	7	21.20%	0.398
Speech rate	5	15.20%	0.142
Articulation	3	9.10%	0.030*
Loudness	3	9.10%	0.030*
Accent	3	9.10%	0.030*
Laryngeal discomfort	2	6.10%	0.011*
Incoordination pneumo-phono-articulatory	2	6.10%	0.011*
Resonance	2	6.10%	0.011*

Equality of two proportions test $p < 0.05$

** RV: reference value in order to compare the statistic with other values

Table 3 – Relation between vocal quality and mean amount of self-perception descriptors reported by the students.

Vocal Quality	Positive			Negative		
	Adapted	Roughness	Breathiness	Adapted	Roughness	Breathiness
Mean	5.42*	2.71*	3.6	4.58*	7.29*	6.25
Median	5.5	3	3	4.5	7	6.5
Standard Deviation	1.88	1.89	0.89	1.88	1.89	0.96
N	26	7	5	26	7	4
p-value	0,004*			0,004*		

Mann-Whitney test $p < 0.05$

Table 4 – Positive and negative self-perception descriptors distribution.

Principais termos positivos	Porcentagem	Principais termos negativos	Porcentagem
Main positive descriptors	Percentage	Main negative descriptors	Percentage
Friendly voice	34.3%	Out of tune voice	25.7%
Expressive voice	31.4%	Unstable voice	25.7%
Confident voice	28.6%	Wavering voice	22.9%
Feminine voice	22.9%	Irregular voice	20.0%
Strong voice	22.9%	Fast voice	20.0%
Sweet voice	17.1%	Nasal voice	17.1%
		Low voice	17.1%

■ DISCUSSION

The present paper shows there is difference between voice quality presented and the presence of complaint reported by the students, that is, even having adapted voices, the students had voice complaints.

The students with deviated voices 10 (30.3%) also had vocal complaints. We believe that these findings may be related to the fact that the students constant see themselves in video during classes, and, therefore, they have feedback about their performance. This makes possible the identification of improvement aspects, reported by them as vocal complaints.

Communicative efficiency may be trained, as demonstrated by a study that showed the viewer judgment through a speech-language pathology intervention proposal. There was a significant percentage of viewers' preference in the post-intervention situation².

There is a significant percentage of negative appreciation of the journalism student about their voices. In a previous study, the authors pointed out the possibility of obtained data be related to media culture, of those called "ideal voice models", that the journalism students believe they should follow. This search may do that they do not be satisfied about their communicative performances, and this may be reflected in voice complaints¹⁷.

The vocal complaint most common of the students is about pitch disturbances, followed by phoneme production troubles, voice quality, and speech rate. Part of the academic speech about the pitch complaint illustrates the data: "*I think that I have to really improve my voice, because it is too high*". About the phoneme production there are reports as "*I have trouble to enunciate consonantal syllables*". As vocal quality complaint "*I think my voice is a little unstable, it waves*" and regarding speech rate "*I speak too fast and get fumbled*". The other

complaints had smaller number of occurrences with differences comparing to the ones quoted.

Some authors comment about the negative effects that the pitch disturbances may bring to communication and, these effects highlights mainly in television communication. Small deviations as one tone higher than expected may be forgiven and yet valued regarding people that do not have the obligation to transmit information with credibility and exemption¹. However, for those in video daily, with the function to clear and precisely transmit information, the demands are different.

In Brazil, the stand out voices in broadcast news and radio tend to be lower. This preference may be cultural, but, it stays clear that even less intense than a few decades ago, these models still remain followed by the students.

Regarding voice quality and the quantity of positive and negative descriptors self-perceived, the subjects with adapted voices mention a higher amount of positive descriptors than the ones with deviated voices, with differences between them. Also there is a difference when comparing the amount of negative descriptors presented by students with roughness and breathiness voices. In addition, it is worthy to point out there is no difference in the comparison of mean positive and negative amount of descriptors reported by the total number of the students in the research.

The voice deviations found in journalism students in general were discrete. However, dealing with a group that may make the option to work with professional voice, it is know that these deviations, even subtle, are undesirable. The impact that a voice disturbance may cause in voice professionals is direct related to emotional impact facing a career risk and professional survivor⁴.

Few students that use different strategies to assess voice¹⁸, as the descriptive terms about voice, that is away from the traditional interviews and questionnaires that assess professional voice

and voice self-perception. This value is assigned and relevant to voice professionals, conforming the individuals perception, demand and need of voice use in each profession.

About the amount of positive and negative descriptors selected by the students, it is observed that the distribution between the two possibilities of self-perception was similar. The professional experience that starts in college in practice activities may do the students to become critical and perceptive regarding their own voices. When using voice professionally it is necessary to start acting consciously about something that still that moment was performed natural and spontaneously¹, which is the case of the students of the present study.

In a study comparing the presented answers by speech-language pathologists and people that were not speech-language pathologists using the descriptive terms about voice, the authors conclude that speech-language pathologists selected more positive entries, as the positive entry "proper voice" was the only positive descriptor of major occurrence between speech-language pathologists. Yet in the group of people that were not speech-language pathologists the descriptor "high voice" was the negative of most occurrence¹⁹.

The positive descriptors about the voice self-perception more reported by the students of the present research were: friendly, expressive, confident, feminine, strong, and sweet voice. These aspects seem to be related to the challenge that they have in transmitting the message with credibility. The descriptor strong, not direct related to increased loudness, may be related to the convincing and credibility aspects that are aimed. The others selected descriptors also have great relation with the needs of a journalist in professional set, as the descriptors feminine and sweet may be related to the sample to be composed by women in majority.

To communicate proper and to transmit credibility it is a need that any subject has nowadays. This context involves, in most important way, the professional to practice their professions use the voice as tool in their jobs. In the case of broadcasters, the literature reports there is the need to use a standard voice that may guarantee the attention by the viewers and transmit the news with credibility and interpretation². In a study about the impartiality in journalism as well as legitimacy of journalism speech, it was observed that these questions are direct related to voice work and subject's self-perception during the academic period and in professional life²⁰.

The main negative descriptors regarding vocal self-perception selected by the students were: out of tune, unstable, wavering, irregular, fast, nasal, low, and shy voice. This data shows the main difficulties mentioned have direct relation with the needs of a reporter in professional set. The more selected descriptors may have a pretty negative impact in a clear and satisfactory message transmission. For instance, the voice with low loudness, mentioned by the students as "low" may be a problem in professional set. The lack of volume may suggest fear, insecurity or shy. The fast characteristic mentioned by them is related to fast speech rate, showing anxiety¹. Therefore it was observed the descriptors protocol was an important tool to complement voice assessment.

■ CONCLUSION

Even with adapted voices the journalism students report voice and communication complaints. The main characteristics self-assigned by them, as positive as negative, have direct relation with their profession need.

RESUMO

Objetivo: relacionar dados da avaliação perceptivo-auditiva queixa e autopercepção vocal de estudantes de Jornalismo. **Métodos:** trata-se de estudo observacional, descritivo, transversal, com coleta de dados prospectiva, realizado na Universidade Estadual do Centro Oeste/UNICENTRO-PR. Participaram 41 estudantes de Jornalismo, sendo 27 do sexo feminino e 14 do sexo masculino. Foi aplicado um protocolo para coleta de dados de identificação e de queixas de voz, bem como foram feitos registros vocais com emissão sustentada da vogal “a” e encadeada (contagem de números e meses do ano). Tais registros foram analisados por um fonoaudiólogo especialista em voz quanto à qualidade vocal (adaptada ou alterada). Os estudantes também responderam ao protocolo “Termos descritivos sobre a voz”. **Resultados:** mesmo apresentando vozes adaptadas, os estudantes apresentaram queixas vocais. As queixas mais comuns referiram-se a alterações de pitch, produção fonêmica, qualidade vocal e velocidade de fala. Os estudantes que apresentaram qualidade vocal adaptada mencionaram maior quantidade de termos positivos referentes à autopercepção. Não houve diferença na comparação entre a quantidade média de termos positivos e negativos apresentados pelo grupo. Os termos positivos mais referidos foram: voz simpática, expressiva, confiante, feminina, forte e dócil. Os negativos foram: voz desafinada, instável, oscilante, irregular, rápida, anasalada, baixa e tímida. **Conclusão:** mesmo com vozes adaptadas do ponto de vista perceptivo-auditivo, acadêmicos de jornalismo referem queixas vocais, provavelmente pela demanda imposta durante a graduação.

DESCRIPTORIOS: Voz; Avaliação; Estudantes; Jornalismo

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