

**Original Article**  
*Artigo Original*

Caroline Azevedo Maciel<sup>1</sup>   
 Andrezza Gonzalez Escarce<sup>2</sup>   
 Andréa Rodrigues Motta<sup>2</sup>   
 Letícia Caldas Teixeira<sup>2</sup> 

**Keywords**  
 Speech Therapy  
 Student  
 Labor Market  
 Professional Practice  
 Educational Assessment

**Descritores**  
 Fonoaudiologia  
 Estudante  
 Mercado de Trabalho  
 Prática Profissional  
 Avaliação Educacional

**Correspondence address:**  
 Caroline Azevedo Maciel  
 Departamento de Fonoaudiologia,  
 Faculdade de Medicina, Universidade  
 Federal de Minas Gerais - UFMG  
 Avenida Professor Alfredo Balena,  
 190, Belo Horizonte (MG), Brasil, CEP  
 30130-100.  
 E-mail: caroline.fono@yahoo.com.br

**Received:** May 03, 2020

**Accepted:** October 12, 2020

# Academic path and professional competencies seen through the perception of speech therapy alumni

## *Percorso acadêmico e competências profissionais na percepção de egressos de Fonoaudiologia*

### ABSTRACT

**Purpose:** To analyze the factors associated with the professional insertion of Speech Therapy graduates. **Methods:** Observational analytical cross-sectional study, with a non-probabilistic sample, composed of 245 graduates from a Speech Therapy course in Brazil. The research applied a questionnaire containing objective and open questions, segmented into six axes. Bivariate and multivariate analysis of the data were performed. **Results:** There was an association between working as a speech therapist with the variables, gender ( $p=0.031$ ), age ( $p\leq 0.001$ ), initiative ( $p=0.001$ ), leadership ability ( $p=0.001$ ), decision making ability ( $p=0.001$ ), teamwork ability ( $p=0.001$ ), managerial skills ( $p=0.034$ ), interest in new knowledge ( $p\leq 0.001$ ), pride in the profession ( $p=0.001$ ), network of contacts ( $p=0.001$ ) and participation in outreach projects ( $p\leq 0.001$ ). There was a higher chance of entering the job market as a speech therapist for those graduates who acquired network contacts during an undergraduate course (3.3 times more); were interested in knowledge (3.2 times more); develop leadership skills (2.6 times more); younger than 29 years old (0.3 times more) and carried out outreach projects during graduation (0.2 times more). **Conclusion:** Graduates in Speech Therapy who develop a network of contacts, have an interest in knowledge, develop leadership skills and participate in outreach projects during graduation have enlarged possibilities of entering the job market as speech therapists.

### RESUMO

**Objetivo:** Analisar os fatores associados à inserção profissional de egressos de Fonoaudiologia. **Método:** Estudo observacional analítico de delineamento transversal, com amostra não probabilística, composta por 245 egressos de um curso de Fonoaudiologia no Brasil. Aplicou-se um questionário com questões objetivas e abertas, segmentadas em seis eixos e foi realizada análise bivariada e multivariada dos dados. **Resultados:** Houve associação entre egressos que trabalham como fonoaudiólogos e as variáveis, sexo ( $p=0,031$ ), idade ( $p\leq 0,001$ ), iniciativa ( $p=0,001$ ), capacidade de liderança ( $p=0,001$ ), capacidade de tomar decisões ( $p=0,001$ ), capacidade de trabalhar em equipe ( $p=0,001$ ), competências gerenciais ( $p=0,034$ ), interesse por novos conhecimentos ( $p\leq 0,001$ ), orgulho pela profissão ( $p=0,001$ ), rede de contatos ( $p=0,001$ ) e participação em projetos de extensão ( $p\leq 0,001$ ). A chance de estar inserido do mercado de trabalho como fonoaudiólogo foi maior para os egressos que adquiriram rede de contatos durante a graduação (3,3 vezes mais); tinham interesse pelo conhecimento (3,2 vezes mais); desenvolveram capacidade de liderança (2,6 vezes mais); tinham idade até 29 anos (0,3 vezes mais) e realizaram projetos de extensão durante a graduação (0,2 vezes mais). **Conclusão:** Egressos de Fonoaudiologia que desenvolvem rede de contatos, têm interesse pelo conhecimento, desenvolvem capacidade de liderança e participam de projetos de extensão durante a graduação têm mais chances de inserção no mercado de trabalho como fonoaudiólogos.

Study conducted at Universidade Federal de Minas Gerais - UFMG, Belo Horizonte (MG), Brasil.

<sup>1</sup> Programa de Pós-graduação em Ciência Fonoaudiológicas, Departamento de Fonoaudiologia, Faculdade de Medicina, Universidade Federal de Minas Gerais – UFMG - Belo Horizonte (MG), Brasil.

<sup>2</sup> Departamento de Fonoaudiologia, Faculdade de Medicina, Universidade Federal de Minas Gerais – UFMG - Belo Horizonte (MG), Brasil.

**Financial support:** nothing to declare.

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

## INTRODUCTION

The Graduates' Follow-up Policy, implemented by the National System for Higher Education Evaluation - SINAES<sup>(1)</sup> is considered one of the strategies of excellence in the evaluation of educational programs in Brazil. Analyzing the alumni's perception it is possible to map relevant information about the academic path, professional situation as well as satisfaction<sup>(2-8)</sup>.

Speech therapy, a science in constant evolution, encourages teaching continuous improvement<sup>(9,10)</sup>. The National Curriculum Guidelines (DCNs) of Speech Therapy undergraduate courses define the principles, fundaments, conditions and procedures of the speech therapist formation, directing the organization, development and evaluation of the pedagogical projects of the courses of the system of Higher Education Institutions (HEI). Regarding undergraduates, these guidelines propose, among other rules, a generalist, humanistic, critical and reflective profile of the graduate in Speech Therapy, based on ethical principles, in the clinical-therapeutic and preventive field of the speech therapy practices<sup>(11)</sup>.

Against this backdrop, and following the DCNs of the Brazilian Ministry of Education, each undergraduate course engaged with teaching, research and community outreach (extension), builds its pedagogical project (PP) that contemplates a set of organizational and operational guidelines expressing and guiding its pedagogical practice, curricular structure, syllabus, bibliographies, course development, including the graduate profile<sup>(12)</sup>.

In order to determine the graduate profile, competencies to be achieved are listed, supported by knowledge, skills and attitudes - K.S.A. Within this concept, knowledge refers to knowing and mastering a certain theme or area; skill is the ability to know how to do things in practice, to transform all the knowledge acquired from the theory studied into real actions that add value; and attitudes are to do something even before being asked, to understand the demand and be proactive to make it happen, to anticipate the needs<sup>(13)</sup>.

We believe that understanding the graduates' perception of the course, especially from the KSA's perspective, once it is critically analyzed, may promote actions to improve the curriculum and enhance the quality of education<sup>(5,6,14)</sup>. The findings are beyond a particularized evaluation of actors from an educational institution; they may be expanded outside the walls and allow other courses to also reflect over training in a multifactorial, educational and professional way, understanding education in order to transform it. As per the above, the objective of this research was to analyze the factors associated with the professional insertion of Speech Therapy graduates.

## METHODS

The study is an observational analytical, cross-sectional design, with a non-probabilistic sample, composed of 245 Speech Therapy graduates from the Federal University of Minas Gerais, invited to participate in the research from January to June 2017, via email, social networks or in person. Only those who signed

the online or physical Informed Consent Form participated in the study.

Out of a total of 529 graduates, 245 agreed to participate in the study. The inclusion criterion was to have a bachelor's degree in Speech Therapy obtained through the abovementioned university between the second semester of 2003 (1st class of the course) and the first semester of 2016. Of those, 237 (96.7%) were female and eight (3.3%) were male, with an average age of 29.93 years, standard deviation of 3.88 years. Half (50.0%) attended high school in public schools and the other half (50.0%) in private schools.

The instrument used for data collection was a questionnaire (both online and in paper) developed by the researchers<sup>(8)</sup>. The instrument encompassed objective and open-ended questions, segmented into six major axes: sociodemographic; course evaluation; academic path; professional situation; job satisfaction and continuity of studies<sup>(8)</sup>. For the purposes of the present study analysis, only the axes that addressed sociodemographic questions, professional situation, course evaluation and academic path were used.

The dependent variable analyzed for this research was "working as a speech therapist" and the independent variables were the sociodemographic data (age, sex, type of institution where he/she finished high school); evaluation of the graduation course and of the competencies developed in it (including: course curriculum, initiative, leadership skills, decision-making, teamwork, managerial skills, networking, knowledge of the National Unified Health System - SUS, interest in new knowledge, pride in the profession, ethical and critical stance towards environmental, human rights and ethno-racial issues, aspects of the undergraduate course that helped entering the job market and that could have been addressed during the undergraduate course); and the academic pathway (participation in research, community outreach, extracurricular internship and monitoring activities).

For analytical purposes, the variable 'curriculum', initially composed of the response options "very good", "good", "regular", "unsatisfactory" and "bad" was grouped into the dichotomous variables "good" (very good and good) and "bad" (regular, unsatisfactory and bad). In the same way, the other course evaluation variables that presented as response options "none", "scarce" and "plenty" were regrouped into "scarce/none" and "plenty".

The graduates, who could make as many observations as they wished, freely answered the two open questions. The results were categorized for further analysis. Regarding the aspects that helped the insertion in the job market, the data were grouped into: training received, participation in projects, extra-curricular internship, networking, having been a student at UFMG, development of skills, quality of the teaching staff, or nothing. In regards to the subjects that could have been addressed during graduation, the answers were categorized as: entrepreneurship, financial and personal management, labor market, further study in certain areas of Speech Therapy, extracurricular internship, multidisciplinary team work, notions of Pharmacology, technological resources and nothing/not sure.

The answers to the variables referring to the academic pathway were categorized as “yes” and “no”. In this article, the reasons for the egress to have participated or not in the actions were not analyzed, nor were the number of times these actions were performed.

A descriptive analysis of the frequency distribution of categorical variables and measures of central tendency and dispersion of continuous variables was performed. Pearson’s chi-square test was used for the bivariate association analysis. Associations were considered significant when  $p \leq 0.05$ .

To verify the strength of the association of the aspects with the variable “Working as a speech therapist” a multivariate analysis was carried out by means of Binary Logistic Regression. The Stepwise method was used for selecting the variables. Initially, the variables that presented p-values less than 0.25 were included in the model, and those that presented p-values  $\leq 0.05$  remained in the final model.

The Statistical Package for the Social Sciences - SPSS, version 21.0 software was used for data entry, processing and analysis.

The present study was cleared by the Ethics in Research Committee of the Institution, under opinion number 2.936.803.

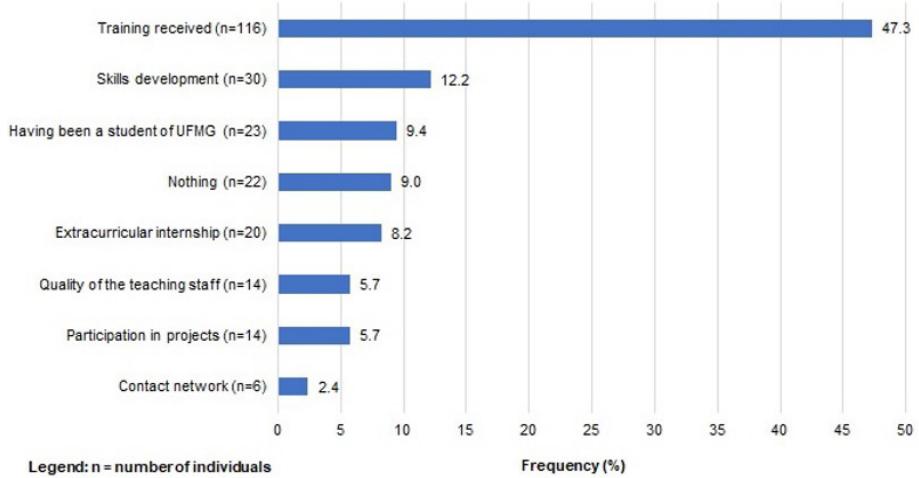
## RESULTS

Table 1 shows that the majority of the individuals in the sample work as speech pathologists and that there was an

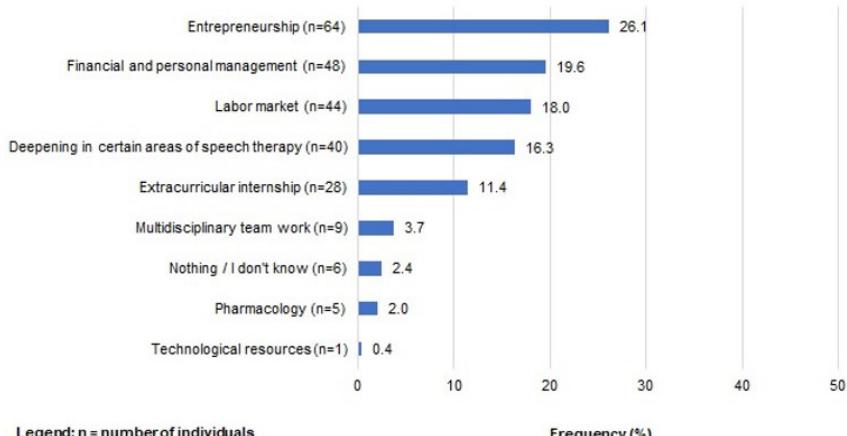
association of working as a speech pathologist and the variables gender and age ( $p=0.031$  and  $p \leq 0.001$ ).

Figures 1 and 2 present descriptive data of the study regarding aspects that helped in the market insertion and those that should have been addressed in the course according to the open questions. Regarding the aspects that most helped the graduates to enter the job market (Figure 1), the most mentioned was the training received (47.3%) and the least mentioned was the network of contacts (2.4%). As for the aspects that should have been addressed in the course (Figure 2) the most cited was entrepreneurship (26.1%) and the least cited technological resources (0.4%).

Table 2 evidences association between those working as speech therapists and professional competencies developed in the course. There was an association between entering the labor market and the variables initiative ( $p=0.001$ ), leadership skills ( $p=0.001$ ), ability to make decisions ( $p=0.001$ ), ability to work in teams ( $p=0.001$ ). There was also association with managerial skills ( $p=0.034$ ), interest in new knowledge ( $p \leq 0.001$ ), professional pride ( $p=0.001$ ), and networking ( $p=0.001$ ). It was observed that there was a higher percentage of responses from those who work as speech therapists and reported having developed in the course plenty of initiative (76.0%), ability to make decisions (78.1%), ability to work in teams (85.2%), interest



**Figure 1.** Descriptive data of the aspects that most helped the insertion of the egress in the labor market.



**Figure 2.** Descriptive data of the aspects that should have been addressed in the course.

**Table 1.** Association between graduates working as speech therapists and general sociodemographic characteristics

Variables	Working as speech-therapist			P-value
	Yes n (%)	No n (%)	Total	
Sex				
Feminine	192 (98.0)	45 (91.8)	237	<b>0.031*</b>
Masculine	4 (2.0)	4 (8.2)	8	
Total	196 (100.0)	49 (100.0)	245	
Age				<b>≤ 0.001*</b>
Up to 29 years	112 (57.1)	14 (28.6)	126	
30 years and more	84 (42.9)	35 (71.4)	119	
Total	196 (100.0)	49 (100.0)	245	
School Type				
Public	98 (50.0)	17 (34.7)	115	0.057
Private	98 (50.0)	32 (65.3)	130	
Total	196 (100.0)	49 (100.0)	245	

\* Statistically significant values ( $p \leq 0.05$ ) – Pearson's Chi-square Test n = number of individuals

**Table 2.** Association between graduates working as speech therapists and the competencies developed during the course

Variables	Working as speech therapist			P-value
	Yes n (%)	No n (%)	Total	
Initiative				
Scarce/None	47 (24.0)	25 (51.0)	72	<b>0.001*</b>
Plenty	149 (76.0)	24 (49.0)	173	
Total	196 (100.0)	49 (100.0)	245	
Leadership capacity				
Scarce/None	96 (49.0)	35 (75.5)	133	<b>0.001*</b>
Plenty	100 (51.0)	12 (24.5)	112	
Total	196 (100.0)	49 (100.0)	245	
Decision-making capacity				
Scarce/None	43 (21.9)	22 (44.9)	65	<b>0.001*</b>
Plenty	153 (78.1)	27 (55.1)	180	
Total	196 (100.0)	49 (100.0)	245	
Teamwork capacity				
Scarce/None	29 (14.8)	17 (34.7)	46	<b>0.001*</b>
Plenty	167 (85.2)	32 (65.3)	199	
Total	196 (100.0)	47 (100.0)	245	
Managerial competency				
Scarce/None	133 (67.9)	41 (83.7)	174	<b>0.034*</b>
Plenty	63 (32.1)	8 (16.3)	71	
Total	196 (100.0)	49 (100.0)	245	
Knowledge about SUS				
Scarce/None	81 (41.3)	22 (44.9)	103	0.747
Plenty	115 (58.7)	27 (55.1)	142	
Total	196 (100.0)	49 (100.0)	245	
Interest in new knowledge				
Scarce/None	10 (5.1)	13 (26.5)	23	<b>≤ 0.001*</b>
Plenty	186 (94.9)	36 (73.5)	222	
Total	196 (100.0)	49 (100.0)	245	
Professional pride				

\* Statistically significant values ( $p \leq 0.05$ ) - Pearson's Chi-square Test n = number of individuals

**Table 2.** Continued...

Variables	Working as speech therapist			P-value
	Yes n (%)	No n (%)	Total	
Network of contacts	Scarce/None	38 (19.4)	22 (44.9)	60
	Plenty	158 (80.6)	27 (55.1)	185
	Total	196 (100.0)	49 (100.0)	245
	Scarce/None	121 (61.7)	42 (85.7)	163
	Plenty	75 (38.3)	7 (14.3)	82
	Total	196 (100.0)	49 (100.0)	245
Critical and Ethical stance	Scarce/None	92 (46.9)	30 (61.2)	122
	Plenty	104 (53.1)	19 (38.8)	123
	Total	196 (100.0)	49 (100.0)	245

\* Statistically significant values ( $p \leq 0.05$ ) - Pearson's Chi-square Test n = number of individuals

**Table 3.** Association between graduates who work as speech therapists and their academic pathway

Variables	Working as speech therapist			P-value
	Yes n (%)	No n (%)	Total	
CV	Good	191 (97.4)	47 (95.9)	238
	Bad	5 (2.6)	2 (4.1)	7
	Total	196 (100.0)	49 (100.0)	245
Research	No	33 (16.8)	10 (20.4)	43
	yes	163 (83.2)	39 (79.6)	202
	Total	196 (100.0)	49 (100.0)	245
Outreach Project	No	25 (12.8)	18 (36.7)	43
	Yes	171 (87.2)	31 (63.3)	202
	Total	196 (100.0)	49 (100.0)	245
Extracurricular practicum	No	99 (50.5)	26 (53.1)	125
	Yes	97 (49.5)	23 (46.9)	120
	Total	196 (100.0)	49 (100.0)	245
Monitoring	No	84 (42.9)	28 (57.1)	112
	yes	112 (57.1)	21 (42.9)	133
	Total	196 (100.0)	45 (100.0)	245

\* Statistically significant values ( $p \leq 0.05$ ) – Pearson's Chi-square Test n = number of individuals

in new knowledge (94.9%) and professional pride (80.6%). A trend was also observed among those who do not work as speech therapists and those who reported acquiring scarce or none leadership skills (75.5%), managerial skills (83.7%), and networking (85.7%).

Table 3 shows the association between working as speech therapists and academic background. There was an association between who works as a speech therapist and developing outreach projects ( $p \leq 0.001$ ). The other associations showed no significant results.

In the initial model of the multivariate analysis, considering a value of  $p \leq 0.25$ , there was an association between working

as a speech therapist and age, type of high school attended, ability to make decisions and work in a team, knowledge of the SUS, interest in new knowledge, professional pride, network of contacts, and having carried out research, outreach, and monitoring activities. After analysis, using the Stepwise model, the variables age ( $p=0.005$ ), leadership ability ( $p=0.016$ ), interest in new knowledge ( $p=0.031$ ), networking ( $p=0.013$ ), and having carried out an extension project during graduation ( $p=0.005$ ) remained in the final model of the Binary Logistic Regression analysis (Table 4). The networking variable was considered a significant predictor for distinguishing between professionals who work or not as speech CI=1.28-8.52) were 3.3 times more

**Table 4.** Multivariate analysis – Final Model

Variables	Working as speech therapist		
	SE	OR (CI)	P-value
Network of contacts	0.482	3.312 (1.287-8.524)	<b>0.013*</b>
No	1	1	<b>1</b>
Yes	0.482	3.312 (1.287-8.524)	<b>0.013*</b>
Interest in new knowledge	0.541	3.204 (1.111-9.241)	<b>0.031*</b>
No	1	1	<b>1</b>
Yes	0.541	3.204 (1.111-9.241)	<b>0.031*</b>
Leadership capacity	0.407	2.654 (1.196-5.888)	<b>0.016*</b>
No	1	1	<b>1</b>
Yes	0.407	2.654 (1.196-5.888)	<b>0.016*</b>
Age	0.403	0.319 (0.145-0.704)	<b>0.005*</b>
30 years and more	1	1	<b>1</b>
Up to 29 years	0.403	0.319 (0.145-0.704)	<b>0.005*</b>
Outreach Project	0.446	0.283 (0.118-0.678)	<b>0.005*</b>
No	1	1	<b>1</b>
Yes	0.446	0.283 (0.118-0.678)	<b>0.005*</b>

\* Statistically significant values ( $p \leq 0,05$ ) – Stepwise Method

Caption: SE: Standard Error / OR = odds ratio / CI = confidence interval

likely to be inserted in the labor market as speech therapists. We also observed 3.2 times more chances of being working as a speech therapist among the graduates who answered that during graduation they showed interest in new knowledge (OR=3.20; 95% CI=1.11-9.24), 2.6 times more chances for those who developed leadership skills (OR=2.65; 95% CI=1.19-5.88), 0.3 times more likely among those who were up to 29 years old (OR=0.31; 95%CI=0.14-0.70), and 0.2 times more likely to be working as a speech therapist among those who performed outreach project (OR=0.28; 95%CI=0.11-0.67).

## DISCUSSION

This study analyzed the insertion in the labor market of graduates in Speech Therapy at the Federal University of Minas Gerais (UFMG), according to their perception regarding the curriculum, skills acquired and activities developed during the academic path. The results allow us to analyze the quality of teaching at this institution and instigate a broad reflection, also for other courses, about the pathways of the education and profession of the Speech Therapist in Brazil.

The participation in this survey included 46.3% of the total population of graduates, and of these, more than two-thirds are working as speech therapists. This result can be considered positive, as it reflects the insertion of the speech therapist in the job market. However, we observed a low adherence of alumni to the questionnaire, an aspect that may be justified by the fact that the e-mails of the former students were not updated. In other studies, with the same theme, it was also evidenced a low adhesion in the participation of the graduates<sup>(4,7,15,16)</sup>. In view of this aspect, it is necessary for higher education institutions to strengthen the bonds and maintain graduates interested, encouraging the participation of former students in the life of the institution, even after finishing the course<sup>(5)</sup>. In this sense, some Brazilian universities already provide former students with the possibility of participating in cultural and academic

activities, besides allowing access to the institution's facilities, such as libraries and leisure spaces<sup>(14,17)</sup>. However, these actions, although positive, are not yet strong enough to maintain a more permanent bond with the graduates.

Among the aspects that most helped the graduates in the labor market, the most cited was the “academic training received”, which shows the recognition of the graduates by the educational institution. In a study conducted in 2013, in the same institution, this was also referenced<sup>(4)</sup> reinforcing education as an essential pillar for quality professional training.

As the most negative aspect, former students cited the lack of networking. It is unquestionable the contribution of education to the academic and professional career of the graduates, but it is believed that other aspects, such as networking and external internships, would be helpful for graduates in the beginning of their training in order to favor entry into the labor market. Studies with egresses from the health area indicate the contact network as one of the facilitators for professional insertion in the labor market<sup>(18,19)</sup>. The graduate profile outlined by the study course covers different aspects; however, it is observed that entrepreneurship and networking are aspects that are little described throughout the project and that require curricular reflection<sup>(20)</sup>.

Regarding the aspects that the graduates would most like to deepen in the curricular grid, they highlighted the need to emphasize Speech Therapy areas. However, the Federal Council of Speech Therapy recognizes 12 specialties<sup>(21)</sup>, a fact that makes it unfeasible to deepen in all these areas. Besides, the guidelines of the Council for undergraduate courses orient to train graduates with a generalist profile, which allows the interaction with the various areas of speech therapy knowledge.

The point of view of graduates regarding the aspects that should be added to the curricular matrix, remark the labor market, financial and personal management and entrepreneurship. These aspects are important because of the demands imposed by the labor market<sup>(4)</sup>, requesting technical-scientific knowledge, administrative

and economic knowledge<sup>(22,23)</sup>, an increase in competitiveness, the number of professionals, emergence of technologies and high costs for maintenance and assembly of the clinical infrastructure<sup>(22)</sup>.

Working as a speech therapist was related to gender and age. As for sex, the majority of speech therapy students at UFMG is female, and reflects a trend also in Brazilian Speech Therapy profession<sup>(4,17,24)</sup>. The predominance of women in the health area may be associated with the increase in the number of women in Brazilian universities<sup>(25)</sup> and to the fact that women are more involved in the care process<sup>(8)</sup>. With regards to age groups, most of the egresses in the study inserted in the labor market had an average age of 29 years. The fact that the graduates of the present study were younger may be related to the age of the course, since it was relatively recent, having been created in 2000. Another aspect that may have influenced the average age of the sample is that recent graduates were less likely to have changed their contact details.

It was found an association of those working as speech therapists with initiative, leadership skills, decision-making skills, teamwork skills, managerial skills, interest in new knowledge, professional pride, and networking. Those who are working as speech therapists reported plenty of initiative, decision-making skills, teamwork skills, interest in new knowledge and pride in the profession. These findings demonstrate that there is a synchrony between the pedagogical guidelines<sup>(22)</sup> and the course objectives, with the profile of the speech therapy professional<sup>(23)</sup>. A study carried out about healthcare graduates shows how important initiative, creativity, leadership skills and the ability to make decisions are in order to get a job and for a good professional practice, as well as the ability to work in a team<sup>(3)</sup>. It is remarkable to notice the aspect related to professional pride, which refers to a highly positive perception of the profession. In other studies, graduates of Speech Therapy were dissatisfied monetarily, but showed satisfaction in being speech therapists<sup>(4,8)</sup>.

In the present study it was also possible to observe that there was an association between those who work as a speech therapist and those who did community outreach (extension) projects. This data reinforces the importance of the new Extension Guidelines in Brazilian Higher Education, which establish that the curricular workload of undergraduate courses must include at least 10% of outreach activities, which must be part of the courses' curricular matrix<sup>(26)</sup>. Authors point out that outreach activities provide students with the opportunity to act directly with the community, exchange experiences, develop critical sense, decision-making skills, problem-solving and teamwork<sup>(26-29)</sup>. Direct contact with the profession makes it possible to compare the theoretical knowledge acquired with the needs imposed in professional practice<sup>(26-29)</sup>.

The logistic regression analysis showed that the contact network, interest in new knowledge, leadership ability, age and accomplishment of an outreach project are associated with the variable 'working as a speech therapist'. It is noteworthy that in relation to the contact network, authors point out that it is essential for insertion in the labor market<sup>(4,16,19)</sup> and primordial for career planning. Therefore, it is necessary that the internships be also extended outside the university walls, so that the student may experience different possibilities of acting and build contact

networks outside the university community, expanding his/her professional bonds.

The researched literature shows that in those speech therapists who have already entered the labor market, the continuity of studies, i.e., the interest in new knowledge should be valued by the professional<sup>(4,8,12,19)</sup>. The capacity of keeping themselves updated in face of the scientific and technological advances in Speech Therapy drives a path that must be followed by the professionals of the area<sup>(19)</sup> and that points to ethical professionals, committed and concerned with the social problems.

In a study carried out with healthcare graduates, leadership skills proved to be a characteristic that helps to get a job and a good professional practice<sup>(3)</sup>. A professional who presents leadership skills is involved by the commitment, responsibility, empathy, ability to make decisions, communication, and management in an effective and efficient way, improving the quality of the service and meeting the expectations of the work<sup>(30)</sup>.

The results of this study contribute to the efforts of the Speech Therapy Course of UFMG to make its second curricular reform, which will be implemented in 2021. It will consider the data from this research with interest, added to other internal evaluations of the course and the legislation and national guidelines of national education. It is also believed that this research provides important reflections for the teaching of Speech Therapy in Brazil.

As limitations, we highlight the lack of scientific studies with graduates of Speech Therapy in Brazil, hampering comparisons and discussions within the area. The regular development of research around this topic promotes valuable information to investigate, question and reinforce the growth of Speech Therapy in the country.

## CONCLUSION

Speech therapy graduates who build a network of contacts, are interested in knowledge, develop leadership skills and participate in outreach projects during graduation have more chances of entering the labor market as speech therapists. The continuous evaluation of the curriculum and the competencies proposed by undergraduate courses in Speech Therapy in Brazil reinforce the importance of the practice of monitoring the graduates in the HEIs and aim to improve the quality of education.

## REFERENCES

1. Brasil. Lei nº 10.861, de 14 de abril de 2004. Institui o Sistema Nacional de Avaliação da Educação Superior – SINAES. [Internet]. Diário Oficial da União; Brasília, 15 abr. 2004a [cited 2019 Out 13]. Available from: [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2004/lei/l10.861.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2004/lei/l10.861.htm)
2. Lousada ACZ, Martins GA. Egressos como fonte de informação à gestão dos cursos de Ciências Contábeis. R Cont Fin. 2005;16(37):73-84. <http://dx.doi.org/10.1590/S1519-70772005000100006>.
3. Câmara AMCS, Santos LLCP. Um estudo com egressos do curso de Fisioterapia da Universidade Federal de Minas Gerais (UFMG) – 1982-2005. Rev Bras Educ Med. 2012;36(1, Supl. 1):5-17. <http://dx.doi.org/10.1590/S0100-55022012000200002>.
4. Teixeira LC, Rodrigues ALV, Santos JN, Cardoso AFR, Gama ACC, Resende LM. Professional trajectory of graduates in speech, language

- and hearing sciences. Rev CEFAC. 2013;15(6):1591-600. <http://dx.doi.org/10.1590/S1516-18462013005000048>.
5. Andriola WB. Estudo de egressos de cursos de graduação: subsídios para a autoavaliação e o planejamento institucionais. Educ Rev. 2014;54(54):203-20. <http://dx.doi.org/10.1590/0104-4060.36720>.
  6. Senger MH, Campos MCG, Servidoni MFCP, Passeri SMRR, Velho PENF, Toro IFC, et al. Professional trajectory of medical course alumni from Campinas University, São Paulo, Brazil: graduates' point of view in evaluating the course. Interface (Botucatu). 2018;22(Supl. 1):1443-55. <http://dx.doi.org/10.1590/1807-57622017.0190>.
  7. Silva DCP, Graziano CR, Carrascosa AC. Satisfação profissional e perfil de egressos em fisioterapia. ConScientiae Saúde. 2018;17(1):65-7. <http://dx.doi.org/10.5585/conssaudae.v17n1.7694>.
  8. Maciel CA, Escarce AG, Motta AR, Teixeira LC. Speech therapy graduates perception of situation and professional satisfaction. Audiol Commun Res. 2019;24(2094):1-9. <http://dx.doi.org/10.1590/2317-6431-2018-2094>.
  9. Souza RPF, Cunha DA, Silva HJ. Fonoaudiologia: a inserção da área de linguagem no Sistema Único de Saúde (SUS). Rev CEFAC. 2005;7(4):426-32.
  10. Ferreira CL, Silva FR, Martins-Reis VO, Friche AAL, Santos JN. Distribuição dos fonoaudiólogos na atenção à saúde no estado de Minas Gerais entre 2005 e 2010. Rev CEFAC. 2013;15(3):672-80. <http://dx.doi.org/10.1590/S1516-1846201300500011>.
  11. Conselho Nacional de Educação. Resolução CNE/CES 5, de 19 de fevereiro de 2002. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Fonoaudiologia. [Internet]. 2002 [cited 20 Out 2019]. Available from: <http://portal.mec.gov.br/cne/arquivos/pdf/CES052002.pdf>
  12. Brito MRFO. SINAES e o ENADE: da concepção à implantação. Avaliação. 2008;13(3):841-50. <http://dx.doi.org/10.1590/S1414-40772008000300014>.
  13. Siqueira WM, Nascimento DC. Gestão por competências: desafios encontrados por uma instituição pública de Petrolina durante o processo de implementação. Id on Line Rev Psic. 2016;10(31):43-62. <http://dx.doi.org/10.14295/idonline.v10i31.488>.
  14. Santos JG, Souza RS. Proposta de acompanhamento dos egressos do IFB com base em um estudo do acompanhamento dos egressos em nível nacional. Revista EIXO. 2015;4(1):53-73. <http://dx.doi.org/10.19123/eixo.v4i1.230>.
  15. Soar C, Silva CAM. Perfil e carreira de egressos de Nutrição da Região do Vale do Paraíba-SP. Demetra. 2017;12(4):1013-29. <http://dx.doi.org/10.12957/demetra.2017.28644>.
  16. Carneiro ACLL, Mendes LL, Gazzinelli MF. Avaliação curricular: a perspectiva de egressos de um curso de Nutrição. Rev Enferm Cent-Oeste Min. 2018;8(2629):1-10. <http://dx.doi.org/10.19175/recom.v8i0.2629>.
  17. Simon LW, Pacheco ASV. Ações de acompanhamento de egressos: um estudo das universidades públicas do sul do Brasil. REBES. 2017;3(2):94-113. <http://dx.doi.org/10.18256/2447-3944.2017.v3i2.2023>.
  18. Puschel VAA, Inácio MP, Pucci PPA. Insertion of USP nursing graduates into the job market: facilities and difficulties. Rev Esc Enferm USP. 2009;43(3):535-42. <http://dx.doi.org/10.1590/S0080-62342009000300006>. PMid:19842583.
  19. Gonçalves MT, Fernandes BL, Santos JN, Ninno CQMSD, Britto DBO. Work, continuing education and income professional audiologist active in Audiology. Rev CEFAC. 2014;16(6):1775-82. <http://dx.doi.org/10.1590/S0080-62342009000300006>.
  20. Universidade Federal de Minas Gerais. Faculdade de Medicina [Internet]. Projeto Pedagógico do Curso de Fonoaudiologia [Internet]. [cited 20 Out 2019]. Available from: <https://www.medicina.ufmg.br/cegrad/wp-content/uploads/sites/10/2017/04/Projeto-Pedag%C3%B3gico-07-04-2017.pdf>
  21. Conselho Regional de Fonoaudiologia - CRFa 6ª Região. Áreas [Internet]. Belo Horizonte: CRF; 2019 [cited 19 Out 2019]. Available from: <http://www.crefono6.org.br/fonoaudiologia>
  22. Ferraz MAAL, Nolêto MSC, Martins LLN, Bandeira SRL, Portela SGC, Pinto PHV, et al. Perfil dos egressos do curso de Odontologia da Universidade Estadual do Piauí. Rev ABENO. 2018;18(1):56-62. <http://dx.doi.org/10.30979/rev.abeno.v18i1.392>.
  23. Bau G, Cardoso MB, Spiger V, Amante CJ. Perfil empreendedor dos estudantes de Odontologia da Universidade Federal de Santa Catarina. Rev ABENO. 2016;16(2):77-82. <http://dx.doi.org/10.30979/rev.abeno.v16i2.268>.
  24. Ferreira LP, Ferraz PRR, Garcia ACO, Falcão ARG, Ragusa-Mouradian CA, Herrero E, et al. Speech-language therapists with Ph.D. in Brazil: profile from 1976 to 2017. CoDAS. 2019;31(5):1-8. <http://dx.doi.org/10.1590/2317-1782/20192018299>. PMid:31618318.
  25. Querino JPFO, Peixoto LR, Sampaio GAM. Perfil dos concluintes de Odontologia da Universidade Estadual da Paraíba. Rev ABENO. 2018;18(1):170-81. <http://dx.doi.org/10.30979/rev.abeno.v18i1.416>.
  26. Góes TRV, Rocha MCG, Lima BPS, Porto VFA. Extensão universitária: perfil do discente de Fonoaudiologia de uma universidade pública. Disturb Comun. 2018;30(3):429-39. <http://dx.doi.org/10.23925/2176-2724.2018v30i3p-429-439>.
  27. Sousa JE, Maciel LKB, Zocratt KBF. O papel do ensino de graduação em Odontologia e o motivo da escolha da profissão: uma visão dos alunos concluintes. RFO. 2013;18(3):277-83. <http://dx.doi.org/10.5335/rfo.v18i3.3272>.
  28. Brasil. Ministério da Educação. Resolução nº 7, de 18 de dezembro de 2018. Diretrizes para a Extensão na Educação Superior Brasileira [Internet]. 2018 [cited 16 Out 2019]. Available from: [http://portal.mec.gov.br/index.php?option=com\\_docman&view=download&alias=104251-rces007-18&category\\_slug=dezembro-2018-pdf&Itemid=30192](http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=104251-rces007-18&category_slug=dezembro-2018-pdf&Itemid=30192)
  29. Martins MLDR, Zenólia CCF. Trajetória formativa e profissional em Educação Física: conhecimentos da formação inicial e perspectivas de carreira. Motrivivência. 2015;27(44):11-23. <http://dx.doi.org/10.5007/2175-8042.2015v27n44p11>.
  30. Strapasson MR, Medeiros CRG. Liderança transformacional na enfermagem. Rev Bras Enferm. 2009;62(2):228-33. <http://dx.doi.org/10.1590/S0034-71672009000200009>. PMid:19430681.

## Authors' contributions

CAM participated in the bibliographic review, collection, design, design, analysis and interpretation of data, writing of the article and approval of the version to be published. AGE and ARM co-supervisors, participated in the conception, design, analysis and interpretation of data, critical review and approval of the published version. LCT, advisor, participated in the conception, design, analysis and interpretation of data, critical review and approval of the version to be published.