Perceptions of speech language pathologists and audiologists on professional model (role model)

Percepções de fonoaudiólogos sobre modelo profissional (*role model*)

Percepciones de los logopedas sobre el modelo profesional (*role model*)

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Abstract

Purpose: To identify the perception of graduates of a Speech, Language and Hearing Sciences course at a public university about important professional models (role models) during their professional practice in undergraduate courses. **Methods:** A questionnaire with a Likert scale (1-5) was completed by 106 graduates and analyzed quantitatively. **Results:** Participants identified professors and preceptors as their main professional models. Attributes referring to clinical skills had a higher degree of importance, while research skills were considered less representative of a professional model. **Conclusion:** The attributes related to a good professional model found in this study may contribute to the professional development of teachers and preceptors and to the formation of a favorable learning environment for the student.

Keywords: University; Professionalism; Mentors; Faculty; Speech, Language and Hearing Sciences

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Authors' contributions:
JOS: data collection and analysis and article writing.
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PPM: participated in all stages of the research as the main supervisor.

Resumo

Objetivo: Identificar a percepção de egressos de um curso de Fonoaudiologia sobre modelos profissionais (*role model*) importantes durante a prática profissionalizante na graduação. **Método:** Estudo transversal aprovado pelo Comitê de Ética e Pesquisa (parecer nº 4.188.795). Foram incluídos como voluntários 106 egressos de Fonoaudiologia de uma instituição pública do interior do estado de São Paulo que receberam um instrumento (*Google Forms*) composto por afirmativas relacionadas ao modelo profissional em escala de resposta psicométrica do tipo Likert (1-5). Os dados foram tabulados e analisados por estatística não paramétrica. **Resultados:** Os participantes identificaram docentes e preceptores como sendo os seus principais modelos profissionais. Os atributos referentes às habilidades clínicas obtiveram um maior grau de importância, enquanto as habilidades de pesquisa foram consideradas menos representativas de um modelo profissional. **Conclusão:** Os atributos relacionados a um bom modelo profissional encontrados neste estudo poderão contribuir no desenvolvimento profissional dos docentes e preceptores e na formação de um ambiente de aprendizagem favorável ao aluno.

Palavras-chave: Universidade; Profissionalismo; Mentores; Docentes; Fonoaudiologia

Resumen

Objetivo: Identificar la percepción de los egresados de un curso de logopedia sobre modelos profesionales importantes (*role model*) durante la práctica profesional en la graduación. **Método:** Estudio transversal aprobado por el Comité de Ética e Investigación (Dictamen **nº 4.188.795). Los** voluntarios incluyeron 106 graduados de Logopedia de una institución **pública** del interior del estado de São Paulo que recibieron un instrumento (Google Forms) compuesto por declaraciones relacionadas con el modelo profesional en una escala de respuesta psicométrica del tipo Likert (1-5) . Los datos fueron tabulados y analizados utilizando estadísticas no paramétricas. **Resultados:** Los participantes identificaron a los profesores y preceptores como sus principales referentes profesionales. Los atributos referidos a habilidades clínicas obtuvieron un mayor grado de importancia, mientras que las habilidades investigativas se consideraron menos representativas de un modelo profesional. **Conclusión:** Los atributos relacionados con un buen modelo profesional encontrados en este estudio pueden contribuir para el desarrollo profesional de profesores y preceptores y para la creación de un ambiente de aprendizaje favorable para el estudiante.

Palabras clave: Universidade; Profesionalismo; Mentores; Docentes; Fonoaudiología.

Introduction

"Role model" is a term that can be defined as "a person whose behavior in a particular role is imitated by others" – hence, it works as a "model of procedures"[1].

A positive role model in the field of health can be classified according to clinical attributes, teaching skills, and personality traits[2]. Some important qualities have already been pointed out, such as the attitude toward students, the empathic and humanizing relationship with patients and staff, integrity, clinical and teaching competence, enthusiasm at work, organization, and commitment to personal and professional growth[3]. Research skills, scientific productivity, and educational attainment have also been considered as less representative qualities[4].

Students develop their clinical reasoning, competencies, autonomy, values, and attitudes when exposed to the work of professional role models[1]. In addition to the professors, tutors who work in clinical practice have also been identified as important clinical role models that positively influence students' attitudes, providing them with significant clinical experiences[5-6].

Professors are responsible for coordinating the content of professional practice courses and/or adjusting it to clinical scenarios to help students develop their procedural, attitudinal, and affective competencies[7]. On the other hand, if they have negative experiences, their confidence and persistence in their future professional career may be affected[6]. Clinical learning models such as tutorship, collaborative learning, facilitation, and cluster learning can be used in such environments.

A study on collaborative learning and the tutors' role in training Speech-Language-Hearing (SLH) students at Stellenbosch University (SU), in South Africa, mentioned the scarcity of research on the topic[8]. In Brazil, no scientific publications on the topic have been found.

SLH Sciences programs include required professional clinical practice. The students' performance in such courses is mentored by professors and tutors (professional SLH therapists) at health services partnered with higher education institutions. Students knowingly develop their competencies, values, and attitudes when exposed to the work of professional role models[5,9].

Therefore, a better knowledge of the importance, influence, and most relevant characteristics of professional role models in training students may encourage professors and tutors to improve their attributes and skills and reflect on clinical learning models that favor students.

Hence, this study aimed to identify the perception of SLH graduates from a public university in inland São Paulo on the important professional role models during their undergraduate professional practice courses and verify the reported parameters as the most important characteristics of a professional role model.

Method

This cross-sectional analytical observational study had a nonprobabilistic convenience sample of 355 graduates and was approved by the Research Ethics Committee under evaluation report no. 4.188.795. The participants were informed of the research conditions and signed an informed consent form, complying with Human Research Resolution no. 466/2012. The study included only graduates from the SLH Sciences program at the Medical School of Ribeirão Preto, on a campus of a public higher education institution located in inland São Paulo.

According to the program's pedagogical framework, all professional practice courses (required supervised internship) are integrated with the healthcare service network of the Unified Health System. They are directly supervised by a professor of the institution while also mentored by

SLH tutors in practical settings, complying with Resolution no. 610[5] of the National Health Council.

All graduates of the said program were invited to participate. The inclusion criteria were as follows: a) being a graduate of the program, and b) having graduated between 2006 (first graduating class) and 2019 (the year before data collection began). There were no exclusion criteria. By January 2019 (when data collection began), the program in question had 355 SLH Sciences bachelor graduates from 14 classes.

A questionnaire with statements on professional role models[10] was adapted and initially sent to three graduates to verify its vocabulary adequacy and applicability. After the pretest, the suggested changes were made and the final version was concluded with the following content: I) sociodemographic data with yes/no and multiple choice answers; II) professional role models' attributes, subdivided into a) clinical skills (9 questions); b) educational skills (10 questions); c) personal attributes (10 questions); and d) research skills (4 questions), with answers on a psychometric Likert-type scale (1-5): (1) unimportant, (2) important, (3) indifferent, (4) very important, and (5) extremely important; and, III) professional role model's degree of influence, with the following answer scale: (1) influenced very little, (2) influenced a little, (3) did not influence, (4) influenced very much, and (5) totally influenced.

Volunteers were recruited through announcements of the research in the official social media of the program, graduates' WhatsApp groups, and institutional e-mail addresses. Those who were interested clicked on a link to the informed consent form; after they agreed with it, they were directed to the instrument in Google Forms. They were given 30 days after receiving the link to send back the questionnaire; after this time, access to the platform was discontinued.

The data were separately tabulated into spreadsheets and categorized according to the type of answer (yes/no, multiple choice, or scale). A descriptive analysis was performed, calculating the absolute and relative frequencies, as well as the measures of central tendency when applicable.

Results

The instrument was made available to 355 SLH therapists from 14 classes, who graduated between 2006 and 2019. The invitation was accepted by 132 of them, while 106 filled out and sent the questionnaire by the deadline – these, then, were considered valid. Hence, the sample totaled 29.9% of the initially intended population, with a response rate of 80.3%. However, there was a difference in representativity per year of graduation, as 48.1% had graduated in the previous 5 years (Figure 1).
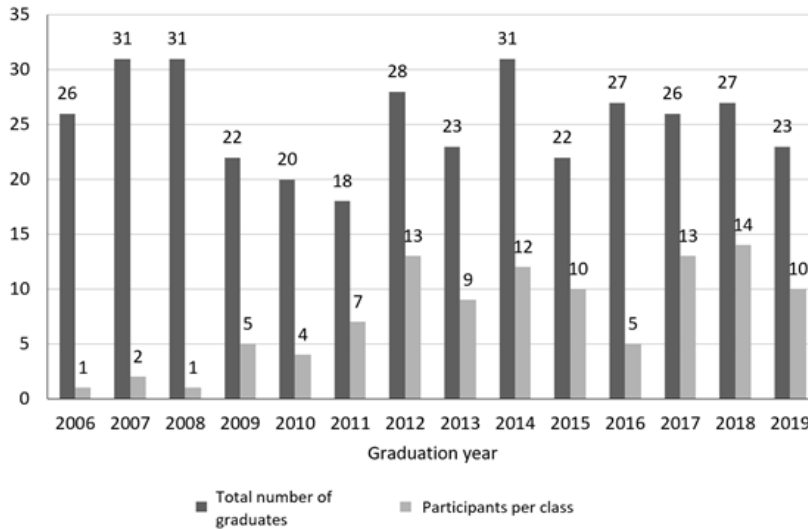
Source: Research data.

Figure 1. Representativity of participating speech-language-hearing therapists per graduation year

Their mean age was 22.8 years; 92.5% of the respondents were females; 68% worked as clinical SLH therapists; 68% had been working for less than 5 years (Table 1); and 81.9% lived and worked in inland São Paulo. Only 2.8% had taken up postgraduate studies – two in specialization courses (multiprofessional residency), and one in a master's program.

Table 1. Demographic data

Variables	n	%
Sex		
males	8	7.55
females	98	92.45
Total	106	100
Field of practice		
Clinical speech-language-hearing therapy	72	68
Hospital speech-language-hearing therapy	19	24.5
Audiology	15	14.15
Total	106	100
Time working in the profession		
≤ 1 year	17	16
From 13 months to 4 years	53	50
≥ 5 years	36	34
Total	106	100

Source: Research data.

The perception of 73.4% of the volunteers was that interacting with professional role models in practical settings influenced their decision for a field of practice. A total of 92 respondents said that the SLH professional role model who influenced them had been the tutor at the health services (86.7%, summing "influenced very much" and "totally influenced"), followed by supervising professors (n = 79, 75.5%, summing "influenced very much" and "totally influenced"). It is important to point out that 20 participants (19.1%) reported that the supervising professor had "influenced a little" (Figure 2).
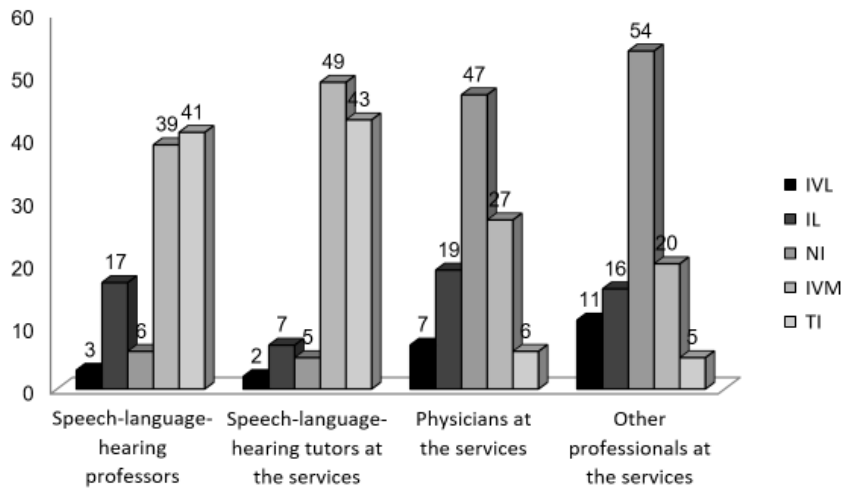
Source: Research data.
Caption: IVL: influenced very little; IL: influenced a little; NI: did not influence; IVM: influenced very much; TI: totally influenced.

Figure 2. Perception of the professionals' influence on forming the graduates' professional model.

The participants' perception of the degree of importance of attributes that SLH therapists should have to be considered positive role models are presented below – encompassing supervising professors, tutors, and employees at the health services. The attributes are classified into blocks: clinical and research (Table 2), educational (Table 3), and personal (Table 4).

It was verified that 26.5% of the graduates were indifferent to the importance of some item in the clinical attributes, and 80.8% were so to some item in the research attributes.

The highest percentage of the role model's clinical skills referred to characteristics such as integrity and an ethical approach to cases and a good professional/patient relationship. On the other hand, the professional's optimism in conducting their cases was less important than other attributes.

In educational skills, the professional's help to students who had questions or were facing difficulties, and the empathy and respect they had for the students proved to be extremely important. In contrast, the professional's good mood, creating a more relaxed educational setting, had a lower percentage of importance.

The characteristics with the highest degree of importance among the personal attributes were the respectful relationship with professionals of other fields and the commitment to personal and professional growth, always seeking to update with new methods and knowledge of the professional practice. A good appearance (considering their attire, friendliness, and ease) was considered less relevant.

Table 2. Degree of the importance of clinical and research attributes to a positive perception of professional role models

Attribute	1		2		3		4		5	
	n	%	n	%	n	%	n	%	n	%
Clinical										
Good therapist/patient relationship	0	0	1	1	0	0	13	12.3	92	86.8
Integrity and an ethical procedure in clinical cases	0	0	0	0	0	0	4	3.8	102	96.2
Showing humanizing skills, such as altruism, compassion, and empathy, when conducting clinical cases	0	0	1	1	0	0	31	29.3	74	69.8
Listening to the patient	0	0	1	1	4	3.8	32	30.2	69	65.1
Clear and objective communication with the patient	0	0	0	0	1	11	3	2.9	102	96.2
Optimistic attitude when conducting cases	0	0	11	10.4	16	15.1	38	35.8	41	38.7
Showing dedication and satisfaction when treating patients	0	0	6	5.7	3	2.8	19	17.9	78	73.6
Showing competence to intervene in cases, proposing adequate measures	0	0	0	0	1	1	9	8.5	96	90.6
Showing empathy and respect for colleagues in their area	0	0	1	1	0	0	12	11.3	93	87.8
Research										
Encouraging interest in research	0	0	11	10.4	19	17.9	36	34	40	37.7
Participating in scientific events	0	0	15	14.2	19	17.9	46	43.4	26	24.5
Number of published articles	6	5.7	16	15.1	47	44.3	20	18.9	17	16

Source: Research data.
Caption: (1) unimportant, (2) important, (3) indifferent, (4) very important, (5) extremely important

Table 3. Degree of the importance of educational attributes to a positive perception of professional role models

Attribute	1		2		3		4		5	
	n	%	n	%	n	%	n	%	n	%
Educational										
Good professor/student relationship	0	0	3	2.8	2	1.9	34	32.1	67	63.2
Using teaching methods favorable to students	0	0	1	0.9	0	0	27	25.5	78	73.6
Listening to students, allowing them to express themselves	0	0	3	2.8	2	1.9	22	20.8	79	74.5
Helping students when they have questions/difficulties	0	0	0	0	1	0.9	11	10.4	94	88.7
Showing empathy and having a respectful relationship with students	0	0	0	0	1	0.9	16	15.1	89	84
Giving students the role of collaborators to construct knowledge	0	0	1	0.9	2	1.9	21	19.8	82	77.4
Having a good mood, creating a more relaxed educational environment	1	0.9	11	10.4	18	17	43	40.6	33	31.1
Allowing students to have greater interaction with patients in clinical contexts	0	0	5	4.7	2	1.9	35	33	64	60.4
Being respectful toward students' occasional limitations and unsuccessful efforts	0	0	3	2.8	2	1.9	25	23.6	76	71.7
Encouraging students to reflect on their experiences	0	0	0	0	3	2.8	28	26.4	75	70.8

Source: Research data.
Caption: (1) unimportant, (2) important, (3) indifferent, (4) very important, (5) extremely important

Table 4. Degree of the importance of personal attributes to a positive perception of professional role models

Attribute	1		2		3		4		5	
	n	%	n	%	n	%	n	%	n	%
Personal										
Commitment to personal and professional growth	0	0	1	0.95	1	0.95	14	13.2	90	84.9
Effort to update knowledge and methods of professional practice	0	0	1	0.95	1	0.95	14	13.2	90	84.9
Broad social look at health problems	0	0	3	2.85	1	0.95	38	35.8	64	60.4
Broad look at education problems	0	0	4	3.8	4	3.8	51	48.1	51	48.1
Broad look at social problems	0	0	4	3.8	4	3.8	51	48.1	47	44.3
Enthusiasm with their profession and field of practice	0	0	4	3.8	8	7.5	46	43.4	48	45.3
Respectful relationships with other health, education, and social professionals	0	0	1	0.9	0	0	20	18.9	85	80.2
Leadership	0	0	10	9.45	28	26.4	44	41.5	24	22.65
Interpersonal communication	0	0	3	2.85	3	2.85	42	39.6	58	54.7
Personal appearance and adequate work attire	1	0.9	16	15.1	14	13.2	49	46.2	26	24.5
Friendliness and ease	0	0	14	13.2	22	20.8	46	43.4	24	22.6

Source: Research data.
Caption: (1) unimportant, (2) important, (3) indifferent, (4) very important, (5) extremely important

Discussion

Questionnaires are among the most practical means to obtain information to learn about behaviors, attitudes, opinions, and preferences.

In all health professions, the interaction of students with professors and tutors in clinical practice significantly contributes to the construction of the student's professional model[11].

Professional internships are part of students' SLH curricula. Hence, they are mentored by professors and tutors and thus exposed to their attitudes. As they observe such attitudes, they can establish standards of beliefs and behaviors upon which they will form the professional model for which they will aim[12-13].

Many studies have approached the perception of medical and nursing students on professional role models[14-15-16]. However, there is a scarcity of research on the topic – and no national publication – in the SLH Sciences.

This study demonstrated that SLH professors and tutors are considered the main role models during undergraduate professional practice courses. They even influence the student's decision on the field of practice – 78 graduates in this research (74.5%) stated that the professional role models with whom they interacted during undergradu-

ate studies influenced their decision for a field of practice. This percentage is higher than the one in a study, in which 55 of the participants (57.3%) identified such influence on the decision for a specialty[11].

Hence, the role of professors and tutors goes beyond teaching clinical theory and practice – they are role models of the procedures that students are to follow, importantly defining their professional attitudes.

Clinical skills were the most valued attributes of professional role models, followed by educational skills and personal attributes. Other studies also mentioned these three aspects as the most important ones[17-18].

In the present study, research skills (e.g., number of published articles and participation in scientific conferences) were not considered a relevant characteristic of professional role models. Another study found a similar result and showed that the time professionals spent in scientific research was not associated with excellent role models[3].

These data suggest that good role models are more associated with clinical professionals than researchers. This may happen because students enter higher education in the field of health aiming to become clinical professionals, which may

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be further reinforced by the program's curricula, which require practical internships.

The questionnaire used in this research to collect data was initially administered to Occupational Therapy graduates from the same university as this study[10]. The comparison of results showed an agreement on therapeutic competence (having a good professional/patient relationship, having integrity and ethical standards, and respecting colleagues in their area), as participants considered these attributes greatly important in a professional role model.

Positive attributes ascribed to role models are skills that both professionals and students can acquire and improve over time. Knowing the most valued attributes helps train and develop professionals and establish a learning environment favorable to students[19].

Professors and tutors have different roles in the students' training. Professors are responsible for theoretical teaching at the university, while clinical supervisors are closer to students during professional practice. This study found that both professors and supervisors were greatly important to form a professional model. Nevertheless, graduates considered clinical tutors as their main professional role models during undergraduate studies – which may be related to the thorough interaction they had during professional internships and the professional experience graduates have already acquired.

Conclusion

Professors and tutors are considered the main professional role models in undergraduate professional practice courses; they can even influence the student's decision for a field of practice. Clinical skills were the most relevant attribute associated with good professional role models, whereas research skills were considered a less important characteristic.

The findings in this study can contribute to the professional development of professors and tutors involved in students' academic training. They can also favor and improve the construction of the most adequate professional role model in this stage of training.

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