

# Perceptions and attitudes of speech-language pathology and audiology students on people with disabilities

Percepções e atitudes de acadêmicos de fonoaudiologia sobre pessoas com deficiência

# Percepciones y actitudes de los académicos de fonoaudiología sobre las personas con discapacidad

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#### **Abstract**

Introduction: Despite different efforts to promote inclusion, adaptation and quality of life for people with disabilities (PwD), there are still barriers to be overcome, especially attitudinal ones. Such people remain subject to different degrees and types of discrimination. It is known that professional training in health, for example – Speech-Language Pathology and Audiology - requires involvement with PwD; therefore, the convenience of conducting research with students on this topic. Objective: to characterize and analyze academics' perceptions and attitudes towards PwD. Method: an exploratory, analytical and quantitative study, carried out by an online questionnaire, designed exclusively for this one, as well as using the Multidimensional Attitudes Scale toward Persons with Disabilities (MAS) adapted, in order to know the perceptions and attitudes of academics of Speech-Language Pathology and Audiology at the Federal University of Santa Maria about the PwD. The collection data occurred between December 2019 and March 2020. The results were tabulated and analyzed by descriptive statistics. Results: 36 students participated; most of them female, coming from public schools, having little contact with PwD before, also in University graduate. A perception of not being widely prepared to deal with PwD prevailed.

#### **Authors' contributions:**

VCB: Study conception; Methodology; Data collection; Study outline. EF: Study conception; Study outline; Critical review; Guidance. PGM: Study conception; Methodology; Orientation.

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They revealed as attitudes: i) sometimes excluding positions; ii) feelings of tension, shyness, shame and impotence; iii) intention for interaction, but contradictory behaviours for such. **Conclusion**: Students' perceptions and attitudes generally indicated little contact and insufficient training related to disabilities. It is suggested that more studies analyze unique aspects of academic training focused on PwD.

**Keywords**: Disabled Persons; Perception; Attitude; Speech, Language and Hearing Sciences; Students.

#### Resumo

Introdução: Apesar de diferentes esforços para a promoção da inclusão, adaptação e qualidade de vida de pessoas com deficiências (PcD) ainda há barreiras a serem vencidas, principalmente, as atitudinais; tais pessoas continuam sujeitas a diferentes graus e tipos de discriminação. Sabe-se que a formação profissional em Saúde, por exemplo - em Fonoaudiologia - implica em envolvimento com PcD; por isso, a conveniência de se realizar pesquisas, junto a estudantes, sobre esse tema. Objetivo: caracterizar e analisar percepções e atitudes de acadêmicos frente à PcD. **Método:** estudo exploratório, analítico e quantitativo, realizado por meio de um questionário online, elaborado exclusivamente para este, bem como pelo uso da The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS), adaptada, visandose conhecer as percepções e as atitudes dos acadêmicos de Fonoaudiologia da Universidade Federal de Santa Maria, acerca de PcD. A coleta ocorreu entre dezembro de 2019 e março de 2020. Os resultados foram analisados por estatística descritiva. Resultados: participaram 36 estudantes; sendo a maioria do sexo feminino, advinda de escolas públicas e com pouco contato com PcD, anteriormente e durante a graduação. Prevaleceu a percepção de não se sentirem amplamente preparados para lidarem com PcD, revelando atitudes como: i) posicionamentos, por vezes, excludentes; ii) sentimentos de tensão, timidez, vergonha e impotência; iii) intenção para interação com PcD, mas comportamentos contraditórios em relação à mesma. Conclusão: as percepções e as atitudes dos acadêmicos, de modo geral, indicaram pouco contato e insuficiente formação relacionada às deficiências. Sugere-se mais estudos que analisem aspectos singulares da formação acadêmica voltada à PcD.

Palavras-chave: Pessoas com Deficiência; Percepção; Atitude; Fonoaudiologia; Estudantes.

#### Resumen

Introducción: A pesar de los diferentes esfuerzos para promover la inclusión, la adaptación y la calidad de vida de las personas con discapacidad (PcD), todavía existen barreras que superar, especialmente las actitudinales. Estas personas siguen sujetos a diferentes grados y tipos de discriminación. Se sabe que la formación profesional en salud, por ejemplo - en Fonoaudiología- requiere envolvimiento con PcD; por eso la conveniencia de realizar investigaciones con los estudiantes sobre éste tema. Objetivo: caracterizar y analizar las percepciones y actitudes de los académicos hacia las personas con discapacidad. **Método**: Estudio exploratorio, analítico y cuantitativo, realizado a través de un cuestionario en línea, desarrollado exclusivamente para este propósito, así como el uso de la The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) adaptada, que tuvo como objetivo conocer las percepciones y actitudes de los académicos de Fonoaudiología de la Universidad Federal de Santa Maria sobre las personas con discapacidad. La busca se realizó entre diciembre de 2019 y marzo de 2020. Los resultados fueron tabulados y analizados mediante estadística descriptiva. Resultados: participaron 36 estudiantes; en su mayoría mujeres, provenientes de escuelas públicas, con poco contacto con las personas con discapacidad antes y también durante la educación superior. Tenían la percepción de no sentirse completamente preparados para lidiar con las personas con discapacidad. Revelaron como actitudes: i) posiciones, a veces excluyentes; ii) sentimientos de tensión, timidez, vergüenza e impotencia; iii) intención para la interacción, pero comportamientos contradictorios pala la misma. Conclusión: Las percepciones y actitudes de los estudiantes, en general, indicaron poco contacto e insuficiente formación relacionada con la discapacidad. Se proponen nuevos estudios que analicen aspectos singulares de la formación académica orientada a las personas con discapacidad.

Palabras clave: Personas con Discapacidad; Percepción; Actitud; Fonoaudiología; Estudiantes.



#### Introduction

The International Classification of Functioning, Disability and Health (ICF) defines disability as a loss or abnormality of a body structure or physiological function (including mental functions).

Also according to the ICF, abnormality refers strictly to a significant deviation from the statistically established norms (as a deviation from an average in the population obtained using standardized norms of measurement) and should be used only in this sense". (p. 187)¹.

In addition to this definition, the ICF highlights functionality, such as body functions and structures, as well as activities and participation, thus characterizing the positive aspects of the interaction of a person's health condition with contextual factors (environmental and personal)<sup>1</sup>. In this sense, people with disabilities (PWD) can be defined as those who have deviations in body functions or structures and who face restrictions on activities and social participation.

The concept of disability has been constantly evolving in recent years. At one point, PWD were seen as people with a body characterized by a deviation, being understood as handicapped, abnormal, monstrous or degenerated, so that their bodies were mystically understood as a result of divine wrath or miracle. Then, there was an understanding that the bodies of PWD should be "corrected", which means that they should be subjected to experiments aiming at reaching a normality<sup>2</sup>. It should be noted that there is a paradigm shift on disabilities, which is reflected in the ICF, in order to enable a deep understanding of a person's conditions, in addition to the disabling factors (as a result of changes in body functions and structures), but also in the relationship established between PWD and their environment, in a broad, physical, historical and sociocultural sense<sup>3</sup>.

This paradigm implies different needs and care demands in health, education, leisure and other aspects. In turn, the World Report on Disability (WRD) indicates that "In the years ahead, disability will be an even greater concern because its prevalence is on the rise" (p.-xi)4. The increase in the number of PWD causes greater difficulty in inclusion and adaptation to the physical and social environment; in addition to increased barriers, mainly

attitudinal barriers that may result in restrictions to full and effective participation of PWD in society on equal terms with people without disabilities<sup>3</sup>. Thus, there is a great need for recognition and comprehensive assistance to PWD.

It should be noted that social restrictions make PWD invisible and also produce feelings of incapacity and guilt, thus promoting feelings of devaluation<sup>5</sup>. Therefore, there is a need for changes, which should not be limited to facilitating the access of PWD to social goods, but also a change aimed at rethinking stereotypes and, mainly, attitudes of society<sup>6</sup>. These changes imply a distancing from biomedical reductionism (mechanistic healthdisease model), in addition to requiring extensive professional activity and the provision of health services, in order to expand the forms of social inclusion and well-being of the PWD4. As a result, there is a need to train competent and excellent professionals to work with the different demands of PWD. The skills of a health professional dedicated to such people must go beyond their areas of expertise, requiring a focus on interdisciplinarity, which is a necessary condition in this field of work (increasingly demanding and interrelated).

In the context of the permanent demand for interdisciplinary work with the PWD and the need to train competent professionals to deal with the diversity, to which these people are subject, it is necessary to reflect on how these aspects have been approached during the training in Speech-Language Pathology. In this sense, this study aimed to characterize and analyze the perceptions and attitudes of Speech-Language Pathology students at the Universidade Federal de Santa Maria towards PWD.

#### Method

This is an exploratory, analytical-descriptive study with a quantitative approach<sup>7</sup>. The study gathers the results of a research developed with students from two Speech-Language Pathology courses (one in Brazil and the other in Chile) in order to analyze perceptions and attitudes related to PWD. In this context, data relating to students at the Universidade Federal de Santa Maria, Brazil, was exclusively analyzed. The study included students from the five years of the Speech-Language Pathology Course at this University - classes entering between 2015 and 2019 - corresponding to a total of 112 students. A simple sample calculation



was used assuming an estimated proportion of 78 students (70% of the population of 112).

In turn, data collection was carried out by sending a form/questionnaire (Perception, Knowledge and Attitudes of Speech-Language Pathology students about PWD) to students, which were made available by the coordination of the Course. The form was generated electronically in Google Forms and should be answered in a single access. It should be noted that data collection was conducted during the vacation period (between December 2019 and March 2020) in order not to affect the academic routine of students. Initially, the study evaluated sending three invitations, with an interval of 15 days between them. However, a fourth invitation was also sent by the professor adviser of this study due to the low number of responses obtained during the regular collection period, in order to reach the sample calculation.

The electronic form consisted of two parts. The first part consisted of questions that aimed to: (i) characterize students; (ii) identify the history (previous and current) of contact and/or attitudes of students with PWD; (iii) verify the academic training aimed at PWD; and, (iv) its consequence for the execution of voluntary support activities with that population. The second part corresponded to questions from "The Multidimensional Attitudes Scale toward Persons with Disabilities" (MAS)<sup>8</sup>, which was adapted by the authors of the aforementioned research. MAS includes questions that address affective (14 questions), cognitive (10) and behavioral (7) dimensions. In addition, the instrument presents a narrative in which a person (without disability, named Cláudia or José) unexpectedly spends a few minutes with a person using a wheelchair. The responses follow a Likert scale, from 1 to 5 (1 being "strongly disagree" and 5 "strongly agree") indicating the degrees of probability of the hypothetical experimentation. Thus, the participants in this study reported how they would feel, think and behave in that specific situation. The use of this scale with speech-language pathology students should be highlighted, as the literature reports research on this topic with respect to Medicine<sup>9</sup>, Nursing<sup>10</sup> and Dentistry<sup>11</sup>.

This study is in line with the recommendations of Resolution No. 466, of December 12, 2012, and was approved by the Research Ethics Committee with Human Beings under the opinion of no. 2.975.025.

#### Results

The results of this study are presented in two subsections: the first on the characterization of the studied population, while the second part is focused on the participants' perceptions and attitudes. However, it should be noted the importance of reporting the participation of students as the greatest difficulty found in carrying out this study. Since it was not possible to reach the expected sample, despite the dissemination carried out and/or the invitations sent, possibly due to the period of data collection (during the academic holidays). Only 36 (Table 1) of the 78 students indicated by the sample calculation (approximately 16 each year) participated in the study. Thus, the study included 46.15% of the students of the course, being 3.84% from the first year, 16.66% from the second, 6.41% from the third, 14.10% from the fourth and 5.13 % of the fifth year (N=78).

Table 1. Responding students and respective response grades (n=36)

	Students												
	1st	Year	2nd	Year	3rd	Year	4th	Year	5th	Year	T	otal	
1st submission	1		3		4		2		3		13		
2nd submission		0		0		1		2		1		4	
3rd submission		1	0		0		1		0		2		
4th submission		1	10		0		6		0		17		
Total /%*	3	8,33	13	36,11	5	13,88	11	30,55	4	11,11	36	100%	

Legend: \* Percentage





## Subsection 1- Characterization of the population studied

Table 2 shows the socio-demographic and economic data of the participants, as well as those related to the education system attended prior to the

university, family constellation and current housing condition. These data were obtained through the responses in the first Item of the form/questionnaire (Perception, knowledge and attitudes of Speech-Language Pathology students about PWD).

**Table 2.** Characterization of speech-language pathology students of the Universidade Federal de Santa Maria (2015-2019) (n=36)

CATEGORY	Sub-it	em	Number	Percentage
Gender	Fema	le	32	88.89%
Gender	Male	9	4	11.11%
	18 to 20 years and	11 months old	15	41.67%
	21 to 22 years and	11 months old	13	36.12%
Age	22 to 24 years and	11 months old	6	16.66%
	25 to 26 years and	11 months old	0	0%
	27 to 28 years and	11 months old	2	88.89% 11.11% 41.67% 36.12% 16.66%
Economic level	Low	1	32 8 4 1 15 4 13 3 6 1 0 2 11 25 23 6 13 21 5 15 26 7 9 1	30.6%
Economic level	Midd	le	25	69.4%
	Elemente de Calenda	Public	23	63.88%
Tanahina Tima	Elementary School	Private	13	36.12%
Teaching Type	Histor Calcard	Public	21	58.34%
	High School	Private	15	41.66%
		0-1	26	72.23%
Family Constellation	Number of Siblings	2-4	9	25%
		≥5	1	2.77%
		With friends	11	30.55%
Housing Condition		With family	16	44.45%
		Alone	9	88.89% 11.11% 41.67% 36.12% 16.66% 0% 5.55% 30.6% 69.4% 63.88% 36.12% 58.34% 41.66% 72.23% 25% 2.77% 30.55% 44.45%



Then, Figure 1 shows the responses of Item II of the form/questionnaire (for better guidance to the reader); followed by Table 3 showing the contact

history (previous and current) and/or attitudes of students towards PWD in different contexts.

Experienced Situations:
Please check each question to indicate how often you experience the indicated activities, according to the following options:  I - Never; II - Once or twice; III - Several times; IV - Often; V - Very often.  Do you know PWD and like them?  Do you know PWD and don't like them?  Have you had/have pleasant experiences with PWD?  Have you had/have unpleasant experiences with PWD?  Do you talk regularly with PWD?  Have you had/have in-depth conversations with PWD about problems they face with disability?  Do you admire/have you ever admired a PWD?  Have you ever let/do you try to help a PWD?  Have you ever felt/do you feel sorry for PWD?  Have you ever felt/do you feel sorry for PWD?  Has the behavior of a PWD ever disturbed or bothered you/does the behavior of a PWD disturb or bother you?  Have you ever shared eating spaces with PWD do you share eating spaces with PWD?  Have you ever shared leisure/entertainment spaces with PWD/do you share leisure/entertainment spaces with PWD?
14. Have you contributed money or kind to institutions and/or companies that do work with PWD/Do you contribute money or kind to institutions and/or companies that work with PWD?
-SCHOOL CONTEXT (PREVIOUS)*  1. Were any PWD included during your Primary School and/or High School? ( ) Yes, in Primary School; ( ) Yes, in High School; ( ) Yes, in both; ( ) No;  2. Did anyone talk to you about PWD during your Primary School and/or High School? ( ) Yes, in Primary School; ( ) Yes, in High School; ( ) Yes, in both; ( ) No;  3. During your primary or high school years, was there any kind of regular activity in support of PWD at your school? ( ) Yes, in Primary School; ( ) Yes, in High School; ( ) Yes, in both; ( ) No;  4. During your primary or high school years, did you participate in any type of volunteer work in support of PWD?  ( ) Yes, in Primary School; ( ) Yes, in High School; ( ) Yes, in both; ( ) No;
-FAMILY CONTEXT*  1. Do you have a relative with a disability? ( ) Yes; ( ) No;  2. Do you have family members in general with a disability? ( ) Yes; ( ) No;  3. Do you have a friend with a disability? ( ) Yes; ( ) No;  4. Do you currently have a affective partner with a disability? ( ) Yes; ( ) No.

Source: Questionnaire - Perception, knowledge and attitudes of Speech-Language Pathology students about PWD.

**Figure 1.** Item II – identification of the history (previous and current) of relationship and/or attitudes of students with PWD.





**Table 3.** History (previous and current) of students relating to contact and/or attitudes with PWD in daily life, educational context and family context (n=36)

Experienced	O	Degree of Events										
Situations	Question -	I	%	II	%	III	%	IV	%	V	%	
Daily life	1	8	22.2	3	8.33	9	25	1	2.78	15	41.6	
	2	27	75	9	25	0	0	0	0	0	0	
	3	3	8.33	4	11.11	10	27.8	9	25	10	27.8	
	4	19	52.77	14	38.9	3	8.33	0	0	0	0	
	5	10	27.8	7	19.4	8	22.2	4	11.11	7	19.4	
	6	13	36.11	6	16.67	6	16.67	4	11.11	7	19.4	
	7	0	0	2	5.55	8	22.2	9	25	17	47.25	
	8	0	0	4	11.11	13	36.11	8	22.2	11	30.58	
	9	11	30.58	6	16.67	11	30.58	2	5.55	6	16.66	
	10	6	16.66	10	27.8	15	41.6	3	8.33	2	5.55	
	11	19	52.78	14	38.9	2	5.55	1	2.78	0	0	
	12	4	11.11	2	5.55	12	33.34	8	22.2	10	27.8	
	13	6	16.67	3	8.33	12	33.34	5	13.88	10	27.8	
	14	23	63.9	7	19.4	4	11.11	1	2.78	1	2.78	

Cabaal Cambaat	Options:									
School Context		No								
	a)	%	b)	%	c)	%	-	%		
1	6	16.66	3	8.33	10	27.8	17	47.25		
2	1	2.78	4	11.11	22	61.11	9	25		
3	4	11.11	4	11.11	2	5.55	26	72.22		
4	2	5.55	2	5.55	4	11.11	28	77.78		

Enmily Contact	Options:							
Family Context	Yes	%	No	%				
1	5	13.88	31	86.12				
2	16	44.44	20	55.56				
3	14	38.9	21	58.33				
4	0	0	36	100				



In turn, Chart 1 shows the results related to academic training in Speech-Language Pathology related to PWD, according to the students' perceptions based on the statements provided in Item III of the form/questionnaire (Figure 2).

Please check each question to indicate the training you have received on Disability and Functionality during your undergraduate course, according to the following options\*:]

I-I strongly disagree; II-I generally disagree; III-I disagree more than I agree; IV-I somehow agree; V-I generally agree; VI-I do not know how to answer; VII-I did not perform clinical practice.

- 1. The theoretical training provided is relevant, I understand the general concepts and their importance for my work.
- 2. I have access to up-to-date and relevant disability information.
- 3. Teachers are concerned with offering an integrated view of functionality, in line with the current development of the topic at the international level.
- 4. The sequence of the offer on disability is relevant and I can clearly identify it in my professional training.
- 5. I receive information on the relevant policies on disabilities.
- 6. I can say that my disability training is appropriate and that my institution is concerned with these issues.
- 7. I can say that the topic of disability is widely discussed by academics.
- 8. The rights of PWD are respected in my practical activities.
- 9. Practical training is relevant, and I interact with the adequate number of PWD in different contexts and with different characteristics.
- 10. The professionals with whom I have interacted in practical activities widely address the issue of disability.

Source: Questionnaire - Perception, knowledge and attitudes of Speech-Language Pathology students about PWD.

Figure 2. Item III - professional training focused on disabilities

Chart 1. Academic training in speech-language pathology aimed at disabilities. (n=36)

Statements	Degi	ee of agree	ement repor	<b>Another Manifestation</b>			
	I	11	ш	IV	٧	I do not know how to answer	I did not perform clinical practice.
1-	1	0	3	9	19	4	
2-	2	2	5	9	15	3	
3-	1	0	5	7	18	5	
4-	1	0	6	6	17	6	
5-	3	7	8	10	4	4	
6-	1	2	5	10	12	6	
7	0	4	12	10	5	5	
8-	1	0	2	5	14		14
9-	0	1	4	10	9		12
10-	0	3	3	8	12		10

Legend: I-I strongly disagree; II-I generally disagree; III-I disagree more than I agree; IV-I somehow agree; V-I generally agree.





In order to know the repercussions of academic training regarding involvement with PWD, outside the training context, students were asked whether or not they volunteered with such people, aiming to identify the factors that prevented them from doing so. However, only two students (1.78%) carry out volunteer activities according to the data obtained. Regarding the reasons for not carrying out such activities, no student selected the option "I do not volunteer because there are people more qualified for this"; while two students reported not being able to volunteer; three reported having no interest (at the time the survey was conducted); 13 students reported not having time at the moment; 16 reported that they thought, but did not decide to volunteer; 20 reported not feeling prepared for volunteering and, finally, 21 indicated they were unaware of institutions that attended PWD to carry out this type of activity.

Regarding the degree of difficulty of students in relating to PWD of different age groups and different types of disabilities, two students reported that they "could not relate to PWD" (reporting the age group of adults and the elderly as limiting factors). Twenty students reported that they have "many difficulties in relating" with such people (six with children, four with young people, five with adults and five with the elderly); while 17 students reported "some difficulties" in relating to children, 20 with young people, 20 with adults and 19 with the elderly. Finally, 13 students reported "no difficulty" in relating to children, 12 with young people, 10 with adults and 11 with the elderly.

Regarding the type of disability, students showed more difficulties with people who have psychiatric problems, since three of whom reported that they "could not relate to people with mental illness" (psychosis, schizophrenia, dementia, among others)12, while 18 reported "many difficulties", 12 reported "some difficulties" and three reported "no difficulties". With regard to visual impairment, 10 students reported having "many difficulties" in relating to people with this disability, while 21 reported "some difficulty" and five reported "no difficulty". Regarding congenital and/or acquired during neuropsychomotor development (non-progressive encephalopathy) PWD, four participants reported "many difficulties", while 16 reported "some difficulties" and 16 reported "no difficulty". Regarding the acquired deficiencies, two participants reported "many difficulties", while 20 reported "some difficulties" and 14 answered "no difficulty". As for cognitive/intellectual PWD, two participants reported "many difficulties", while 20 reported "some difficulties" and 14 reported "no difficulty". With respect to the Auditory PWD, three participants reported "many difficulties", while 16 reported "some difficulties" and 17 reported "no difficulties". Regarding physical PWD, two students reported "many difficulties", while 13 reported "some difficulties" and 21 reported "no difficulties".

### Subsection 2 - Students' perceptions and attitudes on PWD

As for the dimensions (feelings, thoughts and behaviors) of the hypothetical experimentation/situation proposed at MAS, most students (66%) thought of Claudia as the protagonist and 31 (86.11%) thought that the person with a disability would be a male (Table 4).



**Table 4.** Dimensions of hypothetical experimentation and possibilities of experiencing them by students of speech-language pathology at the Universidade Federal de Santa Maria (n=36)

		D	egree	of probab	ility					
Feelings:	1	%	2	%	3	%	4	%	5	%
Rejection	9	25	12	33.33	6	16.66	3	8.333	6	16.66
Impotence	4	11.11	9	25	13	36.11	5	13.88	5	13.88
Fear	12	33.33	8	22.22	10	27.77	5	13.88	1	2.77
Upset	11	30.55	11	30.55	7	19.44	2	5.55	5	13.88
Guilt	16	44.44	8	22.22	9	25	1	2.77	2	5.55
Shyness	2	5.55	4	11.11	16	44.44	11	30.55	3	8.33
Stress	16	44.44	9	25	8	22.22	2	5.55	1	2.77
Shame	7	19.44	6	16.66	11	30.55	9	25	3	8.33
Tension	4	11.11	6	16.66	17	47.22	6	16.66	3	8.33
Serenity	9	25	15	41.66	6	16.66	5	13.88	1	2.77
Nervousness	2	5.55	11	30.55	11	30.55	9	25	3	8.33
Depression	18	50	10	27.77	4	11.11	2	5.55	2	5.55
Calm	11	30.55	11	30.55	8	22.22	4	11.11	2	5.55
Relaxation	13	36.11	10	27.77	8	22.22	4	11.11	1	2.77
Thoughts:										
Why not get to know him/ her better?	1	2.77	5	13.88	14	38.88	8	22.22	8	22.22
If I start the conversation, he/she will thank me	9	25	9	25	14	38.88	4	11.11	0	0
I like meeting new people	1	2.77	5	13.88	15	41.66	7	19.44	8	22.22
We may get along well	1	2.77	0	0	16	44.44	10	27.77	9	25
He/she seems to be an interesting person	2	5.55	5	13.88	13	36.11	13	36.11	8	22.22
I can make him/her feel comfortable	1	2.77	2	5.55	14	38.88	12	33.33	7	19.44
He/she seems friendly	1	2.77	0	0	16	44.44	9	25	10	27.77
He/she will like to meet me	3	8.33	6	16.66	15	41.66	9	25	10	27.77
He/she seems to be a good person	1	2.77	0	0	19	52.77	11	30.55	5	13.88
I can talk to him/her about things that interest both of us	1	2.77	2	5.55	14	38.88	11	30.55	8	22.22
Behaviors:										
Reading newspaper or talking on cell phone	2	5.55	8	22.22	15	41.66	5	13.88	6	16.66
Finding an excuse to leave	7	19.44	16	44.44	3	8.33	7	19.44	3	8.33
Starting a conversation	0	0	3	8.33	20	55.55	8	22.22	5	13.88
Moving away	15	41.66	13	36.11	4	11.11	3	8.33	1	2.77
Switching tables	21	58.33	11	30.55	2	5.55	1	2.77	1	2.77
Getting up and leaving	21	58.33	11	30.55	1	2.77	2	5.55	1	2.77
Keep doing what was being done	1	2.77	5	13.88	19	52.77	7	19.44	4	11.11

<sup>\*</sup>Legend: 1- None, it is unlikely; 2 A little, it is unlikely; 3 It's very likely; 4 It is highly likely; 5 It is absolutely likely.

#### **Discussion**

Although not directly related to its objective, the first point of analysis in this study refers to the low rate of student participation. In this regard, a study that evaluated different methods of data collection (interviews, questionnaires, focus groups, among others) reported that the use of electronic questionnaires tends to result in low response rates due to its limitations, such as internet access, the large volume of email or invalid email addresses<sup>13</sup>. To some extent, the data found in this study are in line with the data found in the literature, since many emails (total of 14, from the first to the



fourth invitation) returned, reducing the number of respondents.

Other possible interpretations regarding the low adherence to this study may be related to the research period (academic vacations) and the grade of the course. Although the initial idea was not to affect academic activities during the school year, it may have been a wrong choice, since summer holidays tend to be effectively fulfilled by students. As for the degree of the course, the study understood that students in the initial phase have not yet incorporated the teaching-research-extension routine of the university context and also tend to have difficulties in adapting in this phase that involves environmental changes (such as moving to another city) and behavioral (new study habits, such as a greater demand for the acquisition of norms and behaviors appropriate to higher education), as well as to everyday life (new housing and new ways of living together). Therefore, the incoming student is facing new academic, social and interpersonal challenges, in addition to those aimed at a career in training<sup>14</sup>.

In this context, and given the current curriculum of the Speech-Language Pathology course at the participating University, it can be inferred that the first years had little contact with the topic, as there are only three disciplines (of a general nature to health education) that may address the deficiencies involving human beings. In turn, the second degree of the course includes more subjects that incorporate the theme of disability (public health and education policies, as well as issues related to the social sciences, the process of human acquisition and development, above all, of language in its aspects of regularity and pathologies), which may explain the greater interest of students in this research.

In the third grade, students begin clinical practices focused on issues of orofacial motricity and oral/speech language, which requires greater availability and commitment in the preparation of the evaluative and therapeutic processes they develop, thus interfering with the time available for activities other than training. In the fourth degree, there are more practical activities in the different areas of Speech-Language Pathology (audiology, dysphagia, balance, oral and/or written language; collective health [Primary and Secondary Health Care] and voice), in which students focus on the services under the supervision of a teacher in the

area. In the fifth grade, students have a Mandatory Internship at external institutions (it should be noted that only five students were in this condition at the time of data collection for this study). It should be noted that four interns answered the form/questionnaire (80% of the total, possibly because they were carrying out activities in institutions that care for PWD). Fourth grade students ranked second in absolute numbers, which can also be understood as a result influenced by clinical practices.

Regarding the sociodemographic characterization of the respondents, the prevalence of females, the age group of students (between 18 and 20 years) and the family constellation (members of small families from the middle class) are noteworthy. These characteristics are in line with those found in a study published in 2015, which investigated the profile of Speech-Language Pathology students from the 2014 National Exam for the Assessment of Student Performance (ENADE)<sup>15</sup>.

The same study also found the so-called "feminization of the workforce" <sup>16</sup>. It also should be noted that the aforementioned study <sup>15</sup> highlights that women have been gaining space, including in the areas of Dentistry and Medicine, which previously had a prevalence of men. Another study <sup>17</sup> also highlighted that women were the majority in 14 health courses, including Speech-Language Pathology, except for Medicine and Physical Education. These studies <sup>16,17</sup> are in line with the data shown at the beginning of the 21<sup>st</sup> century by the Brazilian Institute of Geography and Statistics (IBGE) <sup>18</sup>, which found a higher percentage of women as graduates of higher education in Brazil.

It should also be noted that the majority of students come from public schools and have not had contact with PWD during the school years, in addition to not having had the opportunity to discuss the topic, despite the existence of the Salamanca Statement (1994) that recommended the inclusion of PWD<sup>19</sup>. In this regard, about 90% of children with disabilities in developing countries do not attend school (whether public or private) according to the UN<sup>20</sup>. This is even more evident in public schools that still face many problems to promote the inclusion of PWD, such as the lack of material resources, little or no training of professionals to deal with differences and difficulties in establishing communication<sup>21</sup>. The authors also report another aggravating factor, namely: many educators understand disability only as a purely organic issue;



that is, as a physical, sensory or cognitive deficit, which implies low expectations of teachers related to the educational process of PWD<sup>21</sup>. Thus, it can be said that the participants of this study come from municipalities that did not timely include PWD in regular schools (public or private), keeping them in special schools still in force in the municipalities where they studied until High School.

The little contact of the participants of this study with PWD was also reported in the family context (most of the participants from the middle economic class), also showing that the students did not experience inclusive situations before starting the training in Speech-Language Pathology. No studies were found with students from this professional group that addressed the economic class of the participants. However, the results can be discussed based on data released in the last IBGE Census<sup>18</sup>, which showed that the majority of PWD have very low levels of education (low education) and income (low economic class), suggesting that the largest number of PWD may be among the least educated and poorest families, which does not reflect the reality of the students in this study. As previously reported, most academics reported being of middle economic class when asked about their economic classes (low, medium and high). The World Report on Disability<sup>4</sup> should also be highlighted, which reported that PWD have higher rates of health problems and poverty worldwide due to barriers to access to health, education, and employment (wages and income).

Regarding the feelings and/or experiences of contact with PWD, most students reported that they experienced positive and pleasant everyday events. Many participants reported sharing leisure or eating spaces with PWD "several times or often". Most participants also reported having already made themselves available to assist a PWD, but they never let themselves be assisted by a PWD; and neither spoke to a PWD daily or addressed disability issues with a PWD. These data may be showing flaws in the effective social inclusion of these people, suggesting a mismatch between what is known to be done and what is actually done. These situations may result from stereotyped contextual factors, such as the presence of limiting aspects, individual conditions (both PWD and the person without disabilities) and the physical and social environment, as the behaviors are still characterized by beliefs in inequality, disqualification or devaluation of PWD as social subjects<sup>22</sup>. The authors<sup>22</sup> also report that attitudes (of society in general) can be reflected by professionals who apply assistance and exclusionary models, thus increasing the social disadvantages of PWD. In this regard, the therapeutic processes do not perform activities external to the clinical environment in order to promote inclusion, nor do they encourage activities outside this context.

As academic training in Speech-Language Pathology requires addressing the deficiencies, it should not be limited to therapeutic techniques, but should develop skills, attitudes and ethical values of the future professional. As a result, teaching-learning processes must be (re)constructed in a structured way by educators, students, bodies responsible for health, education and/or assistance to PWD and, certainly, society. Therefore, professional training should favor students' self-criticism and social responsibility, in addition to encouraging the search for interdisciplinary relationships to cope with varied and often adverse situations<sup>23</sup>.

Analysis of the responses showed that most academics fully agree with the statements regarding professional training on disabilities. However, the majority of respondents reported an insufficient detailing of public policies about PWD, in addition to a failure to act broadly with such people, despite the inclusion of subjects focused on public health and education policies in the curriculum of the Speech-Language Pathology course. Among the health policies subject to the participation of Speech-Language Pathology, the teaching plan does not include the National Health Policy on PWD<sup>24</sup>, while Special Education<sup>25</sup> is highlighted in the field of Education.

The limitation of academics to deal with disability was also reflected in their attitudes towards volunteering. Thus, on the one hand, it can be inferred that the limitations reported by students result from the lack of knowledge of the various policies aimed at PWD; while, on the other hand, these limitations may be the result of the limited opportunity for clinical practices with them, since it is known that expanded training requires knowledge and application of the rights of PWD, as well as the implementation of concepts acquired in different areas of Speech-Language Pathology that apply to the care of PWD. In this context, students must be prepared to understand users in their entirety and in their subjectivities of interaction between



spaces (physical and social) that they live. Being prepared to understand these factors will certainly provide the student with a better exchange with those involved in the process (PWD, their families, educators, among others)<sup>23</sup>. PWD feel limited and powerless in the face of the reality they experience, so both health professionals and the support network of these people must be aware of their physical aspects, but also their subjective perceptions<sup>26</sup>.

In addition, according to the National Curriculum Guidelines, instituted by the National Education Council and the Higher Education Chamber<sup>27</sup>, the future professional of Speech-Language Pathology must be generalist, humanistic, critical and reflective; with performance based on ethical principles, whether in the clinical-therapeutic or preventive fields. Thus, with regard to the disabilities, the professional must be competent in recognizing the health needs of the PWD, observing and acting according to their particularities, understanding that the relationships with the physical and social environment that determine the degree of disability and/or functionality of a person<sup>4</sup>.

The study also found a certain difficulty for students in relating to PWD. In this regard, students reported children as the age group that has "least or no difficulty". In turn, adults were reported by students as the "most difficult" age group. In a way, these data are in line with a study<sup>28</sup> that reports children as the age group that receives the most attention in Speech-Language Pathology. The clinical practices offered in the course include a greater number of children in therapeutic processes due to difficulties/disorders of oral/speech, writing, orofacial and auditory motor skills.

Regarding the type of disability, the psychiatric disability (which can also be identified as mental illness) was reported by the respondents as the most difficult, followed by visual impairment. Difficulties of a psychiatric nature are theoretically addressed in the curriculum of the course and clinical practices, which provide contact with people with mental health care needs, are restricted to a single field. However, the Psychosocial Support Centers (CAPS), especially CAPSi (for children), in the municipality do not have speech-language pathologists to meet the needs of the course, thus affecting training in this area. Another study<sup>29</sup> reports the importance of including Speech-Language Pathologists in multiprofessional mental health teams, emphasizing the role of speech-language pathologists as a privileged professional to diagnose and/or improve the forms of expression of subjects in distress, whether performing evaluations or therapeutic interventions (longitudinal follow-ups).

As for visual impairment, there are few studies that report the inclusion of Speech-Language Pathology. Monteiro and Montilha<sup>30</sup> recommend speech-language pathology care to people with visual impairments, indicating stimulation of location and recognition of sounds (especially environmental) to improve the orientation, mobility and protection of these people. The authors also highlight the possibility for the speech-language pathologist to work on aspects related to orofacial motricity in order to contribute to the improvement of oral and communication skills and, still, to work with other aspects that favor activities of daily living.

From this point on, there is a discussion of a hypothetical and susceptible situation between a PWD and a person without a disability (called Cláudia or José, as the protagonist of the situation), in which the gender of the PWD should be indicated. The responses showed that the majority of respondents (female) reported the male character as the person with a disability. According to Crochick<sup>31</sup>, people who have prejudices tend to project their feelings and their impotence on external goals. In a way, this statement can be compared to the results of this study, since there was a projection of disability in the opposite sex. However, it was not possible to identify whether this projection was due to prejudice, due to the lack of proximity of students to PWD and/or due to the scant discussion about deficiencies during the course.

As previously reported, students could experience different feelings, thoughts and behaviors during such a situation. This study discusses (due to text size limits) only the data referring to the "likely to happen", regardless of the course (very likely, highly likely and absolutely likely). Regarding feelings, a high percentage of shyness (83.32%) was reported, followed by tension (72.22%), impotence, shame and nervousness (63.88%). Therefore, as reported by classic studies<sup>31,32</sup>, imagining experiences with PWD tends to produce ambiguities, anxieties and fears in the face of situations considered different. Tension and impotence, for example, can result from the feeling that it is not possible to deal with the disability, which, in turn, may result from the belief that PWDs are incapable and fragile<sup>32</sup>.



However, from the perspective of human rights, disabilities must be understood as a political issue and overcoming them requires collective actions aimed at eliminating physical and attitudinal barriers<sup>3</sup>. In agreement with these studies<sup>32,3</sup>, it is necessary to promote the concept of human rights during professional training, aiming to expand the conditions of students for action together and with PWD.

As for thoughts, most respondents reported that all of the thoughts listed could happen, with variation in the degree of probabilities, except the thought that indicates a gratitude from the PWD to the people without disabilities for starting a conversation (half of the participants reported that it would be very likely to happen and the other half reported that it would most likely not happen). From this, it is possible to understand that half of the students (the group that reported "less or no chance" of happening) understand themselves as really committed, while the other half (the group that selected "likely", "highly likely" and/or "absolutely likely") understand themselves benevolent with PWD. The two groups differ so that the first group shows a professional attitude (coexistence does not require a gratitude from any party involved, as it is a natural human process) and the second group shows a lay attitude (living with a PWD would be bearable due to their weaknesses).

Regarding the behaviors that could happen, it should be noted that most respondents reported that they would start a conversation, but some respondents chose to ignore a PWD (by reading a newspaper, talking on the cell phone and/or continuing their activities). The fact that many respondents would continue their activities and/ or seek a distraction (reading the newspaper or talking on the cell phone) suggests a behavior of withdrawal/exclusion of the PWD. The lack of identification with the other and/or the lack of coexistence are mechanisms of social denial<sup>31</sup> that imply the removal of the possibility of PWD to remain as a subject of coexistence. This exclusionary behavior also suggests the potential presence of assistentialist models of care for PWD in the field of academic training, reinforced by specialized institutions (special schools)<sup>32</sup> that understand that PWD need to be treated/healed/adapt to the "normal"33.

It should be noted that there is a contradiction in behavior, which shows a gap between what students think and how they behave. This shows that the initial feelings of strangeness affect the contact with PWD and are maintained when there is no training opportunity providing the interaction between PWD and people without disabilities<sup>31</sup>. The lack of visibility of PWD, due to historical and exclusive paradigms<sup>22</sup>, withdrawal, fear, strangeness or hostility<sup>31</sup>, is a barrier to be overcome through direct contact (personal) and marketing (social) to provide the correct social inclusion<sup>34</sup>. Studies carried out in other professional groups<sup>9,10,11</sup> also reported that students' insecurity, difficulties and fear in relation to PWD were overcome by the search for information, acquisition of knowledge and direct involvement with PWD. In this way, students understand the importance of experiences with PWD and subjects related to disabilities during the course, since this experience/knowledge relationship can provide professional training (technically and socially desired) to work with PWD.

In this sense, the identification/visibility of PWD is only possible through the coexistence, the inclusion of attitudes and actions of professionals that promote the overcoming of pejorative beliefs, developing, by all means, the conditions of equity in the various aspects of social life<sup>22</sup>.

#### Conclusion

This study allowed identifying the perceptions and attitudes of Speech-Language Pathology students on PWD, as future professionals who will certainly be responsible for the care and social inclusion of these people. There was a low participation of students (approximately 45%) that was not balanced between the five years of the course.

In addition, students in general had little contact with PWD before starting their courses. Regarding professional training, the participants showed that they do not feel sufficiently prepared to work in a broad way with PWD. Respondents reported having minimal training to work with such people and also indicated the need to complement training with public policies aimed at PWD (focusing on their rights), as well as to expand practical experiences with PWD. Students also reported greater difficulties in relating to people with psychiatric problems.

In general, the participants showed contradictions between their feelings, thoughts and behaviors related to living and/or working with the PWD. In



this sense, this study suggests further investigation in this area, with a greater number of participants, aiming to improve the academic training in Speech-Language Pathology focused on PWD, and committed to the social inclusion of such people.

#### References

- OMS. Classificação Internacional de Funcionalidade, Incapacidade e Saúde. Lisboa, Direção Geral de Saúde, 2004.
- 2. Braddock DL, Parish SL. An Institutional History of Disability. In: Albrecht GL, Seelman KD, Bury, M, editors. *Hand book of Disability Studies*. London: Sage; 2001; p. 11-68.
- 3. Ali M, Schur L, Blanck P. What types of jobs do people with disabilities want? Journal of Occupational Rehabilitation, 2011; 21(2), 199-210.
- OMS. Relatório Mundial sobre Deficiência. Publicado pela Organização Mundial da Saúde sob o título World Report on Disability. 2011.
- 5. Smedema, SM, Kesselmayer, RF, & Peterson, L. Evaluation of a multiple mediator model of the relationship between core self-evaluation sand job satisfactions in employed individuals with disabilities. Rehabilitation Research Policy and Education, 2018; 32(2), 139-154.
- 6. Terzi L. Reframing inclusive education: education ale quality as capability equality. Cambridge Journal of Education, 2014; 44(4), 479-493.
- 7. Gil AC. Métodos e técnicas de pesquisa social. 4 ed. São Paulo: Atlas, p. 207. 1994.
- 8. Findler L, Vilchinsky N, Werner S. *The Multidimensional Attitudes Scale Toward Persons With Disabilities* (MAS): construction and validation. 2007, *RCB 50: 3 pp. 166*–176.
- 9. Ryan TA, & Scior K. Medical students' attitudes towards people with intellectual disabilities: A literature review. Research in Developmental Disabilities, 2014; 35(10), 2316-2328. doi:10.1016/j.ridd.2014.05.019.
- 10. Rebouças CBA, et al. Pessoa com deficiência física e sensorial: percepção de alunos da graduação em enfermagem. Acta Paul Enferm. 2011; 24(1): 80-6.
- 11. Ferreira HS et al. Percepção de estudantes de graduação em Odontologia frente ao atendimento de pessoas com deficiência. Revista da ABENO, 2017, 17(1): 87-96.
- OMS. CID-10- Classificação Internacional de Doenças, 1990.
- 13. Vasconcellos-Guedes L, Guedes LFA. Vantagens e Limitações dos Questionários Eletrônicos via Internet no Contexto da Pesquisa Científica. In: X SemAd - Seminário em Administração FEA/USP (São Paulo, Brasil), 2007.
- 14. Granado JIF, et al. Integração acadêmica de estudantes universitários: contributos para a adaptação e validação do QVA-r no Brasil. Psicologia e Educação, Portugal, Universidade da Beira Anterior, v. 4, n. 2, p. 33-43, 2005.

- 15. Santos ACM, Luccia G. Perfil dos estudantes de fonoaudiologia segundo o Exame Nacional de Desempenho de Estudantes. Revista Distúrbios Comunicação Humana. São Paulo, 2015, 27(3): 589-599.
- 16. Matos IB, Toassi RFC, Oliveira MC de. Profissões e ocupações da Saúde e o processo de feminização: Tendências e implicações. Athenea Digital, 2013; 13(2) 239-244.
- 17. Haddad AE, et al. Formação de profissionais de saúde no Brasil: uma análise no período de 1991 a 2008. *Rev. Saúde Pública* [online]. 2010, vol.44, n.3, pp.383-393. https://doi.org/10.1590/S0034-89102010005000015.
- 18. IBGE. Censo Demográfico 2010: Banco de Dados agregados do IBGE. Rio de Janeiro, 2010. [acesso em 2020 julho 23]. Disponível:http://www.ibge.gov.br/home/estatistica/populacao/censo2010/default.shtm.
- 19. UNESCO. Declaração de Salamanca. Conferência Mundial sobre Educação Especial. Salamanca-Espanha, 1994.
- 20. ONU, Brasil (2015). A ONU e as pessoas com deficiência. [acesso em 2020, Julho 27]. Disponível em: https://nacoesunidas.org/acao/pessoas-com-deficiencia/.
- 21. Monteiro MB, Camargo EAA, Freitas AP. Reflexões sobre práticas de ensino e inclusão. Journal of Research in Special Educational Needs. Volume 16 Number s1, 2016, 940–944.
- 22. Mazzotta MJS, D'antino MEF. Inclusão social de pessoas com deficiências e necessidades especiais: cultura, educação e lazer. Saúde soc. vol.20 nº 2, São Paulo Abril/Junho, 2011, p.377-389.
- Ribeiro II, Medeiros Junior A. Graduação em saúde: uma reflexão sobre ensino-aprendizado. Trab. educ. saúde. 2016; 14(1): 33-53.
- 24. Brasil. Política Nacional de Saúde da Pessoa com Deficiência. 2002. [acesso em 2020, Agosto 4]. Disponível em http://bvsms.saude.gov.br/bvs/publicacoes/politica\_nacional\_pessoa com deficiencia.pdf.
- 25. Brasil. LEI Nº 9.394 de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. [Acesso em 2020, Agosto 1] Disponível em: http://portal.mec.gov.br/seesp/arquivos/pdf/lei9394 ldbn1.pdf.
- 26. Pereira MGL. Do Sonho À Realidade: O Impacto Da Deficiência No Âmbito Familiar. Psicologia.pt. ISSN 2018, 1646-6977.
- 27. Brasil. Resolução CNE/CES 5 de 19 de fevereiro de 2002. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Fonoaudiologia. Diário Oficial da União.4 mar 2002; Seção3:165.
- 28. Diniz RD, Bordin R. Demanda em Fonoaudiologia em um serviço público municipal da região Sul do Brasil. Rev. Soc. Bras. Fonoaudiologia 2011;16(2): 126-31.
- 29. Evangelista VN. Transtorno do espectro autista e a fonoaudiologia na rede de atenção psicossocial. [Trabalho de conclusão de curso]. Universidade Federal Da Bahia. Instituto De Ciências Da Saúde, 2018, Salvador-Bahia.
- 30. Monteiro MMB, Montilha RCI. Intervenção fonoaudiológica e a deficiência visual: percepções de profissionais de equipe interdisciplinar. Medicina (Ribeirão Preto) 2010; 43(1): 11-19
- 31. Crochik, JL. Perspectivas teóricas acerca do preconceito. São Paulo: Casa do Psicólogo. 2007



- 32. Silva, LM. O estranhamento causado pela deficiência: preconceito e experiência. Revista Brasileira de Educação, Rio de Janeiro, 2006, v. 11, n. 33, p. 424-434.
- 33. Sassaki RK. Inclusão: construindo uma sociedade para todos Rio de Janeiro, WVA (3ª ed.) 1999.
- 34. Thornicroft G, Brohan E, Kassam A, Lewis-Holmes E. Reducing stigma and discrimination: Candidate interventions. International Journal of Mental Health Systems, 2008, 2:3- doi: 10.1186/1752-4458-2-3 PMID: 18405393.