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# USING THE HAND TALK APPLICATION FOR THE DEAF AS A COMMUNICATION TOOL IN A CONQUEST-BA VICTORY DRUGSTORE

# <sup>1</sup>MonikeShayane Alves de Araújo, <sup>2</sup>Rosimara de Jesus Andrade Caitite, <sup>3</sup>Andressa Lacerda Fernandes Reis, <sup>4</sup>Beatriz Rocha Sousa Duarte, <sup>4</sup>Iaggo Raphael David, <sup>5</sup>Rafael Cerqueira Campos Luna, <sup>10</sup>Daniele Leite Alves, <sup>11</sup>Marciene Antunes C. Cacique, <sup>4,5,6,7</sup>Stenio Fernando Pimentel Duarte and <sup>12</sup>Maria Antonieta Pereira Tigre Almeida

<sup>1</sup>Graduate Student in Pharmacy from the Independent College of the Northeast- FAINOR; <sup>2</sup>Pharmaceutical Specialist in Public Health (IBPEX), specialist in Clinical and Toxicological Analysis (FAINOR) and specialist in Hematology (Cândido Mendes University); <sup>3</sup>Pharmaceutical Graduate in Public Health and Pharmaceutical Care Management; <sup>4</sup>Specialist Professor and Researcher of the Center for Teaching, Research and Extension in Chronic Diseases – NEPEdc; <sup>5</sup>MD. Professor in the St. Augustine Schoolof Health – FASA; <sup>6</sup>Teaching Independent Faculty of the Northeast – FAINOR; <sup>7</sup>Teacher University Center Faculty of Technologies and Sciences - UniFTC <sup>8</sup>Student Faculty of Saint Augustine – FASA; <sup>9</sup>Esaú Matos Municipal Hospital - Bahia, Brazil; <sup>10</sup>Pharmaceutical Specialist in Clinical and Laboratory Hematology; <sup>11</sup>Bachelor of Pharmacy from the Independent College of the Northeast- FAINOR; <sup>12</sup>Master of Linguistics - State University of Southwest Bahia- UESB

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\*Corresponding author: Camilla Silva Santos

## ABSTRACT

The present research aims to perform an analysis of the interfaces of the HandTalk software when it is used to assist the deaf public of a drugstore located in the city of Vitória da Conquista-BA. Similarly, it will be investigated whether the use of this app is capable of having a positive impact on the company's image and, more, if it can be used as a social marketing tool. Thus, a qualitative-quantitative study will be carried out that, in addition to numerically measuring the meanings of the observed phenomena, will compare the results obtained with the literature and legislation that deal with the subject under discussion. Two questionnaires will be used to collect data. The first, aimed at tracing a socioeconomic and demographic profile of the study participants. While the second, more specific, will present questions that evaluate the impression of customers / users of Hand Talk when purchasing some product / service in the drugstore that will serve as a site for the development of the research.

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# **INTRODUCTION**

Since the 1960s, government and specialized entities have begun to undertake efforts for social inclusion of the deaf in Brazil (FERNANDES *et al.*, 2014). Law No. 8,213 / 1991, popularly known as the Quota Law for People with Disabilities, not only reverberated the guarantees expressed by the 1988 Constitution, but also innovated by stimulating a cultural and behavioral change in society regarding the insertion of this group in the market. of work (BRAZIL, 2016). Coupled with the urgency of greater effectiveness of public policies for social inclusion of people with disabilities (PCDs), society also needs to be part of this process which is, by its nature, a two-way street, under penalty of not presenting the initially intended results (ASSIS, 2014). Thus, if on the one hand the deaf must understand themselves as an autonomous subject and holder of diffuse and collective rights, society needs to actively participate in the pursuit of policies that promote and safeguard these prerogatives (STROBEL, 2009). Recently, researchers in the areas of deafness and linguistics have stressed the need to create mechanisms that promote the connection of deaf people with the majority oral language and the hearing society, since the main barrier of this group is precisely the limitation in verbal communication (PORSINAL,

2014). Sign language is the main contribution of this process, but it has not been sufficient by itself; It is not only that a significant part of society does not have mastery of its practice, it is not a literal transposition of a given language, keeping significant differences (SANTOS, 2013). Aware of the need to include the PCDs in the most diverse daily activities, somewas created *software* that are tools mainly aimed at facilitating the communication of the deaf with the society in general, in order to reduce the interaction noise between the visual-spatial language. (sign language) and the oral-auditory language (such as Portuguese, for example) (CASSINO, 2013). Among these applications, stands out HandTalk, which, like its counterparts, has the potential to relate social inclusion with digital accessibility; which makes it even more aligned with current demands (SOARES, 2013). Its main goal "is the LP-Libras digital translation by Hugo, a 3D animated character. The operation of the application is simple and is freely available for mobile devices (android or IOS)" (ALMEIDA et al., 2016, p. 05). Primarily, it is important to make some considerations about deafness, for a better understanding of the topic under discussion. Thus, deafness means the condition that is characterized by the reduction or absence of the ability to hear certain sounds (MONTEIRO et al., 2016). Some authors differentiate a person with hearing impairment from a deaf individual: while the former is marked by hearing impairment or limitation, the latter has only a linguistic difference and, consequently, a specific culture (LACERDA; SANTOS, 2014). This paper aims to raise a discussion about the importance of social inclusion of deaf people, understanding it holistically, as recommended by the National Secretariat for the Promotion of the Rights of Persons with Disabilities. To this end, an exploratory survey of theinterfaces was performed HandTalk software, used to serve the public of a drugstore located in the municipality of Vitória da Conquista-BA. Similarly, it was analyzed if the use of this app can be used as a social marketing tool. Another issue that has been observed, and which has a direct relation with the subject, is the appreciation of the policies of social inclusion and digital accessibility aimed at people with hearing disabilities in the public health area, and especially in the pharmacy area. The idea was to investigate whether current practices favor the access to health of PWDs, and if they are able to stimulate inclusion initiatives that transpose purely governmental actions.

# METHODOLOGY

A qualitative and quantitative study was carried out which, besides numerically measuring the meanings of the studied phenomena, compared the results obtained with the literature and the legislation that address the subject under analysis. The objective was, therefore, to prioritize the enrichment of research, via complementarity in the analysis of the objects of study. According to Pedrancini (2015), this choice is justified as research that evaluates human and social phenomena requires quantitative and qualitative treatments, capable of broadening the analysis and final discussions. The place chosen for the research is a unit belonging to a network of drugstores in Vitória da Conquista-BA, which is consolidated because it is widely known by the city's residents and has a central location, allowing it to have a considerable number, of customers who use your services. The city of Vitória da Conquista is located in the interior of the state of Bahia, and has a population of approximately 306,866 people. Its economy is based on the provision of services, presenting a

broad and consolidated trade that serves not only the local community, but also all the municipalities of southwestern Bahia and northern Minas Gerais (IBGE, 2013). According to information from the Deaf Association of Vitória da Conquista - ASVC, the municipality has approximately 471 deaf. Survey participants were randomly selected according to age criteria; Thus, only individuals who were 18 years of age or older participated in the study. Another essential requirement was previous mastery of the Brazilian Sign Language - Libras. Precisely, 16 deaf and two pharmacy attendants participated in the sample. For data collection, two questionnaires were applied. The first one contains variables such as gender, age, race / color, education, per capita income and level of Libras domain. These questions are aimed at drawing a socioeconomic and demographic profile of the study participants. The second, more specific questionnaire presented questions that evaluated the impression of clients / users Hand Talk when purchasing a product / service in the drugstore that served as the location for the research development. Also the attendants evaluated the software, as they are equally interested in the interfaces *app*. Finally, the data will be analyzed and packaged using tables and graphs created using the Microsoft Excel® 2010 program.

## **RESULTS AND DISCUSSION**

Sociodemographic data of the research participants, regarding gender, age, marital status, occupation, education and income This information is important as research of this nature can support the formulation of public policies, since it presents information on specific population groups (FIOCRUZ, 2019).

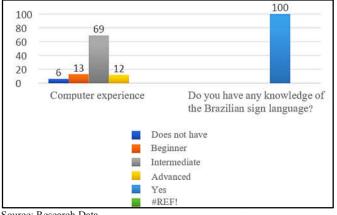
**Table 1. Socioeconomic and Demographic Characteristics** 

Variable	Ν	%
Age		
18-29 years	9	56.25
30-39 years	6	37.5
40 to 49 years	1	6.25
Gender		
Female	9	56.2
Male	7	43.8
Education		
not literate	0	
incomplete Elementary School	1	6.25
complete primary education	1	6.25
Incomplete High School	2	12.5
Complete High School	8	50%
Incomplete Higher Education	3	18.75
Complete Higher Education	0	
Postgrad / Graduate	1	6.25
Est civil		
Single	14	87.5
Married	1	6.25
Widower	0	
Divorced	1	6.25
Other	0	
Occupation		
Unemployed	2	12.5
Student	5	31.25
Working in Commerce	8	50
Retired	1	6.25
Rural Worker		
Housewife		
Monthly Family Income		
Up to 1 minimum wage	13	81
From 1 to 2 minimum wages	3	19
From 2 to 3 minimum wages	0	
Above 4 minimum wages	0	

Source: Research Data.

The results shown in the table above show that of the sample: 56.25% of respondents were female. The age group, of both sexes, was between 18 and 35 years old, except for a single participant, who is 47 years old. With regard to occupation, 50% of respondents said they work in commerce, while 31.25% said they were students. As noted, more than half of respondents (56.25%) are female. According to the latest IBGE Census (2013), hearing impairment in Brazil is slightly more frequent in men, and among women, it is more common among older women. Therefore, it is observed that the present research has a certain approximation with the data presented by IBGE with regard to gender, but opposes the information regarding the age group. This divergence can be explained by the fact that 31.25% of the sample population is composed of ASVC member students. Although results on occupation indicate that 50% of respondents work in commerce, Strobel (apud BASTOS) warns that generally people with hearing impairment "are seen as poor things, and treated paternally, or as aggressive and rude. , are called "deaf-mute", "dumb", "disabled", among other pejorative terms, being considered incapable of autonomy "(2015, p. 15).

Moreover, according to IBGE (2010), the number of deaf people who work with a formal contract in Brazil is 40.2%, while the percentage of those without any of the disabilities is 49.2%; This difference, however, has already been more discrepant: "What made this number of disabled persons with a formal contract become relevant was the requirement that certain companies have for hiring disabled people" (MARCELINO et al., 2015, p. 7). These data corroborate the importance of public policies to include PCDs in the labor market. Regarding remuneration, 100% of respondents reported having a family income of 1 to 2 minimum wages. In the last Brazilian census, most of the hearing impaired were in the range of those who receive this same value (IBGE, 2013). As for the level of education, only 18.75% have completed higher education. Importantly, income and education have a directly proportional relationship: "People with low qualifications have difficulties in entering the labor market and, when inserted, have low salaries. If there is a disability [...] the difficulty is greater "(REBOUÇAS et. Al., 2016, p. 6). When analyzing the indexes achieved in the questionnaire, it is clear (Figure 1) that 68.75% of respondents have an intermediate domain in computer use, on the other hand, all (100%) have some knowledge of the Brazilian Sign Language. These results, however, express a reality that may be isolated, inherent to the specificities of the public that makes up the sample.



Source: Research Data.

Figure 1. User evaluation / software related aspects

The National Survey of Continuous Household Sample - Pnad C, conducted in 2016 by IBGE, showed that 64.7% of the population over 10 years old are connected to the internet, but still 63.3 million people remain offshore. line (GOMES, 2018). The digital divide among the hearing impaired is believed to be even greater, and in 2009 only 0.5% of these individuals were connected (BAPTISTA *et al.*, 2014). Despite the lack of more recent research, the current scenario seems to be more favorable, but probably does not have similarity with the results obtained in this study. Considering that most participants have computer handling skills, Figure 2 has positive results: 93.75% of users were comfortable using the *app;* Regarding layout, 81.25% of respondents said the program's screens had a clear presentation, while only 18.75% classified them as confusing.

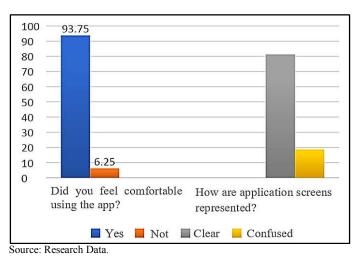


Figure 2. User evaluation / software related aspects

The importance of digital accessibility is confirmed by the results presented in figure 3, since, through the application, 87.5% of respondents were able to communicate. On the other hand, 55.26% of users realized that pharmacy attendants had some difficulty using the *app*.

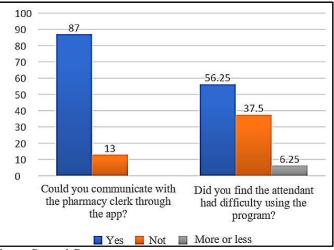
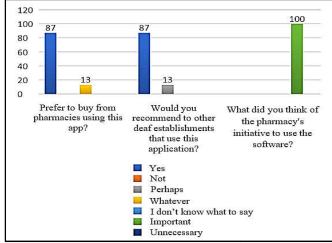




Figure 3. User evaluation / software related aspects

Digital accessibility is not restricted to computer use, but to access to a set of technologies that when used cooperatively can become a tool for knowledge and also for social insertion of groups historically alienated from living and production spaces. of goods and services (BELHAM, 2015). However, the

data contained in Figure 3 show that *Hand Talk*, more than digital accessibility, has enabled the hearing impaired user to successfully communicate with an interlocutor who did not master LIBRAS. In addition to the autonomy and social inclusion that the apparently *app* provided to the survey participants, its importance to the *marketing* company's social was proven: 87% of respondents said they intend to buy from pharmacies using a Portuguese language digital translation application. for LIBRAS; 87% would also recommend the pharmacy for other deaf people to buy. Finally, 100% thought the company's initiative when using the *app was important*.



Source: Research Data.

Figure 4. User evaluation / software related aspects

Socialis a business strategy that seeks raise funds through specific actions, among them provide greater visibility of a particular company in the Community context, that is, it is "an increase in social image with impact on greater efficiency fundraising, even with some financial and infrastructure limitations "(KAZMA et al., apud ROCHA; GONÇALVES, 2017, p. 4). The percentages presented in figure 4 leave no doubt that, by using a *software* that translates the Portuguese language for LIBRAS, the pharmacy made use of marketing social, and thus associated its image to a cause of great repercussion in contemporary society: social inclusion of PCDs. The nature of the study, however, does not allow us to foresee the scope of this initiative beyond the deaf community, nor are there any studies that need to clarify the impact of such actions on the social inclusion processes of the hearing impaired person. As for pharmacy attendants, what were your impressions of using an app to care for the hearing impaired? Despite only two attendants answered the survey, the results presented were quite significant: 100% of respondents said that even having no domain of LIBRAS, could communicate with deaf customers through the app; 100% also thought that the software was able to achieve its goals (word translation); Likewise, 100% felt comfortable using the app.

#### Conclusion

From the reading of this work, the importance of the social inclusion of the deaf became evident. The inclusion reflected here has a broad meaning, and includes the spaces of family, educational and cultural coexistence, as well as those of production of goods and services, inherent to the labor market. However, its main objective is to promote the emancipation of the hearing impaired person. And in this sense, its importance

is evidenced so that these individuals can exercise their autonomy with regard to self-care of their own health, not allowing them to be solely in charge of third parties. What is interesting about the study is that it has been proven, within the sample margin, that *marketing* socialcan be a strategy for coopting resources and improving the corporate image of a company, but it is also the conducive way to change behavior, and apt to dialogue with contemporary demands. Thus, by taking advantage of this tool, the pharmacy that participated in the study was shown to be committed to actions aimed at the social inclusion of the deaf, although restricted to autonomy in self-care of health; and thus validated its social responsibility. Finally, it is recorded that the research, even incipient, reached the goal of bringing pharmaceutical assistance closer to the discussions of social inclusion of the hearing impaired person, and therefore may serve as a contribution to future crosssectional studies with the same population base. . It was also evidenced the need to use applications such as Hand Talk in the spaces of primary health care, such as pharmacies; However, these tools do not invalidate the importance of health professionals having, among their technical skills, skills

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