

The Canadian Journal of Information and Library Science
La Revue canadienne des sciences de l'information et de
bibliothéconomie



Information behaviour of Deaf people in university libraries
A pilot study

Maísa Coelho França  and Ariadne Chloe Mary Furnival 

Volume 47, Number 2, 2024

Bobcatsss 2024 Special Issue
Numéro spécial Bobcatsss 2024

URI: <https://id.erudit.org/iderudit/1116001ar>
DOI: <https://doi.org/10.5206/cjils-rsib.v47i2.17597>

[See table of contents](#)

Publisher(s)

Canadian Association for Information Science - Association canadienne des sciences de l'information

ISSN

1195-096X (print)
1920-7239 (digital)

[Explore this journal](#)

Cite this article

Coelho França, M. & Furnival, A. (2024). Information behaviour of Deaf people in university libraries: A pilot study. *The Canadian Journal of Information and Library Science / La Revue canadienne des sciences de l'information et de bibliothéconomie*, 47(2), 120–127. <https://doi.org/10.5206/cjils-rsib.v47i2.17597>

Article abstract

In Brazil, there are more than 10 million Deaf people. Of these, 2,592 Deaf people are enrolled in Higher Education institutions. This pilot study aims to explore how the field of Library and Information Science (LIS) has studied Deaf people in university libraries. This research uses a mixed methods approach: the first part of the study uses a descriptive approach to present the current state of LIS literature on Deaf users of university libraries. The second part of the research is empirical and consists of a survey that has yet to be fully carried out. It also suggests how the university library can contribute to the empowerment of the deaf community.



Information behaviour of Deaf people in university libraries: a pilot study

Maísa Coelho França  and Ariadne Chloe Mary Furnival 
Federal University of São Carlos

In Brazil, there are more than 10 million Deaf people. Of these, 2,592 Deaf people are enrolled in Higher Education institutions. This pilot study aims to explore how the field of Library and Information Science (LIS) has studied Deaf people in university libraries. This research uses a mixed methods approach: the first part of the study uses a descriptive approach to present the current state of LIS literature on Deaf users of university libraries. The second part of the research is empirical and consists of a survey that has yet to be fully carried out. It also suggests how the university library can contribute to the empowerment of the deaf community.

Keywords: University Library, Deaf community, Information behaviour

Introduction

There are more than 10 million Deaf¹ people in Brazil, according to the Brazilian Institute of Geography and Statistics (IBGE, 2010). More recent data, also collected by the IBGE through the National Health Survey (PNS - *Pesquisa Nacional de Saúde*) in 2019 (IBGE, 2021), show the percentage of people who use Brazilian Sign Language (Libras) according to their degree of hearing. Sign language is used by 1.8% of people with some hearing difficulties, 3% of people with significant hearing difficulties, and 35.8% of people who are completely deaf. It was the first time sign language use had been the subject of a survey carried out by the PNS, allowing an understanding of how Libras is used not only by Deaf people but also by the people around them. These findings provide an overview of how Deaf people communicate with listeners. It also makes visible the communication barriers that Deaf people face in everyday life. Although Libras is the official language of the Brazilian Deaf community, people with little or no difficulty hearing it rarely use it. On the other hand, the percentage of sign language use increases significantly among people who do not hear at all.

Brazilian Law Number 13.409/2016 mandates the reservation of places for individuals with disabilities in technical courses at secondary and higher levels in federal educational institutions. In 2021, only 7 out of every 1,000 enrollments in undergraduate courses were students with disabilities, global developmental disorders or high abilities/giftedness (Brasil, 2023). Data from the 2021 Higher Education Census, carried out by the National Institute for Educational Studies and Re-

search Anísio Teixeira (INEP), shows that there were 2,592 Deaf people enrolled in institutions of Higher Education (Brasil 2022), but to reach this figure, a long road has been travelled. Just over 20 years ago, Law Number 10.436/2002 - known as the "Libras Law" - was passed, making teaching Libras in some secondary and HE courses compulsory. In 2005, Decree Number 5.626 regulated the "Libras Law" (Brasil, 2005). In 2014, Law Number 13.005 approved the National Education Plan (PNE) and guaranteed bilingual education for deaf and hard-of-hearing people up to the age of 17 (Brasil, 2014). Law Number 14.191 of 2021 guarantees (Brasil, 2021) that "the provision of bilingual education for the deaf will begin at age zero, in early childhood education, and will extend throughout life." In the third paragraph, the law states that

In higher education, without prejudice to other actions, the provision of care for students who are deaf, deaf-blind, hard of hearing, deaf with high abilities or giftedness, or with other associated disabilities will be made effective through bilingual education and student assistance, as well as stimulating research and the development of special programs (Brasil, 2021).

Given the above, with the increase in Deaf students in Higher Education, university libraries must be prepared to receive them as library users. This study explores how the Library and Information Science (LIS) field has studied Deaf people in university libraries. It also describes the results of a pilot study conducted as part of ongoing research: a questionnaire to identify the information behaviour of Deaf users who use university libraries. Furthermore, it addresses how the university library can empower the Deaf community.

Correspondence concerning this article should be addressed to Maísa Coelho França: maisa.franca@estudante.ufscar.br

¹Capital 'D' Deaf is for those who have grown up fully immersed in Deaf culture. These individuals see their deafness as a cultural identity

Literature Review

A university library is synonymous with transformation. Be it architectural, cultural, or social. It has always been inextricably linked to the environment in which it is located throughout its history and is, therefore, "subject to any transmutation processes that society goes through" (Targino, 2010, p. 40). Over the years, and especially with technological changes, university libraries have ceased to be just places for storing materials and have become learning centres, promoting the integration of the collection with its public and access to information (Carvalho and Kaniski, 2000). "From the literature (and direct observations), it is fair to say that university libraries, with their increasingly broad functionality, have evolved to become indispensable resources and the foremost places for the reconfiguration of the design, location and utilization of innovative informal and formal learning and teaching spaces" (ODonnell and Anderson, 2021). The information boom caused by the continued evolution of technology brings new ways of accessing and producing knowledge. Therefore, university libraries must always review their products and services and "assess their place in a world that is increasingly accessible in real-time" (Cunha, 2010), as they face very different users who are already digital natives. This reassess ranges from issues such as making the library environment more attractive, facing competition for attention, and working with technologies to develop user autonomy. The university library is a place of possibility, from an information retrieval centre to a place that provides opportunities for the growth of the individual. This is how university libraries have positioned themselves in their environments to follow contemporary trends (ODonnell and Anderson, 2021). Libraries' ability to adapt to new technologies is constantly being tested and must be constantly changing to survive in a new environment (Connaway, 2015). From the first books in the collection to the "threat" of e-books, when it was thought that printed books would cease to exist, to the COVID-19 pandemic in 2020, which forced institutions to close their doors indefinitely, the university library has shown how changeable it is and how much it is not limited to printed materials. The role of the librarian is no longer restricted to being a guardian but instead, is built on the dynamism of society and around the needs of users and, like libraries, must also keep up with users' information needs, including people with disabilities, as foreseen by Law number 13.146/2015.

Library products and services, rather than the people who use information, were the focus of early user studies. The paradigm shifts in Information Science (Capurro, 2003) brought a new vision to these studies, which began to consider how people deal with information rather than how they use a certain library service. This change of perspective - from system-centred to user-centred - occurred at the end of the 1970s and the beginning of the 1980s. Since then, researchers have developed models of user behaviour, including the stages

of information-seeking and searching. In this way, the context in which a person is inserted is taken into account, and this can alter the actions that this person takes and be altered by these actions. The term "information behaviour" can be succinctly defined as "the study of how people need, seek, give and use information in different contexts, including the workplace and everyday living" (Pettigrew et al., 2001, p. 44). It was Wilson who originally coined the term in LIS, and Pettigrew and colleagues see their definition of information behaviour as consistent with his, which he defined as:

[...] the totality of human behaviour in relation to sources and channels of information, including both active and passive information seeking, and information use. Thus, it includes face-to-face communication with others, as well as the passive reception of information as in, for example, watching TV advertisements, without any intention to act on the information given. (Wilson, 2000, p. 49).

Wilson has produced several models of information behaviour, one of which (1996) distinguishes information searching, seeking and behaviour (Ford 2015). One relevant development in the field for the present discussion of Deaf library users is that information behaviour research has undergone a shift away from, as Ford (2015) notes, a focus on the individual information seeker/user to a focus on communities and groups of people, including marginalized groups that have specific information needs. Because the academic output in this rich and constantly growing sub-field of LIS has been so prolific and fascinating over the past decades, it can be challenging for LIS researchers to decide which information behaviour model to adopt. Also, it is important to recognize that any given information behaviour model does not necessarily "cancel out" elements of previous models. Thus, important concepts of Brenda Dervin's "sense-making" model, a grounded-theory approach to information behaviour that she developed in the 1970s (and which she saw as being simultaneously a method and a theory (Dervin 2015)) have been incorporated almost seamlessly into subsequent models and epistemological viewpoints in the area. Very succinctly, sensemaking sees that human beings experience (often not consciously) "gaps" in their life paths that can be "bridged" with some knowledge or information so that the person can continue on their path. The gaps are not necessarily articulated as a conscious information need. One central tenet of her approach is to resist imposing the term "information" on what she terms the "gappy road" of human sensemaking. Most important for our present research with Deaf users is that sensemaking's

[...] central mandate is to attempt to understand informants (e.g. users, audience members, students, participants) on their own terms as free

as possible of expert vocabularies and assumptions about the existence of things and the relationships between them. [...] this requires [...] approaches that direct attention to how humans make sense and unmake sense as they move through a time-space that is always assumed to be gappy [...] (Dervin, 2015, p. 65).

Dervin's observation seems "obvious", but it is not how libraries customarily operate, given that they often unwittingly "impose" their terminology. This can be particularly problematic for groups of users less accustomed to - or almost having no tradition of - using libraries. Chatman is a researcher who focused on more marginalized groups of potential information users (elderly women, school janitors, and female prisoners). For Chatman (1991, 1996, 1999), these people inhabit "small worlds" or "life in the round" structured by their shared beliefs and values - usually forged by being a member (an "insider") of that group. Information that originates with "outsiders" is usually deemed non-relevant to the "small world" and only sought when necessary. This limited worldview is imposed on new members. It is thus seen as limiting "free" information behaviour (Ford 2015), which is why Chatman refers to the group members as experiencing "information poverty." Thus, the term does not refer to financially poor people (although they often are) but the environment that constrains the free flow of information. Thinking of these concepts applied to Deaf users, we could say that "information poverty" arises from the lack of truly substantive communicative measures adopted by libraries with these users. So, in that sense, Deaf users (insiders) can quickly label "outside" information as being non-relevant to their needs. Another more recent approach, which could prove to be a rich source of analysis for studying disabled library users, is that of "embodied information" that pays attention to "how individuals use their bodies to receive, absorb, express, and transmit information" and how this experience will be mediated by their interaction with objects, spaces, and other individuals. Thomson (2018) observes that this space-body-object triad is all pervasive and cites Neuman (440-42, 1999, cited in Thomson, 2018) when she appositely affirms that "Information in [an] environment lies not only on the written pages of books, photocopies, and computer screens, but in how they are [...] placed in relationship to each other and the occupants of this space" and of how "information is contained in tools, in spatial relationships of objects, and in hands that know where to reach for particular things". Although we have found no evidence in the literature of this approach being used to study disabled library users, it is arguably this relationship between the spaces, bodies and objects that traditionally excluded library users, like Deaf users, have to learn to navigate, but equally, library staff will need to learn the significance of this triad for such users, and how it may constitute barriers to access the information that these groups of users need for

their academic careers.

Based on user studies, it is possible to select materials that engage with user profiles, making information available in different media and in a way that caters to everyone, including people with disabilities and, more specifically, Deaf people. Therefore, when referring to Deaf users, we must know their needs as library users. Many Library and Information Science studies focus on web accessibility, particularly in recent years due to the COVID-19 pandemic, when teaching and learning moved online. The pandemic has led to new experiences in the digital world, including access to databases and software. Still, regarding accessibility, most of the studies deal with people with visual or motor disabilities, with the Deaf community being a small part of these studies. Cheng and Lin's (2023) study confirms this: of 330 articles analyzed from the Library and Information Science Abstracts (LISA) database, 182 covered disabilities in general, 64 were on visual disabilities specifically, and only 7 were about deafness. According to Cheng and Lin (2023), although the number of studies is growing, it is still insufficient to guide practical implementation. Despite the proliferation of models of various models of information behaviour, studies on users with impairments rarely consider any model (Berget and Macfarlane, 2020). When discussing accessibility, it is more common to ascribe accessibility primarily to architectural components of the library, such as access ramps, handrails and tactile floors. Aspects regarding the accessibility of websites and digital tools are then considered. However, the lack of accessibility in a university library, explained by the absence of disabled users, can be considered a clear manifestation of ableism. Ableism is the act of discriminating against individuals with disabilities by underestimating their abilities due to their disability. As Chouinard (2010, p. 246) observed, ableism is "[...] defined as relations, attitudes and practices that presume able-bodiedness and value able lives over others." From this stance, the fact that Deaf users customarily access information in a language considered to be their second language (Portuguese, for example) is seen as a barrier to communication - a barrier on which studies involving Deaf people have tended to focus, rather than on their information-seeking and information practices. Nonetheless, this "forced adoption" of a second language is, according to Saar and Artur-Okor (2013), "reported to be the biggest obstacle preventing equal access to information for deaf people".

Not knowing Brazilian Sign Language can leave Deaf people isolated - most libraries cannot even communicate with this user community. It is necessary to understand the paths that Deaf people weave in an environment where the language is foreign, as is the case with library catalogues (Miglioli, 2014). An inclusive university library is not synonymous with a specialized one. A university library must be inclusive and meet the needs of all users equally, allowing them to access services and collections tailored to their specific needs

(Coneglian and Silva, 2006, p. 7). For example,

Accessible format collections include books and other materials with accessibility features (books in braille, ink and braille, audiobooks, bilingual digital books Portuguese/Libras, etc.) that enable access to books and reading for people with disabilities and are also useful for other groups, such as new readers. (Mais Diferenças, 2016, p. 110).

That is, the library should be aligned with the principles underpinning the concept of universal design. Universal Design can be described as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (NC State University, 2008), and the concept emerged due to changes in societal perspectives and attitudes regarding disability (Saar and Artur-Okor, 2013). Therefore, when a Deaf person arrives at a university library, in addition to all the materials available in Portuguese, for example, they should have access to materials available for Deaf people: translated works, adapted works and works created by Deaf people. A translated work is a material that has been translated into sign language; an adapted work is an internationally recognized story that has been given its version to make sense to the Deaf community - a Brazilian example is the children’s story *Deaf Cinderella*. Deaf literature is linked to Deaf culture and identity, and to value this type of production is to empower Deaf people since it is the use of sign language and the visual experience that sustains the life of the Deaf community (Karnopp, 2010). On the other hand, where there is a lack of knowledge of sign language and Deaf culture, there is also a lack of knowledge of the products generated by deaf groups, such as visual poetry and literature in sign language (Karnopp, 2010) and consequently the unavailability of a sign language interpreter or real-time subtitles in sign language.

Understanding Brazilian Sign Language and its acquisition is understanding a world different from that of listeners. It means understanding Deaf culture and its richness, which listeners have suppressed for years, who impose their way of life as if it were unique, an imposition known as audism. The term “audism” was coined in 1975 by Tom L. Humphries as a way to describe discrimination against persons who are Deaf. It is “a set of representations by listeners from which the Deaf person is obliged to look at themselves and narrate themselves as if they were a listener” (Skliar, 1998); in other words, it stigmatizes the Deaf and their worldview. According to Witkoski (2009, p. 556):

The issue of the difference of being Deaf being perceived through the focus of disability perpetuates the obstinacy of making the deaf speak in the same modality as the listener, under the listener

and normalizing logic, anchored in the argument that if the deaf learn to speak Portuguese, they will be included in society since this is the majority language (in the case of Brazil).

According to Foucault (2007, p. 206), these power relations happen all the time, where knowledge is “the space in which the subject can take up a position in order to speak about the objects he is concerned with in his discourse”. In other words, it is the members of the Deaf community who have the legitimacy to speak about their deafness and their customs and culture. And these power relations that are built up day by day must be understood. The librarian concerned with the full inclusion of user community members should know sign language and understand that, always deprived of information, the Deaf community needs allies so that they can take up spaces that are rightfully theirs.

Libras is the sign language used by Deaf communities in Brazilian urban centres and is a way Brazilian Deaf people communicate (Müller de Quadros, 2021). Through Libras, Brazilian Deaf people signify their world and structure their cognition (Gesser, 2009). Librarians need to work with Deaf users so that they are aware of their information needs and are capable of identifying relevant information and relating it to their emotions and social, economic and political factors (Pereira et al., 2021). According to Miglioli (2014, p. 12): “For Deaf people to integrate into society, it is important to give voice to the perspective and information needs of this community”. Therefore, providing Deaf people with access to information must go beyond just making it available. It is necessary to understand how Deaf people obtain information and articulate their information needs. In addition, libraries’ commitment to providing and accessing information to Deaf people is also directly related to the Sustainable Development Goals (SDGs) of the UN’s *Agenda 2030*, especially SDG number 4, which commits to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” (UNESCO 2023), thus in synchrony with the Agenda’s overall aim to “leave no-one behind”.

Research Methods

A mixed methods approach is employed in this research: the first part of the study utilizes a descriptive research approach to present the current state of the LIS literature on Deaf university library users. Research on the relationship between Deaf individuals and university libraries is relatively new, especially in the LIS domain. Firstly, a literature search was conducted in the Library and Information Science Abstracts (LISA) database and the Brazilian Capes Journal Portal using, in the advanced search form, variations of the search terms: deaf patron, deaf person, deaf community, deaf culture, deafness, hearing impaired, academic libraries, library services, and information behaviour/behavior.

The same search strategy was used in both databases as follows:

"information science" AND (deaf (patron OR person OR community OR culture) OR deafness OR "hearing impair*" OR "hard of hearing") AND librar* (academic OR university OR services) NOT health

We chose not to use the term "information behaviour" in the search strategy because adding it produced zero results.

Additionally, to be included in the results, the article was required to meet two criteria: it must have been published in a peer-reviewed journal and must have been published in the last 22 years, that is, between 2002 and 2023, a period that includes all the aforementioned Brazilian laws. The database searches were carried out in November 2023.

The second empirical part of the research - consisting of a survey still to be fully executed - will address the gap identified in the LIS field: namely, that of investigating the use, awareness, and comfort level of deaf students with the resources and services in the context of Brazilian university libraries. To that end, a questionnaire was created in Portuguese and then translated into Libras by the Federal University of São Carlos's Sign Language Translation Service (SeTILS). To participate in this study, individuals must be Deaf and either currently studying at university or have previously studied at the university level. The thematic focus of the questions in the questionnaire is on university libraries, and a Likert scale was used for nine of the questions, apart from those that requested research participant profile data (age, gender, university course followed, etc.). The questionnaire format consisted of short videos showing the Libras interpreters articulating the questions, followed by a print version of each question and numbers of scale, where the participants chose their answers. The pilot version of the questionnaire was administered to four participants. The study included an equal number of male and female participants, with two individuals in each category. The participants were geographically dispersed across four Brazilian states: Rio Grande do Sul, Santa Catarina, São Paulo, and Minas Gerais. Age-wise, one participant was between 18 and 23 years old, one was between 35 and 40 years old, one was over 41 years old, and one did not disclose their age. Two participants attended public universities, and the other two attended private institutions.

Findings

Regarding the literature search in the chosen databases, 52 articles were retrieved from the Capes Journal Portal, and 82 were retrieved from LISA. Of all the articles retrieved from the search on the Capes Journal Portal, only six relate to university library services for Deaf people. Perhaps somewhat surprisingly, of the 82 articles retrieved in LISA, only three covered university library services for deaf people. After removing duplicate results, the total number of relevant articles was six. The six articles are listed in Table 1.

In *Accessibility of distance library services for deaf and hard of hearing users*, the authors reviewed the literature on distance library services for Deaf individuals and provided practical recommendations. *Reference services for the deaf and hard of hearing* investigate reference services for Deaf people by using an anonymous questionnaire and conducting a focus group to assess their awareness, comfort level, and usage of the library and its resources. The article *Collaborating to improve video access for all* is a case study exploring the creation of accessible videos for Deaf individuals through a partnership between the library and the university. The project involves the creation of video subtitles and presents challenges related to copyright and accessibility. The aim of the paper *Assistive Technologies for People with Disabilities in National Capital Region Libraries of India* is to produce a report on the state of assistive technologies within the group of libraries under study, with a focus on their use by individuals who are Deaf or have other disabilities. In *An Assessment of the Resources and Services Provision for the Disabled Library Users in the University of Ilorin and Federal College of Education Oyo*, the authors administered a questionnaire in the community of people with disabilities, including Deaf people, about library services for this public. In the paper *Access to library services and facilities by persons with disability: Insights from academic libraries in Ghana*, the authors survey the services provided by libraries for people who are deaf or disabled. In sum, the first two articles present studies conducted in library reference services, which are typically responsible for conducting user studies. The remaining four articles concentrate on assistive technology resources and accessibility for individuals with disabilities, including those who are deaf, but without a specific focus on this audience.

Regarding the questionnaire developed for our research, which is presented here, of the four respondents for the pilot test, three are studying or have studied for a degree in Libras Literature, and one is a Human Resources technologist. One participant studied on an on-site (face-to-face) course, another studied a distance learning course, and two were enrolled in hybrid courses that combine face-to-face and distance learning classes. Two participants visit the library two or more times a week, one goes once a week, and one does not visit the library at all.

Exactly half of the respondents did not have access to academic subjects in Libras. Respondents provided the following answers when asked how they use libraries: one person does not use the library, one person uses it alone, one person uses it with other Deaf people, and the other uses the library with hearing people. Regarding the use of library products and services: Databases, Technical Standards, and Catalogue records are/were not used by any of the respondents; E-books are the most commonly used format accessed, followed by loan and return services, Catalogue use, databases training/library instruction sessions, participation in the library's cul-

Table 1

List of relevant articles retrieved by our search

Author	Title	Journal	Year
Getts, Erica; Stewart, Katie	Accessibility of distance library services for deaf and hard of hearing users	<i>Reference services review</i>	2016
Saar, Michael; Arthur-Okor, Helena	Reference services for the deaf and hard of hearing	<i>Reference services review</i>	2013
Keenan, Teressa M.	Collaborating to improve access of video for all	<i>Reference services review</i>	2018
Sanaman, Gareema; Kumar, Shailendra	Assistive Technologies for People with Disabilities in National Capital Region Libraries of India	<i>Library philosophy and practice</i>	2014
Adesina, Olabisi F; Saliu, Usman A; Ambali, Zainab O.	An Assessment of the Resources and Services Provision for the Disabled Library Users in University of Ilorin and Federal College of Education Oyo	<i>Library philosophy and practice</i>	2018
Ayoung, Daniel Azerikatoa; Baada, Frederic Naazi-Ale; Baayel Patrick.	Access to library services and facilities by persons with disability: Insights from academic libraries in Ghana	<i>Journal of Librarianship and Information Science</i>	2021

tural programming and use of general facilities (e. g. study rooms). Of the four people responding to the pilot questionnaire, one affirms that the library is “very easy” to use, and the other three affirm that the library is “easy” to use.

Respondents were asked to indicate whether they agreed with the statement “I use the library online catalogue easily.” Half of the respondents agreed with the statement, while the other half neither agreed nor disagreed. The respondents were asked whether they agreed with the statement ‘I can easily find the information I need when I go to the library’. Three people partially agreed, and one neither agreed nor disagreed. Regarding information use, they found three-quarters used it for leisure or personal and academic or professional purposes, while the remaining respondents used it solely for academic or professional purposes. All participants concurred that the university library plays a crucial role in their academic education, but the library equalled Google, Instagram, professors and friends when asked what they use when they want to find information. This result is consistent with Connaway’s (2015) statement, “many people get their information from human resources”. When asked about the parts of the collection related to the deaf community, including deaf culture, deaf literature, and deaf authors, three respondents confirmed that the library has such materials. When asked about those parts of the collection for the deaf community (e.g. videos, sign writing materials), three respondents confirmed that the

library does not provide this type of material.

Discussion

The preliminary findings represent data from a larger, ongoing study. The questionnaire was sent to all federal and state universities (in total, 197) and ten regional associations of the deaf in Brazil. Although it has proved difficult to identify/locate the precise numbers of deaf students at these institutions, we hope that the questionnaire will be answered by all current deaf university students, both undergraduate and postgraduate, and previous HE deaf students. The partial results indicate that research on Deaf users in Library and Information Science is a relatively new phenomenon. The Deaf community remains underrepresented in university libraries. When it is represented, it is often due to the presence of sign language courses or sign language translation and interpreting programs. This may explain why participants in the pilot questionnaire reported that the libraries they frequent have materials related to deaf culture but not specifically for the Deaf community. The materials on the Deaf community and culture may be related to this particular respondent’s undergraduate course in Libras Literature. The studies retrieved tend to focus on the presence or lack of resources for the deaf community.

It should be noted that librarians themselves, rather than

the institutions where the libraries are located, are often the ones taking the initiative to address the needs of Deaf users. Furthermore, these studies demonstrate that the library's reference service focuses primarily on initiatives aimed at these users. For the library to be fully inclusive, a collection development policy that considers the needs of deaf people is also necessary.

Additionally, librarians are largely unaware of the Deaf culture and the barriers that Deaf people face in everyday life, such as communication barriers or the cost of interpreters. To eliminate these barriers, the university library must provide access to information and knowledge for Deaf users. Librarians are responsible for creating an inclusive and accessible environment for all students, including those who are Deaf. This not only involves ensuring that relevant resources are accessible and that appropriate equipment, infrastructure, and technologies are in place to support them but also that these adhere to the principles of UD. Librarians may need to collaborate with other departments or organizations to provide academic support services to Deaf users, including tutoring, note-taking assistance, and captioning or interpretation services. However, it will primarily be up to librarians to initiate, incite, and advocate for library-wide policies and practices that are inclusive and non-ableist. In short, to forge a library culture that will enable deaf users to fully participate in the academic community and achieve their educational goals.

Conclusion

The university library plays a fundamental role in fulfilling the right to information access, which can be a tool for empowering and including the Deaf community. In addition, a university library can make a valuable contribution to the goals of the UN Agenda 2030 if it is knowledgeable about Deaf culture and Brazilian Sign Language. University libraries can support the empowerment of the deaf community by including materials on deaf culture and literature in their collections. Additionally, librarians should be proficient in sign language to eliminate communication barriers deaf individuals face in the library environment. It is important to consider the needs of Deaf users in the library to ensure their right to access information is fully realized.

This pilot research, which is currently being developed in the larger, ongoing study, can contribute directly to the development of the field of Information Science in Brazil, with social, academic, and professional impacts. As a social contribution, we highlight the visibility of the Deaf Community, as well as its culture and literature, since this group is often marginalized by society and, to a certain extent, ignored by many libraries. As an academic contribution, we hope that this study will serve as a theoretical-methodological contribution to new studies in the field since it is an incipient

topic in Library and Information Science; finally, as a professional contribution, we hope that the study will provide the necessary information for library professionals and other informational equipment to be able to provide better service to the deaf public who frequent libraries.

References

- Berget, Gerd, and Andrew MacFarlane. 2020. "What Is Known about the Impact of Impairments on Information Seeking and Searching?" *Journal of the Association for Information Science and Technology* 71 (5): 596–611. <https://doi.org/10.1002/asi.24256>.
- Brasil. 2002. *Lei Nº 10.436 de 24 de Abril de 2002*. <https://legis.senado.leg.br/norma/552312>.
- Brasil. 2005. *Decreto Nº 5.626 de 22 de Dezembro de 2005*. <https://legis.senado.leg.br/norma/566431>.
- Brasil. 2014. *Lei Nº 13.005 de 25 de Junho de 2014*. <https://legis.senado.leg.br/norma/584816>.
- Brasil. 2016. *Lei Nº 13.409 de 28 de Dezembro de 2016*. https://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2016/Lei/L13409.htm.
- Brasil. 2021. *Lei Nº 14.191 de 03 de Agosto de 2021*. <https://legis.senado.leg.br/norma/34639654>.
- Brasil. (2023). *Pessoas Com Deficiência: Diagnóstico Com Base Nos Dados E Informações Disponíveis Em Registros Administrativos, Pesquisas E Sistemas Do Governo Federal*. Brasília: Ministério dos Direitos Humanos e da Cidadania. https://www.gov.br/mdh/pt-br/assuntos/noticias/2023/novembro/copy_of_Relatorio_CGIE_PCD_23.10.2023_FINAL1.pdf
- Capurro, Rafael. 2003. "Epistemologia E Ciência Da Informação." http://www.capurro.de/enancib/_p.htm
- Carvalho, I. C. L., & Kaniski, A. L. (2000). A sociedade do conhecimento e o acesso à informação: Para que e para quem? *Ciência Da Informação*, 29(3), 33–39. <https://doi.org/10.1590/S0100-1965200000300004>
- Cheng, C., & Lin, W. (2023). How We Study Disabled People in LIS Research Area: A Systematic Content Analysis. *Proceedings of the Association for Information Science and Technology*, 60(1), 917–919. <https://doi.org/10.1002/pra2.897>
- Chouinard, V. (2010). *Impairment and Disability In A Companion to Health and Medical Geography*, 242–57. Chichester: John Wiley & Sons, Ltd.
- Coneglian, A. L. O., & Casarin Silva, H. (2006). Biblioteca Inclusiva: Perspectivas Internacionais Para O Atendimento a Usuários Com Surdez. In *Encontro Nacional de Pesquisa Em Ciência Da Informação*. <http://enancib.ibict.br/index.php/enancib/vienancib/paper/viewFile/2485/1616>
- Connaway, L. S. (with OCLC Research). (2015). *The library in the life of the user: Engaging with people where they live and learn*. OCLC Research.

- da Cunha, M. B. (2010). A Biblioteca Universitária Na Encruzilhada. *Pesquisa Brasileira Em Ciência Da Informação E Biblioteconomia*, 6(1), 1001.
- Dervin, B. (2015). Dervin's Sense-Making Theory. In M. N. Al-Suqri & A. S. Al-Aufi (Eds.), *Information Seeking Behavior and Technology Adoption: Theories and Trends*, (pp. 59-80). Hershey: Information Science Reference.
- Ford, N. (2015). *Introduction to Information Behaviour*. London: Facet Publishing.
- Mais Diferenças. (2016). *Fortalecimento de Bibliotecas Acessíveis E Inclusivas: Manual Orientador*. Mais Diferenças.
- Foucault, M. (2012). *A Arqueologia Do Saber*. Rio De Janeiro: Forense Universitaria.
- Gesser, A. (2009). *Libras? Que Língua É Essa? : Crenças E Preconceitos Em Torno Da Língua De Sinais E Da Realidade Surda*. Sao Paulo: Parábola Ed.
- IBGE. (2010). *Tabela 1495: População Residente, Por Tipo de Deficiência Permanente - Resultados Gerais Da Amostra*. <https://sidra.ibge.gov.br/tabela/1495>
- IBGE. (2021). *Um Em Cada Quatro Idosos Tinha Algum Tipo de Deficiência Em 2019*. <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/31447-um-em-cada-quatro-idosos-tinha-algum-tipo-de-deficiencia-em-2019>
- Karnopp, L. B. (2010). Produções culturais de surdos: Análise da literatura surda. *Cadernos de Educação*, 36, Article 36. <https://doi.org/10.15210/caduc.v0i36.1605>
- Rocha, L. R. M. D., Lacerda, C. B. F. D., & Lizzi, E. A. D. S. (2022). Perfil dos estudantes público-alvo da educação especial na educação superior brasileira antes da lei de reserva de vagas. *Práxis Educacional*, 18(49), e9175. <https://doi.org/10.22481/praxisedu.v18i49.9175>
- Miglioli, S. (2014). *Apropriação Da Informação Por Surdos No Ambiente Web à Luz Da Ciência Da Informação*. Dissertation, Instituto Brasileiro de Informação em Ciência e Tecnologia. <https://ridi.ibict.br/bitstream/123456789/845/1/Sarah%20Miglioli.%20Mestrado.%202014.pdf>
- Müller de Quadros, R. (2021). *A Educação De Surdos*. Artmed.
- NC State University. (1997). *Center for Universal Design*. <https://design.ncsu.edu/research/center-for-universal-design/>
- ODonnell, P., & Anderson, L. (2022). The University Library: Places for Possibility. *New Review of Academic Librarianship*, 28(3), 232–255. <https://doi.org/10.1080/13614533.2021.1906718>
- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual Frameworks in Information Behavior. *Annual Review of Information Science and Technology*. (35): 43–78.
- Saar, M., & Arthur-Okor, H. (2013). Reference services for the deaf and hard of hearing. *Reference Services Review*, 41(3), 434–452. <https://doi.org/10.1108/RSR-12-2012-0083>
- Skliar, C. (2013). *A Surdez : Um Olhar Sobre as Diferenças*. Porto Alegre: Mediacao.
- Targino, M. das G. (2009). A Biblioteca Do Século XXI: Novos Paradigmas Ou Meras Expectativas? *Informação & Sociedade-Estudos*, 20(1), 39–48.
- Thomson, L. (2018). The Guided Tour: A Research Technique for the Study of Situated, Embodied Information. *Library Trends*, 66(4), 511–534. <https://doi.org/10.1353/lib.2018.0015>
- UNESCO. (2023). *Sustainable Development Goal 4 (SDG 4)*. <https://www.unesco.org/sdg4education2030/en/sdg4>
- Wilson, T. D. (2000). Human Information Behaviour. *Information Science Research*, 3(2), 49–56.
- Witkoski, S. A. (2009). Surdez e preconceito: A norma da fala e o mito da leitura da palavra falada. *Revista Brasileira de Educação*, 14(42), 565–575. <https://doi.org/10.1590/S1413-24782009000300012>