

## Audiobooks in Information Science: a systematic literature review

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### ABSTRACT

**Introduction:** An audiobook is a sound recording of a book or any text, which you can listen to instead of reading. This medium may contain sound effects, such as music or ambient sounds, narration or synthetic voice. With technological innovations and new media, audiobooks have evolved and are currently sold in digital formats. In the context of Information Science (IS), understanding how audiobooks are organized and represented is fundamental to systematizing their retrieval. **Objective:** To outline an overview of the topic of audiobooks in the area of IS, with a focus on their representation and recovery. **Methodology:** The study characterized as descriptive and exploratory, with a qualitative and quantitative approach, carried out a Systematic Literature Review (SLR), to investigate academic production on the topic, without time limits, carried out in 2023. **Results:** The SLR included three analysis stages, reaching a sample of 24 documents. It was possible to identify that audiobooks are inserted in different areas of knowledge and are used in different ways, covering learning, inclusion and access to information in libraries and information centers, where their acquisition is still discussed, mainly in relation to costs. There are initiatives for textual representation, in the context of IS, however, without a specific look at the formats and environments where audiobooks are available. **Conclusion:** The limited number of studies that addressed the representation and retrieval of information in audiobooks in IS may signal that the topic needs to be deepened, especially with the advancement of streaming services and digital platforms.

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### KEYWORDS

Audiobooks. Systematic literature review. Information retrieval. Information representation. Information science.

## Audiolivros na Ciência da Informação: uma revisão sistemática de literatura

### RESUMO

**Introdução:** O audiolivro é uma gravação sonora de um livro ou qualquer texto, em que pode escutar, em vez de ler. Este suporte pode conter efeitos sonoros, como música ou sons ambientes, narração ou voz sintética. Com as inovações tecnológicas e novos suportes, o audiolivro evoluiu e atualmente é comercializado em formatos digitais. No contexto da Ciência da Informação (CI), entender como os audiolivros estão organizados e representados é fundamental para sistematizar sua recuperação. **Objetivo:** Delinear um panorama da temática dos audiolivros na área da CI, com foco em sua representação e recuperação. **Metodologia:** o estudo caracterizado como descritivo e exploratório, com abordagem qualitativa e quantitativa,

realizou uma Revisão Sistemática de Literatura (RSL), para investigar a produção acadêmica sobre a temática, sem delimitação de tempo, executada em 2023. **Resultados:** A RSL incluiu três etapas de análise, alcançando uma amostra de 24 documentos. Foi possível identificar que os audiolivros estão inseridos em diversas áreas do conhecimento e são utilizados de diversas formas, abrangendo aprendizagem, inclusão e acesso à informação em bibliotecas e centros de informação, onde sua aquisição ainda é discutida, principalmente com relação aos custos. Há iniciativas para representação textual, no contexto da CI, no entanto, sem um olhar específico para os formatos e ambientes onde os audiolivros estão disponibilizados. **Conclusão:** A quantidade limitada de estudos que abordaram a representação e a recuperação da informação em audiolivros na CI pode sinalizar que a temática precisa ser aprofundada, principalmente com o avanço dos serviços *streaming* e plataformas digitais.

## PALAVRAS-CHAVE

Audiolivros. Revisão sistemática da literatura. Recuperação da informação. Representação da informação. Ciência da Informação

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## 1 INTRODUCTION

Advances in information and communication technologies emerged in the context of the Third Industrial Revolution and the Information Revolution, and were accelerated in the 1990s. Since then, the improvement of technology has been marked by different contexts characterized by the so-called "Information Age", phenomena such as big data, high-speed Internet (5G), cloud computing, and the increase in multimedia objects on streaming platforms and services. The possibilities of accessing, manipulating, downloading and storing these objects highlight the importance of precision in retrieving information from large data sets (Ronquillo; Peña, 2017).

With the evolution of the web and new mobile devices, such as tablets and smartphones, new media have also emerged in the publishing market. Books that were only available in print could now be accessed in new digital formats (e-books) and could also be listened to (audiobooks). These new formats were also followed by new digital distribution services through subscription aggregator systems such as Amazon Prime, Apple Store, and Google Play, which allowed the use of audiobooks to expand (Bal, 2018).

However, for Cordón-García (2018), audiobooks are not a new product or medium; they have been part of the publishing sector for several years and have been linked to the production of texts and narrated books. In this way, it can be seen that audiobook publishing has had a direct relationship with technological evolution in its nature as a product, from reel-to-reel tapes, compact cassettes, disks to the new formats that have emerged in the context of the digital age (Colbjørnsen, 2015; Have, Pedersen, 2020).

Menezes and Franklin (2008) add that an audiobook is an audiobook in which the narrators may be volunteers, professionals, the author himself, or amateurs, interpreting literary, scientific, or didactic texts, and which may include sound in their narratives. According to Reséndiz (2022), an audiobook is a document of digital origin and a media experience whose access, distribution, and consumption are similar to other types of audiovisual content in the contemporary digital ecosystem.

For Magadán-Díaz and Rivas-García (2020), audiobooks have been referred to in different ways throughout history, such as: phonographic books, spoken books, talking books, narrated books, and books on tape, among others. However, in 1994, the Audio Publishers Association (APA) defined the term audiobook to refer to audiobooks. Thus, this research will use the term audiobook, since it is a literal translation of the word in Portuguese.

Given this context, it is increasingly important to understand how audiobooks are studied in the field of Information Science (IS), and how their content is represented and organized for retrieval by users. To investigate the subject of audiobooks in IC, this research considered the following guiding questions: What studies have been carried out on the subject of audiobooks in IC? How is this production characterized? The aim was to outline a panorama of the topic of audiobooks in the field of IC, with a focus on their representation and retrieval. To this end, a protocol was created, and a systematic literature review was carried out.

This study is justified to map, understand, and outline a panorama of scientific production on audiobooks in the context of IS, going through its evolution. It should be noted that this article is one of the products of the Master's thesis entitled Information Retrieval in Audiobook Platforms: Recommendations for Metadata and Functionalities, which has contributed to the field of IC by promoting discussions on audiobook platforms, their retrieval, and their representation.

## 2 AUDIOBOOKS

An audiobook is an audio recording of a book, i.e., a book or any text that can be listened to instead of being read. It may include sound effects, such as music or ambient sounds, and the narration may be performed by the author, professional or amateur actors, or even synthetic voices (Have; Pedersen, 2020). The authors Paletta, Watanabe and Penilha (2008, p. 2) define audiobooks as: "an audio book to be listened to, also called a talking book or audiobook".

In 1878, Thomas A. Edison created the audiobook, a device called a phonograph that allowed text to be recorded. However, the audiobook format we know today was only possible with advances in audio technology (Wallin, 2020).

Booksellers<sup>1</sup> use the terms talking book and audiobook interchangeably to describe narratives recorded on a disk, cassette tape, Compact Disc, MPEG-1/2 Audio Layer 3 (MP3) digital file, or other audio format (Rubery, 2016). According to Colbjørnsen (2015), one of the defining characteristics of audiobooks is related to the sound that is heard, which is recorded rather than live. In addition, a device or media that can reproduce and record the sound is required.

For Rae (2017), an audiobook is a recording of the text of a book. According to Cordón-García (2018), this concept of the audiobook has not changed much since the first "talking books" appeared in 1930. In fact, he explains that the way audiobooks are used has adapted to society and new technologies, especially in the publishing sector. Over the years, audiobooks have undergone various adaptations. Rubery (2016), in his book "The Untold Story of the Talking Book," outlines the evolution of audiobooks, starting with phonographic books and ending with commercial audiobooks that are now heard on car stereos and headphones.

The Georgian and Victorian periods (1714 - 1901) are considered the forerunners of the audiobook, as reading aloud was a common activity in homes during this time, especially when the authors of the texts were the narrators themselves. With the spread of printed books, reading aloud diminished as reading became an individualized activity, meaning that each person had to read his or her stories (Jones, 2020).

In 1878, the invention of the phonograph by Thomas A. Edison made it possible for the first time to make audio recordings of texts, thus restoring the possibility of reading together. However, the machine had its limitations and could only record excerpts of children's verses. Recordings of complete books had to wait for philanthropic initiatives for the blind, which invested in audiobook projects in the 1930s (Rubery, 2016).

Rubery (2016, p. 32) pointed out that "Thomas Edison's proposal revealed the technology of sound recording, which changed the concept of the printed book in the last decades of the nineteenth century". In 1931, the American Foundation for the Blind (AFB) in the United States of America (USA) created the Talking Book Program, which triggered a change in the audio support of books.

Barbosa (2013) points out that this change occurred in 1934 with the introduction of the Talking Book Machine, an audiobook for the blind that included headphones and a radio function. An important milestone occurred in 1948 with the establishment of the Recording for the Blind program, which was later renamed Allied Learning.

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<sup>1</sup> Book dealer. Bookseller-publisher, bookseller who buys originals from authors or signs agreements with them to print and sell their works (Ferreira, 2014).

According to Castro (2020), during the 1940s, 1950s, and 1960s, other audiobook formats were created to adapt to the new technology of the time, so much so that in 1952, Caedmon Record was founded in New York, a pioneering company in the audiobook industry. With this in mind, Castro (2020) reports that in 1955, the Listening Library was founded, the first foundation to distribute audiobooks to libraries and schools, based in New York. In 1963, there was a major innovation with the creation of the cassette tape. In 1982, the Compact Disc (CD) was introduced, a new way to access audiobooks in a practical and streamlined way that allowed bookstores to place audiobooks on shelves for easy access. The APA was founded in New York in 1986 to promote policies and activities that would increase awareness and accelerate the growth of the audiobook industry (APA, 2020). The mid-1990s saw significant changes in support for audiobooks. In 1994, the APA established the term “audiobook” as an industry standard. Audible then made it possible to download books to desktop computers (Rubery, 2016).

In 1997, Audible introduced its first digital audio player. According to Oliveira (2020, p. 77), "Audible was a portable media player of the same name, known as the Audible Mobile Player, and the device contained about four megabytes of memory. To download audiobooks, one had to download them from Audible's official website and then transfer them to the player. In the 2000s, with the popularization of the Internet, there were several changes in the format and distribution of audiobooks. In 2004, cassettes were replaced by CDs as a way to listen to audiobooks, and a year later, preloaded digital players appeared that allowed users to listen to an entire audiobook (Barbosa, 2013). In 2009, downloads of files in digital formats began, becoming the most popular format for audiobooks.

In 2011, a tool called the Audiobook Creation Exchange (ACX) was created, making it possible to publish audiobooks (Oliveira, 2020). In 2014, the Deyan Institute of Vocal Artistry and Technology (DIVA) was opened, the first school in the world dedicated to teaching the art and technologies of audiobook production. In 2015, digital audiobook subscription services were launched using platforms accessible through mobile devices.

Currently, audiobooks can be accessed through digital platforms, through the companies' websites or mobile apps, the most modern format in the market (Barbosa, 2017). It can be seen that the technological history of audiobooks follows the rhythm of recorded music, from records to cassettes, DVDs, MP3 files, downloads and digital platforms, with subscription services similar to streaming (Have; Pedersen, 2020).

According to Furini (2008), an audiobook is information extracted from a text, a survey, a digital file, an interview, among other documents, which requires a medium for storage. Thus, the audiobook is a source of oral information recorded in audio, which allows us to establish a relationship with IS. In turn, IS can be understood as an interdisciplinary field in which information is studied and processed to generate knowledge, making it possible to classify, store, retrieve and distribute the information contained in audiobooks (Engelen, 2009), which reinforces the aim of this research by looking at the subject of audiobooks and their relationship with IS.

### 3 METHODOLOGY

The study is characterized as exploratory and descriptive, as it investigates a recent research problem that has not yet been explored, with a qualitative and quantitative approach. The research was characterized as bibliographical and consisted of a Systematic Literature Review (SLR). The SLR is a type of research that follows specific

protocols, generally adapted to each study, and seeks to clarify and substantiate a large set of documents, checking what works or doesn't work in a given research context (Galvão; Ricarte, 2020).

Regarding the method, Ramos, Faria, and Faria (2014) point out that by structuring all the procedures in such a way as to guarantee the quality of the sources, inclusion, and exclusion criteria, and all the rules they deem appropriate for the case, the credibility of the research will be proportional to the rules established. As a result, it is possible for the process to be replicated by another individual, since anything that cannot be verified by peers is not scientific. In this way, SLR is a literature review method that guarantees greater reliability and reproduction of research already carried out on a given topic. According to Briner and Denyer (2012, p. 112) SLR,

[...] addresses a specific question, uses explicit and transparent methods to conduct a detailed literature search and critical appraisal of individual studies, and draws conclusions about what we don't know about a particular topic or question (Briner; Denyer, 2012, p.112).

According to Galvão and Ricarte (2020), SLR is one of the best options for researching emerging issues because it follows a rigorous and detailed protocol for searching, selecting, and analyzing the retrieved studies, avoiding as much as possible personal bias and personal interpretation of the results. In addition, SLR establishes a search strategy with well-defined criteria. In this sense, it should be emphasized that the SLR was chosen to understand how the topic of audiobooks is approached by other researchers, since the topic is new and initially presents unique characteristics in terms of its support, means of presentation, and retrieval in the context of IS. To this end, a specific SLR protocol has been created for this study, which defines the methodological structure for carrying out SLR regarding audiobooks in the field of IS, including elements of information representation and retrieval.

As observed in the works of Morandi and Camargo (2015) and Galvão and Ricarte (2020), which highlighted common elements for the construction of an SLR, namely: the definitions of the SLR questions, the search sources, the search expressions to be used and the organization for searching the databases, the criteria for selecting the studies and assessing the quality of the selected studies, and the presentation of the results obtained. Considering the context of this study and its peculiarities, it was decided to design an SLR protocol based on the literature in the field that would meet the objectives of this research.

The SLR protocol was created considering the following criteria to be defined for the protocol: general objective; questions to be resolved; sources of information searched; eligibility criteria; inclusion and exclusion criteria for search terms, expressions, and strings; procedures for selecting documents retrieved; analysis procedures; and exclusion criteria after analyzing the documents. Chart 1 shows all the criteria and their respective definitions for this research.

Chart 1. Literature review protocol

Literature Review Protocol	
Criteria	Description
General Objective	Identify studies on audiobooks in IS, their representation and retrieval.
Issues to be resolved	Which studies deal with audiobooks in the field of IS? How are audiobooks being represented? How are audiobooks retrieved? What information retrieval methods/techniques are used in audiobooks?
Sources of Information Researched	Reference Database of Journal Articles in Information Science (RDJAIS); Scopus database; Ebsco/shot database; Web of Science database; Wiley database; Brazilian Digital Library of Theses and Dissertations (BDTD)
Eligibility Criteria	Language: English, Spanish, Portuguese No date delimitation Types of documents: books, event proceedings, journal articles, theses, and dissertations
Inclusion and Exclusion Criteria	Inclusion: documents that have an abstract; documents in English, Portuguese, and Spanish; works in the field of IS.
	Exclusion: documents not written in Portuguese, English, or Spanish; documents whose title and abstract are outside the scope of the research;
Search fields	All fields available in the databases
Search expressions	Audiobooks and their variations, combined with: information retrieval; information representation; descriptive representation; metadata. Note: The expressions will be used in Portuguese, English, and Spanish.
Strings	[(audiobook OR talking book OR audiobook)] OR [(audiobook OR talking book OR audiobook) AND information retrieval] OR [(audiobook OR talking book OR audiobook) AND information representation] OR [(audiobook OR talking book OR audiobook) AND metadata] OR [(audiobook OR talking book OR audiobook) AND descriptive representation]
Procedures for selecting retrieved documents	Reading the titles and abstracts of the documents retrieved to verify the relevance of the content to the general objective of the research.
Analysis procedures	Identification of audiobook concepts and definitions, as well as elements of representation and information retrieval in audiobooks.
Exclusion criteria after document analysis	Works that have no conceptual, theoretical or methodological approach to audiobooks.

Fonte: Elaborado pelos autores.

In the development of the SLR protocol, the general objective of the SLR was first defined, which proposed to identify studies on audiobooks in the field of IS, including their presentation and retrieval. This criterion was used to substantiate the topic of audiobooks, to map existing studies, and to identify possible gaps in the field of IS. In this study, the research focus is on information representation and retrieval, subfields of IS that focus on making information understandable, stored, processed, and thus retrievable using search engines that facilitate users' access to information.

Questions were then defined to investigate the topic and elements related to the representation and retrieval of information in audiobooks. The selection criteria for the research sources were based on the IC databases, as described in section 3.1. In terms of eligibility criteria, the following languages were selected: English, Spanish and

Portuguese, as these are the languages most widely understood by the authors and cover most of the scientific production in the field. It was decided not to limit the date of the searches in order not to limit the research and to recover historical issues on the subject.

The types of documents selected for review were: books, proceedings, journal articles, theses and dissertations, selected because they were relevant to the objective of the SLR. Inclusion criteria were defined to select documents suitable for the research and considered: documents with abstracts; documents in English, Spanish, and Portuguese; and works in the field of IC and related fields. Two exclusion criteria were defined: the exclusion of documents that were not written in the selected languages and the exclusion of documents that, according to the title and abstract, were outside the scope of the research.

Initially, strings were used for the search fields: title, abstract and keywords in the selected databases. However, given the low number of results, we realized the need to include all fields available in the databases. The search terms defined for the research included the terms: audiobooks; information retrieval; information representation; descriptive representation; and metadata, as they best represented the research objectives. It should be noted that the extended search, considering for example thematic representation and other techniques (indexing, cataloging), did not increase the number of results and was therefore not included in the strings.

It is important to clarify that the expressions were used in the three selected languages and were combined using Boolean operators. The strings were initially constructed in a generic way but were then adapted according to the syntax used in each database, since each database has its own retrieval parameters.

The criteria defined in the selection procedures for the retrieved documents consisted of reading the titles and abstracts of the retrieved documents to verify the relevance of the content to the general objective of the SLR protocol. In the analysis procedures, an attempt was made to identify concepts, definitions, and applications of audiobooks, as well as elements of information representation and retrieval, to collect the maximum number of documents strictly relevant to the SLR. The exclusion criteria, after analyzing the documents, were to exclude works that did not have a conceptual, theoretical, or methodological approach to audiobooks.

The SLR protocol was created in December 2022 and executed on the databases on January 10, 11, 12, and 13, 2023. The SLR was performed by two researchers who followed the stages of the research according to a schedule and the created protocol, and weekly meetings were held to monitor the progress of the research.

It should be noted that the five generic search terms defined in the protocol were broken down into 13 terms to create the strings used in the databases in the three languages. These modifications ensured that each string was properly represented and retrieved relevant results. All the details of the searches and the corresponding documents selected in this research have been made available in the repository<sup>2</sup> of this research, created by Gonçalves and Nascimento Silva (2024).

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<sup>2</sup><https://doi.org/10.17632/k65txy7hr.3>.



### 3.1 Selection of bases

To identify relevant databases in the field of IC, we used the existing classification of databases indexed in the portal of periodicals of the Coordination for the Improvement of Higher Education Personnel (CAPES). The CAPES portal was accessed through the author's login, which is linked to one of the portal's partner educational institutions. The removal of access to the CAPES portal resulted in some limitations, except for the Library & Information Science Abstracts (LISA) database (Proquest), which is one of the most highly regarded databases in the field of IC. The **EBSCO** database has integrated two specific databases into its platform: Information Science & Technology Abstracts (ISTA) (EBSCO) and Library, Information Science & Technology Abstracts with Full Text (LISTA), but the databases are no longer separate and have been integrated into the new EBSCO interface. For this reason, it was decided to use LISTA, which is also a multidisciplinary database.

The **Web of Science**, **Scopus**, and **Wiley** databases were also selected through the CAPES portal because they are databases that index reference journals in IC and other areas. The Reference Database of Journal Articles in Information Science (**BRAPCI**) was also used, as it brings together Brazilian open access publications in IC and related areas, and the Brazilian Digital Library of Theses and Dissertations (**BDTD**), as it aggregates and disseminates the full texts of theses and dissertations defended in Brazilian teaching and research institutions, bringing together the entire national academic and scientific production. Advanced search interfaces were used in all databases to guarantee the accuracy of the results.

The procedure for analyzing the results consisted of three steps. The first stage consisted of extracting the retrieved documents and centralizing them in a single spreadsheet to identify possible duplicate titles. The second stage consisted of reading the documents, considering the title and abstract, to check the relevance of the document to the research. The third stage consisted of a complete reading of the selected documents. All stages were carried out in the first half of 2023.

## 4 RESULTS

The SLR protocol allowed the retrieval of 787 documents. The first stage of analysis identified 420 duplicate titles, reducing the sample to 367 documents. It is important to note that the number of duplicate documents was significant because the search expressions created first considered the terms in a simplified way and then combined them to identify as many related documents as possible. Although there are various combination resources (Boolean operators) available to support the search terms, simpler combinations produced more relevant results in most of the databases searched.

In the second stage of analysis, after reading the title and abstract, it was observed that the selected documents presented different applications of audiobooks in different fields of knowledge. In the field of health, some selected articles dealt with topics such as the ability of children and adults to understand audiovisual and auditory texts, the use of sound therapy to treat postoperative pain in children undergoing major surgery, and

the positive effects of audiobooks in reducing stress in shelter dogs. Therefore, articles on these topics were excluded, such as "Children's and adults' ability to build online emotional inferences during comprehension of audiovisual and auditory texts"; "The effect of audio therapy to treat postoperative pain in children undergoing major surgery: a randomized controlled trial" and "Study: Audiobooks outperform music in reducing stress in shelter dogs".

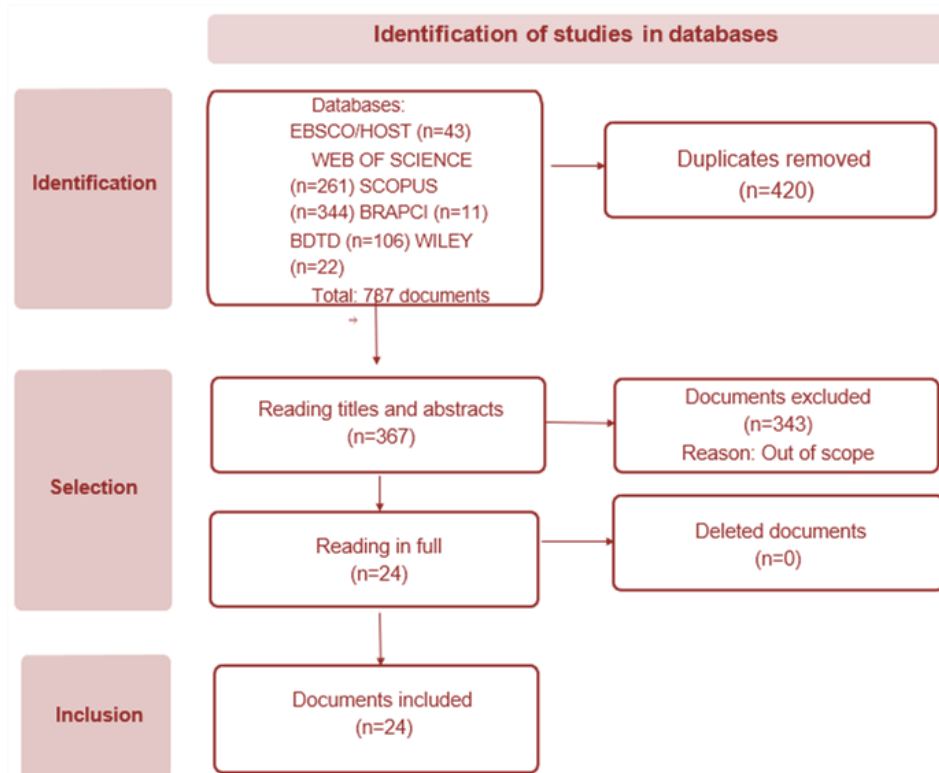
In the area of education, the selected articles focused mainly on inclusive education and language learning, demonstrating the positive effects of interventions on the fluency and reading comprehension of students with learning disabilities, as well as the use of audiobooks and phonetic transcriptions to improve English listening skills. As a result, articles with these characteristics were excluded, such as "The Effects of Reading Fluency Interventions on the Reading Fluency and Reading Comprehension Performance of Elementary Students with Learning Disabilities: A Synthesis of the Research from 2001 to 2014"; "The Effects of Fluency-Oriented Reading Instruction on Reading Skills = Akici okuma odakli okuma öğretimini okuma becerilerine etkisi"; "Phonetic Transcription and Audiobooks as Tools to Improve Listening Comprehension Skills in English" and "Audiobooks that converts Text, Image, PDF-Audio & Speech-Text: for physically challenged & improving fluency".

In addition, engineering and computer science applications were identified, such as converting audiobooks to text and using Daisy technology to make content accessible to the visually impaired. These types of publications were also excluded from the next analysis, such as the articles: "Analysis and Assessment of the Controllability of an Expressive Deep Learning-based TTS System"; "Development of DAISY-WIBORD as a Computer Assisted Learning Facility for Children with Visual Impairment"; "A Neural-Network-Based Approach to Speaker Identification in Novels" and "Direct Expressive Voice Training Based on Semantic Selection".

Finally, some documents selected were not directly related to the topic of audiobooks, such as studies on the influence of music on athletic performance and emotional regulation, the use of TTS skins for voice conversion, the satisfaction of students with disabilities with library and information services, etc., such as the texts "Effects of Music Interventions on Emotional States and Running Performance"; "Rhythmic Auditory Music Stimulation increases task-distraction during exercise among cardiac rehabilitation patients: A secondary analysis of a randomized controlled trial"; "TTS Skins: Speaker Conversion via ASR"; "The Satisfaction Level of Students with Disabilities with Library and Information Services"; "Visual understanding of frameworks through introspection of examples"; and "Framework for semantic integration of geospatial data: integration of geological data".

Thus, after analyzing the relevance of each document and excluding those that were not in line with the objective of the SLR, 24 documents were selected. The list of all selected and excluded documents is available in a spreadsheet in the repository of this research, available on Mendeley Data. Figure 5 shows a summary of the analysis steps.

Figure 1. Identification of studies in the databases

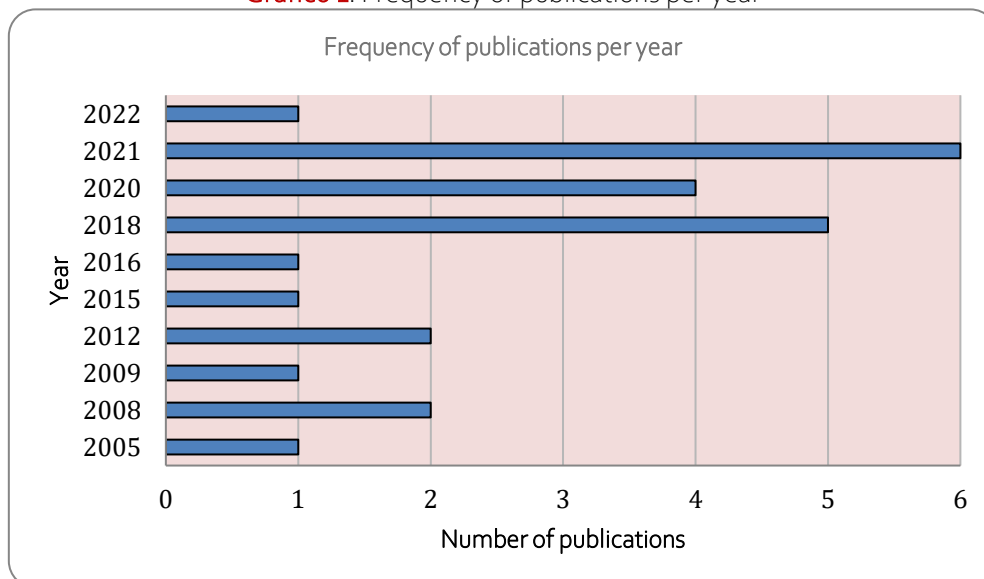


Source: Adapted from Page (2021).

The documents selected consisted of 20 articles, two books and two theses. It is important to note that the books were selected for the research due to their abstracts, which were similar to the articles and theses identified in the search. Of the 24 documents, the authors Barbosa, Wallin and Engelen present two papers each, while the other authors present only one paper.

It is important to note that the documents are recent, most of them having been published since 2018. Graph 1 shows the distribution of frequency over the years.

Gráfico 1. Frequency of publications per year



Source: Prepared by the authors.

Of the 24 documents selected, 11 were from other areas of knowledge, and only 13 were from the field of IC. However, all the documents were read in the third stage to identify related areas and multidisciplinary studies. After reading all 24 documents, Chart 2 was drawn up, containing the identification data (ID), title, authors, and year of publication of each document selected.

Chart 2. Selected documents

ID	Title	Authors
D1	A Brazilian Perspective on Audiobooks History, materiality, and meaning.	Barbosa (2021)
D2	Digital audiobooks for children and young people: characteristics in loan, distribution, and sale platforms.	Izcarra-Temprano; Gómez-Díaz; García-Rodríguez (2021)
D3	The Market for Audiobooks.	Gustafsson (2021)
D4	Time to read: Exploring the time spaces of subscription-based audiobooks.	Wallin; Nolin (2021)
D5	The Right to Listen A Not So Simple Matter of Audiobooks.	Dali; Brochu (2020)
D6	Audiobooks Business Model - Technologic Challenges, Case Study.	Pinheiro; Fernandes; Teixeira (2018)
D7	Exploring the circulation of digital audiobooks: Australian library lending 2006-2017.	Weber et al. (2021)
D8	The Audiobook Market and Its Adaptation to Cultural Changes.	Snelling (2021)
D9	The digital restyling of audiobooks.	Furini (2005)
D10	The Remarkable Rise of the Audiobook.	Thompson (2021)
D11	Digital Audiobooks: New Media, Users, and Experiences.	Have; Pedersen (2016)
D12	Content-Based Audiobooks Indexing using Apache Hadoop Framework.	Shetty et al. (2015)
D13	Reading by listening: conceptualizing audiobook practices in the age of streaming subscription services.	Wallin (2020)
D14	An Overview of the Audiobook Marketplace in Spain.	Rivas-García; Magadán-Díaz (2022)
D15	Library services for all ages - building economical, equal, and complete audio collections.	Titangos (2018)
D16	Modern digital libraries, the case of the audiobook boom.	Engelen (2008)
D17	Audiobooks: an important technological contribution for the visually impaired.	Menezes; Franklin (2008)
D18	Audiobooks and their contribution to information dissemination and social inclusion.	Farias (2012)
D19	Audiobooks and publishing: acoustic-editorial design.	Barbosa (2018)
D20	Digital audiobooks and literary literacy: teaching literature in the culture of convergence.	Oliveira (2020)
D21	The fourth format: How audiobooks have become a standard format for general publishers alongside hardback, paperback, and e-book.	Baverstock; Bradford; Gonzalez (2018)
D22	Sound books" in the modern publishing industry.	Bal (2018)
D23	Providing access to e-audiobooks: Help from the non-Catalog.	Sorrell (2012)
D24	Marketing issues related to commercial and specialized audiobooks,	Engelen (2009)

ID	Title	Authors
	including digital daily newspapers.	

Source: Prepared by the authors.

## 5 DISCUSSION

After analyzing the results, it was first noticed that all the documents analyzed mentioned a definition of audiobook. These definitions have similar characteristics, with little variation in the concept. In addition to definitions, the documents deal with different topics related to audiobooks, such as: reading, accessibility and inclusion, the publishing market, digital platforms, audiobooks in libraries, etc. Chart 3 shows the list of documents and the main subject areas. It should be noted that this categorization was based on a complete reading of the documents and the authors' interpretation of the content.

Chart 3. Themes addressed

Main theme	Documents
Definitions and overview of audiobooks in Brazil	D1, D19
Virtual platform services offered to users	D2, D3, D6, D7
Transformation of audiobooks for libraries and learning	D4, D5, D8, D9, D10, D23
Audiobooks, user needs and inclusion	D11, D12, D17, D18
Changes and use of technology in audiobooks	D13, D14, D15, D22
Representation and information retrieval	D16, D24
Audiobooks, reading, and other media	D20, D21

Source: Prepared by the author

Regarding **definitions and panorama of audiobooks in Brazil**, Barbosa (2021) and Barbosa (2018) present the scenario of audiobooks in Brazil, at different times (2021 and 2018). Both documents are by the same author, and article D1 is the result of thesis D19. The papers presented a study of editing and acoustic-editorial design, in which some works were selected for analysis. In this analysis, the performance of the interpreters was evaluated in terms of voice and narrative structure and sound effects, among others. It should be noted that this author has done other work (articles and master's theses) concerning audiobooks and is perhaps one of the national authors who has done the most research on the topic. Barbosa's (2021) and Barbosa's (2018) research also presented relevant points regarding collection and selection policies. According to Vergueiro (2010, p. 17), "selection seeks to ensure that all material is included in the collection according to predetermined objective reasons and not according to idiosyncrasies or personal preferences". In this sense, the research used selection criteria such as accuracy, timeliness, and quality of the audiobooks on the Tocalivros, Ubook and Audible platforms to select the sample for analysis in the study.

About the **virtual services of the platforms (offered to the users)**, Izcara-Temprano, Gómez-Díaz and García-Rodríguez (2021) presented data on the use and growth of audiobooks in the world market, especially data from Spain, where the authors point out that there is not much research on audiobooks. The focus of the article was on the use of audiobooks by Spanish children and teenagers through audiobook lending platforms in public libraries and audiobook distribution companies. The study also sought to analyze the way audiobooks are presented on the platforms, the search systems, and the information provided. To achieve this, they analyzed the catalog of seven audiobook platforms available in the country. As a result, they realized the need to correctly insert descriptors to retrieve information—in other words, to think about the representation, the most appropriate descriptors, in addition to the traditional ones for physical books, must be included in the record of each audiobook to correctly describe it.

Gustafsson (2021) presented the audiobook market, focusing on the audiobook company Storytel. The study presented the history of the company, its mission, and information about the collections, products, and services offered. It was noted that the document consisted of an interview conducted by Logos magazine with Storytel's strategy director, Helena Gustafsson, with the aim of discovering the company's expansion plans and, above all, new ideas for innovation in the market.

In the studies of Izcara-Temprano, Gómez-Díaz and García-Rodríguez (2021) and Gustafsson (2021), reference was made to the virtual service of platforms and users, based on the definition of Accart (2008), which is based on the presentation and retrieval of information. The virtual service is a means of attracting users' attention to a service that can answer any type of question online. To accomplish this, the information on the platforms must be organized so that it is easier to find and so that the professional can provide the information the user is looking for more efficiently and quickly (Accart, 2008).

Pinheiro, Fernandes, and Teixeira (2018) presented the reality of Portugal in relation to the insertion of audiobooks in the country. The study strongly suggested that the market is small, with low visibility, and that the use of audiobooks is lower than in Brazil, where companies with platforms are already in use. The text mentioned the amounts paid by publishers for audiobooks, as well as the amounts received by authors. As in action research, the authors produced an audiobook and made it available in a university library. They then administered a questionnaire to find out about the quality of the audiobook they had recorded. Finally, they concluded that they needed to invest more time, space, and better equipment to record the audiobook.

It should be noted that Pinheiro, Fernandes and Teixeira (2018) pointed out the reference service, interviews, and user studies. In order to understand the user's needs, an interaction is first needed to assimilate what the user is looking for. By returning with answers, the user's feedback will help to evaluate the information center's material and thus provide quality products and services (Accart, 2008).

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Weber et al. (2021) reported on the circulation of audiobooks in Australian libraries between 2006 and 2017. The authors partnered with some libraries and were able to access data on audiobook loans and returns that occurred through OverDrive (a digital content distribution service). The study presented a comparison between audiobook and e-book lending and highlighted the main changes that audiobook publishing has undergone since 2006. It concluded that libraries are important players for audiobooks, but that they need institutional support to continue with the audiobook service.

With regard to the **theme Transforming audiobooks for libraries and learning**, Wallin and Nolin (2021) presented the relationship between audiobooks and audio, reading aloud, and the sound technologies used to listen to the sound/audiobook. The article also looked at statistical data on the use of audiobook platforms in Sweden. The four main platforms used in the country and the subscription plans were presented. The aim of the article was to find out about the reading habits of Swedes, so a case study was conducted using the BookBeat platform, which provided subscriber information for one year (2017-2018). As a result, it was found that Swedes have different habits and that reading habits rise and fall according to age.

The research by Dali and Brochu (2020) aimed to answer how public libraries in North America could argue with higher authorities about expanding and improving their collections by acquiring audiobooks for their users, as they are growing. It also explains how the use of audiobooks has changed the way users use the library. The article discusses four key questions. One of them is how librarians can have the theoretical background to include audiobooks in the library as a reading source, including the use of audiobook platforms. The authors conclude that librarians have several possible arguments for implementing audiobooks in libraries, but stress that it will not be an easy task given the reduction in budgets and investments in libraries in North America.

The texts by Wallin and Nolin (2021) and Dali and Brochu (2020) present similar studies when they address the transformation that audiobooks bring to libraries in terms of user issues, services, organization, retrieval, and dissemination of information. In this sense, libraries need to plan and reevaluate their selection policies, including new ways of providing quality reference services (Vergueiro, 2010; Grogan, 1995).

Snelling (2021) addressed the transformation of audiobooks during the COVID-19 pandemic (2020) and the use of digital platforms by users. In addition, she presented statistical data on the use of audiobooks in some countries, the marketing strategies of publishers, the diverse audience of users, and an important point: the cultural change in

relation to audiobooks during the pandemic. The main objective of the study was to present the audiobook market and its adaptation to cultural changes. In conclusion, the study highlighted that audiobooks are now mostly digital, which has made it easier for publishers and the industry to expand and adapt to users' cultural changes.

It was noted that Snelling (2021) and Furini (2005) addressed the issues of services provided to users, the transformations that audiobooks could offer as they are easily accessible digital documents, and the impact on the way users consume audiobooks during the COVID-19 pandemic. Miranda (2018) has already pointed out in his research that collection development is one of the most important activities. Moreover, this activity depends on the provision of library information resources, since it allows knowing the audience, the types of materials most appropriate for this audience, and how to make the information available more efficiently.

Furini (2005) highlighted the progress of audiobooks in the market, presenting monetary values and growth percentages in some countries. She also explained how audiobooks are used in education for language learning. There is a proposal to improve them as multimedia and to include other functions for users, such as images and text. The aim was to propose a mechanism for transforming an audiobook file into a multimedia product, which was achieved and demonstrated using an audiobook media player. However, it was found that the whole process is quite complex for professionals who do not master computer techniques.

Thompson (20-21) presented a brief account of the emergence of audiobooks, from the early days when audiobooks were created for use by the visually impaired, through the emergence of Audible, to the recent rise of audiobooks and audiobook platforms. The study highlights the strong growth in production and sales of audiobooks since 2011, and the changes in formats, as well as the new ways of accessing them.

The texts by Furini (2005) and Thompson (2021) presented the transformations of the audiobook and how it has been used to develop learning and reading. One of the most interesting points observed was the need to use technology due to the new formats. This made it possible to understand the need to train and update the services and products offered to users (Grogan, 1995).

As for **user needs and involvement**, the paper "Digital Audiobooks: New Media, Users, and Experiences" by the authors Have and Pedersen (2016) stands out. In this paper, the authors conducted a study divided into three parts. The first presented elements related to aesthetics, sound, and the senses, mentioning ways of listening to audiobooks. The second part presented affordance and voice, commenting on digital audiobook features and performative voice (use of sound effects) in audiobooks. The third part presented use and mediatization, highlighting empirical issues of audiobook use and audiobook users. The importance of using audiobooks for reading and their contribution to increasing the number of new readers due to their format were identified.

The text by Menezes and Franklin (2008) is a study that presents the emergence of audiobooks in Brazil. In this article, the distinction between an audiobook and a spoken book is presented, an issue explained by the visually impaired users who participated in the study. The authors presented the accessibility of audiobooks for the visually impaired through the application of a questionnaire in the Bahia State Public Library, where users



(visually impaired, volunteers, and teachers) participated in the research. The authors discussed the importance of audiobooks, explaining that the MP3 format is one of the best since it is compact and accommodates more content.

Farias (2012) showed the contribution of audiobooks in the dissemination of information and as a source of social inclusion. The article presented the advantages of audiobooks and the Brazilian scenario, highlighting the low penetration of the format and the study in the country. The study collected data through a questionnaire from two schools for the visually impaired in Rio Grande do Sul, presenting results on the use of audiobooks from the perspective of the visually impaired. Finally, the main Brazilian publishers that produce and sell audiobooks and projects that develop audiobooks in the country were identified.

The texts by Menezes and Franklin (2008) and Farias (2012) highlighted the indispensability of accessibility in Brazil, and how audiobooks can contribute to this goal. The authors used user studies in libraries to understand and analyze how these services are used by users, while also reviewing how audiobooks are provided. Accart (2008) highlights the need for information centers to analyze their products and services and conduct user studies to understand user demand. The studies clearly and objectively addressed how visually impaired users who use audiobooks need more attention and preparation from information center professionals.

Have and Pedersen (2016), Menezes and Franklin (2008), and Farias (2012) addressed important issues in terms of meeting users' needs and including those with specific needs. One of the most interesting points about audiobooks is their capacity for transformation and inclusion, which can change users' behavior through narratives (Menezes; Ribeiro, 2008).

On the topic of **change and the use of technology in audiobooks**, Wallin (2020) explored reading through the sense of hearing and how this skill can be developed through audiobooks. Specifically, digital platforms were used that required a subscription to access. She emphasizes that the technical and commercial innovations of audiobooks can change the way reading practices are perceived and how books are understood. In addition, the definition of remediation was presented, which corresponds to the new modeling of a medium/device. The author explained that these new media/supports have characteristics of the old support while at the same time adapting its new characteristics. For example, the audiobook has many characteristics of the physical book, but it also has new characteristics that are being adapted. Finally, the audiobook was compared to the podcast and other media that use audio.

Rivas-García and Magadán-Díaz (2022) examined the impact of audiobooks on the internal processes of the value chain of Spanish publishers. In addition, the study presented technical difficulties in the production of audiobooks, which are different from printed books and e-books but similar to the music and podcast industries. It was pointed out that improvements in technology and the introduction of tablets and smartphones into people's daily routines have promoted the development of digital distribution through subscription systems and audiobook sales platforms. The study concluded that audiobooks have had a positive impact on the publishing market but that they still need to be standardized for production and marketing.

Wallin (2020) and Rivas-García and Magadán-Díaz (2022), among other authors, addressed the changes and use of technologies by audiobooks. These issues have been identified by the changes and technological advances that affect the profile of users, who are increasingly empowered and demand immediate responses. This behavior is in line with one of the principles of Ranganathan's Law, which is the saving of the user's time and the use of automated tools and systems that provide fast and efficient access (Ranganathan, 2009).

Titangos (2018) traced the history of a county library in California and the library's audiobook collection from 1960 to 2016. In addition, she described how audiobooks were promoted in the library, the users' new understanding of audiobooks, and the lack of money to purchase audiobooks. The research also mentioned an event held in 2016 to promote the book *Jerusalem*, written by author Alan Moore, which took place at the Santa Cruz Public Library, one of the main libraries in California. The event was attended by narrator Simon Vance, one of the biggest narrators of audiobooks, who has narrated more than 800 audiobooks.

The study by Bal (2018) presented the evolution of audiobooks, as well as their rapid growth in the Western and Russian book markets. It was pointed out that the current format of audiobooks is promising, and the aim of the study was to present and learn more about the audiobook format in the modern market in the period from 2012 to 2014. The growing use of tablets and smartphones was highlighted, devices that have facilitated access and use of apps, where audiobooks can be easily purchased and downloaded with one click on digital platforms.

Titangos (2018) and Bal (2018) presented audiobooks in the context of libraries, their use through new devices, and ways to disseminate them to users, as well as the importance of inserting new technologies into information centers, making it possible to attract users through new media. When Ranganathan (2009) states that the library is a growing organism, he is referring to the expansion of materials, including the addition of new media/carriers of information. In this sense, we understand how audiobooks have changed the space of information centers and that they need to be treated properly to be incorporated into the collection in a way that facilitates their use by users, as well as to be disseminated appropriately.

In terms of **representation and information retrieval**, the study by Shetty et al. (2015) was the first to directly address the issue of representation (indexing) and information retrieval in audiobooks. A proposal was made to perform automatic indexing of audiobook content in the Apache Hadoop distributed software, using the Sphinx-4 CMU (open-source automatic speech recognizer) to convert the audiobook information into textual format. After the conversion, the keywords were extracted and then indexed using the tf-idf algorithm (a technique for finding documents similar to a given search expression). The presented proposal was successful, but the procedure is complex, requires specific programs, and has its own language, being a computer science experiment.

The research of Engelen (2008) and Engelen (2009) is by the same author and although they present different approaches, they are complementary. Engelen (2008) presented the fact that audiobooks are a purely commercial phenomenon, with specialized

companies producing them, citing big names in the industry. The study questioned why audiobook companies don't use the Daisy format (an open, free format that describes the entire content of a book). The study also highlighted the difficulty of retrieving audiobooks from digital libraries and suggested descriptors for cataloging audiobooks. Engelen's (2009) text added questions about marketing, promotion of audiobooks, the use of audiobooks in education, and new descriptors for cataloging audiobooks. Both studies noted the need to improve the cataloging of multimedia and the use of appropriate metadata.

The texts by Engelen (2008) and Engelen (2009) have identified important questions about information representation and retrieval. Both areas are essential for information dissemination, as information centers will be able to provide users with more accurate results. The need to represent documents in new formats has led to the incorporation of systems to handle document records, highlighting the importance of quick and accurate retrieval (Silva, 2019).

Sorrell (2012) addressed audiobooks and their history in American library collections, presenting the increase in consumption of audiobooks, especially electronic audiobooks in the public domain, and the corresponding increase in the need to catalog them for inclusion in library collections. The article presented the cataloging process for re-recorded audiobooks at the California State University-San Bernardino Library. It was pointed out that there is no one correct way to catalog public domain audiobooks re-recorded on CD at the library. The descriptors used to catalog the re-recorded audiobooks were based on the Anglo-American Cataloging Code (AACR2) standard, but with the upcoming release of Resources, Description, and Access (RDA), it will be necessary to revisit the cataloging of audiobooks.

Sorrell's (2012) study explored an important scenario for information retrieval in audiobooks: the need to use appropriate descriptors/metadata that correctly describe the main information in the audiobook, thus facilitating its retrieval by the user. It is important to note that cataloging is undergoing a process of updating so that new media can be accurately described and thus made more accessible and retrievable (Machado, Zafalon, 2020). It should be noted that the text by Izcara-Temprano, Gómez-Díaz and García-Rodríguez (2021) also highlights some elements of information retrieval through descriptors, but not as the main theme.

For the theme **Audiobooks, Reading, and Other Media**, Oliveira's (2020) work is a thesis that addressed the relationship between audiobooks and literary literacy through an applied study that used literary audiobooks in two high school classes in the municipality of Ijuí in Rio Grande do Sul, Brazil. The author presented the concept of audiobooks, media, and remediation, and this definition was also mentioned in Wallin's article (2020). The study related the audiobook to current media and remediation, since the definition of both alludes to the process of transformation that the audiobook has undergone over the years.

Baverstock, Bradford, and Gonzalez (2018) produced a book chapter in which the authors considered audiobooks as a fourth format after hardcover books, paperbacks, and e-books. The chapter presented the origins of spoken word recordings, the impact of the World War on audiobook production, and the work of the first libraries to make

audiobooks available and contribute to their production. It also presented data on the use of audiobooks, their evolution from 1952 to the 2000s, and the contribution of podcasts to the dissemination of audiobooks.

Oliveira (2020) and Baverstock, Bradford, and Gonzalez (2018) presented a brief historical context of audiobooks and addressed their relationship with reading and other media. There are insights into how audiobooks are connected to knowledge, the written and oral word, and their importance in the development of readers. According to García-Rodríguez (2013), audiobooks have benefits for the population, especially for children and adolescents. However, these benefits depend on the supply, quantity, and variety of formats.

From the documents retrieved from the SLR, it was possible to identify and map the concepts, characteristics, and evolution of audiobooks. The documents showed that audiobooks are studied in different fields of knowledge, such as: computer science, linguistics, communication, information science, among others. Some documents emphasized the connection between audiobooks and technology and, in some cases, a certain dependency. In addition, some studies raised issues of accessibility and learning for people with disabilities or special needs.

Of the 24 documents selected from the SLR, the majority focused on the inclusion of people with disabilities and the use of audiobooks in libraries by users. Only four studies directly addressed the presentation and retrieval of information in audiobooks: Shetty et al. (2015); Engelen (2008); Sorrell (2012); and Engelen (2009), three of which: Shetty et al. (2015); Engelen (2008) and Sorrell (2012) in the field of computing, emphasized the use of appropriate metadata for recording audiobooks. The research of Shetty et al. (2015) and Engelen (2009) dealt with IC techniques such as indexing and cataloging. Engelen (2009) mentioned the issue of representing and organizing audiobooks through AACR2 cataloging, which was done in one library's audiobook collection, but will need to be changed due to compliance with RDA as a way to standardize current cataloging.

Shetty et al. (2015) presented the topic of representing and retrieving information from audiobooks, but left questions unanswered because the article stated that they transformed the audiobook into a textual document in order to perform the indexing process. As a result, the following questions were raised by the authors of the SLR: is it necessary to transform the audiobook into a text document to represent it; should the metadata for the multimedia format or the text format be considered for indexing the audiobook?

Finally, it is important to note that the SLR presented an overview of the research that has been done on audiobooks. The limited number of studies that have dealt with the representation and retrieval of information in audiobooks in the field of IC may indicate that the subject needs to be explored in greater depth, in accordance with one of the hypotheses of the research project associated with this study.

## 6 CONCLUSION

This SLR sought to retrieve and analyze studies on audiobooks in the context of IS, mainly addressing their representation and retrieval. The documents selected in the SLR (24) were fully analyzed and discussed in this study.

Despite being a recently commercialized format, the audiobook is an ancient creation that has undergone several transformations, since 1878 when it was created by Thomas A. Edison. Since then, the audiobook has been improved with the advancement of new technologies and has gone hand in hand with other existing multimedia media that are related to audio.

Audiobooks are used in various areas of knowledge and are used in different ways for learning, inclusion and access to information. In addition, cultural changes associated with audiobooks have had a direct impact on the dissemination of information and the expansion of reading.

Technological evolution also has a direct impact on audiobooks, which although not a new medium/support, are still expanding, especially in the current ecosystem where they are stored (digital files and cloud storage) and marketed (streaming services and platforms).

The objective of SLR was achieved in this research by making it possible to draw up an overview of the area, identify related themes and areas, identify its evolution, access, and use in libraries and information centers, and, above all, by allowing an analysis of the literature in the context of information representation and retrieval.

Although SLR is a well-defined method, it does have its limitations, especially in relation to its implementation in the selected databases, since each database structures its retrieval system differently. It was observed that each database has its own guidelines for carrying out the search, but in some cases the filters and fields for refining the search did not retrieve documents or the results were unrelated to the search, even using the strings according to the rules defined by the databases.

The lack of more detailed studies on the process of representing and retrieving information in audiobooks is a warning about this medium, which is being increasingly used and marketed today. Representing, standardizing, organizing and retrieving information in audiobooks requires a more in-depth discussion, demonstrating that the subject needs further study and research in the field of IC.

## REFERENCES

ACCART, J.-P. **Serviço de referência: do presencial ao virtual**. Brasília: Briquet de Lemos/Livros, 2008.

APA – AUDIO PUBLISHERS ASSOCIATION. **Audiobook listening remains strong in 2020 as publisher report ninth straight year of double-digit growth**. 2023. APA. Available at: <https://www.audiopub.org/uploads/pdf/Consumer-and-Sales-Survey-Press-Release-2021-FINAL.pdf>. Access on: 09 May 2024.

BAL, V.-Y. Sound books in the modern publishing industry. **Tekstknigaknigoizdanie**, v. 17, pp. 91-101. DOI: <https://doi.org/10.17223/23062061/17/7>.

BARBOSA, R. de O. Um olhar sobre o audiolivro e as materialidades de seus suportes – da performance do corpo aos primeiros livros falados. *In*: ENCONTRO NACIONAL DE HISTÓRIA DA CAMÍDIA, 9., 2013, Ouro Preto. **Anais [...]** Ouro Preto: Rede Alcar, 2013. Available at: <https://abre.ai/ew5q>. Access on: 09 May 2024.

BARBOSA, R. de O. Ouvidos para ler: contextualizando audiolivro, leitura e entretenimento. **Revista Brasileira de História da Mídia**, Curitiba, v. 6, n. 1, jan/jul. 2017. Available at: <https://revistas.ufpi.br/index.php/rbhm/article/view/6072>. Access on: 09 May 2024.

BRINER, R. B.; DENYER, D. Systematic Review and Evidence Synthesis as a Practice and Scholarship Tool. *In*: ROUSSEAU, D. M. (ed.). **Handbook of evidence-based management: companies, classrooms, and research**. New York: Oxford University Press, 2012.

CASTRO, A. **El audiolibro en el mercado editorial, breve historia, potencial de ventas y estadísticas**. Hay Festival, 18 mar. 2020. Available at: <https://www.hayfestival.com/talento/blog.aspx?post=1235>. Access on: 09 May 2024.

CORDÓN-GARCÍA, J. A. Leer escuchando: reflexiones en torno a los audiolibros como sector emergente. **Anuario ThinkEPI**, v. 12, n. 1, 2018, p. 170-182. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=6842288>. Access on: 09 May 2024.

COLBJØRNSSEN, T. **The accidental avant-garde: audiobook technologies and publishing strategies from cassette tapes to online streaming services**. 2015. DOI: [https://doi.org/10.1386/nl.13.83\\_1](https://doi.org/10.1386/nl.13.83_1).

ENGELN, J. Marketing issues related to commercial and specialised audiobooks, including Digital Daily Newspapers. *In*: INTERNATIONAL CONFERENCE ON ELECTRONIC PUBLISHING: RETHINKING ELECTRONIC PUBLISHING: INNOVATION IN COMMUNICATION PARADIGMS AND TECHNOLOGIES, 13., 2009, Milano. **Proceedings of the...** Milano, Italy: ELPUB, 2009. p. 621-624. Available at: <https://elpub.architexturez.net/doc/oai-elpub-id-161-elpub2009>. Access on: 09 May 2024.

FERREIRA, A. B. de H. Livreiro. *In*: FERREIRA, A. B. de H. **Novo dicionário Aurélio da língua portuguesa**. 5. ed. Rio de Janeiro: Editora Positivo, 2014.

FURINI, M. Digital audiobook: from passive to active pursuit. **Springer link**, New York City, v. 40, p. 23-39, 5 dec. 2007. DOI: [10.1007/s11042-007-0183-y](https://doi.org/10.1007/s11042-007-0183-y).

GARCÍA-RODRÍGUEZ, A. El papel de las plataformas de distribución y venta en la promoción del libro electrónico infantil y juvenil. **Anales de documentação**, Espanha, v. 16, n. 1, 2013. Available at: <http://revistas.um.es/analesdoc/article/view/166601>. Access on: 09 May 2024.

GALVÃO, M. C. B.; RICARTE, I. L. M. Revisão sistemática da literatura: conceituação, produção e publicação. **Logeion - Filosofia da Informação**, Rio de Janeiro, v. 6, n. 1, p. 57-73, set./fev. 2020. Available at: <http://revista.ibict.br/fiinf/article/view/4835>. Access on: 09 May 2024.

GONÇALVES, S. S.; NASCIMENTO SILVA, P. Materiais de pesquisa - Revisão Sistemática de Literatura sobre Audiolivros 2023. *Mendeley Data*, V3, 2024, DOI: <https://doi.org/10.17632/k65xtyx7hr.3>.

GROGAN, D. **A prática do serviço de referência**. Brasília, DF: Briquet de Lemos/Livros, 1995.

HAVE, I.; PEDERSEN, B.-S. The audiobook circuit in digital publishing: voicing the silent revolution. **New media & society**, United Kingdom, v. 22, n. 3, p. 409-428, ago. 2019. DOI: <https://doi.org/10.1177/1461444819863407>.

JAIN, S. **Not just seeing is believing, accessible audio books & a library for visually impaired are here**. 2017. Available at: <https://www.thebetterindia.com/104715/accessible-audio-books/>. Access on: 09 May 2024.

JONES, N. W. N. The Fourth Format: How audiobooks have become a standard format for general publishers alongside hardback, paperback, and e-book. *In*: BAVERSTOCK, A.; BRADFORD, R.; GONZALEZ, M. (ed.). **Contemporary Publishing and the Culture of Books**. London: Routledge, 2020.

MAGADÁN-DÍAZ, M.; RIVAS-GARCÍA, J. I. El audiolibro en España: ¿industria o modelo de negocio?. **Profesional de la información**, v. 29, n. 6., 2020. DOI: <https://doi.org/10.3145/epi.2020>.

MACHADO, R. de S.; ZAFALON, Z. R. **Catálogo: dos princípios e teorias ao RDA e IFLA LRM**. João Pessoa: Editora UFPB, 2020. Available at: <http://www.editora.ufpb.br/sistema/press5/index.php/UFPB/catalog/book/336>. Access on: 09 May 2024.

MENEZES, N. C.; RIBEIRO, S. F. Audiolivro: uma importante contribuição tecnológica para os deficientes visuais. **Ponto de Acesso**, Salvador, v. 2, n. 3, p. 58-72, dez. 2008. Available at: <https://brapci.inf.br/index.php/res/download/98646>. Access on: 09 May 2024.

MIRANDA, A. C. C. de. Gestão de coleções para bibliotecas especializadas: Uma perspectiva teórica para o planejamento de recursos informacionais. **Ci. Inf. Rev.**, Maceió, v. 5, n. 2, p. 95-105, May/ago. 2018. Available at: <https://brapci.inf.br/index.php/res/v/35932>. Access on: 09 May 2024.

MORANDI, M. I. W. M.; CAMARGO, L. F. R. Revisão sistemática da literatura. *In*: DRESCH, A.; LACERDA, D. P.; ANTUNES JÚNIOR, J. A. V. **Design science research: método e pesquisa para avanço da ciência e da tecnologia**. Porto Alegre: Bookman, 2015.

OLIVEIRA, A. A. de. **Audiolivros digitais e letramento literário**: ensino de literatura na cultura da convergência. 2020. 193f. Tese (Doutorado em Letras) - Centro de Artes e Letras, Programa de Pós-Graduação em Letras, Universidade Federal de Santa Maria, Santa Maria, RS, 2020. Available at: <https://repositorio.ufsm.br/handle/1/22103>. Access on: 09 May 2024.

PAGE, M. J. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. **The BMJ**, [s.l.], v. 372, n. 71, mar. 2021. Available at: doi: <https://doi.org/10.1136/bmj.n71>. Access on: 09 May 2024.

PALETTA, F. A. C.; WATANABE, E. T. Y.; PENILHA, D. F. Audiolivro: inovações tecnológicas, tendências e divulgação. In: SEMINÁRIO NACIONAL DE BIBLIOTECAS UNIVERSITÁRIAS, 10., 2008, São Paulo. **Anais [...]** São Paulo: SNBU/CRUESP, 2008. Available at: [http://repositorio.febab.libertar.org/files/original/30/4376/SNBU2008\\_225.pdf](http://repositorio.febab.libertar.org/files/original/30/4376/SNBU2008_225.pdf). Access on: 09 May 2024.

RANGANATHAN, S. R. **As Cinco Leis da Biblioteconomia**. Brasília, DF: Briquet de Lemos / Livros, 2009.

RAMOS, A.; FARIA, P. M.; FARIA, Á. Revisão sistemática de literatura: contributo para a inovação na investigação em Ciências da Educação. **Revista Diálogo Educacional**, Curitiba, vol. 14, n. 41, p. 17-36, jan./abr. 2014. Available at: <https://www.redalyc.org/pdf/1891/189130424002.pdf>. Access on: 09 May 2024.

RESÉNDIZ, P. O. R. El audiolibro digital y las alternativas de lanarración sonora. **Austral Comunicación**, Buenos Aires, v. 11, n. 2, p. 1-25, 2022. Available at: <https://doi.org/10.26422/aucom.2022.1102.rod>. Access on: 09 May 2024.

RONQUILLO, C. C.; PEÑA, J. M. El audiolibro como herramienta tecnológica para elaprendizaje de los estudiantes de la carrera de bibliotecología y archivología de la Universidad de Guayaquil. **Espirales**: Revista multidisciplinaria de investigación, [S.l.], v. 1, n. 10, 2017, p. 1-1. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=8466400>. Access on: 09 May 2024.

RUBERY, M. **The untold story of the talking book**. Cambridge, MA: Harvard University Press, 2016.

SILVA, D. V. da. **A representação e a recuperação da informação**: bases, diálogos e contribuições para o fazer arquivístico. 2019. 103f. Dissertação (Mestrado em Ciência da Informação) – Programa de Pós-graduação em Ciência da Informação, Universidade Federal do Ceará, Fortaleza (CE), 2019.

VERGUEIRO, W. **Seleção de materiais de informação**: princípios e técnicas. Brasília, DF: Briquet de Lemos/Livros, 2010.

WALLIN, E. T.; NOLIN, J. Time to read: Exploring the timespaces of subscription-based audiobooks. **New Media & Society**, London, v. 22, n. 6, 2019. Available at: <https://encurtador.com.br/pBOR5>. Access on: 09 May 2024.