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## RESEARCH METHODOLOGY IN INFORMATION LITERACY: A SYSTEMATIC REVIEW

METODOLOGIA DA PESQUISA EM COMPETÊNCIA EM INFORMAÇÃO:  
UMA REVISÃO SISTEMÁTICA

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**ABSTRACT**

Information Literacy has been the object of study in Information Science since its inception in 1974. Research related to the theme has led to the proliferation of Information Literacy models, used as reference framework, for application in other researches or in librarian practice. With this in view, we ask: what were the models of Information Literacy used as reference framework in dissertations and theses defended in Information Science Graduate Programs, from 2014 to 2018? The present work has as general goal: to identify the models of Information Literacy used more frequently in the research on Information Literacy in Brazil. And as specific goals: a) present a panorama of the Brazilian research on Information Literacy; b) present the main trends in the production of theses and dissertations on Information Literacy in Brazil; c) to carry out a systematic review of Brazilian research in Master's and Doctoral degrees in Information Science between 2014-2018. This is an exploratory, qualitative approach that uses as a method of bibliographic research the systematic review of the results obtained in a survey carried out at the Digital Library of Theses and Dissertations (BDTD, in the Portuguese acronym) of the Brazilian Institute of Information in Science and Technology (IBICT, in the Portuguese acronym). It concludes by pointing to the fact that the Information Literacy models are considered essential for the development of research on the subject and serves as theoretical and methodological basis for the critique, interpretation and application of concepts and methods on Information Literacy.

**KEYWORDS**

Information literacy. Research methods. Literature review.

**RESUMO**

A Competência em Informação tem sido objeto de estudo em Ciência da Informação desde seu surgimento em 1974. As pesquisas relacionadas à temática levaram à proliferação de modelos de Competência em Informação, utilizados como quadro de referência, para aplicação em outras pesquisas ou na prática bibliotecária. Tendo isso em vista, questiona-se: quais foram os modelos de Competência em Informação utilizados como quadro de referência em dissertações e teses defendidas em Programas de Pós-Graduação em Ciência da Informação, no período de 2014 a 2018? O presente trabalho tem como objetivo geral: identificar os modelos de Competência em Informação utilizados com mais frequência na pesquisa sobre Competência em Informação no Brasil. E como objetivos específicos: a) apresentar um panorama da pesquisa brasileira sobre Competência em Informação; b) apresentar as principais tendências na produção de teses e dissertações sobre Competência em Informação no Brasil; c) realizar uma revisão sistemática da pesquisa brasileira em nível de Mestrado e Doutorado em Ciência da Informação entre 2014-2018. Trata-se de uma pesquisa exploratória, de abordagem qualitativa, que utiliza como método de pesquisa bibliográfica a revisão sistemática dos resultados obtidos em levantamento realizado na Biblioteca Digital de Teses e Dissertações (BDTD) do Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT). Conclui apontando para o fato de que os modelos de Competência em Informação são tidos como essenciais para o desenvolvimento da pesquisa sobre a temática e servem como fundamentação teórica e metodológica para a crítica, a interpretação e aplicação de conceitos e métodos sobre Competência em Informação.

**PALAVRAS-CHAVE**

Competência informacional. Métodos de pesquisa. Revisão de literatura.

## 1 Introduction

Information Literacy has become a subject of discussion since 1974, when the American librarian and president of the Information Industries Association (IIA) Paul Zurkowski first mentioned the term in a report presented to the National Commission on Librarianship and Information Science.

Zurkowski (1974, p.27 ) emphasized the importance of Information Literacy as a means of making individuals capable of coping with current informational overabundance and as an effective outlet for the formation of a democratic society, understanding the need for engendering governmental efforts so that "...citizens would be trained to use existing information tools, as well as those that are under development or being tested."

Information Literacy develops as a set of skills that an individual must possess to deal with information. The document Information Literacy Competency for Higher Education (Information Literacy..., 2000) defines this set as five: identify its informational need, access, evaluate, use information to solve a problem or for decision making, and understand the social, economic and legal issues surrounding the use of information..

In Brazil, the first indications of studies on Information Literacy appeared in the early 2000s, with Caregato (2000), Dudziak (2001), Hatschbach (2002) and Campello (2002) (CAMPELLO, 2003), bringing the discussion about the renewal of the pedagogical role of the library and librarians in the country and the need for them to focus on making the users they serve increasingly more competent, autonomous and responsible when dealing with information, especially with the emergence of new information and communication technologies.

Since then, Brazilian research on Information Literacy has been increasing in an exponential way, through the publication of scientific articles and the defense of theses and dissertations that approach the subject under a diversity of perspectives and based on theoretical, methodological and conceptual models that aim to reflect on the theme or apply it to a new reality.

In view of this proliferation of research on the theme and the use and application of Information Literacy models, the following questions are asked: What were the models of Information Literacy used as reference framework in dissertations and theses defended in Information Science Graduate Programs, from 2014 to 2018?

Therefore, the present work has as general goal: to identify the models of Information Literacy used in the Information Literacy research in Brazil. And as specific goals: a) to present

a panorama of the Brazilian research on Information Literacy; b) to present the main trends in the production of theses and dissertations on Information Literacy in Brazil; c) to carry out a systematic review of Brazilian research in Master's and Doctoral degrees in Information Literacy between 2014-2018.

This study is part of the master's degree research on "Information Literacy in Professional Education" developed in the Graduate Program in Information Science, Federal University of Ceará, which aims to identify Information Literacy indicators to be developed by students of the technical courses integrated to High School, offered by an institute of the Federal Network of Professional, Scientific and Technological Education.

## 2 Information literacy: history, concepts, models

Paul Zurkowski pioneered the establishment of Information Literacy. Campello (2003) also points out that in the 1970s two other authors, Hamelink (1976) and Owens (1976), brought new contributions to the reflection on Information Literacy, including a social dimension to the concept and giving it an important role in the formation of citizens and in the search for an increasingly democratic society.

These advances were instrumental in solidifying the concept of Information Literacy in the discussions of the American Library Association (ALA). An example of this is the publication in 1989 of the Presidential Committee of Information Literacy, which offers, for the first time, an official definition for the term.

Information Literacy is understood as a learning process that involves:

- knowing when you have a need for information
- identifying the information you need to solve a particular problem or issue
- finding the information you need and evaluating it
- organizing the information
- using the information effectively to answer a problem or question. (AMERICAN LIBRARY ASSOCIATION, 1989).

According to this process, the informational individual must know how to identify their informational needs, establishing issues or problems to be solved, through a reflexive process. This information needs to be identified, with the selection of, for example, potential formal or informal sources. The individual should then seek the information in the selected sources and evaluate them, organizing the relevant ones, focusing on their use for the solution of the problem/issue that started their search.

The studies on Information Literacy then led to the creation of theoretical-methodological and conceptual models aimed at the development of informational skills in a systematic way among users of libraries, especially in primary and higher education.

The Information Power: Building Partnerships for Learning was an Information Literacy model proposal aimed for the American basic education in the late 1990s. The document, created by the American Association of School Librarians (ASSL), together with the Association for Educational Communication and Technology (AECT), is divided into categories, standards and indicators. According to the document, the informational student accesses, evaluates and uses information efficiently and effectively, being a student who independently learns and acts with responsibility together with the learning community to which they are linked (AMERICAN ASSOCIATION OF SCHOOL LIBRARIAS; ASSOCIATION FOR EDUCATIONAL COMMUNICATION AND TECHNOLOGY, 1998).

In the field of higher education, in 2000, the Association of College and Research Libraries (ACRL) released the document Information Literacy Competency Standards for Higher Education, which brought the possibility of reflecting and devising actions for the development of systematic actions that allowed university students to expand their informational skills. The document defined five specific standards as Information Literacy, being more closely linked to the ALA Final Report (1989): identifying its own need for information, seeking information, evaluating information, using information and understanding the social, economic and legal issues surrounding the use of information (ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES, 2000).

Alves and Alcará (2014) emphasize, however, that other models of Information Literacy have also been developed, mainly focused on the university context. The chart below shows the survey carried out by the authors:

**Chart 1.** Information Literacy Models and their applicability

Modelo	Aplicação
<i>Information Search Process</i> de Carol Kuhlthau (1993). EUA.	Brasil. Estudantes. Realizado no Curso de Biblioteconomia da Escola de Ciência da Informação da Universidade Federal de Minas Gerais.
<i>The Seven Pillars of Information Literacy</i> de SCONUL (1999). Reino Unido	Reino Unido. Estudantes. Realizado nas universidades: Abertay em Dundee; Cardiff; Southampton; Wales em Newport; Bradford; York (ILIAD Project).
<i>Information Literacy Competency Standards for Higher Education</i> da ACRL (2000). EUA.	China. Estudantes. Realizado na Hong Kong Baptist University.
(CI2) <i>Competencias Informáticas e Informacionais</i> (2004). Espanha	Espanha. Estudantes. Realizado nas universidades espanholas.
<i>Empowering 8 do National Institute of Library and Information Sciences</i> (2004). Sri Lanka	Indonésia. Estudantes. Realizado na <i>Faculty of Languages and Arts, State University of Jakarta</i> .

**Source:** ALVES; ALCARÁ (2014)

In addition, new perspectives on Information Literacy presented in documents such as Standards for the 21st-Century Learner of the American Association of School Librarians (AMERICAN ASSOCIATION OF SCHOOL LIBRARIANS, 2009), Framework of Information Literacy in Higher Education, which in addition to being an update to ACRL (ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES, 2016), addresses the concept of metaliteracy, and the Global Assessment Framework for Media Literacy and Information Literacy: Provision and Competencies of the Country (MARCO..., 2016), with an approach that included the competence for the use of the media to the discourse of Information Literacy.

In Brazil, many models of Information Literacy have also been constructed, either by borrowing from international conceptual models or by inserting innovations appropriate to the national reality. This proliferation of models in the country is the result, mainly of studies at Masters and PhD levels and attend to the different realities and facets of Information Literacy in society.

The teacher and researcher Regina Célia Baptista Belluzzo presented in 2004 two important contributions for the development of the field in Brazil. On the one hand, along with Kerbauy (BELLUZZO; KERBAUY, 2004), it launches its proposed "Standards of Literacy and performance indicators in information" aimed at training teachers, presenting strong influence of the standards of ACRL (2000) and, on the other hand, along with Kobayashi and Feres, presents its "Guide for Research and Information Use in Different Types of Sources" (Belluzzo; KOBAYASHI; FERES, 2004).

While the "Standards and Indicators" renew and contextual Izam to the Brazilian context the ACRL Standards (2000), the Guide surges as an innovation in the field, being subdivided into nine steps, which aim to define how the search and use of information process happens. These nine steps are:

1. Plan, in which the student should group topics, identify topics of research, define major themes, object of research, methodologies and keywords for the research;
2. Find the appropriate sources of information, which will define the possible sources of research, identify what type of information is needed and which sources should be the first ones consulted;
3. Choose the most appropriate sources, which also identifies if the information is updated, reference other sources and correspond to the needs of the students;
4. Identify the sources of information considered, through bibliographic references;
5. Make reading/interpretation of identified information/documents;
6. Write the text of the project;
7. Develop the research project or research project;

8. Write the final work/final product;
9. Presentation and evaluation of the work and final product (BELLUZO; KOBAYASHI; FERES, 2004)

The guide proposed by Belluzzo, Kobayashi and Feres (2004) demonstrates the authors' interest in providing a methodological pathway that facilitates the process of developing Information Literacy, providing students with a model that helps them access, evaluate and use information in a competent, independent and effective way.

A more recent example is the proposal of Vitorino and Piantola (2009). In 2009, Professor Elizete Vieira Vitorino, together with other authors, has been researching Information Literacy from a multidimensional perspective, presenting a Reference Framework that uses as a theoretical reference the work of the author Terezinha Azeredo Rios.

The frame of reference proposed by Vitorino and Piantola (2009) includes the fact that the concept of Information Literacy is constituted of numerous dimensions, which can be classified into: technical, aesthetic, political and ethical (as can be seen in the chart below).

**Chart 2.** Summary of the characteristics of the dimensions of informational literacy

Dimensão técnica	Dimensão estética	Dimensão ética	Dimensão política
Meio de ação no contexto da informação.	Criatividade sensível.	Uso responsável da informação.	Exercício de cidadania.
Consiste nas habilidades adquiridas para encontrar, avaliar e usar a informação que precisamos.	Capacidade de compreender, relacionar, ordenar, configurar e ressignificar a informação.	Visa a realização do bem comum	Participação dos indivíduos nas decisões e nas transformações referentes à vida social.
Ligada à ideia de que o indivíduo competente em informação é aquele capaz de acessar com sucesso e dominar as novas tecnologias.	Experiência interior, individual e única do sujeito ao lidar com os conteúdos de informação e sua maneira de expressá-la e agir sobre ela no âmbito coletivo.	Relaciona-se as questões de apropriação e uso da informação, tais como propriedade intelectual, direitos autorais, acesso à informação e preservação da memória do mundo.	Capacidade de ver além da superfície do discurso.
			Considera que a informação é produzida a partir de (e em) um contexto específico.

**Source:** VITORINO; PIANTOLA (2011, p. 109).

The dimensions presented by Vitorino and Piantola (2009) are interconnected and present the multifaceted characteristics of an individual competent in information, from the practical knowledge of the individuals regarding the access and use of information and information resources (technical dimension), through their creativity in appreciating and expressing information (in the aesthetic dimension), by understanding the contextual, political and socio-cultural aspects that surround the use of information (political dimension) and



culminating in the ethical behavior and responsible use of information by the individual (ethical dimension).

The Information Literacy models therefore seek not only to establish the concept in the field of Librarianship and Information Science, but also to highlight the pedagogical role of the library in acting in the formation of individuals able to deal with information in the contemporary world.

### 3 Methodological Procedures

This is an exploratory research, since it has "...as its main purpose to develop, clarify and modify concepts and ideas, in order to formulate more precise problems or hypotheses for later studies" (GIL, 2007, p. 43). In this way, the type of research adopted here allows to identify the panorama of research on Information Literacy in Brazil and to define research strategies based on Brazilian production on the subject.

From a qualitative approach, it uses the systematic bibliographic review as a method of data collection. According to Costa and Zoltowski (2014, p. 56) based on Fernández- Ríos and Buela- Caal (2009),

Systematic review is a method that maximizes the potential of a search by finding as many results as possible in an organized way. Its result is not a simple chronological relation or a linear and descriptive exposition of a thematic, since the systematic review must constitute a reflexive, critical and comprehensive work on the analyzed material.

The proposal presented here is, therefore, not only to carry out a survey of the scientific production on Information Literacy in Brazil, but to reflect on the methodological paths adopted and their relationship with the Information Literacy models chosen as reference framework.

According to Akobeng (2005 apud COSTA; ZOLTOWSKI, 2014, p.56), the systematic review can follow the following steps to be performed:

1. delimitation of the question to be researched;
2. choice of data sources;
3. election of the keywords for the search;
4. search and storage of results;
5. selection of articles by summary, according to inclusion and exclusion criteria;
6. extraction of the data of the selected articles;
7. evaluation of articles;



## 8. synthesis and interpretation of data.

The issue of this research is: what were the models of Information Literacy used as reference framework in dissertations and theses defended between 2014-2018? Such as data collection sources the dissertations and theses present in the Digital Library of Theses and Dissertations (BDTD) of the Brazilian Institute of Information in Science and Technology (IBICT).

Knowing that the translation of Information Literacy for Portuguese is still a topic of debate, the authors used, in the BDTD Advanced Search option, linked by the "ANY term" option (which allows selected terms to be retrieved during the search process): Information Literacy, Informative Literacy, Informational Literacy, Literacy in Information, Informational learning, Literacy and the term in English.

Other filters used were: the delimitation for works in Portuguese (acronym: por), defended between 2014 and 2018, without preference for works with or without illustration or for type of document (thesis or dissertation). The system retrieved a total of 141 results (95 theses and 45 dissertations), in an estimated search time of 0.29s.

Phase 5 addresses the need to adopt criteria for inclusion and exclusion of documents aiming at narrowing the research, to make the results more and more precise. At this stage, therefore, three exclusion criteria were used: 1) documents whose descriptors were not strictly related to the used keywords; 2) documents whose descriptors were related to the concept of Media and Information Literacy and its variants; and 3) documents whose summary did not highlight Information Literacy models as part of its methodology.

The first exclusion criterion was related to the subject descriptors of the work: all documents whose descriptors were not aligned with the keywords adopted in the search, should be excluded. Thus, of the 141 theses and dissertations, only 74 remained in this first stage.

The second criterion adopted was the exclusion of all documents whose subject descriptors were related to the concept of "Media and Information Literacy" for understanding it as a more comprehensive approach to the use of information, which includes communication and media use. In addition to the term referring to the concept, we also excluded documents whose descriptors were "Media Literacy", "Communication literacy", "Information and Media competency", "Information and media literacy", "Info-communication literacy", among others. Of this exclusion, only 57 works were left.

The question of the research being "What were the models of Information Competency used as reference framework in dissertations and theses defended between 2014-2018?", The

third and last exclusion criterion adopted here was that of documents that did not evidence in its abstract the use of some type of Information Competency model or framework.

From this process, only 5 works were adequate to the present research. Given the recommendation of phase 6 of Akonberg's systematic review, the data in the document are described below:

**Chart 3.** Data of selected articles

Author	Title	Year	Type	Origen
Manhique, Ilídio Lobato Ernesto	Information Literacy and the challenge of university libraries: the case of the Central Library Brazão Mazula of Eduardo Mondlane University of Mozambique	2014	Tese	UFBA
Oliveira, Alexandre Pedro de	The technical dimension of Information Literacy: a study with reference librarians from Greater Florianópolis, SC	2014	Dissertation	UFSC
Santos, Jaires Oliveira	Information Literacy of graduates of the course of Librarianship: an analysis in the Northeast region of Brazil	2015	Dissertation	UFBA
Lucca, Djuli Machado de	The political dimension of Information Literacy: a study based on the informational needs of the elderly	2015	Dissertation	UFSC
Pellegrini, Eliane	The ethical dimension of Information Literacy: the narrated experience of the librarians of the Federal Institute of Education, Science and Technology of Santa Catarina (IFSC)	2016	Dissertation	UFSC

**Source:** the author.

The results indicate a total of 1 thesis and four dissertations, defended in a period that extends from 2014 to 2017. The works come from three universities, two of them federal (Federal University of Bahia and Federal University of Santa Catarina) and one state (State University of São Paulo). According to stage 7, evaluation, all documents are relevant to the research question.

## 4 Results and Discussion

The evaluation of the selected documents obeyed the objectives of the present article about the methodological trajectories of theses and dissertations on Information Literacy. In this sense, the synthesis analysis of the results was restricted to the methodological paths adopted in the theses and dissertations, mainly on the decision-making of the authors regarding the use and application of Information Competency models in their work, as can be seen below:

**a) Informational Competence and the challenge of university libraries: the case of the Central Library Brazão Mazula of the Eduardo Mondlane University of Mozambique.**

The thesis is a research of the descriptive type, of mixed approach, quantitative and qualitative, used bearing in mind, on the one hand, quantitative evaluation of library services and the integration of Information Literacy in higher education, and, on the other hand, the qualitative systematization of the observations. This is a case study that looks at the Central Library of Eduardo Mondlane University, Mozambique.

This study used as a data collection tool: 2 questionnaires of closed questions, one for undergraduate students in general and another one for students in the 4th semester who underwent training in the library, aiming to identify differences between those who did and those who did not undergo training for Information Literacy; 1 semi-structured interview with the librarians who work in the studied library, aiming to know the conception and execution of Information Competency activities, in this case, with questions based on the models of development of education programs for Information Literacy of ACRL (2003) and MOFUS (2008), and on their professional skills; and also used direct observation to evaluate: the operation of the library, the process of training users, the attendance and the informational resources available in the information unit.

The method of analysis of results was the Bardin Content Analysis, being analyzed under three categories: 1) Overview of the informational competence of Mozambique; 2) central library and its services; 3) informational competence of students. This last category was based on the ACRL (2000) standards 1 and 3, to cover a) identification of information sources; b) use of resources and sources of information; c) criteria for evaluating sources of information.

**b) The technical dimension of informational competence: a study with reference librarians from Greater Florianópolis, SC**

This is an exploratory research of qualitative approach, using the bibliographical research to make a survey of the concept of technique and of Information Literacy. It is a research based on the 4 Dimensions of Competence in Information of Vitorino and Piantola (2011), highlighting the technical dimension. It has, as a research scenario, the university libraries of the Meso-region of Greater Florianópolis, coming only from Universities, according to the classification of MEC (Ministry of Education of Brazil), excluding universities, colleges and Federal Institutes of Education Science and Technology. The research subjects were reference librarians with at least three years of service, selected through an intentional sample and for convenience. The instrument used to collect data was the interview, aiming to gather information about the informational practice and the technical

dimension of Information Literacy. The results were analyzed based on the Content Analysis elaborated by Laurence Bardin , through seven categories, one of them being the technical dimension of the Competence in Information.

**c) Competence in information of graduates of the Librarianship course: an analysis in the Northeast region of Brazil**

The dissertation is a research of the descriptive type, which uses as a method of data collection the survey, in the questionnaire format and Likert scale. The questions were elaborated based on the ACRL (2000), through standards 1, 2, 3 and 5. The research scenario was the federal universities of the Brazilian Northeast and the subject of research the graduates of the librarianship courses of these universities. The sampling was intentional and, of the 382 graduates from 2004 to 2014, there were a total of 237 questionnaires totally answered. Analysis of the results was performed through the Bardin Content Analysis . The categories analyzed were: profile; necessities, identification of sources; resource selection strategies; evaluation of information; and legal aspects of information.

**d) The political dimension of Information Literacy: a study based on the informational needs of the elderly**

This dissertation deals with a qualitative approach to social research, using as a method of scientific support the Phenomenology in relation to the objectives and Theory of Social Representations regarding the results analysis. Data collection was first performed through a bibliographical research for the development of a theoretical reference, and later, in the field research, through a semi-structured interview. The target group was a group of 9 elderly people selected by random and intentional sampling, residents of the city of São José, Meso-region of Greater Florianópolis and attendees of the Elderly Care Center (CATI). Data analysis was performed using the Collective Subject Discourse Analysis technique, which makes the group of respondents representative of all individuals belonging to which they are attached (in this case, the elderly). It uses, as theoretical base, the reference framework of the 4 Dimensions of Information Literacy of Vitorino and Piantola (2011), emphasizing the political dimension.

**e) The ethical dimension of Information Literacy: the narrated experience of the librarians of the Federal Institute of Education, Science and Technology of Santa Catarina (IFSC)**

The dissertation is a research of both exploratory and descriptive type, with a qualitative approach, using as a method of scientific support the phenomenology. It has an initial bibliographical and documentary research for the construction of the theoretical reference. It is based on the 4 Dimensions of Information Literacy of Vitorino and Piantola (2011), emphasizing the ethical dimension. The research scenario was the libraries of the Federal

Institute of Education Science and Technology of Santa Catarina and the research subjects the librarians who work in these libraries. The choice of the sample was intentional and not probabilistic, being of a universe of 30 librarians, a total of 6 interviewed. The technique of data collection was the narrative interview. Data analysis was based on the phenomenological analysis based on ACRL Standard 5 (2000).

#### 4.1 Synthesis and Critical Evaluation

The thesis and selected essays showed uniformity in the use of qualitative approach to the study of competence in information despite taking the possibility of using quantifiable data as in the case of the survey and questionnaire of closed questions. This adoption of qualitative approaches may come from an understanding that Information Literacy can not be analyzed according to parameters, but that it is a type of competence that develops through the attitudes, skills and experience of the subject interacting with the informational universe.

The types of research adopted were, mainly, the exploratory research and the descriptive one because they looked to subjects little researched and to identify profiles and attitudes. This is because the research on Information Literacy in Brazil, although on the rise, still finds little expression in the daily practice of libraries, still focused on the traditional paradigms of user education.

A total of 3 researches had university libraries as locus, one in a Federal Institute library and one in the non-educational context, which would be the Center for Elderly Care. From the surveys, 2 turned to the librarian only as a target audience, while 1 sought to understand both listening to the librarian as a user, 2 understanding only one side of the information user. This major choice of academic environments may be due to the fact that there are consolidated instruments in the area of Information Literacy aimed at this public and the choice of 3 researchers to focus on identifying the opinions of librarians, should be linked to the need to identify actions related to the theme in the daily life of libraries.

Of the selected works, 4 used some type of interview, 2 used some type of questionnaire and 1 the observation as instrument of data collection. The chosen instruments demonstrate the need for researchers to better understand the relationship of subjects with Information Literacy through interview, and to identify the levels of Information Literacy of these subjects based on already consolidated models.

From the researches, 3 used Bardin's Content Analysis as an instrument of analysis of results, while 1 used the Discourse Analysis of the Collective Subject and 1 the Phenomenological Analysis. The choice of methods of data analysis was due to the need to categorize the results obtained, especially those that used Content Analysis, and methods of scientific support (such as Theory of Social Representations and Phenomenology).

Regarding the models of Information Literacy, three made use of the ACRL (2000) and 3 of the 4 Dimensions of Competence in Information of Vitorino and Piantola (2009). The use of ACRL standards is due to the fact that they offer performance indicators of skills related to Information Literacy, thus facilitating the systematization of results. The use of the Vitorino and Piantola (2009) dimensions is primarily due to the fact that the three dissertations are linked to the same line of research, and also because this framework offers a philosophical and educational reference on Information Literacy and applications.

## 5 Final Considerations

Information Literacy has become a conceptual benchmark for librarians in introducing information education into their work environments, teaching their public to access, evaluate and use information in a competent, independent and responsible manner.

To evaluate this process, models are developed, as well as conceptual frameworks, patterns, among other tools that allow information professionals to establish methods, techniques, products and training services users, and to identify their the Information Literacy.

The present research, through the technique of Systematic Review, carried out a survey of Brazilian Master's and Doctoral studies in the field of Information Science, which work on the theme in which the use of these tools is perceived, resulting in 5 works (1 thesis and 4 dissertations) defended between 2014 and 2018, which adopted models of Information Literacy as a fundamental part of their methodological procedures.

The main models adopted were the Information Literacy Compensation Standards for Higher Education (ACRL, 2000) and the 4 Dimensions of Competence in Information (VITORINO; PIANTOLA, 2011). The two models can be considered as resources that facilitate the research, since the first one offers a list of indicators of performance that an individual competent in information must present, while the second offers philosophical and educational subsidies for the creation of a conceptual framework on Information Literacy.

The results do not exclude the fact that other theses and dissertations, such as in the case of Passos (2015), have used models of Information Literacy in their methodological pathways or that other models, besides those found here, have been used in Brazilian research. These other documents were not only assisted by the criteria adopted.

This paper concludes by pointing out that the models of Information Literacy are considered essential for the development of research on the subject and serve as theoretical and methodological basis for the critique, interpretation and application of concepts and methods on Information Literacy.



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