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A ANÁLISE BIBLIOMÉTRICA APLICADA A ESTUDOS DE TEMÁTICA LGBT BIBLIOMETRIC ANALYSIS APPLIED TO STUDIES ON LGBT ISSUES

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#### **Abstract**

This article presents two studies whose object of analysis is the distinct aspects of the vulnerability of LGBT individuals. Besides the LGBT discussion, both share the same methodology, which is the examination of case studies, and the use of bibliometric analysis and integrative review to organize a theoretical framework. The question of method addressed in this work deals with the versatility bibliometric analysis may acquire once associated with qualitative methods. Furthermore, since one work is a corporative study and the other is an urban analysis case, we discuss how we can adapt quantitative methods for Architecture and Urbanism researches with a transdisciplinary nature and the differences between them. The application of bibliometric analysis and integrative review allowed us to observe, in both studies, the trends, gaps, and needs, and also improve the knowledge about the issue through case studies. Research findings demonstrate that, in transdisciplinary studies, quantitative methods have greater potential when associated with qualitative ones to produce more original content and add information to the existing bibliography.

**Palavras-chave:** Bibliometric analysis, Integrative review, Case study, LGBT vulnerability, Methods

### 1 Research context

The structure of this article relies on two distinct and transdisciplinary studies that deal with a single theme: the vulnerability of LGBT individuals<sup>1</sup>. Due to different social, cultural, and economic conditions, the LGBT community has a series of vulnerabilities, whether in the family environment, educational institutions, at work, or in everyday life. These vulnerabilities have different levels, which are reinforced by social markers such as gender, gender identity, color/ethnicity, class, religion, and age. Crenshaw (1991) coined intersectionality as an umbrella term widely used to highlight the importance of considering how these markers are connected within social fabrics, producing different experiences and vulnerabilities.

The first research analyses how the sexual orientation of gay cisgender<sup>2</sup> male individuals interferes with the development of their careers in the workplace. Findings show that sexual orientation can negatively impact the gay individual's career, particularly if he works at the operational level. Furthermore, individuals considered "effeminate" are more vulnerable to this interference. This article refers to this study as WORK RESEARCH.

The second study examines LGBT individuals in a more vulnerable context: young people, shortly after their traumatic departure from the parental home – usually by expulsion – without having yet achieved financial autonomy. These young people are thrown into a chain of events that deepen their vulnerability and can culminate in their homelessness. This recurring context has fostered the implementation of various initiatives and housing facilities for LGBT people by the public authorities and civil society. This study focuses on the case of the most visible solution in Brazil: the NGO Casa 1, an LGBT culture and housing/hospitality center. In this article, we refer to HOUSING RESEARCH.

Although both studies analyze some aspects of vulnerability, their developments have different contexts regarding the reality and experiences encountered by the LGBT community. We conducted the studies in different academic environments: the Work Research was carried out at the School of Engineering of the Fluminense Federal University (UFF) and is part of a professional master's degree in Social Responsibility Management. The Housing Research is part of an ongoing master's degree research of the Faculty of Architecture and Urbanism of the University of São Paulo (USP).

Besides the issue, both studies have also used the same methodology: the examination of case studies as well as the use of bibliometric analysis and integrative review to organize the theoretical framework.

The focus of this article, which is directly related to the discussion about the question of method, is to address how we can apply the same methodology to contemplate such different objectives. We intend to demonstrate how they can take advantage of the combination of methods from other areas. Furthermore, by comparing a corporate study with an urban study, we will reflect on the scope of methods not commonly used in this last field of research. In sum, how quantitative methods can be adapted to the area of architecture and urbanism and what differences they eventually may assume.

The article aims to demonstrate the contextualization of both studies regarding other works on the issue in Brazil and worldwide. Additionally, we seek to debate how qualitative analysis methods can associate with the production of quantitative data that corroborate and validate their references and, consequently, increase the scope of the research. By clarifying the methodological choice and demonstrating its application, we could observe the different panoramas achieved for each of the associated researches. We will highlight the use of the methodology in the Housing Research as it is inserted in the Architecture and Urbanism field. Finally, the concern with the ethics present in the research and the results achieved by the methodologies.

## 2 The methodological choice

We can employ several methods to systematize the previous academic production. Bibliometrics, for example, is widely used in scientific researches for quantitative analysis. In Applied Social Sciences, bibliometric analysis "focuses on examining the production of articles in a given field of knowledge, mapping academic communities, and identifying the networks of researchers and their motivations" (Chueke and Amatucci, 2015, p. 2, our translation). The statistical data from this type of study can be used to identify trends, existing gaps, location of the studies, and identification of requirements for future researches. Finally, it measures the contribution of current research to a specific field of knowledge (Soares et al., 2016; Su and Lee, 2010).

Both studies aimed to identify the panorama of the academic production regarding the issue in national and international bibliography, obtain more relevant sources, and produce more original works. However, the numerical systematization of the produced literature has limitations due to the multidisciplinary nature of the discussion. The bibliometric analysis itself is not sufficient to interpret the data obtained. Rather, it is a support method for carrying out other substantial studies. Then, it is necessary to consider the sociohistorical context of each scientific production and associate bibliometric analysis with qualitative methods (Araújo, 2006; Silva, Hayashi and Hayashi, 2011).

We also carried out an integrative literature review. This method enables the combination and integration of data from diverse theoretical and empirical studies based on different methodologies. From the synthesis of the results, we can reduce the uncertainties on the practical recommendations for the research, and identify the gaps that need to be filled in future studies. Mendes, Silveira, and Galvão (2008, p. 759, our translation) identify as steps for the research method completion: (1) the settlement of the research question; (2) the criteria for the search and selection of the sample; (3) the categorization of the studies for data collection; (4) the evaluation of the selected studies; (5) the interpretation of the results (discussion of the collected data, recommendations, future suggestions); and (6) the synthesis of the knowledge.

Descriptive analyses are part of studies that adopt bibliometrics as a method but they are not the main object (Chueke and Amatucci, 2015). Thus, we used bibliometrics and integrative review methods in both studies seeking to bring new perspectives and proving information for future researchers. Nevertheless, in both cases, we achieved innovation by applying the case study method.

## 3 Applying the methods

The bibliographic analyses of the Work and Housing researches were conducted by following the steps suggested by Chueke and Amatucci (2015) and Mendes, Silveira, and Galvão (2008). In this case, we are using Housing Research as an example because of its urban aspect: :

- 1 Research question/protocol: which are the ongoing studies on LGBT in vulnerability and which are the solutions addressed to housing issues?
- 2 Search criteria/Relevance: aiming to answer the research question, we applied a set of keywords and Boolean connectors in the most extensive databases, which provided a sum of thousands of articles. We applied filters by the existing thematic areas of the bases to achieve the objective of the research.
- 3 Categorization/Evaluation of the studies: we observed the main lines of research (aspects of the vulnerability of LGBT youth; characteristics of care services; recommendations and solutions) by defining the information extracted from the studies. After the exploratory reading of titles, authors, affiliations, and abstracts of all the results obtained, we selected the most relevant articles and studies to reduce the sample and enable its full reading.

- 4 Evaluation / Synthesis of the selected studies: we analyzed the directions, methods used, data sampling, common references, results obtained, and scope of the selected studies by reading all the material. We discarded studies that were similar or had used the same sources of more complex researches.
- 5 Interpretation / Integration of results: the integration of the results allowed us to identify the main directions (the needs of the vulnerable LGBT population; the importance of considering intersectionality; the recommendations and impasses of the existing services) and the research gaps (focusing on the services rather than the spaces that host them).
- 6 We incorporated the synthesis obtained by the review to the research, directly influencing its objectives and directions.

For the bibliometric analysis and integrative literature review, we accessed the databases of ISI Web of Science, Scopus, and SciELO journals through the CAPES portal, a digital library financed by the Brazilian government. They were chosen based on their representativeness, scope, and academic evaluation. The data collection of the Housing Research covered all the years available in the databases, prioritizing the most recent materials for the analysis. For the Work Research, on the other hand, we filtered the results for the past five years.

We also used the KDD<sup>3</sup> (Knowledge Discovery in Databases) method to process the information obtained. It includes (Passos and Goldshchmidt, 2005):

- 1 Pre-processing: capturing, organizing and processing data for data mining;
- 2 Data Mining: the effective search for useful information in databases;
- 3 Post-processing: interpretation of the information found in databases.

For obtaining results strictly connected to the researches and their questions, the bibliometric analysis started from articles indexed in the databases using the combination pattern of terminologies (in English and Portuguese) and Boolean connectors (OR; AND). Both studies applied filters by thematic areas to ensure valid datasets due to the expressive number of articles found. Tables 1 and 2 below show a systematization of these searches.

Connectors Keywords		Found researchs				
			SciELO	Scopus	Web of Science	Total
	Gay	red				
AND	Career	unfiltered	428	463	529	1420
OR	Gay					
AND	Carreira	filtered	167	123	41	331
OR	Gay identity					
OR	ldentidade gay					
OR	Diversity Policies	selected	16	4	4	24
OR	Políticas de diversidade					

Table 1: Work Research systematization. Source: Authors, 2016.

Connectors	Keywords	Found Researchs				
			SciELO	Scopus	Web of Science	Total
	LGBT	unfiltered	50	222	1990	2262
OR	LGBTQ	ıJun				
OR	LGBTI	filtered	0	156	1080	1236
AND	Housing					
OR	Homeless	Selected	0	14	15	29
OR	Moradia					

 Table 2: Housing Research systematization. Source: Authors, 2019.

The use of bibliometric analysis enabled to observe:

1 The topicality of the themes: both studies resulted in a robust recent production (the last five years);

- 2 The most common study categories: social sciences fields for Work Research and social sciences, education, and psychology for Housing Research;
- 3 The location: most of the studies were from Anglo-Saxon countries (mainly the United States, Canada, and the United Kingdom). However, during the post-processing, Work Research mined 24 articles, in which 14 were from or published in Brazil and 2 others in Latin America. Bibliometrics express the relevance of considering the national and Latin American context regarding the undertaken study;
- 4 QThe role of Brazil in the fields: Work Research found important Brazilian studies, demonstrating maturity of the organizational diversity issue in the country, as for Housing Research. We only used one out of 34 Brazilian articles indexed on Scopus since most were in health areas;
- 5 The gap in SciELO's database: the base represented an expressive percentage of the bibliometric analysis conducted in the Work Research. However, in Housing Research, the database did not point out any result on the association between housing and the LGBT community. We searched on Google Scholar to analyze Brazilian production about the issue, which found 8 results including articles and theses. We only used a master thesis from those results;
- 6 The metrics: we were able to analyze studies from journals with higher metrics as well as the most cited studies and authors, and the most recent data;
- 7 Obtaining other references: the Housing Research used 4 other studies cited in the indexed articles;

For data mining, we carried out an exploratory reading of all abstracts and selected the studies that were closest to the research objective. After this selection, we read all articles and, finally, selected the titles for the post-processing analysis and organization of the theoretical framework.

The final selection facilitated the analysis of the quality of the articles. According to the criteria defined by Qualis (Brazilian metrics), the grades of the articles regarding the Work Research were: 11 articles A1/A2 (highest rates), 5 articles B1 (intermediate), 2 articles B2/B3 (lower rates) and 6 articles non-identified. Demonstrating the topicality of the theme: from 33 titles of Housing Research, 51% (17) date from the last three years (2017-2019), and 85% (28) from the last six years (2014-2019). In this study, the databases corresponded to 45% (15 items in Web of Science), 42% (14 items in Scopus) and 12% (4 items cited in other articles in databases).

The use of bibliometric analysis to collect references has also limitations. Studies often refer to counting citations, references and metrics as if they were synonymous with scientific value. This type of analysis disregards the fact that well-cited authors are not necessarily the most innovative ones. Other variables may be out of the researcher's control, such as the lack of important information in documents, which hampers their finding. Some variables depend on the researcher's knowledge and experience regarding the use of the methods and research field (Silva, Hayashi, and Hayashi, 2011). For example, the choice of keywords is essential for the method results. If the method returns a few relevant results, it is better to change the terms or use another database (Gray, 2009). The Housing Research could only show more results when we included the term 'homeless' since this issue is an already widely developed research field. We can also highlight that the lack of results in the Latin American Scielo database could have been solved through the use of other keywords.

The local context is also an important factor for social science and humanities researches. The analysis of citations may not be adequate for studies in these fields since databases such as Scopus and Web of Science may under-represent studies from countries like Brazil (Vieira, 2013). This may explain why the initial search of the Housing Research resulted in a single Brazilian article, found on Scopus (authored by Campos and Moretti-Pires, 2018).

# 3.1 Work research: gays at the corporate level

The human rights violation regarding the LGBT population has led the International Labor Organization (ILO), the United Nations (UN), and several companies to promote decent work for that community. The Work Research aims to analyze whether sexual orientation interferes with the development of the career of Gay individuals in their workplace (Oliveira, 2017).

Aiming at an in-depth analysis of the career of gay individuals, the Work Research adopted a qualitative method with an inductive approach (Gray, 2009). We followed the case study method with the use of convenience samples, whose unit of analysis was the gay individual. The qualitative research allowed us to deepen our understanding of the mentioned social group and focus on the quality of information rather than

the numerical data involving large populations through, for example, forms and censuses (Miles and Huberman, 1994; Zanelli, 2002).

We conducted semi-structured interviews as the main form of data collection to understand the individuals' experiences in their workplace and also their perceptions about the impacts of sexual orientation on professional development. We adopted the convenience sampling strategy according to delimiting criteria: cisgender gay men and active employees of organizations that adopt Social Responsibility policies and practices. Due to the face-to-face interviews, these men should reside in the cities of Rio de Janeiro and São Paulo, metropolises that are not very distant from each other and which concentrate a large number of companies.

The sample was composed of 10 professionals, aged between 25 and 45, working in segments predominantly marked by the male workforce. Two other interviewees who were invited at the beginning of the research gave up during the process and reported discomfort in giving interviews about the issue. The difficulty of prospecting interviewees, especially black men (the two dropouts were from black men), was a limiting factor for the research. Complementarily, we interviewed three reference professionals on the diversity theme to investigate the best practices for promoting the professional development of gay individuals in the national context.

Findings show that the practices adopted by private companies, predominantly multinationals, have considerable advantages concerning to the inclusion of the homosexual worker. The Brazilian initiative LGBT Rights Companies Forum represents an organizational and strategic advance for the theme in the national context. However, from the interviewees' experiences, it is possible to assess that sexual orientation can impact their career, particularly if they work at the operational level. Furthermore, individuals considered 'effeminate' are more vulnerable to this interference (Oliveira, 2017).

We also identified the challenges and best practices regarding the guarantee and promotion of LGBT rights in the work environment. Additionally, we recognized the necessity of new researches to map the career problems faced by this community. The study allowed us to create a flow chart of critical elements whose purpose is to improve organizational practices to encourage a pro-diversity culture.

The case study method contributed to the research results because it explores the theme within a very specific range of people, organizations, and contexts, which, consequently, tends to focus on collecting up-to-date information. Besides the interviews, we obtained documentary evidence through public access information from the companies where the interviewees work (sustainability report, codes of conduct and/or ethics, clipping, etc.). The collection of secondary data through reference documents from Civil Society Organizations (CSOs) regarding the LGBT movement, as well as the International Labor Organization (ILO), directly contributed to the research findings due to the topicality of the theme. The methodologies of bibliometric analysis and integrative literature review were fundamental and influenced the subsequent methodological choices. They facilitated the identification of the already existing corporation practices analyzed by international literature, as well as the gaps in national studies, even though the country has organizations that adopt good practices in Social Responsibility.

# 3.2 Housing research: territorialities and housing solutions for the LGBT community

The synthesis of the results obtained by bibliometrics and integrative review enabled the Housing Research to carry out qualitative analyses regarding the material found. Countries such as the United States, the United Kingdom, and Canada produce a vast number of studies regarding LGBT vulnerabilities and shelter services for homeless youths. In general, the studies have three well-defined research lines:

- 1 The most in-depth line shows the different dimensions of segregation faced by LGBT people, and the need for housing and specific social services to assist this community. These studies are about the vulnerabilities of homeless youths and LGBT elderly people<sup>4</sup>;
- 2 The necessity of an intersectional analysis of the theme, considering markers such as race, ethnicity, financial situation, and gender for addressing the needs of vulnerable LGBT youths;
  - 3 The qualitative analysis of the services for this community, existing initiatives, and their results.

From the identification of the main directions, it is also possible to observe gaps in the literature. We identified few studies correlating the LGBT community and housing in the Urban Studies category. There is also a gap regarding the spatial analysis of the facilities that host the services and their socio-spatial relationships: the studies explain the facility as a social service, not as a territory that creates and participates in important dynamics.

With these findings, we drew a chart correlating the research objectives with the materials to be analyzed and methods to be followed, which established the real utility of a particular method for the research. Yin (2009) highlights six main data sources for case studies and their strengths and weaknesses: documentation, archival records, interviews, direct observation, participant-observations, and physical artifacts<sup>5</sup>.

To achieve the objectives, the analysis of the Casa 1 case study adopted an exploratory approach by using qualitative analysis as well as several data collection methods. Ethnographic methods were essential for the Housing Research as well as the interdisciplinary sources from the bibliographic review and document analysis (institutional material). The participation of the author as a Casa 1 volunteer during the empirical observation allowed his immersion in the spatial dynamics produced by the NGO. The main objective was to relate the experience of Casa 1 with the strengthening of its ties within neighbors, the establishment of a network of action (with the militancy, public or private services, and companies), and development of an LGBT enclave in the neighborhood.

Table 3 presents a description of the materials and methods used to achieve the proposed objectives. The color gradient represents the relevance of the method (the darker colors represent the higher importance levels).

AIM 1	METHODS			
Analyse the facilities which compose the NGO, its typology, relationship with the neighbourhood,	Analysis of Institutional Material present in NGO's social networks and websites, as well as the speeches about the NGO produced in its managers' social networks.			
routine, successes and drawbacks.	<b>Physical mapping</b> of the three facilities that compose the NGO (the House, the Cultural Centre and the Social Clinic).			
Related material: theorical references, speeches produced by the	Observation/ Ethnography: field work, academic events at the NGC and a field research diary produced by one of the authors who was a volunteer in Casa 1.			
NGO and its organisers, and empirical observation.	Semi-structured interviews and surveys with several agents involved in the NGO dynamics.			
AIM 2	METHODS			
Provide an overview of territory changes and analyse the possible formation of an LGBT	Semi-structured interviews and surveys: inclusion of questions regarding the changes occurred after the Casa 1 establishment.			
enclave in the neighbourhood.	<b>Observation/ Ethnography:</b> the research journal also seeks to observe territorial dynamics.			
Related material: lists of former residents and those participating in activities, empirical observation in order to verify the NGO	Analysis of Territory and the NGO's Repercussion: in academic research, press articles, websites, and social networks. Issues related to the territory, social movements in the region, social assistance and cultural facilities and the relationship of Casa 1 with these agents.			
capacity to group its former residents in the neighbourhood.	<b>Graphs and Maps production</b> as a method of visualizing the network built since Casa 1 was implanted. Show where the former residents are and how Casa 1 relates with other spaces and services in the region.			
AIMS 3 AND 4	METHODS			
3. Contribute to literature by placing diversity under architecture and urbanism's perspective. 4. Subsidize LGBT public housing policies in Brazil by presenting an existing solution.	Review of literature and other references connecting the othe methods to research topics such as gender, LGBT movement and LGBT homeless population. Also analysing existing LGBT movemen agendas, public or private initiatives underway in Brazil, as well as housing experiences for LGBTs across the world.			
Related material: to identify gaps and possibilities in the literature, as well as to	Semi-structured interviews: inclusion of questions regarding the NGO managers' perceptions of existing public policies, the reason why the NGO has not yet attempted its inclusion in a public notice and whether there is a claim for such.			
create data able to raise guidelines or even subsidize public policies.	<b>Field visits</b> to public facilities of the social care policy in order to verify the differences in operation and the contractual requirements for carrying out the supporting services for homeless people.			

Table 3: Correlation between objectives, materials, and methods used in the Housing Research. Source: Authors, 2020.

The study produced photographic and architectural surveys, sketches, and maps from these data sources and methods. Figures 1 and 2 show examples of the material produced.



**Fig. 1**: October 2019. The photo shows a queue of homeless people awaiting assistance at the NGO. We developed a photographic survey during our volunteering routine. Source: Authors, 2019.



**Fig. 2**: Architectural survey of one of the NGO's facilities. Immersion allows greater access to its areas and the possibility of more lengthy and assertive surveys. Source: Authors, 2019.

Another important source of analysis was the field research diary. To act in a more natural and less invasive way, we used a cell phone text app to produce the records, as shown in Figure 3.

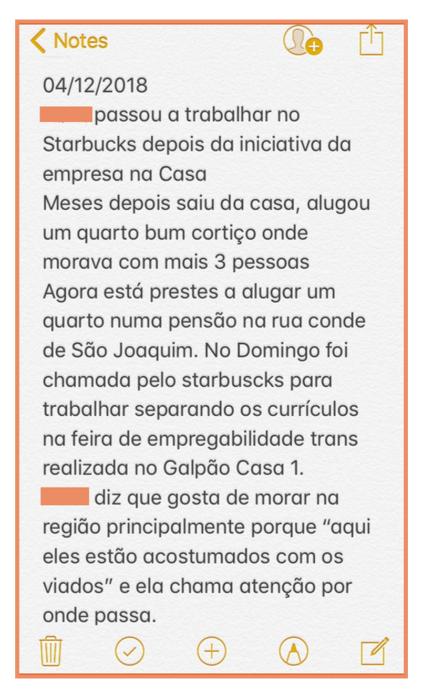


Fig. 3: Print screen of a field diary record produced by a text editor app. Source: Authors, 2018.

From the set of materials and methods, we recognize that the NGO has a territorial impact on the neighborhood and it is leading to an alliance between several vulnerable groups such as LGBT people, the homeless, militant movements, and even low-income children. Casa 1 organizes a process of resistance and strengthening of these groups in Bixiga, an inner-city neighborhood of São Paulo (Duarte, 2018; Duarte and Cymbalista, 2019).

The methods of bibliometric analysis and integrative review were essential to define the objectives of research that could fill the gaps in the literature. They also allowed us to identify the solutions considered as promising by previous literature and recognize the similarities and differences between Casa 1 and these solutions.

# 3.3 Research ethics

Ethical evaluation is a constantly neglected aspect of the Architecture and Urbanism field research. Brazil has a recognized system of research ethical evaluation involving human beings, formed by the National Research Ethics Commission (*Comissão Nacional de Ética em Pesquisa* - CONEP) and other Research Ethics Committees (*Comitês de Ética em Pesquisa* - CEP) spread throughout the country (Amorim, 2019). As both studies deal with human beings, we submitted their proposals to the respective CEPs through the Plataforma Brasil tool. Only after their approval, we were able to conduct the interviews and questionnaires. For the Housing Research, we had to request an authorization to Casa 1 to conduct the study on its facilities. Regarding the interviews, we requested the participants to sign the Free and Informed Consent Form (IC),

guaranteeing their privacy and anonymity, and also the professional handling of the data obtained by the responsible researchers.

### 4 Final considerations

The application of bibliometric analysis and integrative review facilitated, in both studies, the identification of the trends and gaps regarding the current issues and their further development through case studies. The data collected by these methods allows new research in Architecture and Urbanism to contribute in more original ways to the development of those specific themes.

However, the interdisciplinary nature of some Architecture and Urbanism researches requires the association of different methods. It is not possible to think about this kind of research without a socio-historical context of the studied environment, which is the point that holds the biggest limits for capturing references. Their results often consider the most cited published studies and not necessarily the most innovative ones. Furthermore, we need to be careful when dealing with databases. Besides the choice of the keywords, we have to keep in mind we may not find the most recent and original studies from local contexts in the results. Thus, it may be necessary to carry out the analysis of other types of sources, such as thesis and institutional material.

In this article, we compared two studies conducted in very different contexts. The Work Research integrates a current issue for Brazil and other Latin American countries. Thus, it was possible to deepen, through the case study methods, particular aspects not yet developed in Brazilian research, as demonstrated by bibliometric analysis and integrative review.

The Housing Research, which consists of an interdisciplinary approach for the Architecture and Urbanism field, differs from the Work Research because of the use of some methods. The bibliometric analysis and integrative review allowed us to reasonably identify which aspects need to improve regarding housing for vulnerable LGBT people in general. By inserting the research into the urban studies field and adopting the case study methods, we were able to expand the use of data sources, such as documentation, file records, interviews, observation, and spatial analyses.

The question of method addresses the possible versatility of bibliometric analysis and integrative review. However, we achieve this potential at its best when these methods are associated with others, especially in the case of transdisciplinary fields, such as Architecture and Urbanism. The findings indicate that it is possible can combine quantitative methods with qualitative analysis – even with those whose units of analysis are individuals or organizations – to produce more original data and corroborate the incorporation of information to the existing bibliography.

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# References

Amorim, K. P. C., 2019. Ética em pesquisa no sistema CEP-CONEP brasileiro: reflexões necessárias. *Cien. Saude Colet.* 24, p. 1033-1040. Available at: <a href="http://www.scielo.br/scielo.php?script=sci">http://www.scielo.br/scielo.php?script=sci</a> arttext&pid=S1413-81232019000301033&tlng=pt. Accessed: 1 Feb. 2020.

Araújo, C. A. de Á., 2006. Bibliometria: evolução histórica e questões atuais. *Em Questão* 12, p. 11-32. Available at: <a href="https://seer.ufrgs.br/EmQuestao/article/view/16">https://seer.ufrgs.br/EmQuestao/article/view/16</a> Accessed: 20 Apr. 2020.

Campos, D. A. de, Moretti-Pires, R. O., 2018. Trajetórias sociais de gays e lésbicas moradores de rua de Florianópolis (SC), 2016. *Rev. Estud. Fem.* 26, pp. 1-16. Available at: <a href="https://periodicos.ufsc.br/index.php/ref/article/view/45995/37108">https://periodicos.ufsc.br/index.php/ref/article/view/45995/37108</a>. Accessed: 25 Oct. 2019.

Chueke, G. V., Amatucci, M., 2015. O que é bibliometria? Uma introdução ao Fórum. *Rev. Eletrônica Negócios Int.* 10, p. 1-5. Available at: <a href="https://internext.espm.br/internext/article/view/330">https://internext.espm.br/internext/article/view/330</a>. Accessed: 10 Oct. 2019.

Crenshaw, K. W., 1991. Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Rev.* 32, pp. 1241-1299.

Duarte, A. de S., 2018. A Casa 1 e a resistência à gentrificação em São Paulo. In: Cymbalista, R., Silva, G. (Eds.), Seminário Internacional Gentrificação: Medir, Prevenir, Enfrentar. São Paulo, pp. 1-12. *Proceedings...* Available at: <a href="http://outrosurbanismos.fau.usp.br">http://outrosurbanismos.fau.usp.br</a>. Accessed: 10 Jan. 2020.

Duarte, A. de S., Cymbalista, R., 2019. Não só moradia: a Casa 1, suas estratégias espaciais, e o fortalecimento da vizinhança em diálogo com a militância LGBT. In: VIII ENANPUR. Associação Nacional de Pós-Graduação e Pesquisa em Planejamento Urbano e Regional, Natal. *Proceedings...* Available at: <a href="http://outrosurbanismos.fau.usp.br">http://outrosurbanismos.fau.usp.br</a>. Accessed: 10 Jan. 2020.

Gray, D. E., 2009. Doing research in the real world, 2nd ed. Sage Publications, Thousand Oaks, California.

Mendes, K. D. S., Silveira, R. C. de C. P., Galvão, C. M., 2008. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Context. Enferm.* 17, pp. 758-764. Available at: <a href="http://www.scielo.br/scielo.php?script=sci">http://www.scielo.br/scielo.php?script=sci</a> arttext&pid=S0104-07072008000400018&Ing=pt&tIng=pt. Accessed: 2 Oct. 2019.

Miles, M. B., Huberman, A. M., 1994. *Qualitative data analysis*: An expanded sourcebook, 2nd ed. Sage Publications, Thousand Oaks, California.

Norton, M. J., 1999. Knowledge Discovery in databases. Libr. Trends 48, pp. 9-21.

Oliveira, I. G. de, 2017. A diversidade na dinâmica social corporativa: um estudo de caso sobre o desenvolvimento da carreira do indivíduo gay nas organizações contemporâneas. Msc. Thesis, Universidade Federal Fluminense, Niterói. Available at: <a href="https://app.uff.br/riuff/handle/1/5814">https://app.uff.br/riuff/handle/1/5814</a>. Accessed: 10 Jan. 2020.

Passos, E., Goldshchmidt, R., 2005. Data mining: Um guia prático. Rio de Janeiro: Elsevier.

Silva, M. R. da, Hayashi, C. R. M., Hayashi, M. C. P. I., 2011. Análise bibliométrica e cientométrica: desafios para especialistas que atuam no campo. *InCID Rev. Ciência da Informação e Doc.* 2, pp. 110-129. Available at: <a href="http://www.revistas.usp.br/incid/article/view/42337">http://www.revistas.usp.br/incid/article/view/42337</a>. Accessed: 20 Apr. 2020.

Soares, P.B., Carneiro, T.C.J., Calmon, J.L., Castro, L.O. da C. de O., 2016. Análise bibliométrica da produção científica brasileira sobre Tecnologia de Construção e Edificações na base de dados Web of Science. *Ambient. Construído* 16, pp. 175-185. Available at: <a href="http://www.scielo.br/scielo.php?script=sci">http://www.scielo.br/scielo.php?script=sci</a> arttext&pid=S1678-86212016000100175&lng=pt&tlng=pt. Accessed: 10 Sep. 2019.

Su, H. N., Lee, P. C., 2010. Mapping knowledge structure by keyword co-occurrence: a first look at journal papers in Technology Foresight. *Scientometrics* 85, p. 65-79. Available at: <a href="http://link.springer.com/10.1007/s11192-010-0259-8">http://link.springer.com/10.1007/s11192-010-0259-8</a>. Accessed: 10 Sep. 2019.

Vieira, E. de S., 2013. Indicadores bibliométricos de desempenho científico: estudo da aplicação de indicadores na avaliação individual do desempenho científico. PhD thesis, Universidade do Porto, Porto.

Yin, R.K., 2009. *Case study research*: design and methods, 4th ed. Sage Publications, Thousand Oaks, California.

Zanelli, J.C., 2002. Pesquisa qualitativa em estudos da gestão de pessoas. *Estud. Psicol.* 7, pp. 79-88. Available at: <a href="http://www.scielo.br/scielo.php?script=sci">http://www.scielo.br/scielo.php?script=sci</a> arttext&pid=S1413-294X2002000300009&Ing=pt&tlng=pt. Accessed: 20 Dec. 2019.

- **1** LGBT is the acronym to Lesbian, Gays, Bisexual and Transgender people. Although it does not include all sexual and gender minorities, this is the commonly used term in Brazil. The international bibliography employs further acronyms such as LGBTQ, LGBTI, and LGBT+.
- **2** Cisgender is the term used to refer to individuals whose gender identity corresponds to the gender assigned to them at birth. E.g. a cisgender man is someone who identifies himself as a man and was designated as a man at birth. In contrast, someone who identifies himself as a man but was designated a woman at birth is a transgender man.
- **3**KDD can be understood as a process that discovers new relations, patterns, and trends through the analysis of large sets of stored data. This process relies on recognition technologies that use statistical and mathematical patterns and techniques (Norton, 1999).

- **4** The international literature demonstrates the invisibility of LGBT elderly people as well as the importance of thinking about specific services and facilities for the hospitality/housing of this community.
- **5** Physical artifacts are tools, works of art, or any other physical evidence that can be collected or observed (Yin, 2009).