ARTICLES

THE STREET-LEVEL BUREAUCRACY RESEARCH AGENDA IN THE PANDEMIC CONTEXT: AN INTEGRATIVE REVIEW

A agenda de pesquisa da burocracia de nível de rua no contexto da pandemia: uma revisão integrativa

La agenda de investigación sobre la burocracia a nivel de la pública en el contexto de la pandemia: una revisión integrativa

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ABSTRACT

The implementation of public policies during crises situations, particularly at the street level where interactions between the state and the citizen occur, remains a sparsely studied area. The COVID-19 pandemic significantly affected the autonomy of street-level bureaucrats influenced by organizational and relational factors. This study explores the literature available in the Web of Science database on street-level bureaucracy during the pandemic through an integrative review, seeking to understand the crisis' influence on policy implementation at the street level. Additionally, the use of software, specifically the VOSviewer 1.6.17, is examined to understand its contribution to data analysis, pointing out its advantages and limitations. The main results revealed that crisis contexts, such as the pandemic, profoundly influence the implementation of public policies at the street level with negative impacts on user services. While this research has limitations due to the limited number of analyzed data, it contributes to a better understanding of the influences of crises on the street-level implementation of public policies. Furthermore, future investigations should explore the emotional consequences experienced by street-level bureaucrats and examine the approach taken during crises by professionals who regularly deal with emergency situations, such as firefighters and ambulance crews.

Keywords: street-level bureaucrats, discretion, COVID-19, crisis, integrative review.

RESUMO

A implementação das políticas públicas em situações de crise é um campo de estudo escasso, sobretudo no nível de rua, em que há a interação entre o Estado e o cidadão. A pandemia enquanto crise afetou a autonomia dos profissionais da linha de frente e moldou seu comportamento, sobretudo por fatores organizacionais e relacionais. Dessa forma, o estudo explora a agenda de pesquisa no contexto da pandemia disponível na base de dados da Web of Science, buscando compreender a sua influência para a implementação das políticas públicas no nível de rua, utilizando para esse fim o método de revisão integrativa. Adicionalmente, empreendeu-se entender de que forma o uso de softwares contribui com a análise dos dados, apontando suas vantagens e limitações. Para isso, utilizou-se o VOSviewer 1.6.17. Os principais resultados revelaram que contextos de crise como a pandemia influenciam profundamente a implementação das políticas públicas no nível de rua com impactos negativos para o atendimento do usuário. O trabalho possui limitações do recorte definido, que carece de avanços no número de dados analisados, mas contribui para a melhor compreensão da influência das crises para a implementação no nível de rua. Indicam-se investigações sobre as consequências emocionais da linha de frente e a abordagem da atuação durante a crise dos profissionais que lidam diariamente com situações de emergência, como os bombeiros e os profissionais de veículos móveis das redes de urgência e emergência médicas.
Palavras-chave: *burocratas de nível de rua, discricionariedade, Covid-19, crise, revisão.*

RESUMEN

La implementación de políticas públicas en situaciones de crisis es un campo de estudio escaso, especialmente a nivel de calle donde existe interacción entre el Estado y el ciudadano. La pandemia como crisis afectó la autonomía de los profesionales de primera línea y moldeó su comportamiento, especialmente influenciado por factores organizativos y relacionales. De esta forma, el estudio explora la agenda de investigación en el contexto de la pandemia, disponible em la base de datos Web of Science, buscando comprender su influencia en la implementación a pie de calle, utilizando para ello el método de revisión integradora. Adicionalmente, se intenta comprender cómo el uso de software contribuye al análisis de datos, señalando sus ventajas y limitaciones. Para ello se utilizó VOSviewer 1.6.17. Los principales resultados revelaron que contextos de crisis como la pandemia influyen profundamente en la implementación a pie de calle con impactos negativos en la atención al usuario. El trabajo tiene limitaciones del corte definido, que carecen de avances en la cantidad de datos analizados, pero contribuye a una mejor comprensión de las influencias de las crisis para la implementación a pie de calle. Se indican investigaciones sobre las consecuencias emocionales de la primera línea y el planteamiento de actuación durante la crisis de los profesionales que atienden a diario situaciones de emergencia como los bomberos y los vehículos móviles de la red de emergencias y emergencias médicas.
Palabras clave: *burócratas de nivel de calle, discreción, COVID-19, crisis, revisión.*

INTRODUCTION

The implementation of public policies in everyday situations is a field of study with restricted research space compared to investigations on the agenda, formulation, decision-making, and evaluation (Lotta et al., 2018). The scarcity of research addressing the dialogue between the policy implementation's theoretical foundation and the empirical cases of the most varied sectoral public areas represents a gap in the field of study (Lotta, 2008, 2010; Cavalcanti, Lotta, & Pires, 2018; Lotta et al., 2018). , 2021; Gofen & Lotta, 2021; Lotta et al., 2021).

Professionals working on the front line of public service delivery – the street-level bureaucrats – are the core of policy implementation. As they operate with discretion when in contact with citizens, they modify the policy locally and, therefore, can be considered policymakers (Ferreira & Medeiros, 2016; Lima-Silva, Sandim, Magri, & Lotta, 2020). In the literature that addresses these public agents, other expressions synonymous with street-level bureaucrats are found: implementation agents (Cavalcanti et al., 2018), frontline bureaucrats (Ferreira & Medeiros, 2016), or implementers (Lima & D'Ascenzi, 2017). This work will use "street-level bureaucrats," or SLBs, to encompass all these titles.

The COVID-19 pandemic (Christensen & Lægreid, 2020) revealed the crucial role of SLBs when confronted with limited resources to provide services and ensure citizen protection. In this scenario, their work environment and routines change, while government responses are ambiguous and grant them greater autonomy of action (Cox, Dickson, & Marier, 2021; Davidovitz, Cohen, & Gofen, 2021; Meza, Pérez-Chiqués, Campos, & Varela Castro, 2021). SLBs' actions are typically defined by formal and informal rules, which normally impose restrictions. However, these professionals experienced the contrary during the pandemic, as policy changes expanded their limits of action (Malandrino & Sager, 2021; Pérez-Chiqués et al., 2021).

The pandemic affected not only the SLBs' autonomy but also their behavior (Christensen & Lægreid, 2020; Lima-Silva et al., 2020; Oliveira, Barabashev, Tapscott, Thompson, & Qian, 2021; Gofen, Lotta, & Marchesini da Costa, 2021). They developed new coping strategies (Lotta et al., 2018) and assumed different roles as resource rationing became the primary determinant in service provision (Meza et al., 2021). These behavioral changes were influenced by various organizational factors, including altered rules, resource availability, incentives, and knowledge (Lotta, 2010; Bonelli, Fernandes, Coêlho, & Palmeira, 2019). Furthermore, the relationships and interactions between SLBs and service users were profoundly affected by the pandemic, highlighting the bureaucrats' motivation and willingness to deliver the services despite the uncertainties and fear of virus transmission (Malandrino & Sager, 2021; Meza et al., 2021; Pérez-Chiqués et al., 2021).

This quantitative and qualitative study explored the research agenda in the pandemic context, using the integrative review method to understand the influences of the crisis on SLBs (Botelho, Cunha, & Macedo, 2011). The statistical-quantitative bibliometric technique was adopted (Araújo, 2006), applying analytical categories explained in the next section.

The texts were read in their entirety from the perspective of the crisis and its influence on three analytical categories: the space for discretion, the coping strategies, and the roles played.

The first category measures the extent of the professionals' decisions when serving users, i.e., their autonomy (Hupe & Hill, 2007). The second analyzes the influence of formal and informal rules, incentives, and resources on discretionary behavior. Finally, the third category evaluates the interaction and relationships between professionals and users (Lotta, 2010; Bonelli et al., 2019).

The software utilized for this study was VOSViewer 1.6.17, chosen due to its compatibility with the files generated by the data source. The study examined the software's contribution to data analysis, highlighting both its advantages and limitations. This research sought to enhance the analysis of street-level bureaucracies in crisis contexts, contributing to the existing literature in this field (Henderson, 2014; Lima-Silva et al., 2020).

Following this introduction establishing the theme and objectives, the subsequent section presents the research methodology, characteristics, and limitations. The following section outlines the results and discussion, presenting the contributions to the field of study on street-level bureaucracy in the context of a crisis. Finally, the last section concludes the article and offers recommendations for future research.

METHODOLOGY

This study carries out an integrative literature review to explore the research agenda related to street-level bureaucracy in crisis contexts, such as the COVID-19 pandemic. The search was conducted for articles that simultaneously addressed the pandemic and street-level bureaucracy, utilizing the Web of Science database accessed through the platform *Periódicos* of the Brazilian agency Capes – Coordination for the Improvement of Higher Education Personnel. The integrative review follows the structure of a systematic review and incorporates studies that utilize both quantitative and qualitative methods (De-la-Torre-Ugarte-Guanilo, Takahashi, & Bertolozzi, 2011).
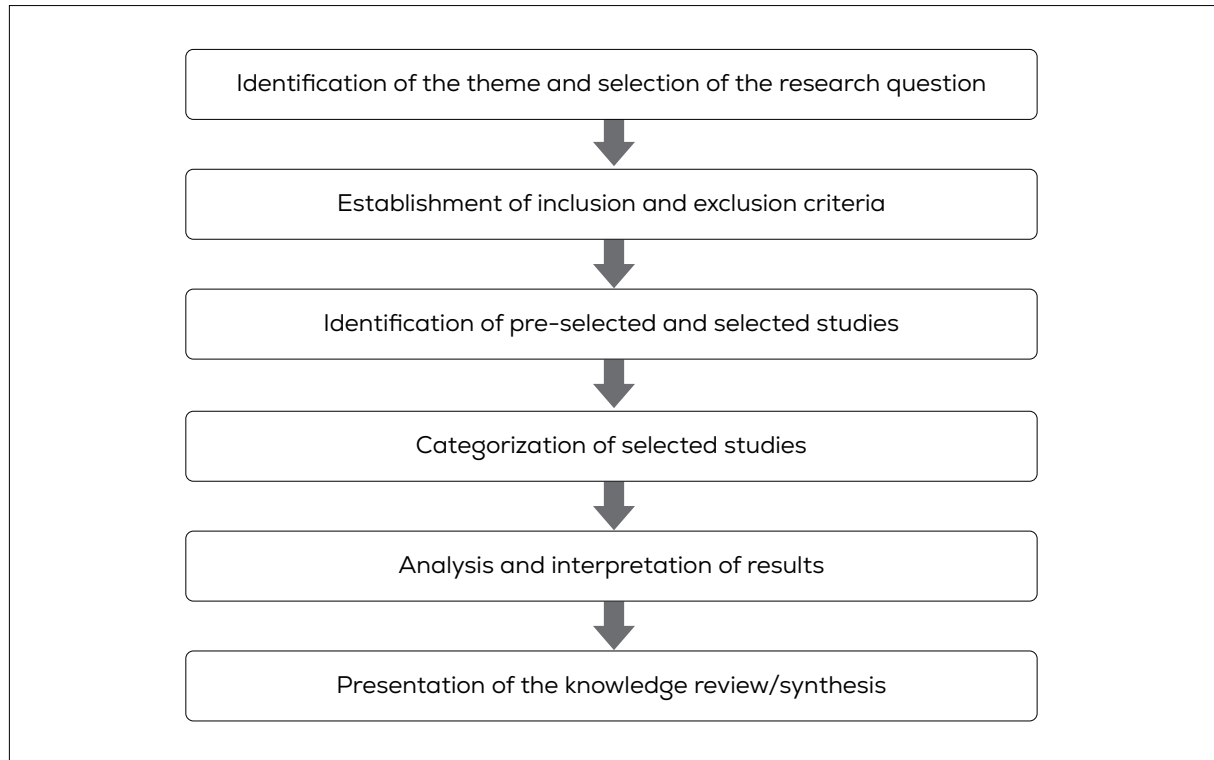
Researchers commonly adopt this qualitative method at the outset of their studies to explore potential answers to their research questions (Sampaio & Mancini, 2007; Botelho et al., 2011). The method aims to share the findings of previous studies on the same or related topics and offer, providing a framework that highlights the relevance of the research and the indicators that allow comparison with results from other studies (Creswell, 2010).

This is an exploratory review, which means that its purpose is to delve into the topic, allowing the researcher to gain a deeper understanding, develop insights, and generate new ideas (Conforto, Amaral, & Silva, 2011).

The integrative review involves summarizing previous literature to provide a broader understanding of particular phenomena (Botelho et al., 2011) by consolidating and analyzing experimental and non-experimental, theoretical or empirical studies. This contributes to the field of knowledge, allowing theory construction, identifying research gaps, proposing new studies (Grant & Booth, 2009; Botelho et al., 2011), and obtaining n overview of the current spectrum of studies on the subject. Researchers must be careful when using integrative review, starting with the systematization of the study. The method requires a procedural order in the

search, collection, and selection of data to be analyzed, avoiding methodological errors or research bias (Botelho et al., 2011). Thus, a six-step process for developing an integrative review is suggested, as shown in Figure 1.

Figure 1. Integrative review process

Source: Adapted from Botelho et al. (2011).

This article presents the methodological procedures based on the integrative review approach proposed by Botelho et al. (2011). However, the article does not provide a detailed description of the six steps shown in Figure 1 due to space limitations. Instead, the focus will be on discussing the study's objectives.

Studies that presented the search descriptors in their title, abstract, or keyword were selected as inclusion criteria. The search was conducted between September and November 2021 on the Web of Science database and used the following descriptors: "street-level bureaucrats," "street-level bureaucracy," and "frontline professionals." These were associated with the Boolean index "AND" to the terms "COVID-19", "pandemic," and "coronavirus." The established time frame ran from January 30, 2020, when the World Health Organization (OPAS, 2020) declared that the coronavirus SARS-CoV-2 was a public health emergency of international concern, until June 1, 2021, when the organization globally validated the eighth vaccine for emergency use against the coronavirus (OPAS, 2021).

Table 1 shows the total number of articles found in the chosen database and the partial numbers by search descriptors.

Table 1. List of articles

SEARCH DESCRIPTORS	NUMBER OF ARTICES
	WEB OF SCIENCE
Street-level bureaucrats AND COVID-19	17
Street-level bureaucracy AND COVID-19	7
Street-level bureaucrats AND pandemic	16
Street-level bureaucracy AND pandemic	7
Street-level bureaucracy AND coronavirus	1
Street-level bureaucrats AND coronavirus	0
Frontline professionals AND COVID-19	14
Frontline professionals AND pandemic	15
Frontline professionals AND coronavirus	9
Total	86

The selection was then submitted to the exclusion criteria, which encompassed duplicity, studies out of the time frame, and articles where the full content was unavailable. The last procedure of the selection process was reading the articles to confirm if the content was aligned with the research purpose. After applying inclusion and exclusion criteria and reading the full articles, nine out of the 86 studies were selected. The small number is explained by the high number of duplicates found at each search stage with the chosen descriptors. The articles that met the parameters established for the research were categorized according to analysis criteria: sectoral areas, approach methods, data collection instruments, countries where the research was developed, and journal of publication.

The VOSViewer 1.6.17 software was used to carry out a quantitative-statistical bibliometric study. It allows for analyzing scientific production and identifying its contribution to the literature (Araújo, 2006), applying data analysis from the Web of Science platform. The software facilitated the analysis of co-authorship, the authors' countries, co-citation, and bibliographic coupling. Co-authorship analysis helps to identify the relationships between the authors, the lines of research, themes, and approaches adopted. The co-citation and bibliographic coupling analyses make it possible to learn the theoretical-methodological connections within a field of study, its approximation, limits, associations, and interface between documents and authors (Grácio, 2016). The co-citation lists the referenced authors in descending order of recurrence, thus revealing those most used by other researchers. The small number of selected articles can be a problem in the bibliometric study using the software. However, this result helped achieve

one of the research objectives.

The next section presents and discusses the results to offer a deeper understanding of the subject.

RESULTS AND DISCUSSION

The pandemic has brought numerous consequences to the world, particularly impacting street-level bureaucrats (SLBs) in the healthcare system. These professionals have faced increased stress and workload and a heightened fear of being exposed to the risk of infection. As a result, they have had to navigate complex decision-making processes while dealing with the challenges posed by COVID-19 (Lima-Silva et al., 2020; Matarazzo, Fernandes, & Alcadipani, 2020; Moura, Furtado, & Sobral, 2020; Vidal, 2020).

Furthermore, the pandemic has impacted social research, leading to a shift in research priorities, particularly in the field of policy implementation. There has been a significant increase in the number of studies focusing on SLBs and their contribution to coping with the disease, starting from February 2020 (Musheno, Musheno, & Austin, 2021). Table 2 provides an analytical framework that summarizes the findings of the integrative review.

Table 2. Analytical bibliometric framework of selected articles

ANALYTICAL CATEGORIES	DESCRIPTION
Public administration sector/ area	Health (Cox et al., 2021; Davidovitz et al., 2021; Gofen et al., 2021; Meza et al., 2021; Prusty & Mahapatra, 2021), social assistance (Lima-Silva et al., 2020), multi-areas (Gofen & Lotta, 2021), public security (Matarazzo et al., 2020; Davidovitz et al., 2021), and education (Davidovitz et al., 2021; Malandrino & Sager, 2021)
Country where the research was developed	Brazil (3), Israel (3), Mexico (3), United States (2), Canada (1), Italy (1), Switzerland (1), India (1)
Journal of publication	Journal of Public Affairs (1), Journal of Comparative Policy Analysis (6), Brazilian Journal of Public Administration (RAP) (2)
Methodological approaches	Quantitative, qualitative, and mixed
Research techniques	Document analysis, interviews, survey, triangulation, literature review
Data collection instruments	Documents, newspapers, journals, semistructured interviews, storytelling, questionnaires, news articles, vignette, Facebook, and other online sources

The studies included in the review primarily focused on SLBs working in the sectors of social assistance, education, public security, and, notably, health during crises. Additionally, an emerging theme explored was street entrepreneurship, specifically examining the performance evaluation of community health agents. These studies revealed that SLBs adopted defensive and

entrepreneurial actions in the implementation of policies aimed at combating the pandemic (Gofen et al., 2021). Health professionals who work in hospitals and nursing homes, community health agents, social assistance agents, teachers, and police officers were the categories of SLBs found in the studies, which were developed in eight countries – Brazil, the United States of America, Canada, Mexico, Israel, Italy, Switzerland, and India. No studies addressing street-level bureaucracy in Africa and Oceania were found. The articles were published in three journals, with the Journal of Comparative Policy Analysis having the highest number of articles (6), followed by the Brazilian Journal of Public Administration (RAP) (2) and the Journal of Public Affairs (1).

A predominance of qualitative studies was observed in the reviewed literature, although quantitative studies and mixed methods were also identified. Various research techniques were employed, including document analysis, interviews, surveys, data triangulation, and literature review. Data collection instruments utilized in the studies included documents, newspapers, journals, semistructured interviews, storytelling, questionnaires, news articles, vignettes, Facebook, and other online sources such as live streams. It is worth noting that only two studies applied triangulation as a research technique, despite its importance in validating research findings. Additionally, the restrictions imposed by public health policies, such as social distancing and isolation measures, have led to changes in the traditional data collection methods. Interviews and face-to-face questionnaires have been replaced by alternative methods, such as searching for information in journals, in order to adhere to the safety guidelines (Cox et al., 2021; Gofen et al., 2021).
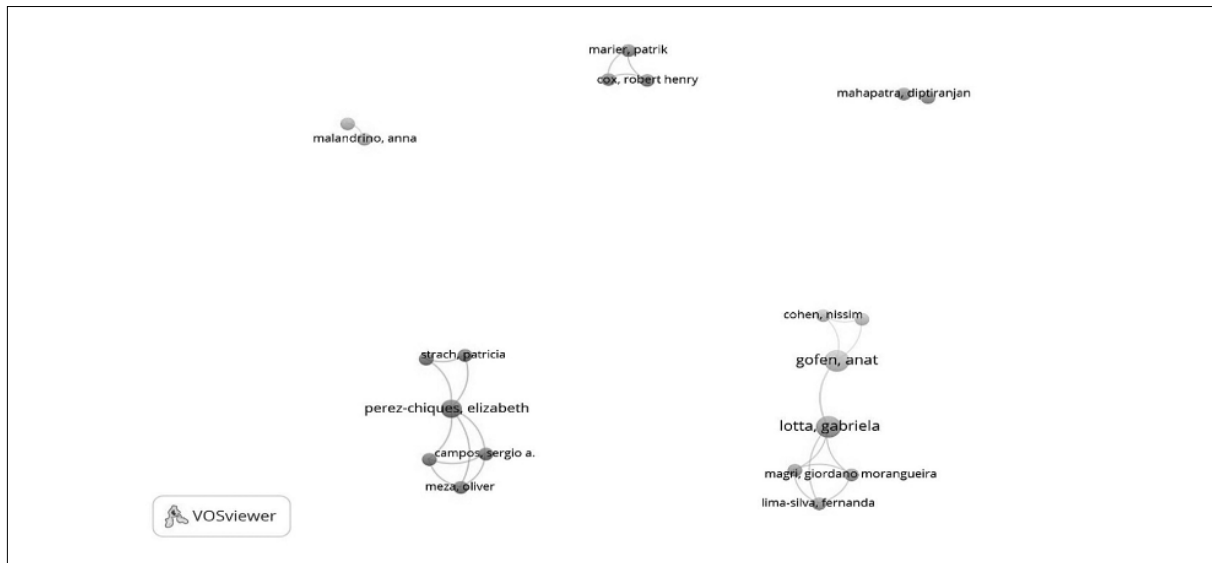
The following subsection continues the analysis of the results by using the software to carry out the bibliometric analysis.

Software application for bibliometric analysis

The statistical measurement of scientific production originated from the field of "statistical bibliography" and has evolved into what is now known as "bibliometrics" (Vanti, 2001; Araújo, 2006). This quantitative method applies mathematical concepts from statistics to assess and describe various aspects of scientific research (Araújo, 2006). The use of software has helped researchers in conducting bibliometric studies, facilitating the analysis and discussion of findings while reducing the time required for these processes. This study used the VOSviewer 1.6.17 software, a free tool capable of mapping knowledge in bibliometric network structures through data clustering techniques (van Eck & Waltman, 2017; Vieira, Lemos, & Teixeira, 2021).

The software analyzed co-authorship, the authors' countries, co-citation, and bibliographic coupling. It should be noted that the data analysis using the software is limited upon its compatibility with the file formats generated by databases such as Scopus, Dimensions, Lens, PubMed, and the database utilized in this study, Web of Science. In terms of co-authorship analysis, the software identified 21 authors, generating six clusters (Figure 2).

Figure 2. Co-authorship analysis

Co-authorship analysis reveals associations between authors in studies addressing a particular topic, shedding light on the core elements and areas that receive more attention in the literature. The greater the connections between authors, the greater the number of publications on a topic.

Figure 2 displayed three main clusters, identified by red, green, and yellow, with Elizabeth Pérez-Chiqués, Gabriela Lotta, and Anat Gofen as central authors. The cluster formed around Elizabeth Pérez-Chiqués investigated the implementation of health policies during the pandemic. In the three groups of articles, the authors observed that the discretion of SLBs increased due to the ambiguity of rules. However, it was noted that when dispensing medication to dependent patients in treatment, SLBs had limited discretion due to organizational mediation (Pérez-Chiqués et al., 2021). Lotta and Gofen explored the themes of street-level entrepreneurship and the public perception of SLBs' actions (Gofen et al., 2021; Gofen & Lotta, 2021). Three author clusters remained unassociated with the others, isolated in the field of analysis.

The author's country analysis examines the relationships between authors from different countries, identifying the existing connections. The analysis unveiled four groups comprising the following countries:

(i)   Brazil, Israel, and Mexico;
(ii) Canada and the United States of America;
(iii) Italy and Sweden;
(iv) India.

Groups (i) and (ii) were connected through the study carried out in Mexico, indicating research convergence on this point. The others did not show interconnections, remaining isolated.

In the analysis of word co-occurrence, researchers can extract information that suggests new search descriptors, contributing to future investigations. The most recurrent words were

"street-level bureaucrats," "COVID-19," and "discretion." To some extent, this result validates the descriptors used in this research, demonstrating that the chosen approach was suitable for the subject of analysis. Figure 3 presents the co-citation analysis, which applied the limitation of a minimum of three citations. The co-citation of a reference indicates conceptual, theoretical, and/or methodological proximity with other authors cited in the same document, and the intensity of this characteristic reveals the degree of the relationship established between them regarding a specific subject (Grácio, 2016).

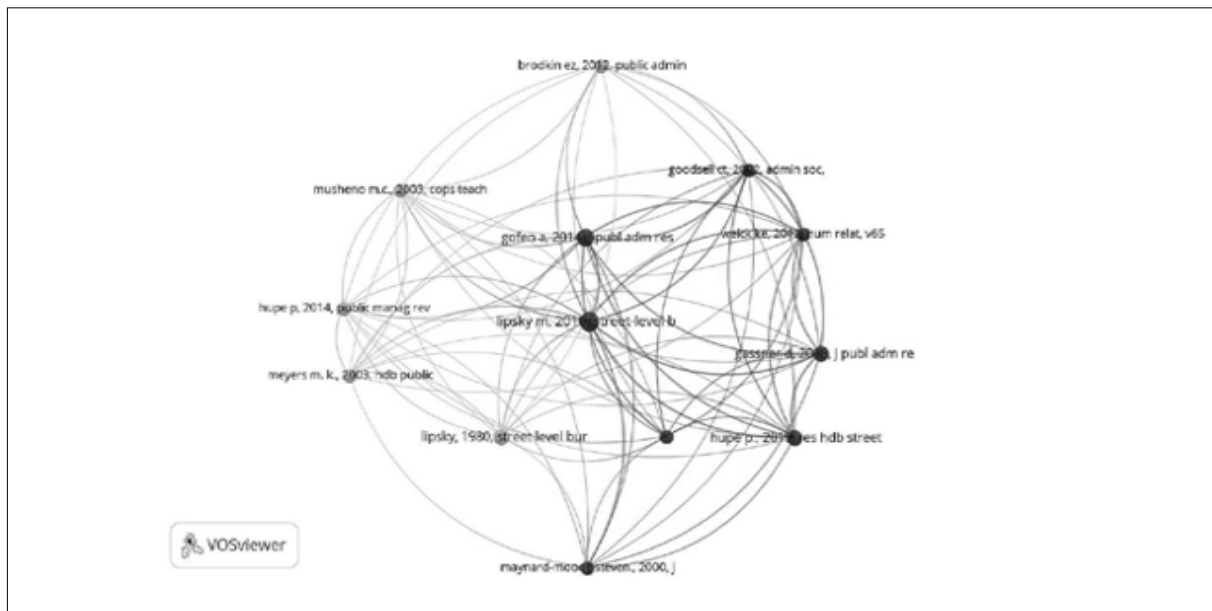Figure 3. Co-citation analysis

Figure 3 provides valuable analytical information. Firstly, two dominant groups can be identified, represented by the colors red and green. These groups consist of references appearing in at least three analyzed articles. The citations within each group indicate a convergence among the articles, suggesting that the authors who cited a particular reference (a) also utilized references (b), (c), and (n) since the themes addressed in these references share a strong connection. However, it is evident that the groups also interrelate, indicating that the themes addressed by the authors have a dialogue with both groups at specific points.

In the analysis of bibliographic coupling, the identification of the use of one or more references in different articles indicates a theoretical-conceptual and/or methodological proximity and an "implicit relationship between them" (Grácio, 2016, p. 85). Therefore, the analysis of bibliographic coupling revealed two clusters.

The first cluster consists of studies by Cox et al. (2021), Davidovitz et al. (2021), Gofen and Lotta (2021), Malandrino and Sager (2021), and Prusty and Mahapatra (2021). These studies explore the relationship between governance and how government responses, often characterized by ambiguity, can influence the behavior of SLBs and increase their autonomy in implementing public policies during a crisis. The second cluster comprises the studies by

Gofen et al. (2021), Lima-Silva et al. (2020), Meza et al. (2021), and Pérez-Chiqués, Strach, and Zuber (2021), which analyze the emergence of new roles and functions of SLBs and emphasize their importance in the implementation of citizen services, given the rapid changes in policies in times of crisis. The article by Gofen and Lotta (2021) used a comparative approach to present the studies that focused on street-level bureaucracy and were published in the early months of the COVID-19 pandemic.

Finally, the software allowed us to understand the relationships among the selected articles and identify authors who can support future research. However, it is important to note that the software has certain limitations. It does not offer features for textual analysis, such as word clouds, descending hierarchical classification, lexical analysis, or basic textual statistics. Therefore, considering other free software developed to carry out this type of analysis is worthwhile.

The next subsection presents the findings obtained from a thorough reading of the articles. The analysis focused on the crisis and its influence on three analytical categories: the space for discretion, the coping strategies, and the roles played.

The space for discretion during the crisis

In general, policymakers tend to restrict the autonomy of SLBs by imposing rigid rules for implementation (Davidovitz et al., 2021). However, the dynamics shifted during the pandemic, as guidelines from central authorities granted greater decision-making power at the street level (Malandrino & Sager, 2021; Pérez-Chiqués et al., 2021).

The formal responses in sectoral public policies during the pandemic varied significantly, with frequent and rapid changes that increased the autonomy of SLBs. The changes were almost daily, expanding the ambiguity of the rules and making it difficult for these professionals to follow the guidelines when making decisions in highly complex situations (Cox et al., 2021). The changing dynamics of their work environment and procedures were influenced by formal restrictions imposed by national and subnational governments and the weakening of control mechanisms (Malandrino & Sager, 2021).

The interruption of contact between SLBs and citizens had significant repercussions on the implementation of public services in the areas of social assistance (Lima-Silva et al., 2020), community health (Gofen et al., 2021), and assistance to drug addicts (Pérez-Chiqués et al. 2021). The lack of direct contact also jeopardized the work of police officers, doctors, and teachers (Davidovitz et al., 2021; Malandrino & Sager, 2021). The routine of the SLBs was adjusted by adopting remote work, reducing or suspending face-to-face services, and coping with increased workload (Lima-Silva et al., 2020; Malandrino & Sager, 2021).

In the field of education, the shift to remote learning has resulted in increased responsibilities for SLBs, particularly in the role of teachers. The physical distance between teachers and students required changes in pedagogical practices, leading to the development of new teaching roles. SLBs have taken on additional tasks, such as creating educational content and providing unconventional services, including telephone support outside regular class hours (Malandrino & Sager, 2021). These changes have significantly increased their workload and transformed the nature of their teaching activities. In the social assistance system, the implementation of social

distancing measures has brought about significant changes in the work of SLBs. While prioritizing their own self-protection, they have also had to consider the needs of those they serve. Balancing the safety measures with the necessity to provide support and assistance to vulnerable individuals has been a critical challenge during this time (Lima-Silva et al., 2020).

Within hospitals, changes in policy guidelines impacted operations by allocating beds exclusively for COVID-19 treatment (Meza et al., 2021). As a result, elective surgeries and non-essential clinical treatments were suspended, and SLBs had to adapt their decision-making to these changes. The intensity of interactions between professionals and patients was also affected as healthcare professionals transitioned from a client-centered approach to a population-centered approach due to limited resources and an increasing number of patients (Meza et al., 2021).

In health care for older people, the change was to ensure the non-contamination of the patients since they were subject to the most harmful consequences of the disease (Cox et al., 2021). Additionally, the implications of the pandemic for the autonomy of SLBs in all levels of government are inconclusive, given that there was a mismatch in decisions between the federal and state governments (Gofen & Lotta, 2021).

Overall, the analyzed studies revealed an expansion of the space for SLBs' discretion. They explain this expansion by the disconnection between the levels of government and by the formal responses that established ambiguous and complex rules, leading professionals to assume a different behavior when delivering the services. We will discuss in the following subsection how street-level professionals changed their behavior during the crisis and the decisive factors involved in this change.

The crisis and coping strategies

SLBs face two types of pressure in carrying out their tasks outside the crisis environment, dichotomous with each other. On the one hand, the government demands efficiency in implementing services to the population. On the other hand, users want personalized services (Lotta et al., 2018). The COVID-19 pandemic brought other forms of pressure, requiring new coping strategies based on cost-benefit calculations and self-protection against the risk of infection (Cox et al., 2021).

Fear of infection and uncertainties about the disease provoked conflictive reactions. At the same time, there was a sense of heroism and professional vocation (Lima-Silva et al., 2020) among the professionals, but also an impulse for inaction, safety-seeking, and self-protection, avoiding physical contact with users of healthcare and social assistance services (Meza et al., 2021; Pérez-Chiqués et al., 2021). Formal rules that changed the work environment were more readily accepted than those that sought to direct decisions (Meza et al., 2021). The lack of institutional support, which did not provide the necessary means of protection, caused resistance and inaction on the part of SLBs (Lima-Silva et al., 2020; Cox et al., 2021).

Therefore, coping strategies were both cooperative and conflictive (Bonelli et al., 2019). In the first case, professionals adhered to safety protocols, adapted personal protective equipment in the face of scarce resources, and implemented new practices in elderly care during the crisis, demonstrating innovative and improvised actions. In the second case, self-protection actions

and evasion of responsibility were identified as forms of resistance by some professionals who avoided direct contact with patients, prioritizing their own well-being (Cox et al., 2021). According to Cox et al. (2021), SLBs responded to the crisis-induced changes through improvisation, followed by a discourse of accommodation and frustration due to the inability to alter the circumstances. They passively accepted the limited resources available and often put themselves at risk based on a sense of duty, albeit with some resistance stemming from concerns about protecting their families. In cases of resistance, professionals would avoid tasks with a high risk of infection and activities for which adequate resources were lacking to alleviate their sacrifices

Similarly, the shortage of qualified professionals, inadequate supply of personal protective equipment, and limited information on safety procedures against the virus played a crucial role in shaping the relationships and interactions between street-level bureaucrats and citizens. These factors disrupted the process of building bonds and had a negative impact on policy implementation (Lima-Silva et al., 2020). The crisis also sparked discussions about working conditions and remuneration, considering the sacrifices made by SLBs in delivering essential services (Cox et al., 2021).

Thus, the crisis environment has unveiled new coping strategies distinct from those observed in regular situations. It is important to gain a deeper understanding of these strategies and incorporate them in future research.

Changing roles in emergency situations

Citizens access public services according to criteria established by the state. These criteria facilitate access for some and make it difficult for others (Lipsky, 2019). In general, this customer processing is guided by resource rationing, considering that resources are insufficient to guarantee service delivery to all citizens. During the pandemic, the high demand for public services did not allow resource rationing, and the scarcity was exacerbated (Prusty & Mahapatra, 2021). Therefore, the decisions of SLBs began to be oriented according to the number of resources available to serve the largest number of people (Meza et al., 2021).

In health, the formal rules of emergency plans changed the availability of services, stopping routine procedures in order to allocate hospital beds and equipment to COVID-19 patients who needed specialized care (Cox et al., 2021). Resource awareness, stress balance, client awareness, and self-care emerged in the hospital environment as SLBs' sub-roles (Meza et al., 2021). The police had to perform new tasks, such as the application of sanctions on citizens who refused to comply with the rules of social distancing and with the concern about the risk of contagion, increasing the daily conflicts between the state and citizens (Davidovitz et al. ., 2021).

Teachers from public and private schools who started to teach remotely had to dedicate extra work hours to assist students through technological tools and even their personal cell phones, providing a heterogeneous service guided by their available time (Malandrino & Sager, 2021). The crisis exposed the SLBs' professional vocation since control mechanisms were reduced, and there were no clear guidelines. Thus, they had to spend more time and resources to deliver public services (Malandrino & Sager, 2021). In social assistance, insufficient resources – such as personal protective equipment – impacted implementation, distancing the state from the user who did not receive follow-up from SLBs operating in this area. This situation aggra-

vated the socioeconomic challenges of the lower-income population (Lima-Silva et al., 2020) and those undergoing chemical dependency treatment (Pérez-Chiqués et al., 2021).

The state's lack of resources and administrative and managerial capacity during the crisis were directly related to the SLBs' preferences and roles in delivering public services.

CONCLUSION

Although studies about the implementation of public policies at the street level have advanced in recent decades, the understanding of the role of street-level bureaucrats (SLBs) in emergencies or crises remains incipient and little explored (Lima-Silva et al., 2020). Thus, this research sought to understand the influence of the crisis that emerged with the COVID-19 pandemic on street-level bureaucracy through an integrative literature review.

The bibliometric analysis unveiled a shift in the research agenda regarding implementation, especially at the street level, demonstrating significant growth from February 2020 onward due to the importance of SLBs in coping with the disease (Musheno et al., 2021). The studies have adopted quantitative, qualitative, and mixed approaches and investigated the performance of doctors, nurses, community health agents, elderly caregivers, police officers, teachers, and social workers in eight countries in the Americas, Europe, and Asia. The search did not find studies in countries in Africa and Oceania.

The journal that concentrated the largest number of publications was the Journal of Comparative Policy Analysis. The digital media used for data collection, in some cases, proved to be important during the pandemic due social distancing measures. These tools enable the continuity of scientific studies despite the restrictions.

The VOSviewer 1.6.17 software contributed significantly to data analysis, facilitating visualization and understanding of the relationships established between the selected studies, indicating possible lines of research and the authors that stood out the most. However, the software has textual analysis and content limitations that can be overcome by using other software to complement data analysis, which is a suggestion for future research.

In the stage of full reading of the texts, the selected studies revealed that the space for the action of SLBs increased during the crisis, and this expansion was caused by the disconnection between the different levels of government and by the formal responses that established ambiguous and complex rules to the implementation of services. Organizational factors, such as the lack of resources and information, the ambiguity of the rules, and the lack of incentives, profoundly influenced the behavior of SLBs, expanding coping strategies to deal with pressure through resistance, innovation, and improvisation (Cox et al., 2021). Ultimately, the relationships and interaction dynamics between SLBs and users were modified by social distancing measures, negatively affecting policy implementation.

Therefore, the study demonstrated that the context of crises such as the COVID-19 pandemic profoundly influences implementation at the street level, with negative impacts on user service. The research has methodological limitations as it collected only a few studies, although these were the existing ones for the defined cut. However, the research design can be expan-

ded in the future, subsidizing comparative analyzes of scientific behavior for the field of study, which remains incipient when it comes to the performance of SLBs in periods of crises.

Finally, the research contributed to a better understanding of the influences of crises on the implementation of public policies at the street level, increasing the discretionary space of professionals who deal with emergencies and revealing how organizational and relational factors shape their behavior. Future investigations may explore the emotional consequences of SLBs working in healthcare during the COVID-19 pandemic and analyze the performance of professionals who work daily in emergencies, such as firefighters and ambulance crews.

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