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The experience of innovation laboratories in the Brazilian public sector

A experiência dos laboratórios de inovação no setor público brasileiro

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Abstract

This study aims to analyze the relationship between the administrative agenda disseminated in the Brazilian public sector by innovation laboratories and the main characteristics of the bureaucratic organization. The research was classified as an exploratory study and its analysis followed the techniques of content analysis, being carried out with the aid of the Iramuteq software. The main results identified were (a) that laboratories are safe spaces for testing and help to propagate the culture of innovation, (b) that leadership is important to ensure the execution of ideas and projects, (c) that it is difficult to measure results and select demands and (d) that the practice of innovation laboratories express the departure from bureaucratic logic. **Keywords:** innovation, innovation laboratory, public sector.

Resumo:

Este estudo tem como objetivo analisar a relação entre a agenda administrativa difundida no setor público brasileiro pelos laboratórios de inovação e as principais características da organização burocrática. A pesquisa foi classificada como um estudo exploratório e sua análise seguiu as técnicas da análise de conteúdo, feita com auxílio do software Iramuteq. Os principais resultados identificados foram (a) que os laboratórios são espaços seguros de teste e ajudam a propagar a cultura de inovação, (b) que a liderança é importante para garantir a execução das ideias e projetos, (c) que há dificuldade em mensurar os resultados e selecionar as demandas e (d) que a prática dos laboratórios de inovação expressa o afastamento da lógica burocrática.

Palavras-chave: inovação. laboratório de inovação. setor público.

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1 Introduction

In Brazil, successive proposals of administrative reforms have been implemented in the public administration with the objective to assure greater flexibility and quality in the functioning and results of the action of the State.



However, despite the advances, a functioning standard that surpasses the decurrent bureaucratic impediments of the implanted model of public administration in the 1930s has not been consolidated (Filgueiras, 2018).

As part of this reformist effort, recently, the innovation in the public sector has gained some self-sufficiency in relation to the proposal of programs of adjustment in the national public administration. Although this concern has been already inserted in the agenda of the New Public Administration, in the 1990s, only in the last decade, 2010, the innovation has assumed relative protagonism (Cavalcante & Wedge, 2017).

One of the most significant current experiences in the country, which expresses the centrality of this theme, has been the dissemination of Innovation Laboratories in the Public Service. However, the studies related to this theme are still recent and scarce (Cavalcante, 2019). Although some studies point to an expansion of laboratories in the Brazilian public sector (Sano, 2020), it is still possible to observe a small amount of research focusing on a better understanding of these experiences and their contribution to innovation in the public service.

Like the reformist proposal implemented in 1995, innovation laboratories try to introduce into the public service a set of tools and working methods used so far under the private initiative (Tõnurist, Kattel, & Lember, 2017). In theory, this experience brings as one of its intentions the attempt to overcome through innovation the bureaucratic obstacles currently existing in the Brazilian public administration.

The advance of this subject on the agenda of the public administration is not an isolated fact. Innovation in the public sector has raised the interest of scholars (Walker, 2014). To a large extent, this attention is related to the idea that innovation, according to Damanpour and Schneider (2009), is able to collaborate both with the improvement of services provided by the public administration, as well as to increase the ability to solve problems.

In the last twenty years the processes of innovation in public administration have intensified, thus assuming a driving role of economic development and modernization of the sector (De Vries, Bekkers, & Tummers, 2015; Mazzucato, 2015). For public organizations, the urgency to innovate is shocked by the need for efficiency and cost optimization, which reinforces the importance of reflecting on this theme (Gieske, Duijn, & Van Buuren, 2019).

In addition, administrative reforms, the rapid informational and communicational technological development and new open and user-centered approaches (co-creation, co-design and co-production) have cornered governments and stimulated the proliferation of innovation laboratories in the public sector (Tõnurist, Kattel, & Lember, 2017).

These laboratories are part of the public administration and usually have their own people and structures. Its activities are aimed at stimulating creativity and experimentation, always seeking the development of an innovation that helps to solve complex problems and improve the quality of services offered to the population (Head, 2008; Tonurist, Kattel, & Lember, 2017).

However, Mulgan (2014) points out that most laboratories fail to implement the innovative ideas that are developed and tested by their teams. Issues such as these raise the need to better understand the functioning of these structures, since, according to the authors Tõnurist, Kattel, Lember (2017), innovation laboratories have gained space in public management and became increasingly present in the sector, both nationally and internationally.

By 2014, few experiments around the world had been scientifically systematized. Themes such as the reason for the creation of a laboratory and the characterization of its structure and its results are still embryonic as a field of study, which justifies a better exploration of this field

of study (Bloom & Faulkner, 2016; Gryszkiewicz, Lykourentzou, & Toivonen, 2016; Timeus & Gascó, 2018).

In Brazil, for example, when gathering the research on "innovation laboratories" or "R&D laboratories", published between 2016 and 2020 on CAPES e-journals, Scielo, Spell or CAPES Brochure of theses and dissertations, only 11 publications are found.

Thus, given the relative historical difficulty in overcoming the bureaucratic obstacles existing in the Brazilian public machine, and the advancement of innovation laboratories in the Brazilian and global public sector, the following research question arises: What is the relationship between the administrative agenda disseminated in the Brazilian public sector by innovation laboratories and the main characteristics of the bureaucratic organization?

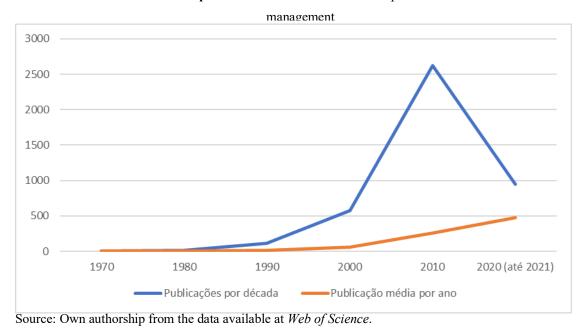
This study contributes to the development of administrative systems within the public service capable of overcoming the bureaucratic obstacles currently existing in the Brazilian public administration, and helps to promote a systemic advance in innovation in the public sector.

2 Innovation in the public sector

Innovation is presented in all areas of society and its concept is linked to an executed idea, products, processes and services that need to be improved or recreated for innovation to happen. With this, the innovator is not the subject who has good ideas, but rather who puts this idea into practice and adds value, whether economic, personal or social (Audy, 2017).

In the public sector, innovation began based on the experiences of the private sector, focusing on the vision of entrepreneurial leadership and competition, advocated by Schumpeter (Sorensen & Torfing, 2017). Bason (2010) defines innovation in the public sector as the process of creating ideas and transforming them into value for society. But this concept is not new, it has existed since the 1980s with the emergence of the New Public Administration that had a discourse of reinventing the government (Mcgann *et al*, 2018).

As can be seen in Graph 1 it is exactly from the 1980s that research on the theme innovation in public management begins to attract the attention of an increasingly significant number of researchers.



Graph 1: Publications on innovation in public

Analyzing graph 1, it is possible to notice that although the 1980s marked the beginning of a more systematic concern with innovation in the context of public management, only in recent decades this theme has been widely investigated.

However, there is no definition of innovation in the public sector that is unanimous. The literature review conducted by De Vries, Bekkers and Tummers (2016) concluded that 76% of the articles analyzed did not present a basic definition of innovation, while the other 24% presented a vague and confusing concept.

De Vries, Bekkers and Tummers (2014, p. 5) conceptualized innovation in the public sector as "the introduction of new elements in a public service in the form of new knowledge, a new organization and/or new managerial or procedural skills, which represents discontinuity with the past." In 2018, OECD (2018, p.20) presented the innovation as being "a new or improved product or process (or its combination) that differs significantly from the unit's previous products or processes and which was made available to potential users (product) or used by the process unit".

Currently, several concepts applied in the field of public administration have been adapted from the current perspective of innovation. The participatory process in the public sector, for example, has its origin in the concept of open innovation (Lee, Hwang, & Choi, 2012). Collaborative strategies for the creation of new policies, processes and services between public and private means are expanding in the public management (Cavalcante & Camões, 2015; Irastorza, Garcia, & Garcia, 2010; Satrustegi, 2017; Sorensen & Torfing, 2017).

In a contradictory and questionable way, the public sector is considered an environment resistant to changes and experimental activities (Mcgann, Blomkamp, & Lewis, 2018; Schuurman & Tõnurist, 2017; Tõnurist, et al., 2017).

Therefore, Carstensen and Bason (2012) declare that innovation in the public sector is more dependent on the actions of individuals than on processes of their own organizational culture. The authors attribute this dependence to the fact that the innovative process does not

seem to be disseminated in public organizations or because there are no reliable indicators available.

According to Tonurist *et al.* (2017), there are some elements that can be presented as vectors of innovation in the public sector: imitation of another structure, responses to external pressures, technological absorption, incorporation of experiences, monitoring of newer structures, incorporation of experiences and individual learning.

In the same direction, the OECD systematized and pointed out the skills that were considered necessary to promote innovation in the public area (OECD, 2017). According to this model, the competencies represent attitudes, skills and knowledge that are essential for the effective implementation of innovation in the public sector, such as: a) Iteration; b) Centrality in the user; c) Narrative; d) Challenge; e) Curiosity; and f) Literacy in data.

Innovation, even if it is one of the ways to improve public services, also faces barriers. Carstensen and Bason (2012) highlight the culture of the organization, the lack of transparency and experimentation, personal interests and departmentalized structures are problems that innovation finds to be adopted in the public sector.

Despite these difficulties, it is important to highlight that characteristics such as the entrepreneurial profile of servers, motivation, collaboration and autonomy contribute to the success of innovative practices (Cummings, 2015).

Thus, with the advance of concerns about innovation in the public sector and in view of the barriers encountered to make it, innovation laboratories have presented themselves as a possible tool to overcome the development of the innovative process in public organizations (Carstensen & Bason, 2012).

2.1 Innovation laboratories in the public sector

Models of innovation laboratories in the public sector born in Western Europe, such as *MindLab* (Denmark) and *Behavioral Insights Team* (United Kingdom), inspired governments to rethink public service and create similar initiatives. These include the *Seoul Innovation* Bureau in South Korea, the *Center for Public Service Innovation* in South Africa, and the *Public Innovation Lab* in Chile (OECD, 2018).

Bason and Schneider (2014) consider innovation laboratories in the public sector as a space where creative methods are used to modify the way the government operates. According to Puttick *et al* (2014), laboratories can be conceptualized as teams that apply resources to generate responses with user-focused design as a consequence of creative processes involving the public and private sectors. The authors also state that innovation laboratories can have permanent or temporary structures, with variety in the formation of their teams, resources and organization (Puttick *et al* 2014).

Laboratories offer the necessary space for the development of new forms of action by governments. According to Ansell and Bartenberger (2016), these spaces commonly practice generative experimentation, an ordered methodology for the generation of solutions to specific problems, in the creation of products and processes.

As mentioned earlier, innovation in the public sector is occupying the top of the agenda in various parts of the planet. As a result, public managers are looking for different ways to involve civil servants, civil society, academia and the private sector to play their roles facing the most complex problems (Agger & Lund, 2017).

According to Bason (2010); Puttick *et al* (2014); Mulgan (2014); Tõnurist *et al* (2017) and Timeus and Gascó (2018) have grown the number of laboratories in the last decade. These

experimental spaces, with the objective of promoting innovation in the public sector and social transformation, integrate approaches such as co-creation for the design of public policies and services (Peters & Rava, 2017).

While involving citizens and different stakeholders in the collective framework of problems and identifying solutions can be an important normative ideal, there is still little evidence to demonstrate whether this produces better policies and innovations in the public service (Voorberg *et al*, 2015).

The experience of the Uruguayan government, for example, when launching in 2015 the Social Innovation Laboratory for the Digital Government, was very similar to several other laboratories. They faced difficulties and even frustrations in presenting their results to the organization managers, since the rich information from the co-creation processes rarely meets the requirements of the conventional model of dominant evaluation in the public sector.

Tõnurist *et al* (2017), point out that the difficulties of laboratories to be supplanted permeate the removal of laboratories from the rest of the state structure. In the study by Putticks *et al* (2014), the autonomy of the teams is also considered. The authors state that the greater the interference of government leaders and structures in laboratories, the lower their ability to develop profound innovations. However, it is worth mentioning that this proximity between laboratories and government leaders can bring, due to the knowledge of political priorities, benefits such as seizing opportunities or enabling the involvement of the relevant sectors.

Putticks et al (2014) presented the types of laboratories and their characteristics, as described below:

- Developers and creators of innovation focusing on solving specific problems;
- Facilitators in the search for new ideas are focused on the involvement of citizens, the private sector and non-governmental organizations;
- Educators through skills development and process changes, they are dedicated to developing changes in the way the public sector handles innovation;
- Architects seek to analyze the social context in the search for solutions to problems, not only hanging on specific answers.

The Inter-American Development Bank conducted a survey in Latin America and categorized the laboratories according to the objectives and as illustrated in Table 1.

Table 1 - Categories of Innovation Laboratories

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N	Goals
1	Fostering an innovative environment in public
	administration
2	Developing specific innovations
3	Introducing technologies into public administration
4	Modernising the public administration processes
5	Creating new mechanisms for citizen participation
6	Introducing new methods of communication into the
	public administration
7	Opening the public administration data

Source: Acevedo and Dassen (2016).

It is possible to perceive in Table 1 that one of the highlighted objectives, fostering an innovative environment, meets the definition of innovation laboratory in the public sector advocated by Sano (2020), by placing laboratories as being "collaborative environments that seek to foster creativity, experimentation and innovation, through the adoption of active methodologies and co-creation, in troubleshooting".

2.2 Innovation in the Brazilian public sector: seeking to overcome bureaucratic limitations.

Although analyses on innovation in public management have gained greater emphasis in recent decades, as already discussed in the previous topic, the first debates on the subject can be found already during the 1980s, in the bulge of the reformer movement of the public machine, the *New Public Management* (NPM), pioneered by Margaret Thatcher and Ronald Reagan (Costa, 2015).

In Brazil, as this public management model (NPM) is implemented only from the approval of the Master Plan for the Reform of the State Apparatus in 1995 (Mare, 1995), it is at this moment that innovation enters the agenda of the Brazilian State and begins to take a greater role.

The Contest of Innovative Experiences of Management in the Federal Public Administration, created as one of the instruments for implementing NPM in Brazil, is one of the expressions of the relationship that Brazilian public management would have since then with this innovation. Despite initially having the objective of valuing the experiences of success in the implementation of the management reform, it changes its name in 2003, moving to the Innovation Contest in Federal Public Management, and in 2007 the concept of innovation is updated, being understood as the incorporation of new practices in the Public Administration, which introduce changes in the patterns of previous operation and generate expressive effects for the public service and society (Ferrarezi, Amorim, & Tomacheski, 2011).

However, although it is possible to affirm that innovation is currently happening in the Brazilian public service, the peculiarities of Brazil still allow us to inquire whether the existing innovation system in the country is capable of developing innovative conscious solutions for the Brazilian government (OECD, 2018a). This is because, although there are some initiatives and innovative interventions, they are still driven by individual and organizational concerns, and still present themselves as a disconnected and disjointed agenda, and therefore possibly insufficient to incorporate innovation in a systemic way in the context of the public service (OECD, 2018a).

The fact is that since the 2000s the Brazilian agenda of public administration reforms has entered into relative paralysis and inflection (Filgueiras, 2018). The last two decades have been marked by incremental changes in public administration, to the detriment of structural reforms (Cavalcante, 2020).

However, this is not a strange picture or context of public administration. According to Rezende (2002) and Alverga (2003), the sequential failure of administrative reforms is an element often found in attempts to increase the performance of public bureaucracy. In this direction, Alverga (2003) points out that the failure of the attempts to reform public administration can be explained by the concept of trajectory dependence, by the need to adapt the original models, by the lack of differentiated incentives for those who are favorable to reforms, due to political disputes within the government and through the diversity of interests at stake inside and outside organizations.

Thus, even in the face of the unquestionable innovation process through which the public service has been underway in Brazil and the attempts to reform the Brazilian public administration, largely the functioning of the public machine and its main characteristics still express standards introduced by other models of public administration, among them the rigidity and administrative inflexibility typical of the bureaucratic model of public administration. This

model introduced the main characteristics of bureaucracy in the logic of operation of the Brazilian public machine as an organizational type.

According to Gil (2016), weberian analysis points out six elements that characterize the ideal type of bureaucratic organization: 1) specialization of work, 2) hierarchy of authority, 3) rules and regulations, 4) technical competence, 5) impersonality and 6) written communication. However, despite being the predominant organizational model and characteristic of modern society, as an ideal type, bureaucratic organizations have several dysfunctions. Gil (2016) and Motta and Bresser-Pereira (1991) summarize some of them, such as: excessive attachment to rules, formalism, conformism to routines, paperwork, rigidity and resistance to change.

Such dysfunctions have made bureaucracies organizational types increasingly anachronistic. Since the 1980s, in the face of social transformations resulting from globalization and technological transformations that are increasingly intense and rapid, some of the central characteristics of the bureaucratic administration model, implemented in public administration by Getúlio Vargas in the 1930s, have become obstacles to the development of the state action and for the promotion of the public good. This process has required public managers and researchers to rethink the functioning of the State in order to overcome the bureaucratic dysfunctions existing in the State (Motta & Bresser-Pereira, 1991).

Currently, the innovation agenda has been disseminated in the Brazilian public service through the expansion of innovation laboratories in the public sector, as a way to overcome the limits imposed by the dysfunctions of the bureaucratic model.

From the mapping of the Brazilian experience in innovation laboratories in the Brazilian public sector carried out by Sano (2020), some important characteristics were identified.

Of the laboratories identified, most of them (51%) are part of the executive branch, and their prevalence is the federal government, with only three laboratories linked to the municipal sphere and seven to state governments. The judiciary and public ministry, on the other hand, concentrate 35% of innovation laboratories, while federal universities appear with only two laboratories. It is also worth mentioning that most laboratories were a recent initiative, 67% of them founded between 2017 and 2019 (Sano, 2020).

Among the laboratories surveyed in the aforementioned research, 37% of them are located in the Federal District, which confirms the predominance of laboratories linked to the federal public service. It is also possible to perceive a predominance of the southeast region, presenting 37% of the laboratories, while the northern region has the lowest presence of this initiative, with only 5% of the innovation laboratories in the public sector (Sano, 2020).

When it comes to the areas of operation of the laboratories, it is notorious that most initiatives are focused on the management area, with 42% of them working in the search for innovations that are capable of contributing to the operation of the public machine (Sano, 2020).

3. Methodological procedures

To carry out this study, a qualitative approach of analysis was used, because it seeks to better understand the details and meanings that are related to the administrative proposal disseminated by innovation laboratories of the Brazilian public sector (Creswell, 2010). The study was classified as an exploratory study and its analysis followed the techniques of content analysis, which seeks the inference of the contents, presenting its apparent and implicit meanings (Bardin, 2011).

The data were collected through the registration of a round table on the innovation laboratories of the public sector, which took place at the 5th Innovation Week, promoted by the

National School of Public Administration (ENAP), in 2019, with the participation of laboratories GNova, Inova ANS, IJusLab, CoLAB-i, MG Lab, BB Labbs, INOVAXXI, LAB-i VISA, Lab-ges, Civil House Lab, HackerCD Lab.

17 civil servants representing the innovation laboratories participated directly in the roundtable. However, the activity also had the indirect participation of other servants and observers interested in establishing laboratories in the organs in which they work.

The table was coordinated by representatives of GNova, who started explaining what the activity would be like. Then, participants were asked to make a presentation round and subsequently the participants were divided into three groups to reflect on three guiding questions: 1) "what are innovation laboratories?"; 2) "how did they arise?"; and 3) "what are their main challenges and results?".

Each group was responsible for reflecting on one of these issues and then the groups were dissolved in the larger group and the impressions of the members of each group were socialized with everybody.

The speeches were recorded, transcribed and subsequently analyzed with the aid of the *Iramuteq software*. This *software* consists of a free tool that enables general and advanced analysis of texts, such as basic statistical analysis, such as frequency and number of words, and correspondence factor analysis (CFA), descending hierarchical classification (DHC), similarity analysis and word cloud (Sbalchiero & Tuzzi, 2016).

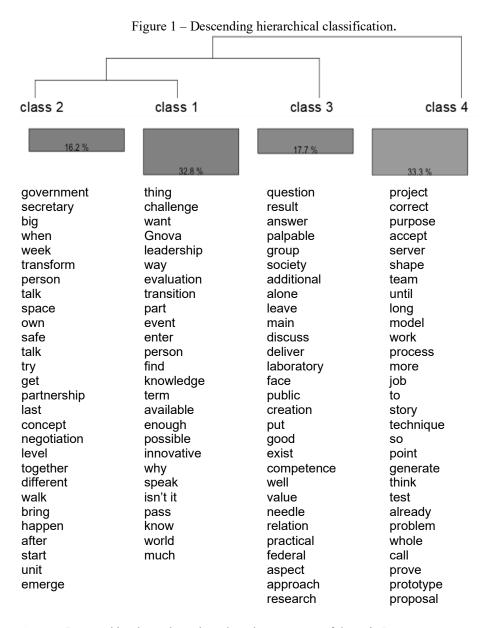
In this study, the use of *Iramuteq* allowed the analysis of Descending Hierarchical Classification (DHC). The choice of this method is justified by the fact that it reduces the bias of researchers in the analysis of qualitative data, which promotes greater reliability of results.

4. Presentation and data analysis

The general analysis of *corpus* consisted of three texts that originated 260 text segments (TSs), with 8940 occurrences, that is, words, forms or, vocabulary and use of 198 TSs (76.15%), which is considered reliable, since according to Camargo and Justo (2013), several authors point out 70% of the text segments as a minimum index accepted for a Descending Hierarchical Classification (DHC) analysis.

4.1 Descending Hierarchical Classification (DHC)

In the DHC, which is an analysis that divides the texts and classifies the words that appear more predominantly, the *Iramuteq software* generates a dendrogram, which in the case of this study, presented a *corpus* divided into three *subcorpus*. Classes 1 and 2 are contained in the first, class 3 was obtained in the second, and class 4 is found in the third *subcorpus*, as illustrated in figure 1.



Source: Prepared by the authors, based on the treatment of data via Iramuteq.

After the classes being separated by the *software*, the TSs were read to make possible to interpret and name the classes, thus being as follow:

Class 1, was called 'Safe Space' and it is formed by textual indications of the fragments of the interviews related to the main reasons for having an innovation laboratory in the public sector. These results are in line with what was presented by Bason, (2010) and Mulgan (2014), highlighting that laboratories can be considered safe environments, where new processes, products and services can be tested. In addition, excerpts that relate to the creation of a culture of change are also observed, which was also addressed by Carstensen and Bason (2012), when they raise that significant characteristics of the structure of laboratories collaborate with the cultural change in the public service.

[...]create a safe space to test to make a mistake and start again, make a quick mistake, make a cheap mistake, not to deliver something after you have spent a lot of money and it is not what people want [...]

The identification of innovation laboratories as safe spaces, relating them to environments where it is possible to make mistakes, points to an imaginary far from the bureaucratic standards of operation, since the bureaucratic compliance with the previously established standard does not converge with the possibility of error. The bureaucratic logic requires that the procedures be previously determined and evaluated based on compliance with the pre-established standard.

According to Motta and Bresser-Pereira (1991), formalism is one of the structuring characteristics of the bureaucratic model of organization, according to which the activities to be carried out are distributed based on rational, written and exhaustive norms, according to the defined objectives.

In addition, the idea of a safe space identified in the imagination of the innovation laboratory management teams suggests an understanding of decision-making as a shared process, based on a co-creation and collaborative logic, as can be seen in the following excerpt

[...] but when we bring everyone together in a safe space we reach a consensus, we are able to build [...]

This excerpt also expresses a rupture with the bureaucratic logic, because, as Motta and Bresser-Pereira (1991) point out, the model of bureaucratic organization requires a formally constituted hierarchy, where the rational norm precisely establishes the relationships of command and subordination. The rational-legal character of bureaucratic organizations offers the person with authority the possibility of coercing and imposing discipline on their subordinates to previously established standards.

The next excerpt highlights concerns about informal aspects of the organization, more specifically with culture, which also points to a relative detachment from excess formalism:

[...] focus on transforming people within the government to foster change to collaborate to create in the institution this culture of collaborating[...]

[...]people talking about disseminating culture is to transform in order to infect other transformative agents to do this in other sectors[...]

Despite the bureaucracy, being a social system made up of men, having its effect in reality mediated by the values, beliefs, feelings and needs of the individuals who constitute it, the bureaucratic model perceives the bureaucratic system as the most efficient due to the rationalization of its structure and functioning (Motta & Bresser-Pereira, 1991).

However, as can be seen, the experience developed from innovation laboratories in the public sector is associated with the diffusion of practices and values associated with the constitution of a safe environment for experimentation, for change, where error is seen as part of the learning process.

Thus, the experience of innovation laboratories promotes a culture associated with experimentation and change as an alternative in the search for improvement in performance, unlike the bureaucratic model implemented in the Brazilian public administration, which perceives the search for improvement based on the stability of administrative systems and the attachment to norms and laws.

Class 2, which was named "Innovation Path", was marked by statements that refer to actions necessary for the creation and operation of an innovation laboratory in the public sector. The statements corroborate the idea of Peters and Rava (2017), who put innovation laboratories as experimental spaces that promote innovation in the public sector and social transformation. Additionally, Lin et al. (2011), Rego et al. (2009), Cho et al. (2007) present the support of leadership as one of the pillars in the implementation of innovation, which is ratified by Vigoda-

Gadot et al. (2008) when reporting that leadership is one of the antecedents that most influence the results of innovation.

[...] we don't want to centralize innovation, we will promote innovation based on what it is [...]

[...] it's no use for me just to create the box to put innovation in the name and think that it will happen now [...]

As can be seen, unlike previous attempts to give the State greater flexibility and capacity to meet social demands, the experience of innovation laboratories does not prioritize in their practices the restructuring of the formal organization. It starts from the idea that the centralization of the innovation task and its institutionalization in an agency of the organization are not enough to promote innovation within the public service. The following excerpts express the path that innovation laboratories have taken.

With regard to evaluation, the laboratories express relative detachment from the formal logic of evaluation.

[...] it was the year of the elections and we were afraid of what would happen to the laboratory in this transition [...] in 2018 we were worried about this transition so started to record everything and then we realized that the evaluation was missing, so we have to demystify the evaluation, but we had no indicator we only had a sign of success [...]

The content of the manifestations of laboratory managers present in the 5th Innovation Week expressed in the excerpt above, presents an imaginary where the path to innovation lies in informal aspects, such as leadership. It is noteworthy that from this perspective the laboratories do not intend to ignore the formal structure of the State's operation, but only not be limited to it, as expressed in the following excerpts.

[...] an important challenge is leadership [...] both in the implementation [...] someone will have to make the decision to finance the laboratory, as then, if you do not have leadership, it will not happen, you will do a lot of workshops, sell a lot of ideas that can die[...] you need someone strong to finance the implementation of the idea[...]

[...] the laboratory needs to have the strength to question what needs to be questioned and propose what needs to be proposed, right? [...]

At the same time that a concern is perceived with leadership capable of sustaining the new methodologies (informal aspect), it is also possible to perceive the need for a certain legitimacy of the organizational structure so that the laboratory has strength in promoting the necessary transformations.

Class 3 was named 'Results Challenge', which contains reports of difficulties in measuring and presenting the results of innovation laboratories in the public sector. Despite this difficulty, Tõnurest, Kattel and Lember (2017) highlight how important measuring these results is. In their work, the authors present the example of laboratories that through rigorous documentation of their results and the development of metrics to support them, it was possible to prolong the life of laboratories that were already born with a date to be closed.

[...]measuring the result is a challenge, right? [...] Because what happens is that we deliver a prototype in a project, deliver something for someone to finish and then this



area ends and often forgets to realize that behind it there was a whole innovation process, of other people[...]

[...]innovation is the generation of new knowledge, it's difficult to measure knowledge [...] we have this difficulty[...]

In this case, the simple concern with the results already represents again a distance from the bureaucratic logic of public administration, because according to this model, the guarantor of the excellence of the results, that is, efficiency, is the conformity to the organizational norms, structures and procedures, in addition to its rational character (Motta & Bresser-Pereira, 1991).

However, in addition to this concern, the laboratories also express the difficulty in materializing these results. This is due both to the nature of the results, in large part associated with the generation of new knowledge, and to the informal nature of the performance of the laboratories, and therefore sometimes invisible.

Thus, both the concern with the results and the difficulties in gauging them express an understanding of the organizational functioning that is different from the bureaucratic rational-legal logic.

The communication of the results also expresses this same distance, as can be seen in the following excerpt:

[...] to bring the government closer to society and here are some aspects, that I know some laboratories work on this, which is the issue of transparency, how do I transform a data into something that people can understand, and how do I speak simple for people to understand what the government does, I think this is on the radar[...]

According to bureaucratic logic, the dissemination of the results should be sufficient if it complies with the required bureaucratic procedures. However, the concern with the understanding of these results by citizens expressed in the excerpt above demonstrates a concern beyond the formal process of making it public, but also of being understood.

Class 4 was named 'Choices" and represents the need to choose which projects the laboratory will work with, what demands should be accepted and how best to present the laboratory's proposals to be accepted by the organization and teams.

- [...] to make the partner team accept the product of a project that we got involved with them is to first choose a real problem [...]that will solve something real for the partner team [...]
- [...]to have the sponsorship of the head of the department, support to have the dedication and time of the staff[...]
- [...]having someone from the partner constantly throughout the project process, from the beginning, in the definition of the scope, alignment of expectations, to the conclusion[...]
- [...]after a survey[...] we have a portfolio, what we called a thematic map of opportunities and so our priority is there then the demand enters in the order of priority[...]
- [...] there are some ways to think about criteria to select the demands: the servants themselves suggest problems, identify a difficulty in their area[...], the senior management propose the problem and open out what society would like us to try to deal with[...]

[...] so we are now testing a new work model that we do research, search for a solution and take to our sponsor's house [...]so that this becomes a project of the house, right? [...]

Here it is possible to perceive that for managers of innovation laboratories the process of defining work priorities expresses a connection with the local organizational reality, breaking an important dysfunction of the bureaucracy, the submission to the norm, when it passes from middle to end. Motta and Bresser-Pereira (1991), highlighting Merton's analysis of bureaucracy, state that in bureaucratic organizations there is pressure on employees to behave in a methodical, prudent and disciplined manner.

This characteristic makes organizations more rigid, with a conservative tendency. Thus, there is a displacement of objectives, the norm becomes an end in itself, losing sight of the objectives and the specific context of each organization or organizational sector (Motta & Bresser-Pereira, 1991).

5. Final considerations

In conclusion, based on the contributions of Motta and Bresser-Pereira (1991) on bureaucratic organizations, this study points out that the administrative agenda disseminated in the Brazilian public sector by innovation laboratories expresses an ideal of moving away from the bureaucratic model of public administration, disseminating a more flexible and more open administrative logic.

From the analysis of the testimony of the representatives of the innovation laboratories present in the discussion group on this topic, held in the 5th Innovation Week promoted by the National School of Public Administration (ENAP), it was possible to constitute four categories that give concreteness to this conclusion.

The first, the "Safe space" category, systematizes the concern of innovation laboratory managers to develop a space where error can be understood with something constructive. It breaks with the rigor of compliance with the previously established standard and with decision-making based on the formally constituted hierarchy, starting to disseminate administrative practices that go against the bureaucratic model, such as co-creation and collaborative work.

The second category, "Innovation path", from the reflections on the process of creation and operation of laboratories, expresses as the center of concern some aspects related to informal organization, such as leadership, social patterns of existing relationships and motivation to innovate. From this category, it is possible to perceive that laboratory managers reproduce an administrative ideal not anchored within the limits of the procedures and standards established by the formal organization.

Concerns are expressed about the "Challenges of results", the third category, about the need to produce concrete and acceptable results and to communicate them to the internal and external public. As can be seen, unlike the bureaucratic ideal, the administrative logic disseminated by innovation laboratories perceives the quality of organizational action from the coherence of the results and not only from the adequacy to the previously established processes.

Finally, the category "Choices", when systematizing the criteria used to define the priority demands, points out a close connection with the local reality from a more adaptive and flexible logic, different from the bureaucratic model, standardized and with a conservative tendency.

Therefore, unlike the standards expressed by bureaucracies (Motta & Bresser-Pereira, 1991), innovation laboratories act and stimulate public service based on the informal aspects of

the organizations such as culture, valuing the expectations and needs of team members and society in general, and identifying and valuing leaders in the processes of innovation and daily operation of the public service.

The importance of leadership for innovation to be a reality in the public sector, for example, is pointed out by many authors such as Lin et al. (2011), Rego et al. (2009) and Vigoda-Gadot, Shoam, Schwabsky and Ruvio (2008) when propagating that leadership is one of the antecedents of greatest influence on innovation results. In addition, the Innovation Observatory in the Public Sector (OECD) in collaboration with Nesta in April 2017 published the key competencies for public sector innovation, where it placed the key role that leaders play in supporting and empowering teams to take a more innovative approach.

One of the limitations of this study is that the data were collected from a discussion forum, being restricted to the information that was presented by the group from guiding questions proposed by the forum meter. Therefore, as a suggestion of future studies, this research points to the need to develop more structured surveys that deepen the analysis of the administrative proposal disseminated by innovation laboratories in Brazil.

The results presented here also make it possible to raise other questions that can be answered from future research, such as: Which results achieved by public sector innovation laboratories should be measured? Is it possible that the culture of innovation will collaborate to reduce the negative impacts suffered by laboratories due to frequent changes in leadership? Can innovation laboratories in the public sector consolidate changes that point to the reorganization of the Brazilian public machine?

Finally, the conclusions presented here contribute to identify how the experience of innovation laboratories in the Brazilian public sector help to overcome the bureaucratic obstacles existing in the Brazilian public machine, in addition to deepening the understanding of the administrative proposal disseminated by the laboratories.

As a practical contribution, this research helps to overcome uncertainties regarding the implementation of innovation laboratories with regard to their ability to introduce new operating standards in public administration, capable of making it more flexible and closer to the demands of citizens. The research also contributes to the dissemination of the experience of laboratories by highlighting the differences between the administrative logic contained in these initiatives and those that constitute the bureaucratic logic of public administration, very common in the Brazilian state structure.

References

- Acevedo, S., & Dassen, N. (2016). Innovation for better management: The contribution of public innovation labs.
- Alverga, C. F. (2003). Theoretical survey on the causes of the failures of administrative reform attempts. Revista do Serviço Público, 54(3), Jul-Sept.
- Agger, A., & Lund, D. H. (2017). Collaborative Innovation in the Public Sector-new perspectives on the role of citizens? Scandinavian Journal of Public Administration, 21(3), 17-38.



- Ansell, C. K., & Bartenberger, M. (2016). Varieties of experimentalism. *Ecological Economics*, 130, 64-73.
- Audy, J. (2017). The innovation, development and role of the University. *Estudos AVANÇADOS*, 31(90), 75-87.
- Bardin, L. (2011). Content analysis. São Paulo: Almedina.
- Bason, C. (2010). *Leading Public Sector Innovation: Co-Creating for a Better Society*. Bristol: Policy Press.
- Bason, C., & Schneider, A. (2014). Public Design in Global Perspective; Empirical Trends. In Bason C. *Design for Policy*. Burlington, VT: Gower Pub Co.
- Bloom, L., & Faulkner, R. (2016). Innovation spaces: Lessons from the United Nations. *Third World Quarterly*, *37*(8), 1371-1387.
- Carstensen, H. V., & Bason, C. (2012). Powering collaborative policy innovation: Can innovation labs help? *The Innovation Journal*, 17(1), 2.
- Cummings, C. (2015). Fostering Innovation and Entrepreneurialism in Public Sector Reform: How can the International Development Sector Embrace Creativity? *Public Administration and Development*, 35(4), 315–328.
- Cavalcante, P. L., & Camões, M. R. S. (2015). Public Management in Brazil: Do innovations configure a new model? CONSAD Public management Conference, 8, Brasília.
- Cavalcante, P., Goellner, I. A., & Magalhães, A. G. (2019). Profiles and Characteristics of Innovation Teams and Laboratories in Brazil. In *Innovation and Public Policies:*Overcoming the Myth of the Idea (pp. 316-339). Organization: Cavalcante C.
- Costa, B. D. L. (2015). Innovation in public management in Espírito Santo: A study of the INOVES award. Dissertation UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO Center for Legal and Economic Sciences Graduate Program in Administration.

- Creswell, J. W. (2010). *Research project: qualitative, quantitative and mixed methods*. Porto Alegre: Bookman.
- Cunha, B., & Severo, W. (2017). *Innovation in the Public Sector: Theory, Trends and Cases in Brazil*. Enap:Ipea.
- Damanpour, F., & Schneider, M. (2009). Characteristics of innovation and innovation adoption in public organizations: Assessing the role of managers. *Journal of Public Administration Research and Theory*, 19(3), 495-522.
- De Vries, H., Bekkers, V., & Tummers, L. (2014). Innovation in the Public Sector: A Systematic Review and Future Research Agenda. *SSRN Electronic Journal*.
- Ferrarezi, E., Amorim, S. N., & Tomacheski, J. A. (2011). Sustainability of initiatives awarded in the innovation competition: Evidence of management change in the federal government? *Innovation in Federal Public Management*. Annals... In: IV CONGRESS OF PUBLIC MANAGEMENT - CONSAD. Brasília (DF).
- Garcia, A. L. (2017). De la Innovación Social a la Innovación Publica: Un marco paea la reflexion em la reforma de las politicas públicas. *Tercer Sector*, 123.
- Gieske, J. M. J., Duijn, M., & Van Buuren, A. (2019). Ambidextrous practices in public service organizations. *Public Management Review: An International Journal of Research and Theory*.
- Gil, A. C. (2016). General Theory of Administration: From Classics to Postmodernity. São Paulo: Atlas.
- Gryszkiewicz, L., Lykourentzou, I., & Toivonen, T. (2016). Innovation labs: Leveraging openness for radical innovation? *International Journal of Innovation Management*, 4(4), 68-97.
- Head, B. W. (2008). Wicked problems in public policy. *Public Policy*, 3(2), 101-118.



- Irastorza, X. B., Garcia, A. L., & Satrustegui, A. U. (2017). La innovación Pública en Gipuzkoa: El caso Etorkizuna Eraikiz. In *VIII Congreso Internacional en Gobierno, Administración y Políticas Públicas*.
- Lee, S. M., Hwang, T., & Choi, D. (2012). Open innovation in the public sector of leading countries. *Management Decision*, 50(1), 147-162.
- Lin, T., Wu, S., & Lu, C. (2011). Exploring the affect factors of knowledge sharing behavior: The relations model theory perspective. *Expert Systems with Applications*, 39(1), 751-764.
- Marchand, P., & Ratinaud, P. (2012). L'analyse de similitude appliquée aux corpus textuels: Les primaires socialistes pour l'élection présidentielle française (septembre-octobre 2011). Actes des 11eme Journées internationales d'Analyse statistique des Données Textuelles. JADT.
- MARE (Ministry of Federal Administration and State Reform). (1995). *Master Plan for State Apparatus Reform*. Brasília: National Press.
- Mazzucato, M. (2015). The green entrepreneurial state. In *The Politics of Green Transformations* (pp. 134-152).
- McGann, J. (2016). Global go to think tank index report. TTCSP.
- McGann, M., Blomkamp, E., & Lewis, J. M. (2018). The rise of public sector innovation labs: Experiments in design thinking for policy. *Policy Sciences*.
- Motta, F. C., & Bresser-Pereira, L. C. (1991). *Introduction to the Bureaucratic Organization*. São Paulo: Brasiliense.
- Mulgan, G. (2014). The Radical's Dilemma: An Overview of the Practice and Prospects of Social and Public Labs. Retrieved from <u>link</u>.
- OECD. (2018a). The Public Service Innovation System of Brazil OECD Preliminary Conclusions. [s.l.] Escola Nacional de Administração Pública.



- OECD. (2018b). Oslo Manual: Guidelines for collecting, reporting and using data on innovation. Paris: OECD Publishing.
- OECD. (2017). Core Skills for Public Sector Innovation. The Observatory of Public Sector Innovation, 04-21. Available at <u>link</u>.
- Peters, G., & Rava, N. (2017). Policy Design: From Technocracy to Complexity, and Beyond. Retrieved from link.
- Puttick, R., Baeck, P., & Colligan, P. (2014). *I–teams: The teams and funds making innovation happen in governments around the world.* New York: Bloomberg Philanthropies.
- Rego, A., Pinho, I., Pedrosa, J., & Cunha, M. P. (2009). Barriers and facilitators to knowledge management in university research centers: An exploratory study. *Management Research: Journal of the Iberoamerican Academy of Management, 7*(1), 33-47.
- Rezende, F. C. (2002). Why do administrative reforms fail? *Revista Brasileira de Ciências Sociais*, 40(2), 123-142.
- Sano, H. (2020). Innovation laboratories in the public sector: Mapping and diagnosis of national experiences. Brasília: Enap.
- Sbalchiero, S., & Tuzzi, A. (2016). Scientists' Spirituality in Scientists' Words: Assessing and Enriching the Results of a Qualitative Analysis of In-Depth Interviews by Means of Quantitative Approaches. *Quality & Quantity*, 50(3), 1333–1348.
- Schurman, D., & Tõnurist, P. (2017). Innovation in the Public Sector: Exploring the Characteristics and Potential of Living Labs and Innovation Labs. *Technology Innovation Management Review*, 7(1), 7.
- Sorensen, E., & Torfing, J. (2017). Metagoverning collaborative innovation in governance networks. *The American Review of Public Administration*, 47(7), 826-839.
- Timeus, K., & Gascó, M. (2018). Increasing innovation capacity in city governments: Do innovation labs make a difference? *Journal of Urban Affairs*, 40(7), 992–1008.



- Tõnurist, P., Rainer, K. R., & Lember, V. (2017). Discovering Innovation Laboratories in the Public Sector. In *Innovation in the public sector: Theory, trends and cases in Brazil* (pp. 179-204). Enap; Ipea.
- Vigoda-Gadot, E., Shoam, A., Schwabsky, N., & Ruvio, A. (2008). Public sector innovation for Europe: The multinational eigh-country exploration of citizens' perspectives. *Public Administration*, 86(2), 307-329.
- Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357.
- Walker, R. M. (2014). Internal and External Antecedents of Process Innovation: A Review and Extension. *Public Management Review*, *16*(1), 21-44.

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